PROCEEDINGS

I**SEEH** 2019

The Second International Conference on Social, Economy, Education and Humanity

"Sustainable Development in Developing
Country for Facing Industrial Revolution 4.0"

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SKA Convention & Exhibition Center, Pekanbaru, Riau, Indonesia

Editors:
Arbi Haza Nasution
Evizal Abdul Kadir
Luiz Moutinho

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ICoSEEH 2019

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Second International Conference on
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Riau - Indonesia

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FOREWORD

In the name of Allah, Most Gracious, Most Merciful
Assalamu'alaikum Wr. Wb.,

Welcome to the Second International Conference on Social, Economy, Education, and Humanity (ICoSEEH 2019). The advancement of today's computing technology, science, engineering and industrial revolution 4.0 play a big role in the sustainable development of social, economic, education, and humanity in developing countries. Institute of higher education is one of many parties that need to be involved in the process. Academicians and researchers should promote the concept of sustainable development. The Second International Conference on Social, Economy, Education, and Humanity (ICoSEEH 2019) is organized to gather researchers to disseminate their relevant work on Social, Economy, Education, and Humanity. The conference is co-located with The Second International Conference on Science, Engineering and Technology (ICoSET 2019) at SKA Co-EX Pekanbaru Riau.

I would like to express my hearty gratitude to all participants for coming, sharing, and presenting your research at this joint conference. There are a total of 108 manuscripts submitted to ICoSEEH 2019. However only high-quality selected papers are accepted to be presented in this event, with the acceptance rates of ICoSEEH 2019 is 71%. We are very grateful to all steering committees and both international and local reviewers for their valuable work. I would like to give a compliment to all co-organizers, publisher, and sponsors for their incredible supports.

Organizing such prestigious conferences was very challenging and it would be impossible to be held without the hard work of the program committee and organizing committee members. I would like to express my sincere gratitude to all committees and volunteers from Singapore Management University, Kyoto University, Kyushu University, University of Tsukuba, Khon Kaen University, Ho Chi Minh City University of Technology, University of Suffolk, Universiti Teknologi Malaysia, Infrastructure University Kuala Lumpur, Universiti Malaya, Universiti Kebangsaan Malaysia, Universiti Utara Malaysia, Universiti Teknologi Mara, and Universiti Pendidikan Indonesia for providing us with so much support, advice, and assistance on all aspects of the conference. We do hope that this event will encourage collaboration among us now and in the future.

We wish you all find the opportunity to get rewarding technical programs, intellectual inspiration, and extended networking.

Pekanbaru, 27th August 2019

Dr. Arbi Haza Nasution, M.IT
Chair of ICoSEEH 2019

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PAPERS

FULL PAPERS

The Implementation of Indonesian Soft Power through Swaggering Strategies in Asian Games 2018

Denik Iswardani Witarti[1], Anggun Puspitasari[1]

[1]*Budi Luhur University, Jakarta, Indonesia*

{*denik.iswardani, anggun.puspitasari*}*@budiluhur.ac.id*

Keywords: Nation Branding, Asian Games, Swaggering Strategy

Abstract: Sport has been known as an effective method for carrying out social integration, forming a national identity and improving the global image. Sports in the modern era have been constructed as the capital of a country. Sport can be a method of domestic political imaging, and externally can be used as a means of diplomacy. In the Indonesian context, sports are used as soft power which is implemented into the Swaggering Strategy to form national image (nation branding). Related to the Swaggering Strategy, sports are used as one of the instruments for holding mega-events in an effort to show the capability of the country, in this case, Indonesia uses the implementation of the 2018 Asian Games as an effort to implement the Swaggering Strategy. At the end of this study, it was found that the implementation of the Asian Games was very effective in an effort to shape the country's image. Thus, Indonesia is expected to increase development in other sectors. The use of the 2018 Asian Games global scale sports event can also be used by Indonesia as a media for diplomacy by the government.

1 INTRODUCTION

In the era of globalization, the complexity of relations between countries is characterized by efforts to outperform one country and another. At the end of October 2018, the World Economic Forum (WEF) published a report of the Global Competitiveness Index (GCI) 2018. Hundreds of countries in the world were assessed and examined their competitiveness and quality. Indonesia is included in this study list and in this report, Indonesia experienced a downgrade. Referring to the report, as many as 140 countries were included in the GCI list this year and Indonesia was ranked 45th. This ranking is an increase from the previous year which placed Indonesia ranked 36th. In addition, in Southeast Asia, Indonesia ranked 4th, far behind Singapore that ranked 2nd, Malaysia which was ranked 25th and Thailand which was ranked 38th. (Schwab, 2017).

WEF also analyzes that Indonesia's weak competitiveness is one of them is the simulation of a culture of investment and confidence in the low business sector. Indonesia must have a strategy to create a good investment climate by making various innovative efforts to improve the nation's branding so that the flow of investment and confidence in the business sector can increase (Petrarca and Terzi, 2018). With the increas-

ing of a country's nation branding, automatically the FDI (Foreign Direct Investment) and a healthy business climate within the country can be achieved.

In order to improve the ranking, various strategies are needed by utilizing the power of a country. The power of a country is theoretically divided into two types, hard power, and soft power. Hard power is more compelling and violent, for example by using military force. In contrast to the transactional hard power approach, the soft power approach is more inspirational in that it attracts others with the power of emotional intelligence such as building close relationships or bonds through charisma, persuasive communication, diplomacy, and cultural influences, thereby making other people affected (Nye Jr, 2004). In the use of state-owned soft power, there are several strategies that can be implemented, one of which is the swaggering strategy (Wrong, 2017).

After the Cold War, the soft power approach can be more developed as a way to improve a country's competitiveness, one of its concrete forms is sports culture. Sport has been known as an effective method for carrying out social integration, forming a national identity and improving the global image. Sports in the modern era have been constructed as the capital of a country. Sport can be a method of domestic political imaging, and externally can be used as a means of

diplomacy (Grix and Brannagan, 2016).

Regarding to the swaggering strategy, sports can be used as one of the instruments for holding mega events in order to demonstrate the country's capabilities. In its history, there have been several countries that have managed to hold mega sports events which can ultimately enhance the country's image at a global level, including the Olympics, the FIFA World Cup, the SEA Games, the Asian Games, the Winter Olympics, and others. The success of holding this mega event has become one of the benchmarks of the nation's branding (pretensions), including Indonesia, which has successfully hosted the Asian Games in 2018 (Freeman, 2012).

Through the momentum of holding the 2018 Asian Games sports event, Indonesia seeks to use its soft power to build the Nation Branding at the global level by using a swaggering strategy. Thus, Indonesia is expected to increase development in other sectors. The use of the 2018 Asian Games global scale sports event is used by Indonesia as a media for diplomacy by the government. This is because, there are representations and diplomatic activities by individuals or groups involved in sports events and in conjunction with existing governments (Wagar, 2009).

In practice sports are used to convey messages or shape the image that a country wants to form (Grix and Houlihan, 2014). The holding of mega sports events such as the 2018 Asian Games is increasingly being used as a media for diplomacy in various countries in order to build the image of a country to change perceptions of issues that are developing in the country and encourage rapid development of the country. Therefore, researchers are interested in seeing how Indonesia uses its soft power through the momentum of organizing the 2018 Asian Games in building a positive image of Indonesia through a swagging strategy.

2 SOFT POWER, NATION BRANDING & SWAGGERING STRATEGY

Soft power is one of the concepts promoted by Joseph S. Nye. Soft power is a term that is widely used to interpret or explain a process of relations and realization of power. The meaning of soft power itself is an ability to do everything and control others, to make it do something that they do not necessarily want to do (things and control others, to get to what they otherwise would). Soft power is a superior national resource as the ability of the state that can be used to influence other countries to achieve the desired results

Figure 1: Soft power instruments

or interests. This soft power can be realized in foreign policy instruments and techniques run by a country.

Nye explained that with Soft Power "the best propaganda is not propaganda" (the best propaganda is not propaganda ", and also explained that" credibility is the scarcest resource "(credibility is the rarest source) (Nye, 2012). Nye introduced this term in his book, "Bound to Lead: The Changing Nature of American Power" (Nye, 1990). Nye then developed the concept further through his book, "Soft Power: The Means to Success in World Politics" (Nye Jr, 2004). According to Joseph Nye, soft power is: *the ability to get through a rather than through coercion or payments attraction*. Some forms of soft power include tourism, culture and so on. Thus, in pursuing its national interests the state can never act alone.

This concept requires other actors such as private agents, religious and educational institutions, and transnational companies engaged in the business of trade, communication and information, art, and culture (interdependence). This concept refers to the non-military power of the state such as the economy, culture and things that realists call low politics compared to hard power such as defence and military issues, soft power also has quite crucial problems for the country. The success of soft power depends on the credibility of the country concerned and acceptance from the target country. Attractions and inducements are social reconstructions so that new soft power will have an effect if there is a two-way relationship. The following are the components that can be categorized as the soft power of a country.

The success of a country in competing in the global market is very much influenced by the nation's Branding. Every country seeks to build a Nation Branding to influence relations with other countries. Nation Branding is one of the main components that can be the starting point for bilateral relations between one country and another. In this relationship, there are also actors who play a role in it, namely

state actors and non-state actors. Both of them always try their best to create a good image or image of their country to the international community. Nation Branding covers various aspects, such as politics, economics, culture, business and sports. At present, countries in the world focus on elevating the image of the country through anything that can distinguish itself on the international stage.

According to Anholt, Nation Branding is:

Nation Branding as 'the dominant' channel of communication for national identity and communication has been a central concept in his conceptualization of nation branding.

According to Raymond Miller, nation branding is defined as:

A set of theories and applications that aim to measure, build and regulate the reputation of a country (still related to place branding).

In accordance with its definition, this nation branding functions to build, develop, and maintain a good image (reputation) about a country. The success of a country in competing in the global market is strongly influenced by the country's brand image. In fact, the branding and image of a country coupled with a commensurate transfer between the images to the products produced are as important as the products produced by the country itself.

Nation Branding covers various aspects, such as politics, economics, culture, business and sports. At present, countries in the world focus on elevating the image of the country through anything that can distinguish itself on the international stage. Every country seeks to build a Nation Branding to influence relations with other countries. The use of Nation Branding in an effort to promote various aspects that are motivated by the interests of the state then combines state identity and nationalism in a real way by establishing cooperation with various branding consultants, various collaborative bodies in the field of national identity promotion both private and state, to develop promotional strategies commercial. Thus, efforts to be able to sell commercially owned and state-owned sectors within the country have a brand that will be published both internally and externally. Related to research on sports and the efforts of nation branding carried out through the holding of mega events, there have been several studies that were previously conducted by both researchers and outside academics. Previous research shows that sporting events can be used as instruments of diplomacy in relations between countries that are experiencing problems. Failure to form diplomacy formally can be softened through sporting events. Sports, even succeeded in initiating or opening the path of the recovery process of relations be-

tween two countries that had been involved in a long enough feud (Volcic and Andrejevic, 2011).

According to Martin Muller, events categorized by size and size are divided into giga events, mega events, and major events. The event category is related to the impact of organizing events. The wider the scope of the event is held, the more complex preparations must be made, and the greater the funds spent. The multi-billion-dollar expenditure on mega-events has a direct impact on host countries in cities, regions, populations and the environment. The host must ensure the availability of facilities such as stadiums, conference facilities, roads, railways, metro, hotels or power plants. In fact, the governments of most of the host countries make strategic use of this mega-event to develop infrastructure and encourage urban development (Müller, 2015).

Conceptually swaggering is the only strategy to use national capability that can accommodate soft power into one of their supporting instruments. Swaggering was originally one of the security strategies that has been carried out by a country where the country was trying to show the military security they had to other countries. Swaggering is mostly done in peaceful situations which can be used for military training in weapons demonstrations or making purchases or building prestigious weapons with the aim of being egoistic.

This strategy is usually carried out through the holding of mega events or major events on an international scale that are "show off" to show the capability of the country. Because it was carried out in a peaceful situation, this strategy then developed into a strategy that was not only militaristic. Swaggering is now carried out by using soft state power, one of which is sports culture. As a reference, the dynamics of the development of the Power Concept and its implementation of globalization can be seen in the following scheme (Murray, 2011).

The evolution of the swaggering concept approach from hard power to soft power can be seen in the following Table 1.

It is difficult to measure soft power appropriately, unlike hard power, which has more obvious elements such as population, or area owned. Several indicators offered that can be used to measure soft power which is developed from several aspects, namely politics, economics, social and culture, diplomacy and international relations (Changhe, 2013). For the purposes of this study, a soft power analysis was developed using a swaggering theory which is usually used in the context of military (non-military) power.

Swaggering is a behaviour used to increase national pride, fulfill the ambitions of leaders, and im-

Figure 2: The National Power Scheme

Table 1: The Evolution of Swaggering Strategy Concept

SWAGGERING		
Characteristics	Hard Power	ISoft power
Demonstration (Show off)	Military Capabilities	Culture Uniqueness
Object	Exhibition, Pre-test, Armament Test	Cultural performances, education, tourism or sports exhibitions
Final destination	Egoistic and militaristic achievements	Nation branding
Media	Major and Mega Event	Major and Mega Event
Situation	Peace	Peace

buying and building modern sports facilities and supporting infrastructure.

The organization of mega sports events such as the World Cup and the Olympics can be a place for a country to demonstrate its capabilities and reputation in the eyes of the international community. The Olympics can be used by the host country to show its identity to the global community. Developing countries can accentuate themselves as "debutante ball" or "coming out party" by becoming organizers. An example is when Japan hosted the Olympics in 1964. The implementation of the Olympics became a symbol of the forgiveness of sins as well as a "total welcome back" of Japan after losing all-out in the 1945 world war. While China used the 2008 Beijing Olympic Games to strengthen its identity in the power hierarchy globally (Fraser and Herbert, 1980).

The host who succeeded in holding a mega sports event will raise his pride in the international arena. The desire and ambition to host the event can show the ability and image of a government (Freeman, 2012). Strengths like this used to be usually pursued through military aspects (hard power), now can be obtained through sports achievements as a form of soft power. But the purpose of self-assertion as in the sense of swaggering can still be obtained.

Although it is difficult to measure its success, some scholars have offered a number of indicators including soft power scope. Nye (Nye, 2005) emphasizes that persuasive attraction is the key to the success of soft power rather than coercion. In a context like this, soft power can be pursued through diplomacy. Su (Changhe, 2013)states that the implementation of public diplomacy by using culture is an effective method of soft power, of course by involving all parties. Government, private individuals or groups can directly or indirectly influence behaviour and public opinion.

In the context of relations between countries, soft power can be used to increase the power of a country. One of them is in the form of increasing friendship with other countries. The aim of a country's diplomacy must be focused on friendship (growing friends) and instilling a culture (cultivating a culture), rather than adding enemies or establishing military alliances (Changhe, 2013). Based on this understanding, the 2018 Asian Games in Jakarta and Palembang are the implementation of soft power diplomacy that Indonesia can use to strengthen friendships with Asian countries.

prove the image of a country (Art, 1980). The discussion of swaggering, in this case, is a form of peaceful use of military power. A study explains the possibility of using sports as soft power using swaggering analysis (Freeman, 2012). In the context of military power, swaggering usually appears in the form, for example by displaying a troop title or a national exercise demonstration. This can be replaced by displaying the toughness of athletes competing in the arena of the prestigious world sports competition. Whereas the purchase of sophisticated weapons to show the strength of a country can be replaced with pride in

3   ASIAN GAMES 2018: INDONESIA'S SOFT POWER DIPLOMACY THROUGH SWAGGERING STRATEGY

The biggest event in Asia, the 2018 Asian Games have been held. The event, which took place August 18 to September 2, 2019, competed for 40 sports. The Games have been attended by 15,000 athletes and officials from 45-member countries of the Asian Olympic Council. Indonesia's appointment was motivated by Vietnam's unpreparedness to host. This is the second time Indonesia has hosted the Asian Games IV in Jakarta in 1962. For this reason, the government established the Indonesia Asian Games 2018 Organizing Committee (INASGOC) as the executive committee. INASGOC is responsible as the executive committee that will plan, prepare and organize the 2018 Asian Games. The INASGOC National Committee is responsible directly to the President of the Republic of Indonesia.

The Asian Games, which were first held in 1951 in New Delhi, are mega event sports for Asian countries. The trust given to Indonesia as the host of the 18th Asian Games is, of course, intended that the sporting events run well, smoothly and successfully. Since a year before, Indonesia has prepared and is actively promoting good. President Joko Widodo who inaugurated the Asian Games countdown at the National Monument, Jakarta on August 18, 2017 invited all components of Indonesian society to support the success of this event. All parties involved in the 2018 Asian Games want to achieve success at this sporting party, both in terms of success and achievement. The organization of the Asian Games also has a strategic meaning for Indonesia.

Sports events such as the 2018 Asian Games can simultaneously become an effort for Indonesian swaggering to the international community. Freeman describes the use of sport as a form of non- militaristic swaggering transformation (Freeman, 2012). First, the appearance of athletes who compete in mega events can lift national pride. Second, prestige as the host of mega sports events that will enhance the image of a country in the world. Pride is the goal of a swaggering strategy so that both are appropriate as a form of non- military swaggering. Finally, extensive media coverage of the event being held will also bring a message to the world outside about the existence and capabilities of the host country.

In this study, the analysis of swaggering in the implementation of the 2018 Asian Games was developed by focusing on achieving two things, attractions and prestige. Attractions are shown by the international media interest that covers the event. Whereas Indonesia's prestige and image are seen from the appearance of athletes at the 2018 Games Games, including considering the sports that are aired and medals.

3.1   Media Coverage

The Asian Games are covered by 3,500 international media crews. While in Indonesia the media will not only cover sports activities, but also various other interesting events and objects in Indonesia. If all this time the Ministry of Tourism and the Ministry of Foreign Affairs invites dozens of foreign journalists to the Familiarization Trip (Fam Trip) and Journalist Visit Program (JVP), of course the presence of 3,500 media workers is a very large number to cover Indonesia.

INASGOC set a budget of 800 billion Rupiah for Asian Games broadcasting costs. The funds are included in the cost of the live broadcast of 38 sports, the opening ceremony, and the closing ceremony of the Asian Games which took place in Jakarta and Palembang. INASGOC provides the International Broadcasting Centre (IBC) located in the Jakarta Convention Centre in Jakarta and the Sriwijaya Promotion Centre in Palembang. The IBC 2018 Asian Games covers an area of 7,100 square meters located in the Jakarta Convention Centre (JCC) Hall B, Jakarta, so that it can accommodate the broadcast room requests of a number of countries.

To maintain the quality of broadcasts of the Asian Games, INASGOC is partnering with a Swiss broadcast management company, International Games and Broadcast Services (IGBS) as a management partner for broadcasting the 18th Asian Games. IGBS had previously been an Asian Games broadcasting partner in the previous three editions, the 2006 Asian Games in Doha, Qatar, 2010 in Guangzhou, China and 2014 in Incheon, South Korea. In the final stage of the auction held by INASGOC in Jakarta in June 2017, they defeated NEP, a media company from Australia. The Asian Games broadcasting will be distributed in all Asian countries even to Latin America except Brazil. A total of 427 high-resolution cameras will be prepared to broadcast live all sports except bridge and squash branches.

Meanwhile, the 2018 Asian Games broadcasting rights are held by Dentsu, a Japanese broadcasting company, while in Indonesia broadcasting rights are held by Elang Mahkota Teknologi (EMTEK Group) which has broadcast rights over broadcasts of terrestrial television (SCTV, Indosiar, O Channel), satellite (Nexmedia), digital channel (Vidio.com) and through the BBM application. The Emtek Group also shares

Figure 3: PR Value Analysis of Asian Games News

the broadcasting rights with a number of national televisions except for broadcasts of soccer and badminton matches. In addition to the Emtek Group, the 2018 Asian Games will also be broadcast by other terrestrial television such as TVRI, MetroTV, TV One (specifically Aquatic branches), all pay television service providers, Usee TV, MNC Play, and MAXStream applications provided by Telkomsel. For broadcasting rights on radio broadcasts, it is held by RRI as Emtek Radio Partner.

On the other hand, the number of a foreign official and media teams at the 2018 Asian Games exceeds capacity. INASGOC predicts the number of broadcasts and future foreign media covering 7,000 people. But in reality, the number of media registering exceeds expectations. A total of 11,000 media crews have been registered in the media covering the 2018 Asian Games with 500 media outlets.

Media attention to cover the 2018 Asian Games supports the swaggering strategy. The large number of foreign media covering international interest, especially in Asia, is about the implementation of the 2018 Asian Games held in Jakarta and Palembang. Throughout the 2018 Asian Games, namely from August to September, it managed to attract viewers (readers and viewers) and viewers. Their interest was not only about the matches held, but also everything related to Indonesia, especially regarding the cities of Jakarta and Palembang. Spread news brings positive sentiment and builds a positive image of Indonesia. Based on the PR Value analysis that has been carried out related to the Asian Games news in Indonesia, there are the following results.

Based on the PR Value, it can be seen that negative reporting on the Asian Games is only around 1%. This shows that efforts to establish a positive national image are going very well. Especially with

the very active reporting from foreign media making the spread of national image to a global scale can be easily implemented. In the context of the swaggering strategy, the Asian Games 2018 sports event became effective soft power diplomacy to build Indonesia's nation branding in international relations.

Based on the success of the PR Value, in accordance with the concept of nation branding, it can be said that the host who succeeded in organizing a mega sports event will raise his grip on the international arena. The desire and ambition to host the event can show the ability and image of a successful government. Indonesia's success as the host will strengthen the image of being a country that has the ability to hold mega sports events. This brings benefits to the identity of the Indonesian nation as a country that has developments especially in the economic and political fields which are quite stable so that the Asian Games can be held well.

The implementation of soft power diplomacy during the 2018 Asian Games has involved many stakeholders in all aspects so that it can be said to be a form of successful public diplomacy. Public diplomacy is fully integrated with the process of forming a country's image (Ginesta and de San Eugenio, 2014). This is an advantage of implementing a swaggering strategy that uses soft power because it can be done by non-state actors. Their involvement in the 2018 Asian Games also shows Indonesia's integrated public diplomacy.

3.2 Medal Earning

As the host, Indonesia won 98 medals, consisting of 31 gold, 24 silver and 43 bronze. With this result, Indonesia finished 4th in the highest number of golds medallists at the 18th Asian Games. This incision has become its own history for Indonesia because Indonesia has never before received this much gold. In rank, occupying the fourth position was the second-best achievement after the 1962 Asian Games in which Indonesia which at that time also appeared as the host managed to become the runner-up. Indonesia's success at the 2018 Asian Games cannot be separated from the great contribution of the Pencak Silat sports. This traditional Indonesian martial art has become the golden barn of Indonesia. Of the total 16 gold contested, Indonesia won 14 medals. This is a "clean sweep" because Indonesia does not include its representatives in two numbers.

3.3 Sport Divisions

The Asian Games event as Asia's four-year grand event involves 40 Sports Divisions. For the first time, Pencak Silat sports competed in the Asian Games even though they had competed regularly since the Southeast Asian Games, the SEA Games 1987. Pencak silat is an Indonesian martial art form which was formally recognized as a form of sport in 1948. There are several ways for a sport can enter sports competitions that are in accordance with Olympic rules. The traditional way is through the international sports federation to petition the International Olympic Committee, but the alternative is that the local organization committee encourages the branch to be competed.

Youth and Sports Minister Imam Nahrawi in July 2018 renegotiated with the Asian Olympic Committee so that pencak silat was contested. The official statement is "Indonesia is ready to host the Asian Games as long as various conditions from us can be fulfilled. The main requirement is to present Pencak Silat which is a typical Indonesian sports branch." As the host of the 2018 Asian Games, Indonesia can indeed add to the other three sports.

The competition of Pencak Silat at the 2018 Asian Games is considered to be able to help its recognition as a world heritage. The United Nations Educational, Scientific and Cultural Organization (UNESCO) and the Indonesian government are discussing the submission of Pencak Silat as the world's non-cultural heritage for humanity. Over the past year, dossiers (files and documents) have been carefully prepared by a team of various stakeholders.

3.4 Mapping Perceptions of International Media

News management is communication management on daily issues involving the contents of domestic and international policies. The government in shaping policy in the modern era is always looking for efforts to make the policy a concern so that it can be conveyed to the wider community. But in general, the government only focuses on delivering in the domestic sphere and does not deliver it to the international scope. Whereas the delivery of policies at the international level is very important in the first dimension of public diplomacy (Leonard, 2002).

Therefore, the government's efforts to form policy can be delivered not only in the domestic sphere but also internationally, news management is needed that can facilitate the government to connect with the outside world. News management serves as a channel for the government to disseminate policies made to the public and not only to the domestic public but also internationally. From here it can be seen that the role of the first dimension of public diplomacy, namely news management, is very important in supporting traditional diplomatic efforts carried out by the government.

According to the facts, the measurement of the soft power effectiveness, are calculated based on Media Coverage, Medal Earning, Sport Divisions, Mapping Perceptions of International Media. From the results of the research, it was found that in some of these categories, the responses of the Asian Games showed a positive trend. Based on the analysis above, there are several benefits of 2018 Asian Games diplomacy and promotion. First, to improve and strengthen people to people relations, because people are the leading actors in diplomatic activities, especially public diplomacy. Second, to increase the promotion of Indonesia abroad, with the amount of foreign media coverage during the Asian Games. Third, it will clearly improve the economy of the community.

4 CONCLUSIONS

Indonesia uses its soft power strategy through the Asian Games 2018 to increase Indonesia's Nation Branding in the eyes of the world. Nation Branding is one of the main components that can be the starting point for bilateral relations between one country and another. In these relations, there are also actors who play a role in it, namely state actors and non-state actors. Both of them always try their best to create a good image or image of their country to the international community. Based on the research above, it can be concluded that the sport held in mega events can be a power in the form of soft power and is used in the efforts of nation branding carried out by countries in the world.

In this study, researchers found that Indonesia is not just holding the 2018 Asian Games as a mere sports tournament. But it is also one of the efforts to use soft power through a swaggering strategy to build a Nation Branding Indonesia as an international tourist destination country as well as to promote Indonesia's potential with the aim of achieving broader national interests. Through the holding of the 2018 Asian Games, Indonesia seeks to form a positive image of Indonesia's potential in the form of tourism, economic openness, state stability, and so on.

REFERENCES

Art, R. J. (1980). To what ends military power? *International Security*, 4(4):3–35.

Changhe, S. (2013). Soft power. In *The Oxford Handbook of Modern Diplomacy*.

Fraser, J. and Herbert, F. (1980). *The Chinese: Portrait of a people*. Summit Books New York.

Freeman, K. (2012). Sport as swaggering: utilizing sport as soft power. *Sport in Society*, 15(9):1260–1274.

Ginesta, X. and de San Eugenio, J. (2014). The use of football as a country branding strategy. case study: Qatar and the catalan sports press. *Communication & Sport*, 2(3):225–241.

Grix, J. and Brannagan, P. M. (2016). Of mechanisms and myths: conceptualising states'"soft power" strategies through sports mega-events. *Diplomacy & statecraft*, 27(2):251–272.

Grix, J. and Houlihan, B. (2014). Sports mega-events as part of a nation's soft power strategy: The cases of germany (2006) and the uk (2012). *The British journal of politics and international relations*, 16(4):572–596.

Leonard, M. (2002). *Diplomacy by Other Mean*. The Foreign Policy Centre.

Müller, M. (2015). What makes an event a mega-event? definitions and sizes. *Leisure Studies*, 34(6):627–642.

Murray, S. (2011). Sports-diplomacy: a hybrid of two halves. In *Artigo apresentado no International Symposium on Cultural Diplomacy. Anais... Berlim*, pages 1–25.

Nye, J. (2005). Soft power and higher education. In *Forum for the Future of Higher Education (Archives)*, pages 11–14.

Nye, J. (2012). Why china is weak on soft power. *The New York Times*, 17.

Nye, J. S. (1990). Soft power. *Foreign policy*, (80):153–171.

Nye Jr, J. S. (2004). *Soft power: The means to success in world politics*. Public affairs.

Petrarca, F. and Terzi, S. (2018). The global competitiveness index: an alternative measure with endogenously derived weights. *Quality & Quantity*, 52(5):2197–2219.

Schwab, K. (2017). The global competitiveness report 2017-2018. World Economic Forum.

Volcic, Z. and Andrejevic, M. (2011). Nation branding in the era of commercial nationalism. *International Journal of Communication*, 5:21.

Wagar, B. M. (2009). Marginal benefit of hosting the summer olympics: Focusing on bric nation brazil (rio 2016). *Global Studies Student Papers*, page 17.

Wrong, D. (2017). *Power: Its forms, bases and uses*. Routledge.

The Instrument Development for Evaluating the School Budgeting Planning Management at Yogyakarta Elementary School

Siti Maisaroh[1], Dedek Andrian[2]

[1]*Elementary School Teacher Education, Yogyakarta PGRI University, Yogyakarta, Indonesia*
[2]*Department of Mathematics Education, Universitas Islam Riau, Pekanbaru, Indonesia*
sitimaisaroh@upy.ac.id, dedekandrian@edu.uir.ac.id

Keywords: Instrument, Development Research, Evaluating, School Budgeting Planning Management, Elementary School

Abstract: The purpose of this research is to develop the instrument to evaluate the Budgeting Planning Management at Yogyakarta Elementary Schools. Type of This research is a development research consisting of four phases: 1) phase of the initial investigation, 2) phase of design and 3) phase of expert validation, and 4) phase of the trial. From the phase of initial investigation obtained 6 components of the evaluation that is; 1) school program; 2) Financing; 3) fund source;4) Planning;5) organizing; 6) Implementation; 7) supervision; 8) evaluation. The phase of design is done by studying from various the theory and making the instrument in the form the questionnaire as many as 31 items. The phase of expert validation is done by 2 evaluation experts, the school management expert and, and 6 management practitioners. The assessment results from expert and practitioners were analyzed using the Aiken's formula. The phase of the trial was analyzed using confirmatory factor analysis (CFA) and construct reliability with the assistance Lisrel software 8.80. From the analysis results of validity and reliability acquired 31 items of the questionnaire were valid and feasible to be used to evaluate the Budgeting Planning Management at Yogyakarta Elementary Schools.

1 INTRODUCTION

Government Regulation No. 17 of 2010 concerning Education Management and Implementation, especially in articles 50 and 51 states that the unit of education must plan and develop education policies following schools regulation. One of the education policies that are the obligation of the school is to develop an annual work plan and prepare an annual income and expenditure budget. The government hopes that with the planned school activities, the government will ease in monitoring and evaluating school development. This school activity plan can be a reference and working guide in submitting what educational resources needed in developing schools' program.

School expenditure budget management will make it easier for schools to find out what activities will be carried out by the school so that the expected goals can be achieved and school obligations can be fulfilled. In terms of participation, school budget management can provide an overview of what is needed and what support is needed by school stakeholders both internally and externally. This is in line with the regional autonomy policies

developed within the scope of formal education, namely School-Based Management (SBM). SBM makes the school's education development better in terms of school management, school funding, and supervision. Schools become more independent and have a responsibility for managing and developing their schools. Schools will ease and flexible in developing school programs have designed or planned following the needs and the school resources capabilities.

Budget planning is an activity of planning activities for the future and how much funding is needed to support the intended activities and to explore sources of funds, collect, also describe into activities that have been programmed for the achievement of an educational goal. School financing planning requires accurate and complete data so that all future planning needs can be anticipated in the draft budget. The position of the Principal as a leader must be able to develop some dimensions of administrative actions. The ability to apply educational programs into cost equivalents is important in preparing the budget. Activities to make budgets are not routine or mechanical work, involve consideration of the basic purposes of education and

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programs Based on these perspectives the planning of school education costs must be able to open the way for the development and explanation of concepts about desired educational goals.

Harjanti's (2010) research on budget planning concluded that there were still important school needs that had not been identified, budget planning implemented in schools was still not accordance to school needs, schools' program targets, program alternatives selection, and selection of effective costs. If budget planning is not done well, then budget implementation often appears important but unplanned programs beforehand. activities to evaluate the budget will be difficult because some components of the budget are not recorded in planning but implemented.

The school budgeting will be a success if involve of all parties, namely the community, parent, principal, teachers, schools committee and students. The results of research conducted by Yuliastuti & Prabowo (2014) state that the principals, teachers, and school committees have involved in the budget planning process of the school. the principals and teachers in planning the school budget in the good category but the school committee is still lacking in planning and controlling the process of the school budget planning. The school committee also signed the ratification of the APBS but in the budget planning process, the school committee didn't get involved. In the preparation of the school budget, a budgeting team has been formed, but the school does not yet understand how to estimate the ideal budget, so many school programs are not carried out by school, and there was a lack of commitment to the budget prepared. Reports made by schools were less accountable because the administration wasn't neatly arranged. Budgeting management transparency is still lacking because the APBS is not disseminated to school residents.

The elementary school in Yogyakarta also faces a big dilemma between the strong desire to provide quality-assured education on the one hand and the fact that there is a lack of funds from the government on the other side. Of the 93 Elementary Schools in the city of Yogyakarta, the sources of funds in the School Expenditure and Revenue Budget Plan (SERBP) that come from School Operational Costs (SOC) funds are on average 55 percent, from the State School Operational Costs (SSOC) an average of 24 percent, and those that come from school committee contributions are on average 23 percent. The use of financial resources for the construction and procurement of school facilities and infrastructure averages 22 percent, for school needs as much as 20

percent, for teaching and learning activities as much as 19 percent, for honorariums as much as 16 percent, for student activities as many as 16 percent, and for other purposes as much as 3 percent (Setyaningrum, 2010).

Thus, the quality of education can be guaranteed by program synchronization with the budget planning at each year. Planning is the first and foremost thing to do. If in carrying out activities there is no planning, then the goal will not be achieved so that waste occurs and activities are not as expected. based on the problems that have found, the development of instruments to evaluate budget planning needs to be carried out so that weaknesses or shortcomings can be identified that need to be improved in improving the quality of learning through the management of good school budgets.

The purpose of budget planning is to facilitate future work, so decisions can be made with careful planning. According to Robbins & Coulter (2012: 204), "planning involves determining the objectives of the organization, strategies for achieving goals, and developing networks to achieve goals. Poston, (2011: 5), states that school budget planning is part of prediction, communication, and decision making, (Lipham, 1985: 237) "School budgets are systematic planning for income and expenditure related to educational programs and supported by data that reflects the needs, goals, and results that the school wants to achieve.

Anthony & Govindarajan (2005: 373) states that budgeting planning is one of important activity for effectively developing, controlling, and planning an institution like schools. Budget planning is one strategy to help the program made by schools in achieving institutional goals have planned . Budget planning is affected by the length of management carried out by schools stakeholders (Sato, 2012). Based on the expert statement above, it can conclude that budgeting planning management of schools is an important thing have to consider in implementing an education program.

(Sisk, 1969) states that school management is a unity of all resources through a process of planning, organizing, directing and controlling. Education management is activities that related to education management at school (Sun, 2014). Management made by stakeholders aims to check standards or criteria with their implementation, which can increase the attitude of the value of the individual in the workgroup (Berggren and Söderlund, 2008). School management is various roles in education were made by schools to give education and training to schools community who are carried out teaching and

learning process (Pant and Baroudi, 2008). School management is a system needed to handle student diversity so that the school can get the goal of the school program was the transferring knowledge to the student (Passailaigue and Estrada, 2018; Oplatka and Arar, 2017) stated that school management is an important part to implement good atmosphere for school staff in getting a good quality of teaching and learning in the classroom.

2 RESEARCH METHOD

Research on instrument development to evaluate The Instrument Development for evaluating the School Budgeting Planning Management at Yogyakarta Elementary Schools using research and development. The purpose of this research is to develop a valid and reliable instrument of a questionnaire for evaluating the budgeting planning management at Yogyakarta elementary schools.(Borg, 1983) model was an appropriate model for carrying out this research. This model consisting of 10 steps which are simplified into four steps:

- phase of initial investigation
- phase of design
- phase of expert validation
- phase of trials

Initial investigations were done by studying the theory from a variety of sources and FGD with 10 Participants consisting of 6 expert and 4 practitioners. The purpose of the FGD is to get what is component can be used to evaluate budgeting planning management of Elementary Schools of Yogyakarta Province. The instrument design phase was conducted by developing a questionnaire. Validation Phase conducted by 2 evaluation experts or 1 measurement expert and 4 practitioners. The validation phase aims to see the validity of the contents of the developed questionnaire. Content validity affects the accuracy of data to be obtained in the field. The trial used to see the validity and reliability of component or indicators have got from studying the theory.

2.1 Population and Sample

The population in this study were all elementary schools from 5 districts in Yogyakarta Province, namely; 289 schools from Kolun Progo Regency, 280 from Bantul Regency, 431 from Gunung Kidul Regency, 379 from Sleman Regency, and 99 from Yogyakarta City. The sampling technique in this study is the Proportional Random Sampling Cluster technique, which is school sampling in each region. Sampling is based on the school from a defined area using the Krejcie & Morgan table developed from Isaac and Michael, if the population is 1,464 Elementary Schools with an error rate of 5%, the total sample is 284 Primary Schools.

2.2 Population and Sample

The instruments in this study were expert validation sheets and instrument effectiveness sheets. Instrument validation sheet is used to assess the content of the instrument being analyzed. the instrument effectiveness sheet is used to test whether the instrument is effective in gathering information. The instrument to be developed in this study is a questionnaire consisting of 8 components or indicators, namely; school programs, financing, Fund Source, Planning, Organizing, Implementation, Supervision, and Evaluation.

2.3 Analysis Data Technique

Analysis data in this development research used Content Validity uses Aiken's Validity, Construct Validity uses CFA, Cronbach's Alpha, and Construct Reliability. Aiken's Validity used to see the content quality of the instrument. CFA used to check the construct validity of the instrument has developed. Cronbach' Alpha used to analysis the reliability of items of instrument. The construct reliability used to analysis the construct reliability of each indicator or components.

3 RESULT & DISCUSSION

3.1 Content Validity

Content Validity analyzed with the help excel program based on Aiken's Formula. The assessment of experts and practitioners analyzed from the score have given through the assessment sheet. the result shows that 31 items of the instrument has a high category and middle category. 19 items with the high category and 12 items with the middle category. these results show that all items have developed by researcher have a good category and can use to get good data from the field.

3.2 Reliability of Instrument

Reliability of instrument based on all items or items total was analyzed with Cronbach's Alpha. For getting the reliability coefficient, the researcher gives the instrument to the respondent as many as 30 respondents and analyzed using Cronbach's Alpha Formula with the help SPSS software. From the analysis, the result was got the coefficient Cronbach's Alpha about 0.87. Based on this result can make a conclusion that the instrument was developed by the researcher was reliable.

3.3 Validity and Reliability of Construct

3.3.1 Confirmatory Factors Analysis (CFA)

CFA used to check so far model measurement has developed by studying theory from various sources is fit with data to have acquired from the field. Measurement model can be said fit with the data from the field if this model already fulfills criteria or standard from statistics expert or consensus of statistics expert based on statistics theory that is Goodness of Fit Index. The result of analysis CFA in this model can be seen in Table 1.

Table 1: Standard and Result of Goodness of Fit Model Budgeting Planning Management.

GOF	Standard	Result	Conclusion
Chi-Square	P >0,05	0,4421	Fit
RMSEA	RMSEA <0.08	0,000	Fit
GFI	GFI ≥ 0.90	0.96	Fit
NFI	NFI ≥ 0.90	0.95	Fit
CFI	CFI ≥ 0.90	0.96	Fit
IFI	IFI >0.80	0.96	Fit
RFI	RFI 0-1	0.91	Fit

From table 1 acquired that seven criteria of GOF show the data was fit with the measurement model was built by the researcher. From this result can be concluded that the measurement model has built from studying theory from various sources was fit with data were acquired at the field

CFA is the measurement model that shows one latent variable can be measured by one or more observed variables. CFA will see so far the observed variables or indicators were got from studying the theory are the variable builder. CFA will be helped by Lisrel Software. At this analysis, observed variables or indicators must meet established standard with loading factor at standardized>0.3 or T-value>1.96. The analysis result can be seen clearly in table 2

From Table above can be concluded that planning, organizing, implementation, supervision, evaluation,

Table 2: Summary of Measurement Model of Manifest Variables

Manifest Variables	Standardized	T–value	Decision
Planning	0,48	12,28	Significant
Organizing	0,26	8,41	Significant
Implementation	0,65	15,1	Significant
Supervision	0,51	12,86	Significant
Evaluation	0,55	13,45	Significant
School program	0,63	13,98	Significant
Financing	0,73	15,08	Significant
Fund Sources	0,43	11,41	Significant

school program, financing, and fund sources are significant so that eight indicators have found from studying the theory were indicators as variables builder of budgeting planning management variable. indicators of budgeting management variable have T-value score more 1.96 so that indicators have found from studying the theory has fulfilled the good of measurement standard.

3.3.2 Construct Reliability

Construct reliability used to the analysis level of construct reliability from various indicators from studying the theory both the references book or journals have published at various publishers. Good indicators are indicators have high construct reliability coefficient is more 0.70. this reliability was calculated with error and loading factor have found from analysis uses CFA. the summary of CFA analysis can be seen in Table 3 below.

Table 3: Construct Reliability

Observed Variables	Loading Factor	Error	CR
Planning	0,70	0,51	
Organizing	0,55	0,70	
Implementation	0,84	0,20	
Supervision	0,68	0,54	
Evaluation	0,69	0,33	0,82
School program	0,80	0,37	
Financing	0,85	0,27	
Fund Sources	0,66	0,56	
Total	*2,31*	*1,20*	

Based on Table 3, it was got construct reliability coefficient about 0.82. This value or coefficient more good standard of measurement theory that is more 0.70. from this table can make a conclusion that all of the indicators have found from studying the theory were valid and reliable based on construct so that this instrument can be used to get information or data about the school budgeting planning management.

Evaluating an education program needs an instrument valid and reliable based on content and construct. the content validity shows how far

items have developed from indicators are fulfilled or appropriate indicators definition or items represent indicators have found from studying the theory of various references sources, while construct explains how far indicators are valid and reliable which marked have good loading factor is more 0.30 (Andrian et al., 2018) Feasibility of an instrument to evaluate an education program is very important in the measurement theory. This thing shows for getting good data from field needed a good instrument. The instrument becomes the main key in getting good information or data in the field.

The instrument for evaluating the school budgeting planning management already valid and reliable in content and constructively (Wynd et al., 2003). This instrument is expected to provide convenience in evaluating the school budgeting planning management at elementary school fo Yogyakarta Province. The instrument has a good validity of content and construct can give valid information and the right conclusion (Setiawan and Mardapi,). The valid and reliable instrument will describe what happened in the education program evaluated. The valid and reliable instrument will give accurate information about weakness and strengthen of educational programs have created or designed the government or private (Wright and Craig, 2011). If an instrument was good in content and construct, it will give a good conclusion in making a policy (HADI et al., 2019).

4 CONCLUSIONS

Based on the analysis result can be made the conclusion that the instrument was developed by the researcher as many as 31 items were valid and reliable in content and construct. Analysis of Aiken's formula shows all items have assessed by experts have score or coefficient with middle and high category, while the reliability of instrument based on total items show coefficient from Cronbach's Alpha is more 0.70. Construct reliability was analyzed with CFA shows all indicators have loading factor is more 0.3 or has fulfilled the good standard of measurement theory, while construct reliability has coefficient more 0.70. The Instrument for evaluating the school budgeting planning management is feasible to get good or valid data in the field.

REFERENCES

Andrian, D., Kartowagiran, B., and Hadi, S. (2018). The instrument development to evaluate local curriculum in indonesia. *International Journal of Instruction*, 11(4):921–934.

Berggren, C. and Söderlund, J. (2008). Rethinking project management education: Social twists and knowledge co-production. *International Journal of Project Management*, 26(3):286–296.

Borg, W. (1983). Gall. m. d. *Educational research (4th ed.).* New York: Longman.

HADI, S., ANDRIAN, D., and KARTOWAGIRAN, B. (2019). Evaluation model for evaluating vocational skills programs on local content curriculum in indonesia: Impact of educational system in indonesia. *Eurasian Journal of Educational Research (EJER)*, (82).

Oplatka, I. and Arar, K. (2017). The research on educational leadership and management in the arab world since the 1990s: A systematic review. *Review of Education*, 5(3):267–307.

Pant, I. and Baroudi, B. (2008). Project management education: The human skills imperative. *International journal of project management*, 26(2):124–128.

Passailaigue, R. M. and Estrada, V. (2018). Educational management with technology support. *International Journal of Applied Engineering Research*, 13(12):10647–10650.

Sato, Y. (2012). Optimal budget planning for investment in safety measures of a chemical company. *International Journal of Production Economics*, 140(2):579–585.

Setiawan, A. and Mardapi, D. Supriyoko, & andrian, d.(2019). the development of instrument for assessing students' affective domain using self-and peer-assessment models. *International Journal of Instruction*, 12(3):425–438.

Setyaningrum, T. (2010). *The education budget commitment in the education city of Yogyakarta still hasn't reached 20 percent*. Jurnal Populasi.

Sisk, H. L. (1969). *Principles of management: A systems approach to the management process*. South-western Publishing Company.

Sun, M. (2014). 30 years of chinese educational management: achievements, characteristics and problems. *International Journal of Educational Management*, 28(3):340–348.

Wright, P. M. and Craig, M. W. (2011). Tool for assessing responsibility-based education (tare): Instrument development, content validity, and inter-rater reliability. *Measurement in Physical Education and Exercise Science*, 15(3):204–219.

Wynd, C. A., Schmidt, B., and Schaefer, M. A. (2003). Two quantitative approaches for estimating content validity. *Western Journal of Nursing Research*, 25(5):508–518.

The Legal Protection of Consumer Rights in Sale-purchase through E-Commerce

Zulfikri Toguan, Johari Nur

Faculty of Law, Universitas Islam Riau, Pekanbaru,Indonesia
zulfikripohan@law.uir.ac.id, Joharinur87@gmail.com

Keywords: Consumer Rights, E- Commerce, Legal Protection, Sale-Purchase.

Abstract: The need to provide legal protection to consumers is due to their weaker position than producers in terms of capital and knowledge in E-Commerce transactions. For this reason, the Consumer Protection Law, Electronic Information and Transactions Law, and Arbitration Law could be applied. This research analyzed the legal protection of consumer rights through E-Commerce transactions with normative juridical legal research methods, the E-Commerce Business to Consumer (B2C) transactions, and with secondary data through library materials as primary legal material and secondary legal material. The conclusions obtained are; 1) The Consumer Protection Law (UUPK) has been able to protect consumers of e-commerce transactions domestically, but has not been able to protect consumers in e-commerce transactions abroad because this Law has limited understanding of business agents and its scope, namely individuals or legal entities that are located in Indonesia. Besides, the development of e-commerce has become global. The Consumer Protection Law (UUPK) includes; The protection of consumers from business agents, consumers, products and transactions. 2) The consumer protection by Electronic Information and Transactions Law (ITE Law) has accommodated e-proofs electronically and the choice of law for parties both nationally and internationally. The international E-Commerce dispute resolution can be resolved through electronic media as a choice of law and Arbitration Law as its basis. So, the consumers can go through a lawsuit through correspondence without having to approach the court easily.

1 INTRODUCTION

Cross-border consumer transactions are the most frequent transactions conducted around the world. As a result of globalization, increased regional integration, and the internet, consumers enter into international and interstate sales contracts, services contracts, and other types of contracts on a day-to-day basis, very often without being fully aware of their contract terms. In most cases, these contracts are governed by general contract terms provided by the professional. And in many cases, these terms provide for a choice of law clause. From an economic perspective, these clauses pose serious problems. It is due to consumers know less about the applicable law and have no incentive to invest in the gathering of relevant information. Professionals, in contrast, enter into a large number of similar contracts on the same market. As a result, they have an incentive to gather information about the applicable law in order to choose the law that provides the most benefits for them and the least benefits for consumers. Since consumers are not able to distinguish between professionals who choose consumer-

friendly laws and those who do not, this may lead to a race to the bottom and a market for lemons (Rühl,).

The legal protection of consumers needs to be applied because the position of consumers is more risk than producers in E-Commerce transactions in terms of capital and knowledge. Although many studies have discussed this topic, the writer intends to enrich knowledge from a different perspective in presenting this paper, that are: 1) Describing the protection of consumer rights in Indonesia's positive law. According to Hadjon (Hadjon, 1987; Kendall and Kendall, 2001) , The Legal protection is divided into Preventive and Repressive Legal Protection.

The principle of E-Commerce sale-purchase transactions is an agreement. Thus, the provisions of the Civil Law Article 1320 apply as a principle in accordance with Article 47 of Electronic Information and Transactions Law, in which rights and obligations are regulated between consumers and producers. Consumers as users of goods / services have several rights and obligations (Nasution, 1995). Literally, consumers are everyone who uses goods and services. In the English-Indonesian dictionary, consumers are

users (Az. Nasution, 2006).

E-Commerce is a mechanism of transactions that uses electronic communication network such as internet which is used by developed countries or developing countries. The business operations can be effective and fast because the activities of transactions can no longer be limited by geographical boundaries. Kalalota and Whinson state that E Commerce is a modern business method that seeks to meet the organizational needs of traders and consumers to reduce production costs (cost products), improve the quality of goods, and improve goods delivery services (Sanusi, 2001). In E-commerce transactions, the business transactions are more practical without paper (paperless) and between sellers and buyers do not need to meet directly, so that the business can save time and money.

In addition, Purbo and Wahyudi quoted Baum's opinion (Purbo, 2000) as quoted by Badrulzaman, define that: "................. E-Commerce is a dynamic sets of technologies, applications, and business processes that link enterprises, consumers and communities through electronic transactions and electronic exchange of goods, services and information .... ".

The use of this electronic media in the business world continues to increase. The results of the survey by the Indonesian Internet Service Providers Association (2018), reports that the penetration of internet service users is about 143.26 million people from the total population of 262 million people or around 54.46 %. The people of Java still dominates the internet users with percentage at 58.08%, the people of Sumatra is at 19.09%, the people of Kalimantan is at 7.97%, the people of Sulawesi is at 6.73%, the people of Bali is at 5.63%, and the people of Maluku-Papua is at 2.49%.

In line with the increasing trend of users in sale-purchase through e-commerce, of course it needs to be regulated so that consumer rights can be protected. (Hartono et al., 2000; Reynolds, 2000) says that "Protection of consumers is seen materially and formally as being very important because of the advancement of science and technology as a driver of producer productivity for goods or services that have been produced in the context of business objectives, both directly and indirectly, so that consumers feel the impact. Thus, adequate efforts must be made towards the interests of consumers to immediately find a solution, especially in Indonesia with the complex problems that exist in facing the era of free trade".

Philipus. M. Hadjon states that legal protection is the protection of dignity, recognition of human rights owned by the legal subjects based on legal provisions of authority (Hadjon, 1987). Meanwhile, according to Setiono, legal protection is an action or effort to protect the public from arbitrary acts by the authorities that are not in accordance with the rule of law to realize order and tranquility so as to enable humans to have their dignity (Setiono, 2004). The point is to protect the public from losses from other people's actions that are against the law (onrecht matughedaad) or because of broken promises. This applies to the field of civil (business) to recover civil rights.

In accordance with this regulation on consumer protection, it has been regulated by Law No. 8 of 1999 which was ratified on April 20, 1999 Consumer Protection Law (In Indonesia is called UUPK). Moreover, the transaction through e-commerce has also been regulated in Law No. 11 of 2008 concerning Electronic Information and Transactions Law (ITE). In accommodating national and international E-Commerce disputes, it is regulated in Law No.30 of 1999 concerning arbitration. This is what needs to be studied in this research so that it can be understood what rights are protected by law, and the community knows their rights, especially the people who use e-commerce transactions.

Hence, it is very important to know how these consumer protection arrangements are regulated in positive law, especially in the Consumer Protection Law, Electronic Information and Transactions, and the Arbitration Law. Many sides need to be protected in the positive law, but there are at least three sides that need to be discussed in this study, namely; the protection of consumers from business agents, the consumers, the products and the transactions. In this paper, the writer focuses on three sides of the protection of consumer rights law in order to present a clear conclusion.

2 THE RESEARCH QUESTIONS

From the explanation above, it is clear that legal protection for consumers has been regulated separately, namely the Consumer Protection Law (UUPK), but it does not reach business transactions through e-commerce. By the adoption of the Electronic Information and Transactions Law, it gives new strength in the protection of consumer rights in e-commerce businesses. This provision is not regulated in the Indonesian Civil Code Procedure as a basis for the process of consumer protection in court. Therefore, the problems arise which will be explained in this paper. Research questions are:

- What are the rights of consumers in Consumer Protection Law, Electronic Information and Transactions Law, and Arbitration Law?

- How is the legal protection of consumer rights in sale-purchase through E-Commerce in line with Consumer Protection Law, Electronic Information and Transactions Law, and Arbitration Law?

3 RESEARCH METHODOLOGY

The method of this research is a normative juridical legal research method. According to (Soekanto, 1986; Jansen et al., 2011), ... "Normative juridical research is a study to find out how the positive law of a particular thing, event or problem ...". In this study, the writer focuses on Bussiness to Consumer (B2C) transactions, namely a sale-purchase through internet between sellers and consumers whose parties or objects of agreement are in different jurisdictions.

In this study, the writer used secondary data. It was obtained through library research. It covers primary legal materials and secondary legal material. The primary legal materials used in this study include:

- the 1945 Constitution.

- The Civil Code

- Law No. 11 of 2008 concerning Electronic Information and Transactions.

- Law Number 30 of 1999 concerning Arbitration and Alternative Dispute Resolution.

- Government Regulation Number 82 of 2012 concerning the Implementation of Electronic Transactions and Systems as well as Law No. 30 of 1999.

The secondary legal material used in this study is legal material that is supportive and provides an explanation of primary legal material, in the form of books, papers, reports or research results, scientific writings, materials or articles from the internet regarding international electronic transaction jurisdiction .

4 RESULTS AND DISCUSSIONS

4.1 The Protection of Consumers from the Side of Business Agents

In the Consumer Protection Law (UUPK) in Article 7, the obligations of business agents shall be: a. having a good intention in conducting business activities; b. providing correct, clear and honest information about the condition and guarantee of goods and/or services and providing explanation about uses,

repair and maintenance; c. treating or serving consumers correctly and honestly and indiscriminatory; d. guaranteeing the quality of the goods and/or services produced and/or traded on the basis of the prevailing standard provisions on the quality of goods and/or services; e. providing an opportunity to consumers to test and/or try certain goods and/or services and providing an assurance and/or a guarantee for the goods made and/or traded; f. giving compensation and or refund for the losses caused by the use, application and utilization of goods and/or services traded; g. giving compensation and/or refund if the goods and/or services received or utilized are not up to the agreement.

In Electronic Information and Transactions Law, Chapter 5 Article 1, it has regulated the protection of business agents and consumers who admit that electronic document/information are as legal evidences. "..........Electronic Information and / or Electronic Documents and / or the printouts there are valid legal evidence.......". It means that e-commerce transactions of sellers and buyers have been protected by this article because this legal evidence is a guideline that is made by the parties whether in normal circumstances or there is no dispute or in a dispute. The existence of these documents is very important because it regulates each of their rights and obligations. In the document, it can be seen whether achievements have been made or the event of default. If disputes arise in court or outside the court, the evidence of this letter is the initial guideline, so is the importance of acknowledging this documentary evidence in e-commerce transactions.

From the business actor's side, it is also regulated in Article 9 of the Law on the responsibility of contracts and products; Business actors that offer products through Electronic Systems must make available full and true information about contractual conditions, producers, and offered products. If the consumer wants to buy goods offered through electronics, the business actor must be clear in terms of legal subjects, as well as the source of goods such as customs and excise and need to check the existence of the goods and the specifications of the goods.

Furthermore, In Article 17 of Section 2 of Electronic Information and Transactions Law concerning the principles of responsibility for mistakes, responsibility for negligence and principles of responsibility without error. Guarantee that the private sector in running an e-commerce business, but must have good intentions in conducting its business and does not conflict with Government Regulation Number 82 of 2012 concerning the Implementation of Electronic Transactions and Systems. Whereas, if a dispute arises in

the Electronic Information and Transactions Law, it is regulated in article 38 and article 39; any Person may institute actions to provide Electronic Systems and / or detriment, the society may use class information systems and / or use Information Technology to the society loss, in accordance with Rules, the Civil actions shall be instituted in accordance with the provisions of Rules, Then may resolve through arbitration or other alternative dispute resolution institutions in accordance with provisions of Rules.

4.2 The Protection of Consumers from the Side of Consumers

In the Consumer Protection Law (UUPK) No. 8 of 1999 concerning consumer rights that must be protected has been regulated in article 4, that are: the right to comfort, security and safety in using goods and / or services; The importance of the right to comfort, security and safety in using goods and / or services for consumers must be realized because satisfaction is the customer's response to the fulfillment of their needs. It means a form of privilege of an item or service or service itself, providing a level of comfort associated with meeting a need, including meeting needs under expectations or meeting expectations or meeting needs exceeding customer expectations (Oliver Richard, 1997; Nemzow, 1999). This convenience also becomes the basis for consumers to decide to buy or cancel goods that are traded, ... a convenience for consumers is also a dimension of convenience of decisions on consumer perceptions of time, cost, and effort for service purchase or use decisions (Berry et al. , in Fandy Tjiptono, 2004).

Consumers are free to choose goods and / or services and obtain goods and / services that are in accordance with the exchange rate and the requirements and guaranteed guarantees, must find correct, clear and honest information about the requirements and guarantees of goods and / services. They also need to know the responsible party for the goods sold to express their opinions and complaints about the goods and / services used. Consumers must understand whether there is advocacy of protection and protection given to customers, consumers must obtain guidance and consumer education, consumers must feel information that is true and honest and not discriminatory, consumers must get compensation, compensation and / or replacement, change goods and / or services received not by agreement or not in accordance with the actual agreement.

Consumers are free to choose goods and / or services and obtain goods and / services that are in accordance with the exchange rate and the requirements

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4.3 The Protection of Consumers from the Side of Products and Transactions

Basically, The Electronic Transaction is a contract model that is the same as a conventional sale-purchase contract carried out by the community in general. A conventional sale - purchase which is carried out by the community is currently carried out based on the provisions stipulated in the Civil Code. Therefore, it is not much different from the conventional sale-purchase agreement so that the general principles in the agreement such as the principle of freedom of contract, the principle of consensualism, the principle of pacta sunt servanda, and also the principle of good faith also apply in Electronic Transactions.

The difference is not meeting directly between the buyers and sellers. The meeting is only through electronic media, and goods sold are only in the form of images so that consumers experience more risks, such as the risk of goods not being sent after the money is transferred, consumer identity will be misused, goods received do not match the wishes of consumers and so on. So we need to know how to regulate the Consumer Protection Law for this e-commerce transaction.

The weakness of UUPK has been accommodated in Law No. 11 of 2008 concerning Electronic Information and Transactions Law Article 18 paragraph (2) states that the Electronic Information and Transactions they enter, but the Electronic Information and Transactions Law does not regulate standard clauses as stipulated in the UUPK, so that consumers must submit to the rules made by business actors.

Article 15 of the Electronic Information and Transactions states that information systems and electronic transactions must be carried out safely, reliably and operate properly. The implementation of an electronic system must be responsible for the system be-

ing held. To the extent that it is not determined by a separate law, every implementation of an electronic system must operate an electronic system in a minimum, which must be carried out by an electronic system operator.

Every person who breaks the provisions is responsible for any losses and legal consequences that arise. This means that each person is responsible for all losses incurred due to violations committed against providing security for the electronic signature. Although this e-commerce transaction is the culprit of the business world, the government must also provide supervision.

The Electronic Information and Transactions Law also requires business actors to provide complete information on the products they offer in accordance with Article 49; Business actors offering products through the Electronic System must provide complete and correct information relating to contract terms, producers and products offered. He / She is obliged to provide clear information about the contract or advertisement offer. The deadline for consumers to return goods sent if it is not in accordance with the agreement or there are hidden defects, convey information about the goods that have been sent, cannot burden consumers about the obligation to pay for goods sent without a contract basis, when the parties reach an agreement.

The agreement occurs when the transaction offer sent by the sender has been received and approved by the recipient, and can be done by: a. Act of acceptance of approval; or b. Acts of acceptance of and / or use of objects by Electronic System Users. In conducting Electronic Transactions, the parties must guarantee: a. Providing correct data and information; and b. availability of facilities and services and settlement of complaints. In the implementation of e-commerce Transactions, the parties are obliged to make a legal choice in proportion to the implementation of the Transaction.

One of the legal options is to apply Arbitration Law, No. 30 of 1999 concerning Arbitration and Alternative Dispute Resolution (Arbitration Law), that e-commerce activities are entirely online, and the resolution of the dispute is conducted online considering that the parties are located in different countries. If dispute resolution is done by meeting physically, it will take a lot of time and costs.

The Arbitration Act provides the possibility of online dispute resolution using e-mail. It is stated in the provisions of Article 4 paragraph (3) of Law No. 30 of 1999 that "The agreement for resolution of disputes by arbitration is contained in an exchange of correspondence, including letters, telexes, telegrams, faxes, e-mails, or any other form of communication, the same shall be accompanied by a record of receipt of such correspondence by the parties".

5 CONCLUSIONS

From the result and discussion above, it can be concluded that:

- The Consumer Protection Law (UUPK) has been able to protect consumers of e-commerce transactions domestically, but has not been able to protect consumers in e-commerce transactions abroad because this Law has limited understanding of business agents and its scope, namely individuals or legal entities that are located in Indonesia. Besides, the development of e-commerce has become global. The Consumer Protection Law (UUPK) includes; The protection of consumers from business agents, consumers, products and transactions.

- The consumer protection by Electronic Information and Transactions Law (ITE Law) has accommodated e-proofs electronically and the choice of law for parties both nationally and internationally. The international E-Commerce dispute resolution can be resolved through electronic media as a choice of law and Arbitration Law as its basis. So, the consumers can go through a lawsuit through correspondence without having to approach the court easily.

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REFERENCES

Hadjon, P. M. (1987). *Perlindungan hukum bagi rakyat di Indonesia: sebuah studi tentang prinsip-prinsipnya, penanganannya oleh pengadilan dalam lingkungan peradilan umum dan pembentukan peradilan administrasi negara*. Bina ilmu.

Hartono, S. R., Syawali, H., and Imaniyati, N. S. (2000). *Kapita Selekta Hukum Ekonomi*. Mandar Maju.

Jansen, B. J., Sobel, K., and Cook, G. (2011). Classifying ecommerce information sharing behaviour by youths on social networking sites. *Journal of Information Science*, 37(2):120–136.

Kendall, J. E. and Kendall, K. E. (2001). A paradoxically peaceful coexistence between commerce and ecommerce. *Journal of Information Technology Theory and Application (JITTA)*, 3(4):3.

Nemzow, M. (1999). Ecommerce stickiness for customer retention. *Journal of Internet Banking and Commerce*, 4(1):9908–03.

Oliver Richard, L. (1997). Satisfaction: A behavioral perspective on the consumer. *New York NY: Irwin-McGraw-Hill*.

Reynolds, J. (2000). ecommerce: a critical review. *International Journal of Retail & Distribution Management*, 28(10):417–444.

Rühl, G. Consumer protection in choice of law'(2011). *Cornell International Law Journal*, 44:569.

Sanusi, M. A. (2001). *E-commerce: hukum dan solusinya*. Mizan Grafika Sarana.

Soekanto, S. (1986). Pengantar penelitian hukum, universitas indonesia.

Students' Understanding of the Equal Sign: A Case in Suburban School

Reni Wahyuni[1], Tatang Herman[2]

[1]*Department of Mathematics Education, Universitas Islam Riau, Pekanbaru, Indonesia*
[2]*Department of Mathematics Education, Universitas Pendidikan Indonesia, Bandung, Indonesia*
reniwahyunifkipmat@edu.uir.ac.id,tatangherman@upi.edu

Abstract: Mathematics has an essential role in education and to get employment opportunities then algebraic topics are one of the fundamental topics of efforts to reform mathematics education. Understanding algebra is related to understanding the basic concepts of equality. There are not many students understand the meaning of the equal sign. Therefore, this article is aimed to examine students' understanding of the meaning of the equal sign in solving an equation. Knowing the students' understanding deeply, we used this research by choosing the qualitative method. The research carried out the 22 students, the second-semester secondary school, who have learned the material of algebraic form and its operations, the seventh grade of SMP in Pekanbaru, Riau. The data provided in this study shows that many students do not have a sophisticated understanding of the meaning of the equal sign. Most students understand the equal sign as a result of a problem, such as solving a problem likely a count from the left side to the right side. The view of the students' misunderstanding about the equal sign causes that the students perceive the meaning of the equal sign as the result of operations, not a symbol of mathematical equality.

1 INTRODUCTION

In recent years, many mathematics education communities have been interested in investigating students' difficulties in learning algebra (Gutiérrez et al., 2016). Algebra is a fundamental concept for understanding high and advanced school mathematics either for their daily lives or for employment.

Much research has done in investigating students' difficulties in learning algebra, especially for middle school students, but algebra problems still provide exciting opportunities to be examined in many aspects. Lately, the theme of early algebraic thinking has become an interesting one. This theme indicates that learning algebra, not only for students in middle school but also students, in primary school, can learn.

Research in early algebra began with the movement research of Carraher and Schliemann about how young students were able to start learning algebra in elementary school (Carraher, 2007; Kieran et al., 2018). Algebra in middle school usually has been a difficult subject for the students. The transition from arithmetic to algebraic thinking give the difficulties problem to the students. From the research Carraher and Schliemann, they showed that the young students could learn algebra earlier. The

students are given a problem in their learning topic, like numbers, then they could solve the problem algebraically. However, their idea research gave difference against doing the concept of a traditional curriculum in which states that algebra can be learned if students already have sufficient knowledge in arithmetic. The students, in elementary school, learn about numbers and operations, but, in secondary school, they will learn about algebra (Van Amerom, 2003; Chimoni et al., 2018). If the students who are already proficient in mathematics, it will easy to learn algebra, but the fact that occurs, the student's prior experience in arithmetic is not enough to help students learn algebra, even make students afraid of learning algebra.

There are two ideas for algebra, the basic concept for developing algebraic reasoning, that is variable and equality (Knuth et al., 2005; Ertekin, 2017). In this article, we focus on the discussion of the concept of equality. Equality is an essential concept for algebra achievement (Van Amerom, 2003; Chimoni et al., 2018). In elementary school, the students have learned about equality. They learn about finding the value of an unknown number. Then in the next level, the student will learn how to connect the two mathematical expressions that have the same value.

The symbol that became a necessary concept is the equal sign. Most of the student has the complicated meaning of the equal sign. They generally perceive that the equal sign as a result of arithmetical operation rather than mathematical equality (Kieran, 1981; Stephens et al., 2013; Vermeulen and Meyer, 2017). The famous research founded by Falkner, Levi, and (Falkner et al., 1999) showed that most of the students perceive the meaning of the equal sign as an operational symbol, calculating the number from left side to right side. Most of the students do not recognize the meaning of the equal sign as a relational symbol.

The usage of the equal sign in mathematics has four primary categories, such as an answer of the operation, quantities equality, an expression that is right for all value of the variable, and an expression that express the new variable (Warren, 2006; Ertekin, 2017; Vermeulen and Meyer, 2017).

In Indonesia, the research on the meaning equal sign does not take in much discussion in the area of middle school. Whereas the understanding of the equal sign is an essential concept in algebra learning, it is necessary to advance mathematical concepts. Indonesia Curriculum does not mention explicitly about the meaning of the equal sign. Though the meaning the equal sign is the basic concept for the learning mathematics. In this paper, we drew the students' understanding of the equal sign with examine their worksheet and thinking by interview. However, the students have learned algebra topics, their thinking of the meaning the equal sign describe how they were understanding of the equal sign.

2 RESEARCH METHOD

This research used a qualitative methodology and descriptive analysis, based on the participant observation, interview, and worksheet (Creswell and Creswell, 2017).The task was about algebra domain, and the participants have already learned in the first semester in grade seven. The participant was from a private middle school in Pekanbaru. The school has a well-resourced in the suburban area of Pekanbaru City. Its teacher is a very enthusiastic person and proper motivation. The position of the researcher in this research was observer and researcher directly while the research was doing. Because this research was a qualitative approach, the researcher was a dominant aspect to control the process of the research, and teacher became a partner and together decided on examining the work of students and selecting students to be interviewed. This study took part in

22 students (aged 13 to 14). In general, the students have a different academic, and their daily life was surrounding in that school.

Data for this research was taken from students' answer sheet, such as the written document that the students' produces, and the audio record while interviewing the participants. The participants were given the essay test; then, they wrote the answer in the blank paper as a document for the researcher. After they finished the answer, the researcher examined the answer sheet and discussed with the teacher how the result of the students' worksheet. We chose three participants who solve the problem correctly and three participants who solve the problem incorrectly. The participants also were students who were able to communicate when the researcher conducted interviews and evaluated students' understanding in solving problems.

The data were analyzed by description for the document answer sheet. We collected all document and the code based on the student answer and what their understanding of the equal sign while solving the equation. The audio record, the result of the students' interviewing, were analyzed in transcripts, and we chose what students' the misunderstanding and the thinking of the equal sign.

3 RESULTS AND DISCUSSION

As it already mentions the concept of the equal sign, that is, the equality shows two mathematical expressions that have the same value. In the first question in this study, we present simple equations that are similar assignments in the students' elementary school. The task is the following "Find the value of this number sentence $30 = \Delta + 20$". Most of the students solve the problem by subtraction operation. The students claim that the first time while seeing this problem as strange. The students are seldom solving this problem. They say that they usually solve the problem like $\Delta + 20 = 30$. So, it is a simple problem to solve.

However, it is a strange form for themselves; they can solve and find a solution. There are 19 students get the correct answer of the 22 seventh grade students in this class. Three students have an incorrect answer in seeing the symbol triangle. The mistake of the students is when they move the triangle symbols from the right side to the left side then do the addition $30 + 20 = 50$.

The correct students find the solution by using subtraction operation as $30 - 20 = \Delta$". However, initial their thinking is confused; they move the

triangle from the right side to the left side. It emerges that in their thinking, the symbol should put it on the left side. The student is usual in solving the equation by counting from the left side to the right side. The student's answer sheet was categorized as operational level in which the student's ides that do the operation number like addition or subtraction (Knuth et al., 2008), when the students are asked the meaning of the equal sign in that problem, student answer that it is as a sign the answer to the problem. The researcher has indicated that the operational interpretation of the students; it is mostly from their experience influences in prior knowledge in elementary school.

The usage of the equal sign is in this case as an answer to the operation. The students are solving the problem in this case for one unknown number. The students think that it is a simple problem and more accessible to solve it. Most research shows that the students are not troubled while solving equation $3 + 4 = ?$ but trouble in solving in $8 = 4 + ...$ research found that proportion students to understanding the function of the equal sign as relational only 37% of the students at the same time just 48% of the students know the equal sign as an operational (Asquith et al., 2007).

As a result of this case, the students link their thinking about the equal sign with the operational aspect in arithmetic. The students perform the equal sign as a symbol to get a final answer from their calculation.

Another case that the student says while interviewing. The student is confused while moving the symbol and number from the left side to the right side, and vice versa. If the positive numbers move from the left side to the right side, the positive numbers will become the negative numbers. They put the triangle on the left side, but they do not give the negative sign in the triangle symbol. They do the addition of number $\Delta = 30 + 20$. It is incorrect one in this task. The inaccuracy of the students is one of which causes the wrong answer.

While interviewing happening, another student tries to solve the other problem. We find the unusual case of his answer sheet and try to investigate what he did. That is his handwriting.

Figure 1: The student put the equal sign as a result.

In figure 1 show that the student put the equal signs as a result of $16 + 1$. He does not think that the meaning of the equal sign is the equivalence of two mathematical expressions. In this case, the expression of 8×2 and $16 + 1$.

They think the equal sign is the result of what they are doing and finishing the problem. When we are expanding the students writing, that is $8 \times 2 = 16 + 1 = 17$, of course, it became the wrong expression. This way is that most of the students write while solving the problem. The impact of these mistakes that these students always make will give forthcoming aspects in understanding the meaning of the equal sign (Vermeulen and Meyer, 2017).

Next, we look at the third equation that it is given to the students. The task is, how do we solve this statement to be true? This is the number sentence problem $\Diamond + 4 = \nabla + 1$. This problem is two mathematical expressions that have two unknown numbers. The student should find the two unknown numbers, then the sum of the numbers should equal between in the left side and the right side.

The student answer sheet seems to contradict from the researcher thinking. He gives a unique answer from that equation. He put five on the left side and two on the right side. Firstly when we examine the answer sheet, we do not understand the meaning of this answer. After that, we interview the student for knowing this reason.

Figure 2: The Student is misunderstanding while solving equality task.

From figure 2, we directly say that it is a wrong statement. We will not think why the student chooses those numbers. In interviews, the student shows the reason that he writes in solving this equation. The transcript between researcher and students will be shown in this following (R is a researcher, and S is a student) :

R: Is 5 + 4 the same as 2 + 1?.

S: No.

R: Why do you put 5 and 2 in that the geometric form?

S: Because? (silence and scratch the paper)

S: I think that 5 add 1 equal to 6 and 4 add 2 equals to 6. So, the answer is 5 and 2.

R: Ok, let us see the question again!

S: (See the problem and try to change the answer).

R: Why do you change this position?

S: Because 5 + 1 = 6 and 2 + 4 = 6.

R: Are you sure? Can you explain it?

S: Hmm, I think this a correct one (he point his script)

R: What do you think about the equal sign?

S: The equal sign stands for the result.

R: Can you explain it?

S: Yach, it is adding 5 + 1 = 6 dan 2 + 4 = 6. So, the left side and the right equal to 6

R: Is there other meaning that you know about the equal sign?

S: No.

This student sees the equal sign as the result of the operation of the number. Nevertheless, in his answer sheet, initially, he does not make aware of the equal sign between two mathematical expressions. He does the calculation to find the value; then he decides that the task is a true statement.

From the results of this research, Many students view the equal sign as an operational symbol and the result of the calculation of numbers (Stephens et al., 2013) They fail to see the equal signs as the symbols of the equivalence between the left side or the right side (Kieran, 1990; Knuth et al., 2008). The other student thinks that there is no relation between the two statements either in left or right. The students cannot be able to explain why this number sentence is correct or not, and why they do the calculation by adding between two number.

Concerning the correct answer of the students, they are correctly in solving the equation, but they are not correct the meaning of the equal sign (Knuth et al., 2008). Most students did not seem to understand the usage of the equal sign. The concept of the equal sign is necessary to lead the student in learning algebra either in middle school or the advance school. The problem seems the simple equation, but it has a goal to find the students' understanding. The students are easier to find the one unknown number, but it is challenging to find more unknown numbers (Falkner et al., 1999; Warren, 2003; Ertekin, 2017).The limited experience of the student in solving the problem makes this task to be a difficulty. For a reason, the students should typically use the meaning of the equal sign in various mathematical problems.

The next research of this topic, the researcher thinks about the students in the city area. The question for the researcher is, "Is there the same problem for the city school in Riau province?". It will become the next research for us to know the problem in Pekanbaru city. The larger target for the research could help to find more problem.

4 CONCLUSIONS

Based on the discussion that students show in their responses while solving the problem, indicate that the student has learned and see the equal sign that is a result activity from a statement in left to right. Most of the student does not see the relation between two statements in the right and left. In this research, we cannot conclude that the students in the suburban cannot understand the equality domain. In this aspect, it is just looking at the view of how the understanding of student while solving the equation.

As we reflect that in our background in this paper, this is the notion of equality and the equal sign in the middle classroom, and we should continue the other aspect what the student interest and excited while solving the task and bring in-depth discussion. The students understanding the equal sign should be developed as they learn about numbers and operations. This understanding will give the student the reflection about the equation and will lead them to learn learning algebra in the next grade.

REFERENCES

Asquith, P., Stephens, A. C., Knuth, E. J., and Alibali, M. W. (2007). Middle school mathematics teachers' knowledge of students' understanding of core algebraic concepts: Equal sign and variable. *Mathematical Thinking and Learning*, 9(3):249–272.

Carraher, D. W. (2007). Early algebra and algebraic reasoning. *Second handbook of research on mathematics teaching and learning*, pages 669–705.

Chimoni, M., Pitta-Pantazi, D., and Christou, C. (2018). Examining early algebraic thinking: insights from empirical data. *Educational Studies in Mathematics*, 98(1):57–76.

Creswell, J. W. and Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.

Ertekin, E. (2017). Predicting eight grade students' equation solving performances via concepts of variable and equality. *Online Submission*, 8(21):74–80.

Falkner, K. P., Levi, L., and Carpenter, T. P. (1999). Children's understanding of equality: A foundation for algebra. *Teaching children mathematics*, 6(4):232.

Gutiérrez, Á., Leder, G. C., and Boero, P. (2016). *The second handbook of research on the psychology of mathematics education: The journey continues*. Springer.

Kieran, C. (1981). Concepts associated with the equality symbol. *Educational studies in Mathematics*, 12(3):317–326.

Kieran, C. (1990). Cognitive processes involved in learning school algebra.

Kieran, C., Kieran, C., and Ohmer (2018). *Teaching and Learning Algebraic Thinking with 5-to 12-Year-Olds*. Springer.

Knuth, E. J., Alibali, M. W., Hattikudur, S., McNeil, N. M., and Stephens, A. C. (2008). The importance of equal sign understanding in the middle grades. *Mathematics teaching in the Middle School*, 13(9):514.

Knuth, E. J., Alibali, M. W., McNeil, N. M., Weinberg, A., and Stephens, A. C. (2005). Middle school students' understanding of core algebraic concepts: Equivalence & variable. *Zentralblatt für Didaktik der Mathematik*, 37(1):68–76.

Stephens, A. C., Knuth, E. J., Blanton, M. L., Isler, I., Gardiner, A. M., and Marum, T. (2013). Equation structure and the meaning of the equal sign: The impact of task selection in eliciting elementary students' understandings. *The Journal of Mathematical Behavior*, 32(2):173–182.

Van Amerom, B. A. (2003). Focusing on informal strategies when linking arithmetic to early algebra. *Educational Studies in Mathematics*, 54(1):63–75.

Vermeulen, C. and Meyer, B. (2017). The equal sign: teachers' knowledge and students' misconceptions. *African Journal of Research in Mathematics, Science and Technology Education*, 21(2):136–147.

Warren, E. (2003). The role of arithmetic structure in the transition from arithmetic to algebra. *Mathematics Education Research Journal*, 15(2):122–137.

Warren, E. (2006). Comparative mathematical language in the elementary school: A longitudinal study. *Educational Studies in Mathematics*, 62(2):169–189.

The Enhancement of Junior High School Students Self-efficacy through Problem Based Learning

Fitriana Yolanda

Department of Mathematic Education, Universitas Islam Riau, Pekanbaru, Indonesia
fitrianayolanda@edu.uir.ac.id

Keywords: Enhancement, Student Self-Efficacy, Problem Based Learning

Abstract: This study aims to examine enhancement of students self-efficacy who get learning with problem based learning and scientific approach. The design used in this study is the design of non-equivalent control groups. The population in this study were all of eighth grade students of one of the junior high schools in Bandung. Determination of the sample was done by purposive sampling. Technique of collecting data using a self-efficacy questionnaire. Data analysis techniques used the Mann-Whitney test. The results showed that the average value of the problem based learning class was 64.16 while the average value of the learning class students with the scientific approach was 51.06. Based on the Mann-Whitney test results obtained a value of significance value of 0,000 smaller than $\alpha = 0.05$. The conclusions from the study show that the self-efficacy of students who get problem-based learning is better than students who get learning with the scientific approach.

1 INTRODUCTION

In life, self-efficacy is a very important thing that humans have. self-efficacy encourages someone to discuss about who can solve someone who corrects and is successful. From that experience, he will be able to express his confidence. Etymologically, self-efficacy consists of two words namely "self" which is interpreted as not a belief structure (Alwisol, 2010), and "efficacy" related to oneself, can be used to perform tasks that can be done well, right or wrong, can or can not do something that is in accordance with the prepared (Alwisol, 2010).

Self-efficacy theory is based on Bandura's social-cognitive theory which postulates that one's achievement or performance depends on the interaction between behavior, personal factors (for example: thoughts, beliefs) and one's environmental conditions (Sudrajat, 2008). From the various opinions of experts, self-efficacy in practice is synonymous with " self-efficacy ". Self-efficacy has influence in election, big effort and perseverance, as well as patterns of thinking and emotional reactions. Self-efficacy assessment encourages individuals who avoid challenges that exceed their abilities or carry out activities that are expected to overcome them. In solving difficult problems, individuals who have doubts about their abilities will reduce their difficulties to let go.

Self-efficacy can improve students' mathematical abilities through an effort to build one's self-efficacy to achieve success in problems solving in life. self-efficacy is an ability that must be possessed by students, it is in accordance with the general goal of mathematics, namely having an attitude of appreciating the usefulness of mathematics in life, namely having curiosity, attention and interest in learning mathematics, and being resilient and confident in problem solving.

According to (Hendriana et al., 2017) so that the ability of students to develop properly, several factors need to be considered by teachers, namely

- by providing relevant feedback.
- explaining the importance of objectives.
- giving examples (examples) which can be used as a guide for students to behave

Therefore, self-efficacy must be developed within students so that they can interpret mathematical processes and learning in real life, so that the learning process occurs optimally, and can connect the knowledge they have with the surrounding environment.

Some studies conclude that student self-efficacy is positively correlated with student motivation, performance and achievement. Among them is the research conducted by (Ilhamsyah, 2014) which states the positive influence between self-efficacy

and student mathematics learning achievement. If the student's self-efficacy is higher then the learning achievement achieved is higher and vice versa. Successfully considering individuals who have higher self-efficacy consider it to be a failure, while individuals who have low self-efficacy consider better than ability.

The statements that are not much better are delivered by (Hamdi and Abadi, 2014) on PGSD STKIP-H students and PGMI IAIH, which states that there is an influence between self-efficacy and student learning achievement. Self-efficacy refers to the individual's belief that he is able to do certain tasks, or the belief can do something in certain situations successfully. Thus it can be seen that self-efficacy is not the same as expectation of results (outcome expectation), outcome expectation is a consideration of the possible consequences that will result from behavior (Bandura, 1993), but self-efficacy is the expectation of excellence or self-mastery (personal mastery expectation).

Based on preliminary studies conducted by authors on students of Senior high school Negeri 15 Bandung, information was obtained that many students had low self-efficacy. This can be seen from the attitude of students who are easily hesitant and unsure of their own abilities when given difficult questions and require problem solving concepts. Students look confused and do not have the confidence to resolve the problems given. Furthermore, weak students even give up immediately when given a problem that requires a high level of resolution. As a result students are not successful in learning the material provided by the teacher.

This is in line with the opinion of (Bandura, 1997) which states that individuals who have low self-efficacy will tend to stay away from difficult tasks because the task is seen as a threat to them. They are also slow in fixing or regaining their self-efficacy when facing failure. While individuals who have high self-efficacy tend to do a certain task, even though these tasks are a difficult task. They do not view duty as a threat that they must avoid. In addition, they develop intrinsic interests and deep interest in an activity, develop goals, and are committed to achieving these goals. They also increase their efforts in preventing failures that may arise. From some of the opinions of the experts above it can be concluded that student self-efficacy is still not as expected. To overcome this, one of the lessons needed to improve student self-efficacy is problem-based learning.

Problem-based learning is one of learning based on constructivism learning theory, which is oriented towards student centered learning. Problem-based learning according to (Fogarty, 1997) provides opportunities for students to understand concepts or subject matter to reveal problems first with the initial knowledge they already have, both formal and informal. In problem-based learning students are required to find problems first, state problems, gather facts, build questions, submit hypotheses, re-examine problems in other ways. Build alternative solutions and propose solutions.

In problem-based learning the teacher does not present mathematical concepts in ready-made forms, but by exposing students to a problem in which there are facts, situations, circumstances that can potentially lead to cognitive conflict in students. Through the help of friends and teachers, it is expected that students can rearrange and find the correct concept of the problem given. Assistance given by the teacher does not mean having to answer student questions directly, but can ask questions by using questioning techniques and directing students to find the right concepts. With all the knowledge and abilities they have, students are required to solve problems that are rich in mathematical concepts. Furthermore according to (Rusman, 2011) open learning spaces, using democratic processes, and centering on student activity are some of the learning environment factors that must be prepared in problem-based learning.

In the learning process, in the step of student orientation to the problem, the teacher motivates students to be involved in solving the problem provided so that students require high self-efficacy. Student's self-efficacy will be created in the first stage in problem-based learning syntax because with high self-efficacy students are able to solve mathematical problems. Based on these explanations, it can be concluded that problem-based learning can provide challenges to students in order to find solutions to solving mathematical problems and motivate students to be more active in learning and create a spirit of student self-efficacy.

The advantages of problem-based learning according to (Ibrahim and Nur, 2000) are :

- student retention of what is learned longer and stronger
- well integrated knowledge.
- develop long-term learning skills, namely how to research, communicate in groups, and how to deal with problems.
- increasing motivation, interest in the field of study, and learning independence.
- increasing the interaction of students and student teachers.

Based on the description above, the researcher is interested in examining whether problem-based learning can improve students' self-efficacy in mathematics learning. So this study the author entitled "the enhancement of junior high school students self-efficacy through problem based learning".

2 RESEARCH METHOD

This research is a Quasi Experimental study consisting of two research groups, namely the experimental class is a group of students who do problem-based learning and the control class is a group of students who conduct learning with a scientific approach. The design used is the design of non-equivalent control groups (Ruseffendi, 2006). This research was conducted in class VIII at one of the junior high school in Bandung, odd semester of the 2014/2015 school year. Samples are determined by purposive sampling, namely sampling techniques based on certain considerations (Sugiyono, 2013), namely classes that have equivalent academic characteristics and abilities. The purpose of sampling is like this so that research can be carried out effectively and efficiently, especially in terms of supervision, the condition of the research subjects, the time of the study set, the conditions of the research site and licensing procedures. Based on the consideration of the teacher of the mathematics class VIII local junior high school, two classes were chosen as the research sample, namely class VIII.C as the experimental class and class VIII.F as the control class.

Data relating to student self-efficacy were collected through self-efficacy questionnaires. The self-efficacy scale in this study is arranged in the form of a Likert scale. The self-efficacy scale consists of 18 items given to students after learning, both in the experimental class that have problem-based learning as well as in the control class that has learning through the scientific approach. Furthermore, to answer the hypothesis "whether the self-efficacy of students who obtain problem-based learning is significantly better than students who obtain learning with a scientific approach" then a nonparametric test is performed, namely the Mann-Whitney test. The self-efficacy questionnaire data processing of students uses the help of SPSS version 21 software for Windows.

3 RESULT DISCUSSION

3.1 Result

3.1.1 Self-efficacy Analysis

Student self-efficacy data were obtained from the provision of scale questionnaires composed of 18 statements consisting of 12 positive statements and 6 negative statements. Self-Efficacy of students was measured using a Likert self-efficacy scale in the form of a questionnaire given to students after obtaining learning treatment in both classes. The results of scale data processing of self-efficacy of students in problem-based learning class and learning class with scientific approach can be seen in the table below:

Table 1: Descriptive Obtaining Self-Efficacy Score of Students on Problem-Based Learning Classes and Learning with Scientific Approach.

	N	Min	Max	Mean	Sd
Efficacy experiment	37	48	75	64,16	7,034
Efficacy control	37	32	64	51,06	8,446
Valid N	37				

The table above shows that the difference in the acquisition of students' self-efficacy scores in the problem-based learning class and the learning class with the scientific approach. Problem based learning class with an average of 64.16 while the learning class with a scientific approach 51.06. Based on this, it can be concluded that the average difference between the acquisition of students' self-efficacy scores in the problem-based learning class and the learning class with the scientific approach is 13.1. The maximum value in the problem-based learning class is 75 and the minimum value is 48. As for the learning class with a scientific approach the maximum value is 64 and the minimum value is 32. Also based on obtaining the standard deviation between problem-based learning classes which is 7.034 and the learning class 8.466 means that the variance of class data distribution that applies problem-based learning and classes that apply learning with the scientific approach has different distribution variances. Furthermore, to reinforce the conclusions of descriptive statistics, nonparametric tests were carried out, namely the Mann-Whitney test to show that the self-efficacy of students in problem-based learning classes was better than students' self-efficacy in the learning class with the scientific approach.

3.1.2 The Difference of the Average Self-efficacy of Students

The test of the difference in mean self-efficacy of students was done to show the effect of learning treatment carried out by both classes on students' self-efficacy through nonparametric tests namely Mann-Whitney. The research hypothesis proposed is:

Hypothesis : "Self-efficacy of students who get problem-based learning is significantly better than students who get learning with a scientific approach".

With the testing criteria as follows:

H_0 The average self-efficacy score of students who get problem-based learning is the same as the average score of self-efficacy students get learning with the scientific approach.

H_1 The average score of self-efficacy of students who get problem-based learning is significantly better than the average score of self-efficacy of students who get learning with the scientific approach.

Table 2: The Mean Difference Test Results in Obtaining Self-Efficacy Score of Students in Problem-Based Learning Class and Learning Class with Scientific Approach

	Self-Efficacy
Mann-Whitney U	160,000
Wilcoxon W	863,000
Z	-5,671
Asymp. Sig (2-tailed)	,000

Based on the table above, it can be seen that the value of Sig. (2-tailed) is 0,000. Because the hypothesis test is used one-sided (1-tailed), the significance value is 0,000 $< \alpha$. So it can be concluded that **H_0** is rejected, meaning that the self-efficacy of students who get problem-based learning is significantly better than students who get learning with the scientific approach.

3.2 Discussion of Research Result

A person's self-efficacy greatly determines how much effort is spent and how strongly the individual survives in the face of obstacles and painful experiences. The stronger the perception of one's self-efficacy the more active and diligent his efforts. Individuals who have high self-efficacy tend to do a certain task, even though these tasks are a difficult task. They do not view duty as a threat that they must avoid. In addition, they develop an intrinsic interest and a deep interest in an activity, develop goals, and are committed to achieving those goals. They also increase their efforts in preventing failures that may

arise. This is also in line with the opinion of (Yolanda, 2019) which states that individuals who individuals who are persistent in carrying out developmental tasks as an individual with good things are individuals who have positive self-efficacy.

While individuals who have low self-efficacy will tend to stay away from difficult tasks because the task is seen as a threat to them. They are also slow to fix or regain their self-efficacy when facing failure (Bandura, 1997). The measurement of self-efficacy in this study focused on four characteristics adapted from (Hendriana, 2009), namely:

- believing in one's own abilities, namely a belief in oneself against all phenomena that occur that are related to the individual's ability to evaluate and overcome phenomena happened that

- acting independently in making decisions, which can act in making decisions about what is done independently without involving many others. In addition, it has the ability to believe in the actions taken

- have a positive self-concept, namely the existence of a good judgment from within themselves, both from the views and actions taken so as to create a positive sense of self

- dare to express opinions, namely the existence of an attitude to be able to express something in themselves that wants to be revealed to others without any coercion or things that can hinder the disclosure of these feelings.

The results of the study showed that the self-efficacy of students who obtained problem-based learning was better than students who obtained learning with the scientific approach. Based on descriptive self-efficacy statistical tests in both classes, for problem-based learning classes with many students 37 people obtained maximum scores of self-efficacy questionnaires by 75, a minimum score of 48 and an average of 64.16 with a standard deviation of 7.034. As for the learning class with a scientific approach with 37 students the maximum score of self-efficacy was 64 and the minimum score was 32 with an average of 51.06 and a standard deviation of 8.44. Based on the explanation above, it can be described in polygon form as follows:

The results of the above data are also proven by testing the difference in the average of the two classes. The average difference test results show a (Hendriana, 2009) significance value of 0,000 smaller than α = 0.05. Thus it can be concluded that **H_0** is rejected, meaning that the self-efficacy of students who get problem-based learning is better than students who get learning with the scientific
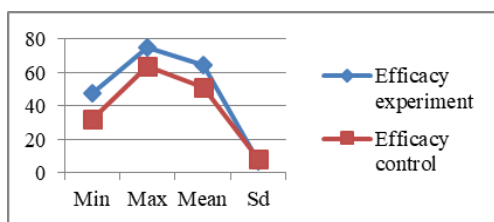
Figure 1: Descriptive statistics polygon.

approach. The results of this study are in line with the research conducted by (Hendriana, 2009) which suggests that the self-efficacy of groups of students who have learned metaphorical thinking is better than the self-efficacy of groups of students who obtain conventional learning. Furthermore, it is emphasized by research conducted by (Risnanosanti, 2010) which says that the self-efficacy of students who take inquiry learning is better than the self-efficacy of students who obtain normal learning.

4 CONCLUSIONS

Based on the research and discussion mentioned above, the average value of the problem-based learning class is 64.16 while the average value of the learning class with the scientific approach is 51.06. The standard deviation of the problem based learning class is 7,034 and the learning class with the scientific approach is 8,466. This means that the variance of class data distribution that applies problem-based learning and classes that apply learning with the scientific approach has different distribution variances. Furthermore, based on the Mann-Whitney test obtained a significance value of $0,000$ smaller than $\alpha = 0,05$. The conclusion of this study is that the self-efficacy of students who obtain problem-based learning is better than students who obtain learning with a scientific approach.

REFERENCES

Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational psychologist*, 28(2):117–148.

Bandura, A. (1997). *Self-efficacy: The exercise of control*. Macmillan.

Fogarty, R. (1997). *Problem-based learning and other curriculum models for the multiple intelligences classroom*. ERIC.

Hamdi, S. and Abadi, A. M. (2014). Pengaruh motivasi, self-efficacy dan latar belakang pendidikan terhadap prestasi matematika mahasiswa pgsd stkip-h dan pgmi iaih. *Jurnal Riset Pendidikan Matematika*, 1(1):77–87.

Hendriana, H. (2009). *Pembelajaran dengan pendekatan metaphorical thinking untuk meningkatkan kemampuan pemahaman matematik, komunikasi matematik dan kepercayaan diri siswa sekolah menengah pertama*. PhD thesis, Universitas Pendidikan Indonesia.

Hendriana, H., Rohaeti, E. E., and Sumarmo, U. (2017). Hard skills dan soft skills matematik siswa. *Bandung: Refika Aditama*.

Ibrahim, M. and Nur, M. (2000). Pengajaran berdasarkan masalah. *Pusat Sains dan Matematika Sekolah. Surabaya: PPS UNESA*.

Ilhamsyah, I. (2014). Pengaruh efikasi diri, metakognisi dan regulasi diri terhadap prestasi belajar matematika siswa kelas x sma negeri di kabupaten wajo. *JKIP (Jurnal Keguruan dan Ilmu Pendidikan)*, 1(1):10–20.

Ruseffendi, E. T. (2006). Pengantar kepada membantu guru mengembangkan kompetensinya dalam pengajaran matematika untuk meningkatkan cbsa. *Bandung: tarsito*, pages 336–337.

Rusman (2011). *Model-model pembelajaran: mengembangkan profesionalisme guru*. Rajawali Pers/PT Raja Grafindo Persada.

Sudrajat, D. (2008). Program pengembangan self-efficacy bagi konselor di sma negeri se-kota bandung. *Universitas Pendidikan Indonesia*.

Yolanda, F. (2019). Penerapan pembelajaran kooperatif tipe numbered heads together (nht) untuk meningkatkan self-efficacy siswa. *PHI: Jurnal Pendidikan Matematika*, 4(1):300–303.

Routes of Narcotics Smuggling in the Southeast Asia Region:
Case Study in Riau Province Region Border Indonesia and Malaysia

Rendi Prayuda, Cifebrima Suyastri, M. Arsy Ash Shiddiqy, Fitrisia Munir and Artha Yudilla

International Relations Department, Faculty of Social and Political Sciences, Universitas Islam Riau, Pekanbaru, Indonesia
{rendiprayuda, cifebrimasuyastri, arsyshiddiq, fitrisiamunir, arthayudilla}@soc.uir.ac.id

Keywords: Narcotics, Smuggling, Southeast Asia.

Abstract: This paper describes the route of narcotics smuggling in the Southeast Asia region, especially in the Riau Province, bordering Indonesia and Malaysia. The Southeast Asia region is one of the regions in the world that has an area of around 4.4 million km^2. Rapid population growth in the Southeast Asia region has a negative impact on the development of narcotics smuggling. Riau Province is one of the gateways to illegally enter narcotics from other countries. This paper uses a qualitative approach with collect data by observation, interview and documentations. The theoretical concepts are used are international security, human security and drug trafficking. The results of this study indicate that narcotics smuggling routes in the border regions of Indonesia and Malaysia are carried out by sea lane along the borderline of Riau Province and Malaysia. Narcotics are neatly wrapped and installed GPS devices are then smuggled at night by utilizing the services of fishermen as couriers. The seawater smuggling route was chosen due to several factors, namely: the distance of the near water area, the number of unofficial or illegal ports, the lack of surveillance patrols along the territorial seas and the professionalism of law enforcement officers in the border region.

1 INTRODUCTION

This article is a paper describing narcotics smuggling routes in the Southeast Asia region, especially in the Riau Province region, Indonesia and Malaysia borders and will also analyze how narcotics smuggling is carried out by the drug cartel mafia and why the route is used as a narcotics smuggling route in the province Riau borders Indonesia and Malaysia.

One type of transnational organized crime that threatens human security today is the circulation of narcotics which can easily penetrate the borders of the world through neat management networks and sophisticated technology (Broome, 2000). In the development of the international narcotics distribution network, the Southeast Asian region is categorized as the area of production, distribution and consumption known as the "Golden Triangle" or "Golden Triangle" (Othman et al., 2004). The Golden Triangle area is located on the border of Thailand, Myanmar, and Laos and produces 60% of the world's opium and heroin production. Narcotics production in this region is included in the narcotics category and a potential addictive made from poppy plants and papaver somniferum which produce heroin. This Golden Triangle region contributes to the heroin

industry which is worth US $ 160 billion per year (Othman et al., 2004). The following is a graph of the development of opium growth in the Golden Triangle region according to the UNODC report, namely:
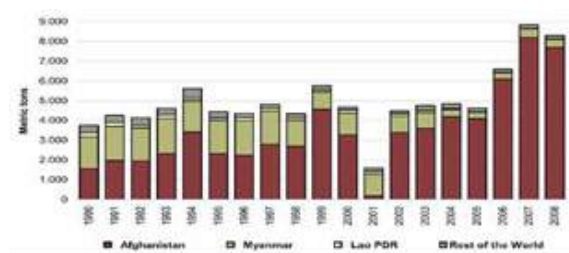
Opium cultivation in the Golden Triangle
(1998-2007) – UNODC Report.

Figure 1: Graph of Opium Growth in the Golden Triangle region (Laos, Myanmar, and Thailand)

Based on the graph above, Thailand, Myanmar and Laos are included in the category of countries in Southeast Asia which have high rates of opium production. So that the high rate of narcotics production has resulted in countries in the Southeast Asian region becoming a country market of illegal drug smuggling by cartel of narcotics crimes. One of the countries that are the goal of narcotics

smuggling in the Southeast Asia region in Indonesia. Widespread narcotics trafficking in Indonesia is caused by several first things because of the demand from consumers who need the supply of imported narcotics. Both of Indonesia are considered good land for narcotics trafficking with a very strategic geographical condition of Indonesia, the form of a country that is mostly a separate archipelago and there are 10 entry points that make it easier for dealers to include narcotics in Indonesia.

According to data from the Indonesian National Police (Polri), the number of narcotics and illegal drugs cases in Indonesia has continued to increase, since 2010 there were 26,614 narcotics cases, and increased to 26,500 cases in 2011. In 2012, the number of narcotics and drug cases increased illicit drugs are not too significant from 2011, only 0.23 percent or an increase of 61 cases to 26,561 cases. In 2013, the number of narcotics and illegal drugs cases in Indonesia increased again, this time with a significant number of cases, namely 32,470 cases in 2013 and until 2015 cases that occurred in Indonesia were around 44,321 cases (https: // www. asean.org/news/asean-secretariat-news/item/asean-rea ffirmed commitment towards-drug-free-vision).

Based on data from the BNN report, Indonesia is the country with the highest ranking in the distribution of narcotics in the Southeast Asian region. According to National Police Headquarters data that several cities in Indonesia such as Bali, Jakarta, Medan, Surabaya, Batam, and Pekanbaru are cities with a high level of narcotics circulation. One of the regions of Indonesia which is the gateway to the entry of narcotics from Southeast Asia by sea is the territory of Riau Province. This is because as a region directly bordering Malaysia and Singapore, Riau Province has high mobility in the flow of goods and people. The geographical location of Riau Province which is strategically adjacent to Malaysia and Singapore has resulted in the network of transnational crime making the Riau Province Region a transit area for narcotics from Malaysia, mainly from the type of shabu-shabu sent illegally or unofficially through unofficial port lines in the Province Riau.

The problem of narcotics smuggling in the Southeast Asian region is a regional security threat, meaning that every citizen in the Southeast Asian region becomes a victim of illegal and massive narcotics abuse. The Riau Province region which is directly adjacent to Malaysia in the Malacca Strait waters makes Riau one of the entry gates of narcotics through the sea (sea) so that the threat to human security becomes very serious. This argument was analyzed using the perspective of constructivism which focused on how narcotics smuggling in the Riau Province region borders Indonesia and Malaysia was carried out and why this form of modus operandi was used by perpetrators of narcotics crimes in the Southeast Asia region.

2   LITERATURE REVIEW

This article uses the perspective of constructivism in analyzing route routes and modus operandi of narcotics smuggling in the Southeast Asia case study in the Riau Province region bordering Indonesia and Malaysia. Some basic assumptions from the perspective of constructivism:

- The state does not become the only actor in international politics, there are other actors in international relations such as international organizations, individuals and groups.

- Security issues in international relations are not only war and the military, but there are security issues that are non-military in nature such as transnational organized crime.

- Knowledge and mutual understanding are the results of the construction of ideas by interaction between many actors.

- Material resources; is an empirical fact that is completely separated from the collective knowledge.

- Actors' practices or behavior are actually variables that are influenced by the construction of knowledge that they construct collectively and are very dynamic (Jackson, Robert & Sorensen, Jackson. 2005).

Vignette explained in his writing about International drug trafficking, organized crime, and terrorism in Afghanistan. (McCarthy, 2011) Find out that the development of transnational narcotics crime in Afghanistan is influenced by two factors, namely geographical and economic factors. Geographically, Afghanistan is flanked by two valleys known as Wakhan Corridor connecting with China and the Pamir Knot connects with the Indian Himalayas. Economically, Afghanistan is known as potential mining and producing poppy plants in which is a type of plant source of opium which is processed into heroin and legalized by the Government. This plant is mass-produced in Helmand Province and is the largest opium production beyond opium production in Burma (Myanmar).

Furthermore, Carl Troccki conducted research on drug abuse, entitled The Criminalization of

Drugs. Drugs Before They Were Criminalized (Trocki, C. A. 1999). Explain that the criminalization of narcotics is a prohibition on all forms of narcotics-related activities starting from production, extraction, trade and marketing activities. Since 1725 Opium is an illegal form of narcotics according to the United States, while for allies of the Soviet Union such as Burma, Vietnam, Nicaragua, and Afghanistan the opium trade is a source of foreign exchange. As a transnational crime, the narcotics trade is very profitable, so the prohibition on the circulation and trafficking of narcotics is increasingly encouraging the occurrence of transnational illegal drug trafficking.

According to the writings of Francisco E. Thoumi in his article entitled The Impact of the Illegal Drug Industry on Colombia (R. T Naylor, 1995). He found that changes in the economy and politics globally resulted in crimes in the border region. In 1990, Colombian drug traffickers used ships, cargo planes to send cocaine on the international market. The export route is developed in extreme complex coordination through air and sea routes to penetrate the transit country. In 1990 the circulation of narcotics was carried out with a multinational narcotics company model structured in various countries complete with subcontractors and freelancers as well as by way of smuggling, marketing, money laundering. Therefore, these organized transnational narcotics crimes work unconditionally and are known by state governments with high work risks, the threat faced is not only high prices of narcotics but also must understand the coordination and authority of the Government in anticipating transnational crime.

Elfira's writing regarding the existence of regional institutions in dealing with narcotics crimes (Elfira Febira. 2013). To conclude that the existence of regional institutions is carried out by agreeing on the cooperation of each member country through coordination of handling and handling patterns of each country in resolving narcotics problems and making collective agreements especially in the policies of each country that is integrated.

Buzan explained that security is a perception formed by the state in defining a security issue. Whereas Weaver added the need for securitization on security issues. The dynamics of security are seen from various sectors such as military, economic, political, environmental and social. Current issues in the social, political and military sectors are more influenced by the complexity of security at the regional level while economic issues at the global level and environmental issues are summarized in local and global security issues (Buzan et al., 1998;

Kramer et al., 2009; Federico, 1996). The concept of security according to Buzan is seen as a complex problem or known as a security complex. In general, security complexes are defined as a set of states whose major security perceptions and problems are not related or resolved apart from another (Buzan et al., 1998; Ma'sum, 1987).

The term "transnational crime" was introduced to explain the complex links that exist between organized crime, white-collar crime, and corruption, which are serious problems that arise as a result of "crime as a business". Arrangement of crime activities extends beyond national borders and has an impact on violations of various countries' laws, has become the most dangerous characteristic of crime groups that operate at the international level. In its development, the form of crime termed has often been associated with the context of globalization (which is a representation of current social, economic and cultural conditions). Therefore, frequent debates are centered on the opportunity to commit various crimes or the legitimate actions given by a world that develops without borders, to a variety of actors commonly defined as transnational organized groups, transnational organizations, and transnational networks.

According to Albanese, the growth of organized crime in various countries cannot be separated from its supporting factors. There are five supporting factors including economic conditions, government regulations, the effectiveness of law enforcement, the level of demand for goods or services, and the formation of new markets for goods and services through social and technological changes (http://www.asean.org/communities/asean-political-security-community/item/asean-declaration-on-transnational-crime-manila-20-december-1997). Therefore, transnational crime carried out in an organized manner is referred to as transnational Organized Crime (TOC). In general, transnational crime can be formulated as a form of crime that "provides goods or services illegally to gain profit". Transnational crime is a threat to the national security of a country or a region, considering that this crime is organized and oriented to power and money.

Conceptually, narcotics comes from Greek, from the word Narke, which means frozen, paralyzed, and stupid (Alifia, 2008; Edwards and Gill, 2004), whereas according to the definition of medical Pharmacology, narcotics are drugs that can eliminate (especially) pain originating from the area Visceral and can cause stupor effects (dumbfound still conscious but still need to be bullied) and addiction.

The terminology that is widely used to refer to drugs is drugs, drugs, and Madat (Alifia, 2008; Tobing, 2002). According to the effect of its use (effect), due to overdose (overdose) and symptoms of free influence (Withdrawal Syndrome) and the medical community, drugs are often misused.

3   RESEARCH METHODS

The research approach used in this study is a qualitative approach. But this study also uses some quantitative data such as statistical data tables, graphs and quantitative diagrams regarding the development of numerical scales of an empirical phenomenon. This research is a case study using a qualitative approach. The data in this paper come from field research and library research. This paper is field research (field research) and library research (library research). Therefore, several data collection techniques in this study were conducted by in-depth interviews with research informants namely the Directorate General of ASEAN Cooperation Ministry of Foreign Affairs of the Republic of Indonesia, ASEAN National Secretariat in Jakarta, ASEAN NARCO, National Narcotics Agency, Directorate of Investigation and Narcotics and smuggling criminals narcotics.

4   THINKING FRAMEWORK

The thinking framework is one subsection that cannot be separated from writing. Therefore, as for the framework of thinking in writing about narcotics smuggling routes in the Southeast Asia region (Case study in the Riau Province region bordering Indonesia and Malaysia), namely:

5   RESULT AND DISCUSSION

One form of the real threat today to human security is the illegal trade and abuse of narcotics. The prevalence of drug abuse in the world from 2006 to 2018 has increased. Although the curve looks sloping, the total amount is quite high. The amount of prevalence of abuse in the world is estimated at 4.9% or 208 million users in 2006 and then experienced a slight decline in 2008 and 2009 to 4.6% and 4.8%. But then it increased again to 5.2% in 2011 and remained stable until 2013. In absolute terms, it is estimated that there are around 167 to 315 million
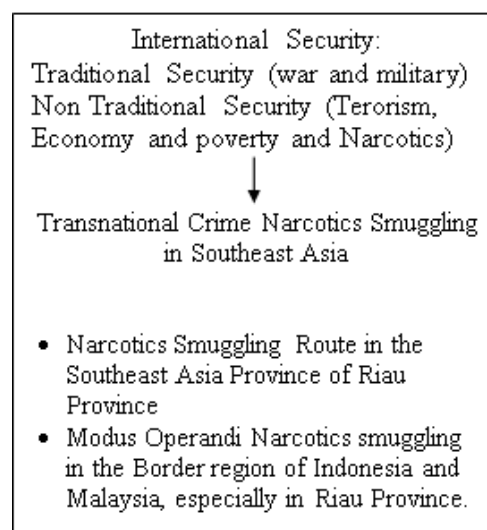
Figure 2: Research Thinking Framework
Source: Research Processed Data. 2019

abusers from the world population aged 15-64 years who use drugs at least once a year since 2013 (UNODC. 2015).

In the last five years, the trend of the type of ecstasy has been indicated to decline by around 15% in various countries, while the use of Amphetamine has been reported to be stable. However, there has been a dramatic increase (158%) in the last five years, namely the consumption of amphetamine. In addition, several types of synthetic drugs have emerged and developed in the drug trade, even more and more countries are reporting each year. In 2014, new types of drugs were reported in more than 90 countries, the number of countries reporting new types of drugs increased by about 1.5 times compared to 2009. This type of synthetic drugs became a "legal highs" commodity and replaced drugs such as cocaine and ecstasy. This synthetic drug is sold on the internet and online and has special shops. Cannabis use also increases in most countries. Cannabis abuse is the most abuse group that requires special treatment for users. The use of ATS also increases globally. This might be because ATS is used as a drug to treat opiate use disorders (UNODC. 2015).

Geographically, Riau Province has a very strategic position, which is directly adjacent to Malaysia, Singapore, and Thailand; face to face with the Malacca Strait which is the crossing point of world trade. In addition, the Sumatra regional region of Riau Province is in the central part of the island of Sumatra on a cross-regional movement trajectory that provides an opportunity to build high access to goods, people, information and capital traffic. Riau Province has a long coastline stretching from the Panipahan region

of Rokan Hilir Regency to the Kijang Island area of Indragiri Hilir Regency, which is around 370 Mil or equivalent to 685.24 km with 139 islands in Riau Province with details of an island called 73 islands and nameless island 66 islands. In addition, Riau Province also has several regions or islands with the status of the leading islands, namely:

- Jemur Island is located in the Kuching Stone area about 45 miles (83.34 km) Malaysia

- Tokong Island is bordered by Batu Kuching Malaysia

- Sinaboi Island is bordered by Port Dickson Malaysia

- Tanjung Medang is bordered by Tanjung Rachado Malaysia

- Tanjung Parit is bordered by Tanjung Tohor Malaysia

- Tanjung Kedabu is bordered by Pulau Pisang

Riau Province is directly adjacent to the northern part of the Straits of Malacca and only 83 km from Batu Kuching Malaysia. In the waters, there are 3,214 large and small islands that are spread strategically. Because part of it is in the Malacca Strait and the South China Sea which is one of the main sea/shipping routes in the world of global trade. With this strategic position, Riau Province is one of the gateways to enter narcotics smuggling in the Southeast Asia region. Narcotics smuggled into Riau Province by sea or water from a transit country, namely Malaysia. Several factors have encouraged the development of the narcotics business in Southeast Asia, especially the smuggling of narcotics smuggled through the Riau Province, namely:

- A very significant difference in selling prices among Southeast Asian countries

- The unemployment rate is very high in several Southeast Asian countries, especially Indonesia

- Poverty conditions in several Southeast Asian countries have caused the process of recruiting and courier recruitment costs to be quite cheap

- The number of current drug users, especially in Indonesia, has exceeded 5 million (interview with the Director of the Riau Police Narcotics on 21 March 2018).

The following is an entry point for narcotics from Malaysia through ports along the coast in the Riau Province region, namely:

Based on the map above, there are five regencies/cities in Riau Province which are directly
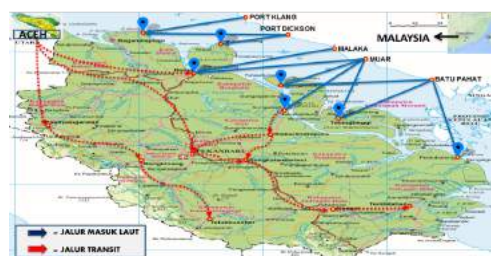
Figure 3: Map of Narcotics Entrance in the Province of Riau Source: Directorate of Narcotics Investigation of the National Police of the Republic of Indonesia in Riau. In 2017.

adjacent to Malaysia, such as Rokan Hilir Regency, Dumai City, Bengkalis Regency, Kepulauan Meranti Regency, and Indragiri Hilir Regency. The narcotics smuggling route in the Riau Province region borders Indonesia and Malaysia sent through production countries namely China and Taiwan. Furthermore, narcotics sent through the Malaysian transit line will be smuggled through unofficial ports located along the coastline of Sumatra Island in the Riau Province.

Several narcotics smuggling routes sent from Malaysia, entering through the port area of Riau Province and ready to be sent to several major cities in Indonesia can be described in the following explanation that the shipment of narcotics sent from Malaysia is smuggled through Port Klang Port which will then be smuggled to the port in the area of Bagan Siapi-Api (Penipahan and Pulau Jemur), the narcotics package will be sent to the North Sumatra Province, especially Medan City. As for the Port Dickson Port area, it will be smuggled through the waters of Rupat and Dumai Islands and the narcotics package will then be sent from Bengkalis Regency to Pekanbaru City. While narcotics smuggled from Malaka and Muar Ports will be sent to Bengkalis and Siak waters through Buton Port to be sent to Pekanbaru City and Jambi Province while narcotics smuggled from Malaysia's Batu Pahat Port will enter the Long Strait Port of Meranti Islands and Tembilahan Regency of Indragiri Hilir Regency and will be sent to consume narcotics in the City of Padang, Palembang, Bandar Lampung, and Jakarta. Therefore the smuggling of narcotics from the international network of the Southeast Asia region is a very strategic and rational pathway for narcotics mafia to smuggle narcotics and be distributed in major cities in Indonesia.

Based on the author's observation in the field of the results of mapping the route of narcotics smuggling routes in the Riau Province originating from Malaysia, the narcotics smuggling activities are carried out by narcotics dealers smuggling narcotics at night and using fishermen as narcotics

couriers. Narcotics smuggled by narcotics dealers from Malaysia were sent by couriers from Malaysia and the narcotics transactions were carried out in the middle of the sea in the Indonesian border region such as in the waters of Rokan Hilir, Bengkalis, Indragiri Hilir, and Meranti which would then be taken by fishermen to the mainland. The smuggled narcotics package is wrapped in thick plastic so it is not translucent and sometimes GPS is given as a signal tracker.

According to the Director of the Riau Police Narcotics Unit, that after transactions in the middle of the sea during the night, the narcotics packages carried by the fishermen were placed by fishermen's boat or sometimes placed hanging in the sea under a fishing boat. This was done to trick the patrol of the Aquatic Police Unit and AL Patrol in the event of raids carried out by the authorities. It is not uncommon for a ship inspection by officers in the narcotics package to be submerged in the seafloor with a GPS device and after the patrol of the border area is over, the fishermen will dive in the sea to trace GPS signals from the narcotics package that was drowned. Furthermore, the fishermen will bring the narcotics package to the mainland to be carried by the land courier to the destination of the narcotics package sent.

Therefore, it can be briefly analyzed that the circulation or smuggling of narcotics from Malaysia to Indonesia, especially the Riau Province, according to the Director of the Riau Regional Police Narcotics Investigation in its modus operandi is also done by using official ports to disguise contents, enter through small ports or illegal ports with use ships. In addition, the other modus operandi is that narcotics are swallowed in the stomach or inserted into the anus, disguised in a Suitcase / Travel Bag and in food packaging, then using a package delivery service company as well as shipping a ship to ship.

The Riau Province region consisting of regencies located in coastal areas such as Rokan Hilir Regency, Dumai City, Bengkalis Regency, Siak Regency, Meranti Regency, and Indragiri Hilir Regency was chosen to be one of the gates to the entry of contraband narcotics due to several factors. The main factor that caused this smuggling to occur was due to the law of supply and demand for narcotics. This means that currently the demand for narcotics is quite high in Indonesia and Riau Province is one of the provinces included in the top five provinces in Indonesia which have massive drug trafficking after Medan, Southeast Sulawesi, Jakarta, and Surabaya. So from that, the magnitude of the demand for narcotics and the large profits from this sale has

resulted in the Riau region becoming one of the potential alternative choices in narcotics smuggling.

In addition to the illegal business profit factors, the factor of the proximity of the region between Riau Province and Malaysia has resulted in sea or water routes being a potential alternative to smuggling narcotics. This is because the sea lanes in the Riau Province area are still very wide and the number of ports - people's or illegal ports in the border areas of Riau and Malaysia has resulted in criminals being able to smuggle narcotics freely through these unofficial ports. Furthermore, the factor of weak law enforcement and escorting government institutions is a factor why the drug trade business in the Southeast Asia region is very easy to develop (Bambang Cipto, 2007. p. 223). The lack of routine patrol or supervision in Riau and Malaysia's area of warfare has also become an obstacle in handling illegal narcotics smuggling and the professionalism of security forces in carrying out routine patrols, according to Riau Police Drug Director that until now there are still many police officers involved in the narcotics business illegally due to being tempted by multiple profits from the sale of narcotics.

6 CONCLUSIONS

Based on the explanation of the results, it can be concluded that narcotics smuggling in Southeast Asia is growing very rapidly with the production and distribution of narcotics smuggling. Narcotics smuggling in the borders of Indonesia and Malaysia, especially in the region of Riau province carried out by using the waters of Malacca Strait in Riau border which directly borders the region.

This route was chosen by the mafia narcotics cartel due to the geographical fact of Riau Province which is very close to Malaysia so that narcotics can be quickly smuggled, besides that there are many illegal ports along the coastline of the border areas of Riau Province and Malaysia so that narcotics couriers are free to enter without close supervision from the officers, the next factor is the dualism of the work of fishermen in the border region who also have jobs as narcotics couriers from the middle of the sea to land. The law enforcement factor by Indonesian law enforcement officials is also a factor in Riau being one of the areas where narcotics smuggling means that the lack of routine surveillance patrols by officers and the professionalism of border area security officers is also a driving factor in the increase in narcotics smuggling rates.

REFERENCES

Alifia, U. (2008). Apa itu narkotika dan napza. *PT Bengawan Ilmu, Semarang*.

Broome, J. (2000). *Transnational crime in the twenty-first century*. Australian Institute of Criminology.

Buzan, B., Wæver, O., Wæver, O., and De Wilde, J. (1998). *Security: A new framework for analysis*. Lynne Rienner Publishers.

Edwards, A. and Gill, P. (2004). *Transnational organised crime: perspectives on global security*. Routledge.

Federico, G. (1996). Ixth united nations congress on the prevention of crime and the treatment of offenders (cairo, egypt, 29 april-8 may 1995). rapport sur la réunion auxiliaire sur" le rôle du ministère public dans la justice pénale selon les différents systèmes constitutionnels". *Cahiers de défense sociale: bulletin de la Societé International de Défense Sociale pour une Politique Criminelle Humaniste*, (23):99–102.

Kramer, T., Jelsma, M., and Blickman, T. (2009). *Withdrawal symptoms in the Golden Triangle: A drug market in disarray*. Transnational Institute Amsterdam, The Netherlands.

Ma'sum, S. (1987). *Penanggulangan bahaya narkotika dan ketergantungan obat*. Haji Masagung.

McCarthy, D. M. (2011). *An economic history of organized crime: A national and transnational approach*. Routledge.

Othman, Z. et al. (2004). Myanmar, illicit drug trafficking and security implications. *Akademika*, 65(1).

Tobing, F. B. L. (2002). Aktivitas drug trafficking sebagai isu keamanan yang mengancam stabilitas negara. *Global: Jurnal Politik Internasional*, 5(1).

Policy Implementation of Green Open Space in Pekanbaru City

Moris Adidi Yogia[1], Raden Imam Al Hafis[1] Mustika Devitasari[2]

[1]*Faculty of Social and Political Sciences, Universitas Islam Riau, Pekanbaru, Indonesia*

[2]*Student Faculty of Social and Political Sciences, Universitas Islam Riau, Pekanbaru, Indonesia*
moris.adidiy@gmail.com, imamalhafis@soc.uir.ac.id, mustikadevita@student.uir.ac.id

Keywords: Policy, Implementation, Green Open Space, Cooperation.

Abstract: The obligation to provide public Green Open Space is the responsibility of regional governments as stipulated in Law Number 26/2007 concerning Spatial Planning as a form of service or the provision of public facilities for the community. The problems faced are the lack of urban protected areas, the existence of Green Open Space which is far from ideal proportions in Pekanbaru City so that when the rain occurs, it is flooded due to low water absorption. The purpose of this paper is expected to be input for the Pekanbaru City Government to carry out the mandate of the existing Act and be able to overcome existing problems. The results of the research show that 30% of Green Open Space has not been met by the city, 20% public and 10% private. In the policy implementation of the Green Open Space in Pekanbaru City, it has not been implemented optimally from the targets set in the Act. For this reason the Pekanbaru city government needs to take steps to meet the needs of providing Green Open Space in Pekanbaru City as follows: 1. Increasing more intensive socialization to the public, and the private sector about the important role of green open space in Pekanbaru City; 2. Making local regulations relating to partnerships in the provision of green open space; and 3. Require housing companies or developers to provide Green Open Space.

1 INTRODUCTION

The obligation to provide public Green Open Space is the responsibility of regional government as a form of service or provision of public facilities for the community. The policy of providing public green open space is a part of public policy, which means that policies that regulate public / public interests are not interests of certain groups or groups. In order to respond to these matters in Law Number 26/2007, content related to environmental issues is increasingly emphasized. One of them is in connection with City Spatial Planning which is required to include plans for the provision and utilization of Green Open Space.

Law Number 26/2007 on Spatial Planning said that 30% of Green Open Space must be contained in urban spatial planning, 10% private area and 20% public area. The 30% amount is a standard measure to ensure a sustainable balance of urban planning is maintained and a supply of fresh air can be enjoyed by residents of the city. Efforts to implement 30% of the green open space in the urban area are able to be achieved in stages with the allocation of urban land in accordance with Minister of Public Works Regulation Number 5/2008 deals with procedures for providing

and utilizing green open space in urban areas. As for the phenomenon that occurs at this time:

- Lack of urban protected areas, but the population growth of Pekanbaru City is increasing and the growth of private vehicle use is increasing and pollution is increasing.

- Lack of control of water management, so that the low supply of open green space in the city of Pekanbaru during the rain causes flooding due to low water absorption.

- The realization of green open space that is not in accordance with the expectations of the law. Market dominance of government regulations that are able to accommodate the desires and needs of capital owners.

- There is no need for 30% of green open space from the city, from 20% of public green space and 10% private. The area of pekanbaru is 632.26 KM2, equivalent to 63,226 ha. If it is taken 30%, the green space that must be fulfilled is 189.68 KM2 or equal to 18,967 ha. If divided by 20% public and 10% private, then the area that must be provided by the government is 126.45 KM2, equivalent to 12,645 ha and 63,226 KM2,

equivalent to 6,322.6 ha. Whereas the facts show that in Pekanbaru, the existing public green space only amounted to 80,582 ha until 2017, equivalent to 0.637% of the 20% Green Open Space that must be met.

The objectives of this study include:

- Describe how Pekanbaru City Government implements Green Open Space Policy in Pekanbaru City.

- Knowing and describing obstacles or obstacles faced by the Pekanbaru City government in implementing the Policy for Provision of Green Open Space in Pekanbaru City.

- Determine the model of application for the City of Pekanbaru in meeting the needs of Green Open Space in the City of Pekanbaru, so that the mandate of the Laws and Regional Regulations regarding the fulfillment of the specified amount can be fulfilled to the maximum.

2 RESEARCH METHODS

The method used in this research is descriptive qualitative, the type of research that describes a phenomenon or event as it is. The method used in this study is by conducting in-depth interviews with the Department of Public Works Department of Parks and agencies related to this problem. Data collected both primary and secondary. Qualitative research according to (Strauss and Corbin, 2003; Gandara, 2013) is a type of research that produces findings that cannot be obtained by using statistical procedures or by other means of quantification (measurement). (Ikbar, 2012) said that the qualitative approach is a research approach based on phenomenology and constructivism paradigm in developing science. Meanwhile, according to (Sarwono, 2013; Agustino, 2008), conveying in a qualitative approach the emphasis on meaning, reasoning and defining certain problems and more examining problems related to daily life, emphasis on the process rather than the final result. Some things that become fundamental considerations in using qualitative methods in this study, are as stated by (Chaedar, 2002; Creswell and Poth, 2017), conveying that qualitative research in analyzing a phenomenon can be presented as a whole and more sensitive in capturing information but still maintaining wholeness and object. In other words the data collected in the case study is an integrated whole. (Miles and Huberman, 1992; Purwanto, 2012; Tarsito, 2014), suggest that the activities in qualitative data analysis are carried out interactively and take

place continuously until complete, so that the data is saturated. The size of data saturation is indicated by no new data or information obtained. Activities in the analysis include Data Reduction, Data Presentation and Conclusion Withdrawal and Verification.
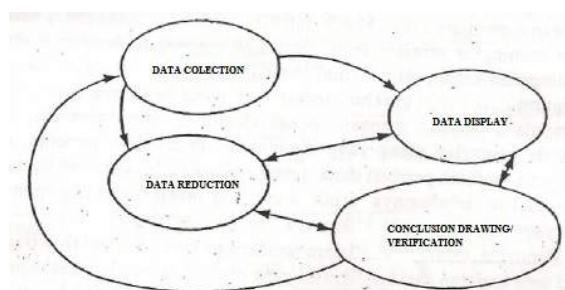
Figure 1: Interactive Models, (Miles and Huberman, 1992).

3 DISCUSSION

3.1 Policy Implementation of Green Open Space in Pekanbaru City

To find out in depth about the Implementation of Green Open Space Policy in Pekanbaru City, researchers used four indicators to measure the implementation of green open space policies, especially in Pekanbaru City, among these indicators.

- Communication
- Resources
- Disposition
- Bureaucratic Structure

Regarding communication carried out in the policy implementation of the green open space in Pekanbaru and coupled with the observation of the research team to the community regarding green space, especially with the community's responsibility to provide 10% green open space in their homes, the authors concluded that communication between units was generally the implementers have been carried out accordingly according to the indicators discussed by the researchers, but for the socialization carried out by the government to the community it has not been implemented as it should be in accordance with the expectations of the existing policies.

In connection with available resources in the implementation of the policy, in general it has been implemented in accordance with the existing provisions, but for the availability of funding sources in the provision of green space is also limited

because there is a need that must also be provided or completed by the Pekanbaru PUPR Office.

For the Disposition in the implementation of green open space policy in Pekanbaru city it can indeed be said as it should and this is proven by the existence of several Green Open Space in Pekanbaru City recent years. Although there are several problems in the implementation of the provision, such as the occurrence of corruption cases in the Green Open Space Appoints / "Integrity Monument".

The bureaucratic structure in the implementation of green open space policies has been carried out well even though the open green space has not been maximally determined by the existing rules / policies. This is indicated by the completion of the provision of green open space at several points in Pekanbaru, which is currently widely enjoyed in Pekanbaru. such as green open space, integrity teaching green space, road parks, feeding, etc. Barriers to the government in implementing the Policy for Provision of Green Open Space in Pekanbaru City

Through this study, researchers found several obstacles faced by the city government especially in implementing this green open space policy. The obstacles faced by Pekanbaru City Government itself include:

- The absence of a special team in disseminating information to the community about the importance and the community has a responsibility for fulfilling 10% of the green open space of the 30% who were saved in the policy.
- Limited land owned by the government of Pekanbaru city in particular, so that to provide green open space in the city itself the government must buy it to the public at a very high price
- There is no collaboration with the private sector to supply and manage green open runag in the city of Pekanbaru.

The model for the Pekanbaru City government in implementing the Policy for Provision of Green Open Space in Pekanbaru City

The author provides a model recommendation that can be applied in the city of Pekanbaru in the implementation of providing green open space in Pekanbaru city. As for the proposed model as follows:

4 CONCLUSION

From the results of the research that has been carried out on the implementation of the green open space
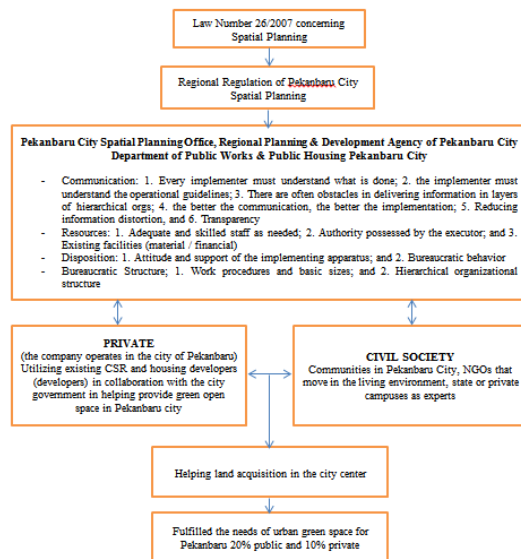
Figure 2: Pekanbaru City Spatial Planning Office

policy in Pekanbaru, the authors make the following conclusions:

- In general, the communication between the implementing units has been carried out accordingly according to the indicators discussed by the researcher, but the socialization carried out by the government to the community has not been implemented as it should be in accordance with the expectations of the existing policies.

- In implementing the green open space policy in pekanbaru city, for the Resource indicator, in general it has been implemented in accordance with the existing provisions, but for the availability of funding sources in the provision of green open space it is also limited because there is a need that must also be provided or completed by the Office PUPR Pekanbaru City.

- That the implementation of green open space policy in the city of pekanbaru can indeed be said to have been implemented, this is evidenced by the development of several Green Open Space in Pekanbaru City recent years. But it has not been carried out maximally from the desired expectations. The area of Public Open Space that must be met is 126.452 Km^2 (20%) = 12,645.2 ha, Total Public Open Space managed by DPUPR 2017 = 80,582 ha. So the green space that is fulfilled = 0.637% from 20%.

5 SUGGESTION

From the results obtained, the researcher gave recommendations as follows:

- Increasing more intensive socialization to the community, and the private sector about the important role of Open green space in Pekanbaru City.

- Increasing more intensive socialization to the community, and the private sector about the important role of Open green space in Pekanbaru City

- Require companies or housing developers to provide and CSR to provide Green Open Space and for housing developers to provide as much as 10% of the total total area developed.

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REFERENCES

Agustino, L. (2008). Dasar-dasar kebijakan publik.

Chaedar, A. A. (2002). Pokoknya kualitatif. dasar-dasar merancang dan melakukan penelitian kualitatif. *Bandung: Pustaka Jaya*.

Creswell, J. W. and Poth, C. N. (2017). *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications.

Gandara, Y. (2013). *IMPLEMENTASI KEBIJAKAN PEMERINTAH KOTA DALAM UPAYA PEMELIHARAAN RUANG TERBUKA HIJAU KOTA BANDUNG*. PhD thesis, Universitas Pendidikan Indonesia.

Ikbar, Y. (2012). Metode penelitian sosial kualitatif. *Bandung: Refika Aditama*.

Miles, M. B. and Huberman, A. M. (1992). Analisis data kualitatif.

Purwanto, E. A. (2012). *Implementasi Kebijakan Publik Konsep dan Aplikasinya di Indonesia*. Number 1. 2012.

Sarwono, J. (2013). *Mixed Methods Cara Menggabung Riset Kuantitatif dan Riset*. Elex Media Komputindo.

Strauss, A. and Corbin, J. (2003). Dasar-dasar penelitian kualitatif. *Yogyakarta: Pustaka Pelajar*.

Tarsito, S. (2014). Metode penelitian kuantitatif, kualitatif dan r&d. *Alfabeta. Bandung*.

ICT Integration Trends in EFL (English as Foreign Language) Classrooms

Sitti Hadijah, Shalawati

English Education Department, Universitas Islam Riau, Pekanbaru, Indonesia
{sittihadijah, shalawati}@edu.uir.ac.id

Keywords: ICT, EFL Classrooms, Smartphone

Abstract: Since the integration of ICT in education has been widely implemented in the classrooms, hence this study is focused on studying the ICT trends in English as Foreign Language Classrooms and EFL students' perspectives to the ICT integration. This study worked on descriptive research design by applying both quantitative and qualitative methods. Thirty-three undergraduate students in English Department of Education Faculty were involved, they were voluntary invited to fill out online questionnaire for this research purposes. The findings reveal that smartphone is the most preferable devise used by the students, they conveyed that Smartphone's simplicity and portability are two main reasons for using it to support their learning experiences. In addition, the students aware that the integration of technology in English language teaching brings good values to improve their English skills. They also added that the teacher's roles are interchangeable, no matter how advance the technology is, the teacher's existence in the class is still highly required. However, the students said that teachers need to be creative in deploying the technology devices because the core point of utilizing technology devices in learning is not simply about using the technology as media, but it should empower the students to have better learning experiences and skills.

1 INTRODUCTION

Integration of Information and Communication Technology has been implemented by numerous teachers in their teaching and learning contexts, (Yogi, 2013; Ganapathy, 2015; Zhang and Zhang, 2015; Nicolas and El-Aly, 2018). This condition depicts that ICT has essential contributions towards the teaching and learning process as teachers can employ it to enhance their students' performances. The ICT can also be a tool to motivate students in their learning experiences because its integration can benefit them through different learning experiences, (Yogi, 2013).

In 1960s, computers were introduced in language learning context through CALL (Computer Assisted Language Learning) which present benefits for both language learners and teachers in teaching and learning process, (Al-Mahrooqi & Troudi, 2014). Afterwards, in 1990, the appearance of internet in education brought significant change in language education, such as transforming textbooks into e-books, face-to-face to online or blended learning, paper-based exam to online-based exam, and also reducing some barriers about time and space, (Farooq

and Soomro, 2018).

In technology era nowadays, teachers in EFL classrooms are highly required to be skillful with "cutting edge" technology in order to facilitate their students with better learning experiences which will simultaneously affect their English proficiency. However, the use of technology in the classrooms is not an easy way to engage into reality as some constraints can be encountered by both teachers and students, for example; paucity skill of ICT, financial and technical supports, time, lack of teachers' professional development program, and eligible classrooms for ICT integration, (Alwani and Soomro, 2010), (Liu and Pange, 2015), (Elemam, 2016), and (Hsu, 2016). In this case, teachers and students need to be prepared to work with ICT in order to maximize the roles of ICT integration in learning.

Influential factors of ICT integration can be categorized into two different categories; students level and university level. In students level relates to students' characteristics, ICT home access, and ICT skills and use, meanwhile in university level involves University ICT infrastructure, teacher characteristics, (Chiraz, 2016). In a review study about global

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experience of technology integration in EFL contexts, there are eight-main factors of the integration which appeared in several countries;

- Teachers' competence (Turkey, Indonesia, Saudi Arabia)

- Accessibility(Saudi,Malaysia,Indonesia).

- Lack of training on technology use (Saudi Arabia, Bangladesh, Malaysia).

- School Necessity (Iran).

- Space an resources (Saudi Arabia).

- Budget (United State of America)

- Perceived Usefulness, (North America).

- Academic workload (Australia), (Ammade et al., 2018).

Based on the previous study, Indonesia faced two main problems which relate to teachers' competence and technology accessibility which still limited. Some efforts need to be taken to figure the barriers of the ICT integration in education, as stated by (Aslan and Zhu, 2016), facilitating the teachers to receive professional development program should be considered as an effort to enable the deployment of ICT more confidently in teaching and learning contexts. Regular training of ICT integration program has to be set by government or other parties who concern of the teachers' quality in integrating ICT, (Hadijah and Shalawati, 2017). In addition, the professional development program should also be focused on improving the teachers' self-esteem and providing more specific content of particular field, and developing high level learning, (Hsu, 2016).

Some strategies can also be taken by teachers to affect the effectiveness of the ICT integration; technology plans, in-service training, strong infrastructures, technical supports, and role models, (Goktas et al., 2009). It means that teachers should prepare and implement technology plans by providing time for preparing the implementation of the ICT in their teaching and increase the quality and quantity of service training in ICT. Moreover, increasing the number of devices to enhance learning through technology which should be supported by some technical supports. Lastly, teachers should be role models for prospective teachers in teaching through technology.

In a study done by (Elemam, 2016), there are some sorts of technology applications used by 40 teachers in their teaching programs, they refer to word processing, power point presentation, data base (access), spread sheet (excel), internet, and email. Working with digital story telling can also be another

way that can be employed by teachers in teaching through the integration of multimedia technology into the classrooms, (Heo, 2009).

Digital story telling is a part of storytelling that uses digital media, for example; art, oral history, creative writing, speaking, photographs, music, news clippings, digital videos, the web, graphic design, sound engineering, or animation. Digital story telling also brings benefits in relation to improve students' interest in exploring new ideas, facilitate discussion, promote the 21st century skills and multiple literacy skills. (Hsu, 2016).

Since the integration of ICT in education has been widely implemented in the classrooms, hence this study is focused on studying the ICT trends in English as Foreign Language Classrooms and EFL students' perspectives to the ICT integration are two points which are elaborated in this study.

2 METHOD

This study involved 33 undergraduate students in English Department of Education Faculty, they were invited to voluntary fill out online questionnaire for this research purposes. The participants were in 16 up to 25 years old students who mostly had started learning English when they were at 6 up to 10 years old. The participants were chosen to involve in this study because they were assumed to have adequate learning experiences to work with technology devices in their language learning process.

This study worked on descriptive research design in order to describe ICT trends in EFL classroom. Both quantitative and qualitative methods were applied by distributing questionnaire to the participants. According to (Jhonson and Cristensen, 2014) in (Elemam, 2016), questionnaire is an instrument to collect personal data of research participants by completing any information needed. The questionnaire was constructed based on the indicators in table 1:

Table 1: Questionnaire's Indicators.

No	Indicators	Number of questions
1	Personal Experience of using technology in English learning	2
2	Sorts of technology devices used in learning English	13
3	Students' perspectives towards ICT integration in EFL context.	3

The participants were encouraged to fill out the forms by selecting some options and writing detail

information based on the tasks in the form. List of the questions in the questionnaire sheet are provided in the table 2 below:

Table 2: List of Questions in Questionnaire.

No.	Questions
1	How old are you now?
2	How old were you when you firstly studied English?
3	Do you use technology devices when learning English ?
4	What are the learning media that you used to use when learning English?
5	How long have you been learning English ?
6	What are the tools that you love to use when learning English in the classroom?
7	Among Computer, Laptop, and Smartphone, what is the most favorite device that you use in learning English both inside and outside the classrooms? Why?
8	What are technology devices that you love to use when learning English in the classroom?
9	Do you think using laptop or computer in learning English both inside and outside the classroom is very helpful?
10	How do you use laptop or computer in learning English in the classroom?
11	How do you use laptop or computer in learning English out of the classroom?
12	Do you think that using smartphone in learning English both inside and outside the classroom is very helpful?.
13	How do you use your smartphone in learning English in the classroom?
14	How do you use your smartphone in learning English out of the classroom?
15	How do you use your most favorite technology device (computer or laptop, or smartphone) to improve your listening, reading, writing and speaking skills?
16	What do you think about integration of technology in English Language teaching?
17	Do you still need your teacher's guidance on how to use your favorite device(computer or laptop or smartphone) to improve your English Skill ? Why?
18	What should English teachers do when teaching by using technology?

The questionnaires were distributed to the targeted participants by using Google form. In this phase, the link of the questionnaire form was copied and shared to the participants. They were assigned to submit their answers by twenty-four hours and provide the information individually based on their personal experiences and perspectives. Each participant was only allowed to give their responses in the questionnaire once only.

The collected data were analysed both quantitatively and qualitatively. The quantitative data were organised in terms of sort of devices deployed by the students in EFL context, and the students' perspective towards the ICT integration, based on their learning experiences were analysed by on students' responses on essay questions. Beforehand, the process of data organisation had been categorised in the Google form in answers report sheet. Hence, the data could be read and implied properly.

3 FINDINGS AND DISCUSSION

3.1 ICT Trends in EFL Classroom

The following chart depicts the students' trends in using technology to support their English learning process. Most of them use smartphone in their learning, it is also supported by the use of laptop which is in less percentage, compared to smartphone uses. The students do not use computer any more in their learning, but their preferences in using printed sources, such as books and magazines are still in average number. The detail description about the students' trends can be seen in figure 1 below:
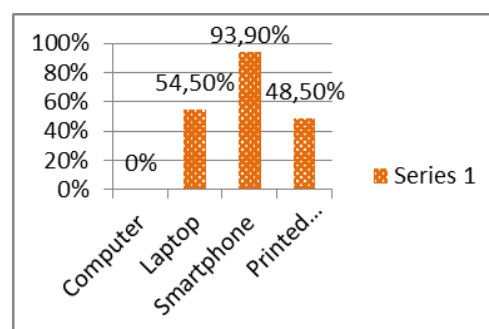
Figure 1: Students' Trends in Learning English.

The figure above clearly presents that smartphone is the most preferable devise used by the students. When they were asked to select one of their most favourite devices among computer, laptop, and Smartphone in learning English, most of the students selected Smartphone as their favourite one. They conveyed that Smartphone's simplicity and portability are two main reasons for using it. As stated by some students in the following statements:

I prefer to use Smartphone, because it is easy to bring everywhere I go

Smartphone. It is easier. Laptop is too heavy to bring. Plus, smartphone can access internet same like laptop. So I'd prefer to use smartphone.

Smartphone, it's simpler to find English sources or e-books.

I prefer to use smartphone in learning English because it's simple and useful

The easiness offered by Smartphone can facilitate the students in their learning process, they enjoy using smartphone whether in or out of the class. In more specific, some students said that using smartphone can help them when facing some problems with unfamiliar vocabulary. They can straight away open their Smartphone applications, such as online dictionary or other English learning applications in their phones to consult meaning of unfamiliar words. Besides that, they could easily open videos in YouTube which can be very helpful for them in enhancing their listening and speaking skills. In addition, some students also said that they could improve their pronunciation by learning from you tube in their smartphone. In other words, the use of smartphone help the students better to solve their learning problems and support their learning process to get more authentic learning sources.

Furthermore, the following figure presents the percentage of the students who prefer to use Smartphone in their learning:
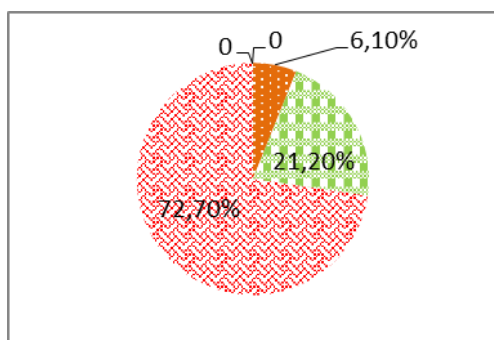
Figure 2: Students' Responses toward Smartphone Use.

Based on the chart above, almost 75% students were strongly agree that using smartphone is very helpful for their language learning experiences. None of them denied about the benefits of using the device, but there are still less than 10% of them are in neutral option which means that they still find some other devices that resemble the benefits of Smartphone. The following statements present how Smartphone contributes towards the students' learning process both in and outside of the classrooms:

I can chat with my lecturer through my phone on WhatsApp. I usually ask some lessons that I still don't understand

I use my smartphone to watch videos in English, learn from online tutor, and do some online quiz(toefl/ielts)

I use my smartphone to study in Youtube, read comics, watch anime with english subtitles ,and study for exam.

Sometimes, I am stuck to translate or say something in English. Directly, I open online dictionary in my smartphone.

Smartphone is very helpful for me because I can watch and learn any things about English in one hand. And it is clear enough for me to study.

I usually open twitter application in my hand phone because i have a group chat that consists of some members from various countries, so I use English for communication. It really helps me to improve my English.

However, for some students, using laptop can be beneficial as well, particularly when they are working on presentation projects, they usually create their presentation slides and present it by using laptop. Some other students also use laptop to increase their vocabulary mastery by setting English as the language used in the laptop, so they can learn some vocabularies every time they open their laptop. Besides that, some other students prefer to use laptop for browsing and reading some articles instead of using Smartphone. The following information provides the students' statements:

I use laptop to make PPT presentation, search meaning of words or sentence that I found unfamiliar for me during in the classroom.

The setting of my laptop is in English, so i can increase my vocabulary, also when I am studying English, I can open links or internet about what my teacher teaches, so I can read and get more information about that.

I downloaded some applications that related to English and it's fun. I use it by my laptop such as kahoot and Google classroom.

Making Power point And word for assignments, I usually use laptop.

Sometimes I use laptop if I did my presentation or using kahoot.

I do my powerpoint presentation, I do my task, read online materials.

From the above statements, the students admitted that the use of laptop cannot be ignored in their learning process since it highly contributes to help them in creating presentation slides. In addition, they could work more effectively when using laptop, particularly when they have to utilize certain applications, such as Google Classroom and Kahoot.

Moreover, when using smartphone or laptop in the students' learning activities, they usually use some

applications to enhance their learning. Actually, nowadays, there are a large number of applications that can be deployed by the students to improve their English learning, but there are only few applications that the students are familiar with. The following figure shows sorts of devices are usually used by the students in their language learning process:
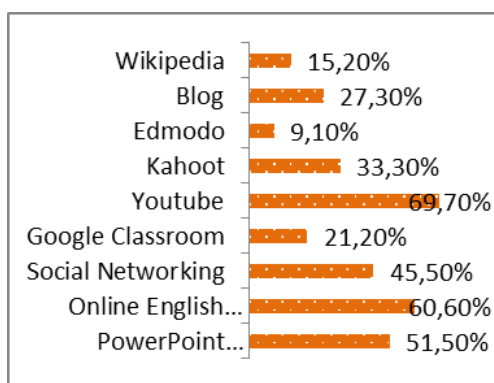
Figure 3: Sort of Devices Used in learning English.

The figure 3 listed some devices which are frequently deployed by the students, they are Youtube, Online English Dictionary, and PowerPoint Program for presentation with over than 50% of the students work with them. Interestingly Social media appeared in the second category of applications used by the students with approximately 50% and Kahoot followed the social media with about 33% users. Meanwhile Google Classroom, Edmodo, Blog, and Wikipedia were only used by less than 12% of the students. A large number of the students work with Youtube that they access from their smartphone, they use this application to practice listening, reading and speaking skills, while for writing skill, some students use social media, such as Instagram or other applications, such as Google Classroom, Edmodo, Blog, and Wikipedia.

3.2 Students' Perspectives to the ICT Integration in EFL Classroom

In relation to the students' perspectives towards ICT integration in English language teaching context, three questions were delivered to the participants;

- What do you think about the integration of technology in English Language teaching?

- Do you still need your teacher's guidance on how to use your favorite device(computer or laptop or smartphone) to improve your English Skill ? Why?

- What should English teachers do when teaching by using technology?

For the first question, all of the students aware that the integration of technology in English language teaching brings good values to improve their English skills. In addition, as prospective English teachers, the students believe that technology can help them a lot in teaching English in the future since there many choices of applications that they can bring into the classrooms. Moreover, the integration of technology provides different learning atmosphere that can stimulate the students in learning the language better. They can br independent learners in figuring out some problems in their learning or practicing the language skills that they want to develop. In other words, the existence of the technology can kill the students' boredom and motivate them to always make innovation in their learning process. Some of the students' statements about the first question can be seen in following:

Question : *What do you think about integration of technology in English Language teaching?*

Responses : *In technology era, it's okay for using technology for learning. because it's simpler.*

In this modern era, I think integrating the technology with English language teaching can help teachers to guide the students to learn English better.

Using technology, learning and teaching process about English can give positive impact and has strongly influence the students, for example we can converse with native speakers and search for scholarship information overseas.

It's very good, because it makes easier to learn english in many conditions and everywhere. The benefit of this integration in teacher side is to make teacher more creative to teach in the classroom.

Furthermore, based on the second question, most of the students still require the teacher's guidance in using technology in their learning process. In this case, the students stated that the teacher's roles are interchangeable, no matter how advance the technology is, the teacher's existence in the class is still highly required. Eventhough technology can facilitates the students to find information, they still believe that their teacher can provide more information as well. On the other hand, there are only a few students who claimed that they can independently work with technology to find out any information that they need. Some lists of the students' statements regarding to the second question are presented below:

Question : *Do you still need your teacher's guidance on how to use your favorite device(computer or laptop or smartphone) to improve your English Skill ?*

Responses : *Yes of course, because i believe that teacher knows more about how to use it in the more effective way. I just do what i think it's good for my English. I do it just because i like it. I don't know whether it's effective for my English or not.(Agreed)*

Yes because I still need guidance for fix my English, give TMI about English and make it better. If I have no teacher to guide me, I might be in a doubt or sometime, I'll be confused of something I learn and I don't have someone professional to ask.(Agreed)

I think no, because I already being adult. Hehe, and I know how to use my smartphone to learn English. (Disagreed)

I guess i can do it on my own, but if someone tell me about some new app that can become really handy for me, i will probably use it. (Disagreed)

In the last question, when the students were asked about what English teachers should do when teaching by using technology, mostly the student said that the teachers need to be creative in deploying the technology devices because the core point of utilizing technology devices in learning is not simply about using technology as learning media, but it should empower the students to have better learning experiences and skills. Here are some students' views about what teachers have to do when deploying technology in teaching:

Question : *What should English teachers do when teaching by using technology?*

Responses : *They should be creative when they're creating the media by using technology. Also they have to teach the students by interesting way to catch their attention to study English.*

Provide English lesson with fun activities using technology wisely.

If the teachers can't join the class because urgent reason, they can send some homework or giving link about the English topic so the class didn't cancelled. By using technology teachers can give learning games simple so the students understand easily.

In my perspective, the teacher should be creative in teaching by using technology. They cannot just ask the students to understand the lesson by showing them power point, video or pictures by

explaining nothing. If the media is interesting enough, the teachers' way of teaching should be attractive too. Because, no matter how great the media used in teaching, it means nothing when the teacher cannot use it properly.

4 CONCLUSIONS

The purposes of this study were to describe ICT trends in EFL context and the EFL students' perspectives to the ICT integration. The findings depict that smartphone is the most favourite devise used by the students, they conveyed that its simplicity and portability are two main considerations for using it to support their learning experiences. In addition, the students aware that the integration of technology in English language teaching brings good values to improve their English skills. The technology can facilitate them better in finding more information to improve their English skills. The advancement of technology to support the students in English language learning does not affect the importance roles of teachers as facilitators in learning. The teachers are still highly required by the students to guide them in their learning process. However, the teachers need to be creative in deploying the technology devices because the core point of utilizing technology devices in learning is not simply about using the technology as media, but it should empower the students to have better learning experiences and skills.

REFERENCES

Alwani, A. E. S. and Soomro, S. (2010). Barriers to effective use of information technology in science education at yanbu kingdom of saudi arabia. In *E-learning experiences and future*. IntechOpen.

Ammade, S., Mahmud, M., Jabu, B., and Tahmir, S. (2018). Integrating technology in english language teaching: global experiences and lessons for indonesia. *International Journal of English Linguistics*, 8(6):107–114.

Aslan, A. and Zhu, C. (2016). Influencing factors and integration of ict into teaching practices of pre-service and starting teachers. *International Journal of Research in Education and Science*, 2(2):359–370.

Elemam, A. E. (2016). Barriers to implementation of information and communication (ict) in public sudanese secondary schools: teacher's prospective. *Journal of Sociological Research*, 7(1):33–43.

Farooq, M. U. and Soomro, A. F. (2018). Teachers and technology: Trends in english language teaching in saudi arabia. *International Journal of English Linguistics*, 8(5):10–19.

Ganapathy, M. (2015). The effect of incorporating multiliteracies pedagogy in esl writing. *International Journal of Arts & Sciences*, 8(6):253.

Goktas, Y., Yildirim, S., and Yildirim, Z. (2009). Main barriers and possible enablers of icts integration into pre-service teacher education programs. *Journal of Educational Technology & Society*, 12(1).

Hadijah, S. and Shalawati, S. (2017). Investigating teachers'barriers to ict (information communication technology0 integration in teaching english at senior high schools in pekanbaru. *Proceedings of ISELT FBS Universitas Negeri Padang*, 5:302–310.

Heo, M. (2009). Digital storytelling: An empirical study of the impact of digital storytelling on pre-service teachers' self-efficacy and dispositions towards educational technology. *Journal of Educational Multimedia and Hypermedia*, 18(4):405–428.

Hsu, P.-S. (2016). Examining current beliefs, practices and barriers about technology integration: A case study. *TechTrends*, 60(1):30–40.

Liu, X. and Pange, J. (2015). Early childhood teachers' perceived barriers to ict integration in teaching: a survey study in mainland china. *Journal of Computers in Education*, 2(1):61–75.

Nicolas, M. O. and El-Aly, S. (2018). The smartphone as a tool to enrich an english language classroom in an efl environment. *International Journal of Arts & Sciences*, 11(1):441–450.

Yogi, M. (2013). Developing language and teaching skills through videoconferencing and collaborative projects: A case study of english teacher training programs in japan. *International Journal of Arts and Sciences*, 6(4):347–362.

Zhang, Z. and Zhang, Z. (2015). Using commonly available ict for english learning: Experiences and recommendations. *International Journal of Arts & Sciences*, 8(2):189.

Students' Acceptance of Mobile Application based-Office English Learning Material for University Students

Sri Wahyuni and Fauzul Etfita

English Language Education, Universitas Islam Riau, Pekanbaru, Indonesia
{wahyunis, fauzuletfita}@edu.uir.ac.id

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Abstract: Learning material is one of the strategic tools that can be used to achieve the learning goal. However, the conventional learning material is still employed such as a book, printed module, etc. Responding to this issue, the researchers have developed mobile application-based office English learning material. The application was named ENFORCE. Hence, this research aimed to analyse the correlation among factors and to figure out the best factor that influenced students' acceptance of the mobile application as a learning material for university students. In this research, 105 students had been asked to use a supportive mobile application-based learning material during the learning process. Further, at the end of the semester, online questionnaires were distributed to obtain the data. In analysing the data, the correlation and regression analysis were carried out through SPSS. The results revealed that the correlation among the factor was correlated significantly. It was emphasized by the significant value which was greater than 0.01. Additionally, the result of regression analysis showed that significant value which was .000 that greater than 0.005. It can be declared that the best factor that influenced students' acceptance of mobile application-based office English learning material for university students was ease of use.

1 INTRODUCTION

The development of the mobile application has been utilized for educational issues (Domingo and Garganté, 2016). Specifically for language learning, there are many mobile applications designed for supporting language learning and providing learning material (Hao et al., 2019). The movement of mobile objectives has opened opportunities an alternative media in providing an interactive learning material (Akpan, 2017; Al-Hunaiyyan et al., 2018). Besides, it also becomes challenges for lecturers and students to maximize the mobile application-based learning (Chavoshi and Hamidi, 2019).

As confirmed by several studies that have announced the advantages of language learning through mobile applications (Pilar et al., 2013; Shanmugapriya and Tamilarasi, 2013; Wu, 2015). In term of the students' acceptance of learning mobile also showed positive attitude (Al-Emran et al., 2018; Bozdoğan, 2015; Dashti and Aldashti, 2015). In this research, the students' acceptance was determined based on the internal factors that influenced the students' behavioural intention of use mobile-based learning material such as usefulness perception and ease of use perception (Davis, 1989).

Additionally, external factors were also considered as affected aspect in acceptance namely self-efficacy and compatibility (Venkatesh and Davis, 2000). In consequence, the current research aimed to reveal the correlation and the best-affecting factor on students' acceptance of mobile application-based office English learning material at the end of the semester after using the application.

2 RESEARCH METHOD

The respondents of this research were 105 private university students who had learned English for office through mobile application namely ENFORCE. The students were asked to use ENFORCE as a supportive learning material during 14 weeks of the effective learning time allocation. To have the app, the installation through play store was required for every student at the first week. In its implementation, the semester learning plan was modified for applying this application. Further, the quantitative method was used through the survey to achieve the purpose of this study. The 20 statements of the questionnaire were

adapted from (Davis, 1989); (Venkatesh and Davis, 2000); and (Chung et al., 2015) employed to collect the data at the end of semester. The google form was utilized to address the questionnaire to the students. After collecting the data, SPSS was used to compute and analyse quantitatively the data. Additionally, the correlation analysis was carried out to figure out the correlation among factors and regression analysis was conducted to know the best-affecting factor.

3   RESULTS AND DISCUSSION

In this part, the researchers discussed the results and discussion in some sub-section. To elaborate on the research results obviously, the researcher divided the sub-section into descriptive statistics, the result of correlation among factors, and the result of regression analysis.

3.1   Descriptive Statistics of Each Factor

The descriptive statistics revealed that ease of use showed the greatest mean score which was 16.45. The behavioural intention of use, usefulness, self-efficacy, and compatibility were 15.96, 15.84, 14.75, and 14.4 respectively. The criteria for each factor are based on the range of average scores with levels from very high to very low. The descriptive statistics of each factor can be seen in table 1-5.

Table 1: Descriptive statistics of ease of use

Items	SD	Mean
studying English for office through ENFORCE App is easy for me	.994	4.05
studying English for office through ENFORCE App saves time	.814	4.17
studying English for office through ENFORCE App is convenient	.872	3.99
studying English for office through ENFORCE App is easy to use	.861	4.24

In term of ease of use perception, students trusted that studying office English class by using ENFORCE application was easy to operate it. The evidence of students' perceived of ease of use can be seen from the means score which were 4.24 and 4.05. As well, it can save their time learning through that application. Besides, mobile application-based office learning material was appropriate to use in learning English for office. The evidence of students' perceived of convenience and saving the time can be seen from the means score which were 4.17 and 3.99. It was evidenced from the mean score that was at a

high level and the students' perceived of ease of use was positive (see table 1).

Table 2: Descriptive statistics of behavioural intention of use

Items	SD	Mean
I am ready using ENFORCE App to learn office English	.898	4.10
I will continue using ENFORCE App to learn office English in the future	.950	3.96
Overall, I will learn office English through ENFORCE App	.946	3.90
I will recommend others learning office English through ENFORCE App	935	3.99

In term of behavioural intention of use, students intended to use ENFORCE application to learn office English. It was evidenced by mean score which was 4.10. As well, they would like to promote that app for other office learners. It was also evidenced by mean score which was 3.99. Overall, It can be proven from means scores that were at a high level and students' intention were positive (see table 2).

Table 3: Descriptive statistics of usefulness

Items	SD	mean
studying English for office through ENFORCE App is not limited by time and place	1.182	3.67
studying English for office through ENFORCE App can assist me to access the information I need	.895	4.08
studying English for office through ENFORCE App improve my learning effective	.866	3.98
studying English for office through ENFORCE App provides serviceable guidance in running tasks	.870	4.11

In term of usefulness, students perceived that using learning office English through ENFORCE Application can be done anywhere and anytime. Besides, they believed that application was a very effective learning resource during having to learn English for office. These statements can be proven by the means score which were 3.67 and 4.08. Besides, students perceived that this app was effective to employ as a supportive learning material especially for running the tasks. It can be proven by the means score which were 3.98 and 4.11. Additionally, the mean score was at a moderate level and the students' perceived of usefulness was positive (see table 3).

In term of self-efficacy, students believed that they can solve the obstacles faced during the learning process by using ENFORCE application. It can be seen from the means score which were 3.60, 3.63,

Table 4: Descriptive statistics of self-efficacy

Items	SD	mean
I can finish learning office English tasks through ENFORCE App if there is no information I got from people around me	.957	3.67
I can finish learning office English tasks through ENFORCE App if someone had helped me get started	1.025	3.60
I can solve the obstacles faced when I used ENFORCE App to study office English	1.058	3.63
I can finish learning office English assignments through ENFORCE App, no matter what the difficulties	.903	3.86

3.67, and 3.86 respectively. Overall, it can be said that in term of perceived of self-efficacy was responded positively (see table 4).

Table 5: Descriptive statistics of compatibility

Items	SD	mean
studying English for office through ENFORCE App, I don't have to substitute anything I recently do	1.090	3.34
studying English for office through ENFORCE App does not need changes significantly in my existing work custom	1.010	3.48
studying English for office through ENFORCE App is similar to using other application that I have applied in the past	1.027	3.57
studying English for office through ENFORCE App can strengthen from computer	.976	3.72

In term of compatibility, students perceived that using ENFORCE application was related to their previous impression while using another application. It also confirmed by the means score which were 3.57 and 3.48. They also believed that using that application was useful as same as another application that they used before. It also strengthened by the mean score which was 3.34. As well, students perceived that this app was easy because it can be used through computer. This statement was supported by the mean score which was 3.72 (see table 5). It can be said that in term of compatibility that students positively responded.

3.2 The Correlation among the Factors

To see the correlation among the students' acceptance factors of ENFORCE application as a learning resource, correlation analysis was conducted (see table 6).

Table 6: The correlation among the factors

factors	Useful ness	Ease of use	Self- Efficacy	Compati bility	Intention
Useful ness	1	.778** .000	.569** .000	.550** .000	.666** .000
Ease of use	.778** .000	1	.514** .000	.416** .000	.704** .000
Self- Efficacy	.569** .000	.514** .000	1	.704** .000	.591** .000
Compati bility	550** .000	.416** .000	.704** .000	1	.538** .000
Intention	.666** .000	.704** .000	.591** .000	.538** .000	1

**. Correlation is significant at the 0.01 level (2-tailed).

As could be seen in table 6, all of the factors were correlated to each other significantly. In term of the perception of usefulness, this factor had a significant correlation with ease of use perception ($r_{calculated}$=.778**> r_{table}=.176), behavioural intention of use ($r_{calculated}$=.666**> r_{table}=.176), self-efficacy $r_{calculated}$=.569**> r_{table}=.176), and compatibility ($r_{calculated}$=.550**> r_{table}= .176) respectively.

In term of perceived ease of use, it also had correlated significantly with perceived usefulness ($r_{calculated}$=.778**> r_{table}=.176), behavioural intention of use ($r_{calculated}$=.704**> r_{table}=.176), self-efficacy ($r_{calculated}$=.514**> r_{table}= .176), and compatibility ($r_{calculated}$=.416**> r_{table}= .176) sequentially. Further, self-efficacy had significant correlation with compatibility ($r_{calculated}$=.704**> r_{table}=.176), behavioural intention of use ($r_{calculated}$=.591**> r_{table}= .176), usefulness ($r_{calculated}$=.569**> r_{table}= .176), and ease of use ($r_{calculated}$=.514**> r_{table}= .176). Next factor, compatibility had significant correlation with others factor as well.

The most positive correlation was compatibility with self-efficacy ($r_{calculated}$=.704**> r_{table}=.176) and followed by perceived usefulness ($r_{calculated}$=.550**> r_{table}=.176), behavioural intention of use ($r_{calculated}$=.538**> r_{table}= .176), and ease of use ($r_{calculated}$=.418**> r_{table}=.176). Regard to the intention of use, ease of use perception was the most positive correlated factor. It can be seen from the $r_{calculated}$=.704**. Perceived usefulness ($r_{calculated}$=.666**), self-efficacy ($r_{calculated}$=.591**), and compatibility ($r_{calculated}$=.538**) were correlated with the intensive attitude of use. Overall, Correlation

analysis revealed that the intensive attitude to use the application as a learning resource had a positive correlation with the acceptance factors ($p < 0.01$).

This result was confirmed by previous studies that mentioned usefulness perception and ease of use perception had correlation to behavioural intention to use an application in learning as a resource during the learning process. Wahyuni & Etfita (2019) dan (Weng et al., 2018) stated that perceived usefulness and perceived ease of use influenced the attitude in using an application as a material. (Van De Bogart and Wichadee, 2015); (Elkaseh et al., 2016); and (Wahyuni, 2018a) also revealed that the intention of using an application mobile learning was the effect of two internal factors such as ease of use perception and usefulness perception of mobile application-based learning material. The effectiveness of its mobile application-based learning material was in the context of usefulness and ease of use perception affected the attitude use it intensively (Kitchakarn, 2016). To sum up the research finding based on the analysis and supported by other studies, perceived usefulness and perceived ease of use had a correlation in influencing the intensive behaviour on using an additional mobile application-based learning material.

Further, the external factor namely self-efficacy and compatibly that also had a correlation to intention of use a mobile application in learning also emphasized by several related researchers. (Chen, 2014); (Chung et al., 2015); (Alshammari et al., 2016) strengthened that these external factors had a significant correlation in effecting the intention of using the mobile application in learning. It can be inferred that self-efficacy and compatibility should be considered in designing mobile application-based learning material.

3.3 The Analysis Regression Result

In figuring out the best-affected factor of students' acceptance, regression analysis was carried out. The result was presented in table 7.

Table 7: The result of regression analysis

Factors	t	Sig.	
Compatibility	1.644	.103	not significant
Usefulness	1.205	.231	not significant
Self-efficacy	1.852	.067	not significant
Ease of use	4.270	.000	significant

The result revealed that the best factor that influenced intention in using ENFORCE application as a supportive learning resource was ease of use intentionally. It can be proven from the significant value which was .000<0.005. Additionally, the result was confirmed that the value of $t_{calculated}$ was greater that t_{table} which was $1.6602 < 4.270$ (see table 7). As emphasized by (Abu-Al-Aish and Love, 2013); (Davis, 1989); and (Wahyuni, 2018b), the perception of ease of use can give positive impression on using the learning based mobile application intentionally. Additionally, mobile language learning meets the students' needs, following the digital era, and creating autonomous learning (Shroff and Keyes, 2017). On contrary to the research finding conducted by (Alqahtani and Mohammad, 2015), they stated that the most affecting factor was perceived usefulness to behavioural intention in using the mobile application. It could be inferred that the most considerable factor of students in using ENFORCE application as an additional learning material for university students was the ease of use.

4 CONCLUSIONS

This study analysed the correlation among students' acceptance factors and which one the best factor that affected students' acceptance of behavioural intention in using ENFORCE application. The result showed that each factor had a positive correlation to the behavioural intention of use the mobile application. Furthermore, the most affected factor to intention of use was the sense of ease of use. Specifically, it could be inferred that students believed that utilizing ENFORCE application was easy and useful as an alternative media for providing learning material.

It is very crucial for lecturer to design implementation plan mobile assisted language learning model. As well, the lecturers should cooperate with practitioners or designer's mobile application to develop learning material based mobile to provide interactive learning.

In conclusion, the research findings indicated that the university should expand the strategic plan and offer guideline reflecting in students' acceptance of mobile learning in order to accommodate all on reflecting factors for sustainable development of mobile language learning. The result and findings of this study can contribute which factors can be offered for modelling to run plan of mobile assisted language learning in the university.

study.

REFERENCES

Abu-Al-Aish, A. and Love, S. (2013). Factors influencing students' acceptance of m-learning: An investigation in higher education. *The International Review of Research in Open and Distributed Learning*, 14(5).

Akpan, V. I. (2017). Cell phones as effective learning resource. *Journal of Education, Society and Behavioural Science*, pages 1–8.

Al-Emran, M., Mezhuyev, V., and Kamaludin, A. (2018). Technology acceptance model in m-learning context: A systematic review. *Computers & Education*, 125:389–412.

Al-Hunaiyyan, A., Alhajri, R. A., and Al-Sharhan, S. (2018). Perceptions and challenges of mobile learning in kuwait. *Journal of King Saud University-Computer and Information Sciences*, 30(2):279–289.

Alqahtani, M. and Mohammad, H. (2015). Mobile applications' impact on student performance and satisfaction. *Turkish Online Journal of Educational Technology-TOJET*, 14(4):102–112.

Alshammari, S. H., Ali, M. B., and Rosli, M. S. (2016). The influences of technical support, self efficacy and instructional design on the usage and acceptance of lms: A comprehensive review. *Turkish Online Journal of Educational Technology-TOJET*, 15(2):116–125.

Bozdoğan, D. (2015). Mall revisited: Current trends and pedagogical implications. *Procedia-Social and Behavioral Sciences*, 195:932–939.

Chavoshi, A. and Hamidi, H. (2019). Social, individual, technological and pedagogical factors influencing mobile learning acceptance in higher education: A case from iran. *Telematics and Informatics*, 38:133–165.

Chen, Y.-L. (2014). A study on student self-efficacy and technology acceptance model within an online task-based learning environment. *Journal of Computers*, 9(1):34–43.

Chung, H.-H., Chen, S.-C., and Kuo, M.-H. (2015). A study of efl college students' acceptance of mobile learning. *Procedia-Social and Behavioral Sciences*, 176:333–339.

Dashti, F. A. and Aldashti, A. A. (2015). Efl college students' attitudes towards mobile learning. *International Education Studies*, 8(8):13–20.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, pages 319–340.

Domingo, M. G. and Garganté, A. B. (2016). Exploring the use of educational technology in primary education: Teachers' perception of mobile technology learning impacts and applications' use in the classroom. *Computers in Human Behavior*, 56:21–28.

Elkaseh, A. M., Wong, K. W., and Fung, C. C. (2016). Perceived ease of use and perceived usefulness of social media for e-learning in libyan higher education:

A structural equation modeling analysis. *International Journal of Information and Education Technology*, 6(3):192.

Hao, Y., Lee, K. S., Chen, S.-T., and Sim, S. C. (2019). An evaluative study of a mobile application for middle school students struggling with english vocabulary learning. *Computers in Human Behavior*, 95:208–216.

Kitchakarn, O. (2016). How students perceived social media as a learning tool in enhancing their language learning performance. *Turkish Online Journal of Educational Technology-TOJET*, 15(4):53–60.

Pilar, R.-A., Jorge, A., and Cristina, C. (2013). The use of current mobile learning applications in efl. *Procedia-Social and Behavioral Sciences*, 103:1189–1196.

Shanmugapriya, M. and Tamilarasi, A. (2013). Design and development of mobile-assisted language learning (mall) application for english language using android push notification services. *International Journal of Research in Computer and Communication Technology*, 2(6):329–338.

Shroff, R. H. and Keyes, C. J. (2017). A proposed framework to understand the intrinsic motivation factors on university students' behavioral intention to use a mobile application for learning. *Journal of Information Technology Education: Research*, 16:143–168.

Van De Bogart, W. and Wichadee, S. (2015). Exploring students' intention to use line for academic purposes based on technology acceptance model. *The International Review of Research in Open and Distributed Learning*, 16(3).

Venkatesh, V. and Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management science*, 46(2):186–204.

Wahyuni, S. (2018a). Students' perception of using an android smartphone application as a supplementary learning resource. *Asia Proceedings of Social Sciences*, 2(4):115–119.

Wahyuni, S. (2018b). Students' perspectives on using telegram messenger as a learning media. *ELT-Lectura*, 5(1):31–37.

Weng, F., Yang, R.-J., Ho, H.-J., and Su, H.-M. (2018). A tam-based study of the attitude towards use intention of multimedia among school teachers. *Applied System Innovation*, 1(3):36.

Wu, Q. (2015). Designing a smartphone app to teach english (l2) vocabulary. *Computers & Education*, 85:170–179.

Analysis of E-Commerce Online Purchase Decisions: Case Study on the Implementation of E-Commerce in Online Shop Blanja.com

Susie Suryani[1], Rizky Amelia[2] and Yul Efnita[1]

[1]*Faculty of Economics, Universitas Islam Riau, Pekanbaru, Indonesia*
[2]*Faculty of Agriculture, Saga University, Japan*
{*susie, yulefnita*}*@eco.uir.ac.id, liarizkyamelia@gmail.com*

Keywords: Ease, E-commerce, Purchase Decision, Trust.

Abstract: The purpose of this research is to know consumer purchasing decisions on online products viewed from the dimensions of ease and trust in the online shop Blanja.com. Data analysis used in this research is descriptive and quantitative analysis, data collection is done by purposive sampling method with total sample counted 100 respondent. The data used in this research is the primary data in the form of spreading the questionnaires online and global data about the online shop company Blanja.com. The analytical tool used in this research is multiple linear regression. Based on hypothesis testing by partial can be concluded belief significantly influence to purchase decision with t-count value amount to 3,518 and ease no significant effect on purchasing decision with t-count value amount 1,592, while simultaneously ease and trust variable have significant effect to purchasing decision.

1 INTRODUCTION

The development of an increasingly modern era encourages a variety of system changes, either directly or indirectly either directly or indirectly such as trading systems, transactions and marketing systems. But with the advancement of the times and technology, especially the Internet, all the limitations of distance, time and cost can be solved easily.

Increasing number of internet users has attracted a wide range of businesses to promote some products on the internet to conduct trade transactions. One type of technology implementation in terms of improving the business, sales and purchases of products is to use electronic commerce (e-commerce) to market and buy various kinds of products and services, whether in physical or digital form (Almilia, 2007: 4).

Number of e-commerce users in Indonesia in 2016 reached 25.1 million and predicted up to 39.3 million in 2020. Online shopping is the activity of buying and selling or electronic commerce that allows consumers to be able to directly buy products or services from the seller through internet media using a web browser.

Ease is the first thing that consumers consider in making purchasing decisions via the Internet. Davis (1989) in (Adityo and Khasanah, 2011) defines ease as a level where one believes that a technology can be easily used. Ease in terms of operating the

site, how to transact until delivery of goods, is an important thing in buying and selling online. The second factor is the trust, When someone takes a decision they would prefer a decision based on the choice of the people that they can trust more than the lack of trusted (Moorman, 2009: 8) quoted by Deni Pranoto (2014: 14). Trust is one of the important factors that should be considered if want to trade online. The confidence factor becomes a key factor in every sale and purchase online. Only customers who have confidence and brave that will make transactions through the internet media. In online purchasing via e-commerce, consumers can not see the product directly therefore the characteristics and specifications of the product must be clear and correct therefore that consumers have confidence in the ecommerce site which ultimately affects consumer interest using the site to make a purchase transaction.

In early 2016 there are many Marketplace sites in Indonesia there are at least 18 Marketplace which is generally already known to some people of Indonesia. One of the Marketplaces is Blanja.com. This buying and selling site is the result of a joint venture between a large Indonesian company is Telkom Indonesia and E-Commerce website from America is eBay. Until now Blanja.Com has more than 1 million products that more than 90% is a local product provided by sellers consisting of individual businesses, small

medium enterprises (UKM) and renowned retail brands.

Although it is under the same holding company, Blanja.com does not have an auction feature like eBay. Users who want to be registered as a seller must have a business license from the government, and they can only sell new things. In theory these conditions can complicate Blanja.com in embracing sellers and competing with competitors. However Blanja.com implement these rules on security grounds. Although the trust in e-commerce continues to grow, there are sellers who have intention to deceive buyers in the online marketplace. Blanja.com filter system can provide a sense of security to buyers, and can help this site to attract the attention of buyers who want to be more careful in transacting in the online shop.

The results of research (Ardyanto, 2015), (Naomi, 2015), (SARI,) shows that ease and ease of using e-commerce have a significant effect on online purchasing decisions.

The purpose of this research is to examine and analyze the effect of the ease and confidence using the e-commerce on purchasing decisions online in the online shop Blanja.com.

2 LITERATURE REVIEW

2.1 Definition of Purchase Decision

According to (Philip and Amstrong, 2008) purchasing decisions are the stage in the buyer's decision-making process where the consumer will actually buy.

2.2 Purchase Decision Making Process

- Problem Recognition, is a process where consumers will buy a product as a solution to the problems that are facing.

- Information Search, is an advanced process of the introduction the problem, where the consumer will be motivated to find information to solve problems that are facing him. The information search process can be derived from the memory (internal) and based on the experience of others (external).

- Alternative Evaluation, is a continuation of the information search process, after which the consumers get a wide range of consumer information will evaluate the alternatives- any strategic alternative will be selected to address the problems it faces.

- Purchase Decision, is an advanced process of evaluating alternatives, where the consumers will make the purchase decision of a desired product.

- Post-Purchase Evaluation, is a process after a consumer to buy a product, where consumers will evaluate whether the product is in accordance with her wishes. In this process, there can be customer satisfaction and dissatisfaction. The stages of decision-making above can be described as follows:

2.3 Factors Affecting Purchasing Decisions

There are five internal factors relevant to the purchasing decision process, are:

- Product Motivation. Is an encouragement contained in a person in order to achieve a certain goal.

- Perception. Is the result of the interpretation or perceptions of an event that it faces based on the information and experience to those events.

- Attitude Formation. Is an assessment in a person, which reflects a person's likes or dislikes for a thing.

- Integration. Is a combination of attitude and action. Integration is a response to the position taken. Feelings like to encourage someone to buy a product, otherwise feelings of dislike will make a person not to buy a product.

According to Engel (2000: 285) "needs activated eventually be expressed in purchasing and consumption behavior and in the form of two types of benefits are1) utilitarian benefits and, 2) hedonic benefits/experience".

According to Kotler (2000: 157) "confidence is a descriptive thought that someone has about something. This confidence may be based on true knowledge, opinion or trust and may raise emotions and may not".

2.4 Purchase Decision Online

Meanwhile, according to Turban et al. (2004) "online consumer behavior model based on the factors that influence and the process of attitude and behavior" are described as follows:

The model above can be explained as follows:

- Buying consumer decisions include: purpose, purchase and repurchase.
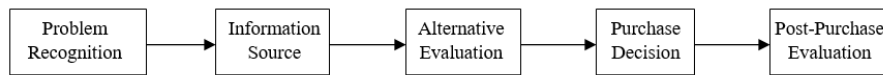
Figure 1: Purchase decision process
(Philip and Amstrong, 2008)
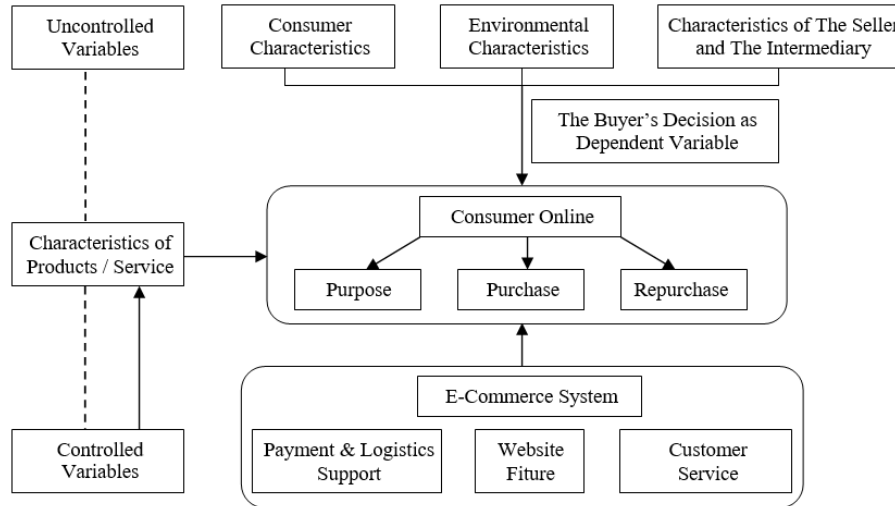
Figure 2: Models of consumer behavior online
Source : Rifqi Nugroho Adi (2013)

- Consumer characteristics include: age, gender, ethnicity, education, psychological issues, knowledge, values, satisfaction, prior experience, preferences, habits, beliefs, attitudes, innovations and personalities.

- Environmental characteristics include: culture, normative social influences, informational social, legal, institutional, governmental, regulatory and political.

- Characteristics of sellers and intermediaries: brand reputation, trustworthiness of policies and procedures, compensation and apology.

- The characteristics of a product or service include: knowledge of a product or service, type of product or service, availability of product or service, product or service adjustment, product or service quality, product or service variety, product or service differentiation, purchase frequency, tangibility.

- Systems in E-Commerce are: 1) Payment and logistic support include: payment options, freight forwarding options, accuracy and delivery speed of orders, condition of goods upon receipt, security and privacy; 2) Website features: accuracy, novelty, information presentation, completeness, simple design, navigation, consistency, easy to use and easy access; 3)

Customer service: there is FAQ, email and personalization.

2.5 E-Commerce

According to Laudon & Laudon (1998), E-Commerce is a process of buying and selling electronic products by consumers and from company to company with computer as an intermediary of business transactions.

According to (Philip and Amstrong, 2008; Hardiawan and SUGIONO, 2013; Hermawan, 2012), e-commerce is a description of the company's efforts to inform, communicate, promote, and sell products and services through the Internet. It can be concluded that the definition of e-commerce is any form of trade transactions / trade goods or services (trade of goods and services) by using electronic media.

2.6 E-Commerce Concepts

According to Kalakota and Whinston (1997) e-commerce can be reviewed in the following four perspectives:

- From a communication perspective, e-commerce is the delivery of goods, services, information, or payments through computer networks or through other electronic equipment.

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- From a business process perspective, e-commerce is an application of technology that leads to automation of business transactions and workflows.

- From a service perspective, e-commerce is a tool that meets corporate, consumer, and management desires to cut service costs when improving the quality of goods and improve the speed of delivery services.

- From an online perspective, e-commerce provides the ability to buy and sell goods or information via the internet and other online means.

- E-commerce in general can be classified based on the transaction. The types of e-commerce can be described as follows Turban et al., 2004:

- Business to Business (B2B). Almost all e-commerce is now a B2B type. This is because this type of transaction is already included iOS and electronic market transactions between organizations.

- Business to Customer (B2C). In general, retail transaction involves the shopper individuals and companies that provide e-commerce applications, in this case, online shopping.

- Consumer to Consumer (C2C). In this category, consumers selling products or services directly to other consumers.

- Consumer to Business (C2B). This category includes individuals who sell products or services to the organization.

- Non business E-commerce. This type of e-commerce includes non-business institutions such as academic institutions, non-profit organizations, religious organizations and government agencies that use e-commerce to reduce their spending.

- Intra Business (organizational). E-commerce category includes all internal activity, usually done in the form of the Internet that involves the exchange of products and services or information.

According to Turban et. al (2004), activities in e-commerce transactions involving parties who transact can be summarized in the picture below:

2.7 The Relationship Between Ease, Trust and Online Purchase Decision

Based on previous research conducted by Deavaj et al. (2003), declare that the decision of buying online is influenced by several factors, including the efficiency of the search, value, and interaction.

3 RESEARCH METHOD

3.1 Population and Sample

The population in this study are all people who have been shopping at online shop Blanja.com. Sampling technique in this research using purposive sampling technique. Thus, the sample was not taken at random but is determined solely by the researchers based on certain considerations.

From the criteria set and the character of the population is not limited then taken a sample of 100 consumers Blanja.com.

3.2 Data Analysis Technique

Data analysis in this research using descriptive and quantitative analysis method. The size level used in the measurement of variables is by Likert scale with five choices of answer categories. Before the data analysis continued, first performed by using the testing construct validity and reliability test. To see the effect between the two variables, then the data processing using the program SPSS (Statistica Product and Service Solution) by using multiple linear regression method.

4 RESULTS AND DISCUSSION

4.1 Multiple Linear Regression Test

Based on Table 1, can be composed of multiple regression equation as follows:

$$\mathbf{Y} = \mathbf{26.399} + \mathbf{0.162X_1} + \mathbf{0.338X_2} \qquad (1)$$

Where:
- The value a = 26.399 indicates that the purchase decision will be constant at 26,399 if any (influenced) variable Ease (X_1), Trust (X_2). It means that purchasing decisions are fixed at 26.399 before or without variables Facility (X_1), Confidence (X_2).

- $\beta1 = 0.162$ shows that if the value of the convenience variable increases by 1%, the purchasing decision variable at Blanja.com online shop will increase by 0.162% assuming the variable X_1, is constant.

- $\beta2 = 0.338$ indicates that if the value of confidence variable rose 1% then the purchase decision variables on the online shop Blanja.com will rise by 0.338% assuming variable X_2, fixed or constant.
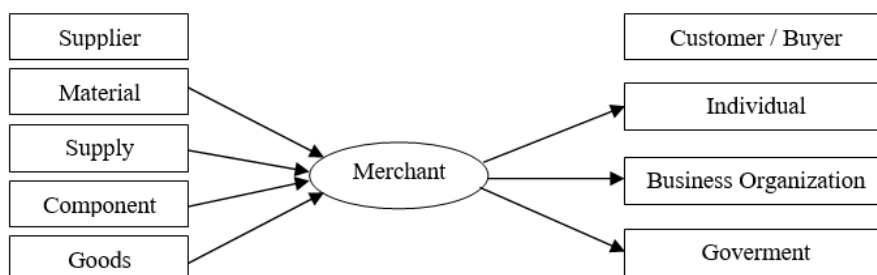
Figure 3: Models of consumer behavior online
Source : Rifqi Nugroho Adi (2013)

Table 1: Multiple regression coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	26.399	3.619		7.295	.000
Easiness	.162	.102	.156	1.592	.115
Trust	.338	.096	.345	3.518	.001

Source: Data processed by SPSS (2018)

Based on the above explanation, it can be concluded that the results of multiple regression for all independent variables have a positive relationship direction, ie if the independent variable (X_1, X_2) rises then the dependent variable (Y) will increase.

4.2 Simultaneous Test (Test f)

Based on the above explanation, it can be concluded that the results of multiple regression for all independent variables have a positive relationship direction, ie if the independent variable (X_1, X_2) rises then the dependent variable (Y) will increase.

Based on Table 3 above obtained Adjusted R Square value of 0.164 meaning that the level of influence or contribution given by the Ease variable (X_1), Trust (X_2) to the Purchase Decision (Y) at the online shop Blanja.com of 0.164 X 100 = 16.4%. While the remaining 83.6% is influenced by other factors that are not included in the study, such as security factor, promotion, price, brand, service quality and others.

4.3 Discussion

Prior to data analysis and data experience using multiple linear regression analysis with SPSS v17 program, first research in trials using validity and reliability test with 100 respondents and this is done on the consumer of online shop Blanja.com with valid and reliable results are 15 statements on the variables ease and trust (X), 10 statement on the purchase decision variable (Y). The calculated f_count in

Anova table is 10.698 and the value of f_tabel is 3,940 at 5% significant level. Based on result of f test obtained f_hitung equal to 10698. When compared to the f-table is 3,940 at significant level of 5%, then f_hitung greater than f_tabel. This shows that there is a positive relationship between Ease (X_1), Trust (X_2) to Purchase Decision (Y), the results of this study are in line with the research of (Naomi, 2015; Sugiarto, 2013; Setiawan and Fauziah, 2017) which shows that Trust and Ease Positive Influence on Purchase Decision. And a significant relationship to Trust (X_2) on Purchase Decision (Y), the results of this study are in line with the research of Cicilia Desy Widya Permatasari (2015) and Denni Ardyanto, et al (2015) which shows that trust has a significant effect on Purchase Decision.

Many factors that can improve purchasing decisions such as ease / trust can be said as a form of encouragement, the impetus aims to provide a spirit that can improve a consumer satisfaction, so for the future can improve product quality and can bring the company to a good purpose.

Thus, E-commerce becomes one of the important criteria in determining the growth and success of the company. Therefore the results of the analysis in the study states that the hypothesis of E-commerce influence on the purchase decision on online shop Blanja.com acceptable truth, which means the better E-commerce provided to consumers, then higher to the purchasing decision.

Table 2: *ANOVA*^{b}

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	55.406	2	27.703	10.698	.000^a
	Residual	251.184	97	2.590		
	Total	306.590	99			

Source: Data processed by SPSS (2018)

Table 3: Coefficient of Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
	.425a	.181	.164	1.609	.977

Source: Data processed by SPSS (2018)

5 CONCLUSIONS

Based on the results of the analysis and discussion in the previous chapter, it can be concluded:

- Partial hypothesis testing (t test) of the two independent variables there is 1 significant variable that is, trust (X_2). The results showed that the independent variables consist of convenience (X_1), trust (X_2) simultaneously has a significant influence on the purchase decision variable (Y).

- While the amount of contribution variable ease, confidence in the purchase decision variable (Y) indicated by the coefficient of determination for 0164, or 16.4% while the remaining 83.6% is influenced by other variables outside the research variables.

From the results of this descriptive can be concluded that the value of the lowest score in the respondent of variable ease (X1) amount 4.22 (Goods purchased will be delivered directly to the consumer address), on trust (X2) amount 4.22 (Seller is able to create a sense of security in transactions without interference from othersViewing still the lowest score on the respondents' answers, the company can increase the E-commerce on purchasing decisions on the online shop Blanja.com, because E-commerce variables have a dominant influence in influencing purchasing decisions, So the purchase decision will increase.

REFERENCES

Adityo, B. and Khasanah, I. (2011). *Analisis Pengaruh Kepercayaan, Kemudahan dan Kualitas Informasi terhadap Keputusan Pembelian Secara on line di Situs Kaskus*. PhD thesis, Universitas Diponegoro.

Ardyanto, D. (2015). Pengaruh kemudahan dan kepercayaan menggunakan e-commerce terhadap keputusan pembelian online (survei pada konsumen www. petersaysdenim. com). *Jurnal Administrasi Bisnis*, 22(1).

Hardiawan, A. C. and SUGIONO, S. (2013). *Pengaruh Kepercayaan, Kemudahan, dan Kualitas Informasi Terhadap Keputusan Pembelian Secara Online (Studi Pada Pengguna Situs Jual Beli Online tokobagus. com)*. PhD thesis, Fakultas Ekonomika dan Bisnis.

Hermawan, A. (2012). Komunikasi pemasaran.

Naomi, P. E. (2015). Pengaruh kepercayaan, kemudahan, kualitas informasi, dan harga terhadap keputusan pembelian konsumen dalam memilih berbelanja secara online. *Jurnal. Universitas Muhammadiyah Purworejo*.

Philip, K. and Amstrong, G. (2008). Prinsip-prinsip pemasaran edisi 12 jilid 2. *Jakarta: Penerbit Erlangga*.

SARI, C. D. W. P. Pengaruh kepercayaan, keamanan, persepsi resiko dan kualitas pelayanan terhadap keputusan pembelian secara online (studi pada pengguna situs olx. co. id d/h berniaga. com).

Setiawan, E. H. and Fauziah, A. (2017). Pengaruh keamanan, kemudahan, kepercayaan, dan risiko kinerja terhadap keputusan pembelian secara online. *Jurnal Ilmu Manajemen Advantage*, 1(1):64–75.

Sugiarto, H. (2013). Kajian efektifitas sistem informasi penjualan online: Studi kasus www. tokprada. com. *Paradigma-Jurnal Komputer dan Informatika*, 15(1):54–67.

The Evaluation of Edmodo in News and Report Writing Class

Fauzul Etfita, Johari Afrizal and Sri Wahyuni

English Language Education, Universitas Islam Riau, Pekanbaru, Indonesia
{fauzuletfita, johariafrizal, wahyunis}@edu.uir.ac.id

Keywords: Evaluation, Edmodo, News and Report Writing

Abstract: Technology development are expected to be utilized reciprocally in Education. Lecturer had started to merge face to face interaction with online course which is called blended learning since the students can easily send their assignments. Many attempts have been made to maximize efficiency of technology to support students and lecturer in teaching and learning process. This study, therefore, evaluate Edmodo as one of online platform which allow students and lecturer to connect, collaborate and share content as well as ideas and educational applications, and assess works, grades, and class discussions. The participants in this study were 25 students of News and Report Writing class. They were asked to fill close-ended questionnaire to evaluate the use of Edmodo in News and Report Writing class. The finding from questionnaire revealed that the use of Edmodo had given positive effect to the students in the News and Report Writing class.

1 INTRODUCTION

A news report is similar to a news article which cover the basics of current events. In English Language Education of Universitas Islam Riau, News report is a part of journalism where the fourth students learn about how to collect the informations and then write them become a news. The subject is called News and report writing.

Furthermore, News report is a paper which provides data for a particular audience and intent in structured format. Technically, report is defined by Sharma and Mohan (2011) as a written declaration of the condition, project, process or testing.

The meaning of news itself is provide through various means of communication such as word of mouth, printing, mail, broadcasting, digital communication and also the witnesses and observers' testimony to events. Then, News report is described as information gathered about something or rumors or gossip spreading (Mohan, 2002).

Since technology is useful for learners, it will be an option for the lecturers to combine between technology and teaching learning process in a classroom. It can be said that today's technology is very helpful in the education process. As what stated by Chakraborty et al (2018), information and communication technology is not only seen as a tool for current learning techniques, it is also seen to be a significant tool to promote different ways of learning.

Furthermore, Internet is one of the different types of technology that frequently used in education. In using internet, lecturer and students can find and search many things from various sources. They can also send emails between teachers and students. While learners and lecturers use Internet, several web sites that offer distinct functions may also be found.

Edmodo is one of the world's most popular websites (Flanigan, 2012) for over 6,5 million users. Students who register into Edmodo can have the profile page on which they can view the recent messages from communities they are connected to and from organizations they join. Besides that, Edmodo has various features and functions.

Edmodo enables users to upload profile images, links, documents and videos that can also be stored in the Library to be shared with other users while uploading into Resources. In addition, items in the Library can be viewed anytime and anywhere (Ali, 2005). As well as that Edmodo helps students to more understanding in learning process and also it makes lecture easier to apply their students assessment.

According to (Ekmekçi, 2016), Edmodo is a free social learning platform which enables learners to access material uploaded by the educators. Additionally (Cauley, 2014) Stated that Edmodo is appropriate for learning. He also stated that it is an educational website that takes and refines the social network's idea. By sharing thoughts, issues and useful advice, students and educators can reach each

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other through Edmodo.

Moreover, According to (Hourdequin, 2014), Edmodo offers helpful instruments for learners and educators to communicate outside of their class online anywhere, at all times. Therefore, Edmodo is an easy Mlearning medium to present the content of the lesson and thus is common to any smartphone operating system. Then, Edmodo's objective is to assist teachers exploit the strength of social media to make the classroom easy to customize.

In addition, Edmodo is used by roughly 32 million individuals, including teachers, educators and students worldwide, in multiple subject areas and the degree of students (Charoenwet and Christensen, 2016). Edmodo network's primary goal is to teach and learn among learners and educators. It also encourages network members to share thoughts in learning methodology, equipment and cooperation.

In contrast to other social media communities, Edmodo usually concentrates on helping teachers and educators manage their own online tasks strategies. In addition, various versions of the Edmodo application can be downloaded for smartphone, tablet and other hand devices for small gadgets.

It can be concluded that Edmodo is one of technological developments that help in the world of education, for example, facilitate teachers in providing learning, quizzes, tasks and provide assessment directly through online wherever and whenever.

2 METHODOLOGY

The researchers used qualitative research in this research, because they wanted to explain the result of the research in detail without statistical or number calculation. Rugaiyah (2016) clarified that qualitative research is a research that describe the data and tend to use analysis. She added that, in qualitative studies, process and significance (subject view) are further emphasized.

Moreover, (Chaedar Alwasilah, 2006) also stated that the descriptive technique was helpful to describe the group and phenomenon characteristics. In other word, data is not analysed by using statistical calculations (statistics formula/numbers). This method is usually for research analysis, study, and also evaluation.

2.1 Research Participant

In this type of research, (Patton, 2005) argues that the recommended size for a focus group is ten to twelve

people. Based on that statement, the participants were selected based on purposive sampling, in particular, typical case (median) sample. Twenty five (N=25) students provided their views on the use of Edmodo while attending News and Report Writing class. Therefore, in the current study the participants was the students of the fourth semester, especially C class in Language Education Universitas Islam Riau who was attending News and report writing class.

2.2 Research Instrument

Based on (Johnson and Christensen, 2019) instrument is a document filled out as part of a research study by each research participant. The researcher handed the questionnaires to 25 students in the News and Report Writing class. It was given after they experienced learning through Edmodo.

In this research, students were provided the questionnaire to discover information about how students perceive using Edmodo in the writing of news reports. In the form of a rating scale, the researchers used a close-ended questionnaire.

There are two questionnaire's blueprint which are adapted from Apriani (2017). The blueprint describes as follow:

Table 1: The Questionnaire Blueprint

Statement	Indicator	Form
1 – 15	The Implementation of Edmodo	Close-ended
16 – 24	The perception on the use of Edmodo	Close-ended

2.3 Data Collection Technique

Data collection technique enables researchers to gather information about the objects of research such as people, objects and phenomena systematically and the situations in which they happen. The data collection techniques follow the procedure as follow:

- Entering the class of research and giving the question sheet to the students (questionnaire)
- The researcher gave 30 minute to the participants for filling the questionnaire.

2.4 Data Analysis Technique

The Likert scale was used by the researchers as the questionnaire rating scale. It is used for measuring attitudes, opinions, perceptions of individuals and organizations about social issues (Sugiyono, 2012).

In completing the questionnaire, the participants were requested to choose one of those options, which they believed they almost fitted with and experienced at the moment.

In this research, the questionnaire were given to the students' to find numerical data of student perception in used Edmodo in News and Report Writing. The questionnaire has four options, those are:

Table 2: Category of Questionnaire Score

Category	Score
Strongly Agree	4
Agree	3
Disagree	2
Strongly Disagree	1

After the students doing the questionnaire, the researchers then take the total score from every students by the category of the questionnaire score. Then, researchers groups from every category. And get the percentage. In calculating percentage, the researchers used a formula adopted from (Sudijono, 2005). The formula used to determine the score of each level in percentage.

$$\frac{F}{N} \times 100\% = P \qquad (1)$$

F : The number of students that choose same level

N : Total number of students

P : Percentage

3 RESULT AND FINDINGS

3.1 Macroeconomic Variables

The researchers has formulated two research questions to evaluate the use of Edmodo in News and Report Writing class. The first research question concerns with the use of Edmodo in the News and Report Writing Class. The second research question is about students' overall perceptions about using Edmodo in News and Report Writing Class. Two wide topics were defined based on the analyzed information in order to understand the further results of the questionnaire.

3.2 Use of Edmodo in News and Report Writing

First of all, the researchers explains the students' responses to the application of Edmodo in News and

Report Writing class. The corresponding numbers are numbers 1 to 24.

Table 3: The Use of Edmodo in News and Report Writing

ITEM	Number of Students			
	Strongly Agree	Agree	Disagree	Strongly Disagree
1	4	11	10	0
2	8	16	1	0
3	8	14	3	0
4	8	17	0	0
5	0	1	14	10
6	1	5	14	5
7	9	14	2	0
8	8	16	1	0
9	1	24	0	0
10	1	23	1	0
11	1	16	6	23
12	1	13	9	2
13	2	20	3	0
14	1	16	8	0
15	0	20	5	0

The researchers analyzed the results on the information written in Table 3 above in order to understand the further results of the questionnaire

Item1. This is the first time for me using Edmodo. From item 1 we can find out that more than half number of students are just starting to find Edmodo from their lecturer. Then they also do not have any experience about Edmodo before, and now, by starting to recognize Edmodo as one of the new media in the teaching and learning process students are expected to be more interested in learning News and Report Writing.

Item2. My teacher assists me in learning News and Report Writing through Edmodo. From this item we can know that only one students who do not have positive opinions about this statement because in the previous item it was clear that they knew Edmodo from their lecturer. Then, the lecturer explained and taught students how to use Edmodo so they could use Edmodo easily

Item3. My friends assists me in learning News and Report Writing through Edmodo. It could be seen from the table 3 above that few students decided that their friends did not assist them while learning News and Report through Edmodo, but certain students agreed that their friends helped them use Edmodo to learn News and Reports Writing.

Item4. I am exited in learning News and Report Writing through Edmodo. The high percentage results show that the students are exited in learning News and Report Writing by using Edmodo. That means, they get one of the interesting learning media

in learning News and Report Writing and can increase their motivation in learning Writing of News and Report.

Item5. **I do not agree to learn News and Report Writing through Edmodo.** The results of the total percentage that choose do not agree with this statement were greater, which was as much as 96%. Almost all students did not agree with the statement because they realized that by using Edmodo learning English was more interesting.

Item6. **I usually learn News and Report Writing through Edmodo.** Based on the result, it showed that most of the students or about 19 students rarely access Edmodo. They access Edmodo less than 3 times in a week even in the previous statement they agreed to use Edmodo in learning News and Report Writing.

Item7. **I think Edmodo can use easily.** The results of this item of questionnaires indicate that 36% of students voted strongly in agreement and 56% of students chose to agree. No student chooses strongly disagree and only 8% choose not to agree. So, the total percentage of students who agree was 92% and the total percentage that disagrees was only 8%. Therefore, we can see from the results of the percentage that students strongly agree with the statement that they believe that Edmodo is easier to utilize.

Item8. **I believe that Edmodo can be used in News and Report Writing as an Interesting educational website.** Most of the students or about 24 students assumed that Edmodo was an exciting website for studying News and Report Writing in particular. This phenomenon occurred because all of students were working together to use Edmodo. They actively used Edmodo to obtain some data from their teacher or shared it with each other as well

Item9. **I can easily interact with my lecturer using Edmodo.** The total percentage of students who agree was 100%, it means students have a positive response to the statement that they can easily interact with their lecturer by using Edmodo. Then, they realized that by using Edmodo they could interact easily with their lecturer and friends wherever they were. Because one of Edmodo's uses is was a medium for lecturers and students to communicate with each other and provide material, tests, or give comments on something shared by the lecturers and his friends.

In addition, when their lecturer was not coming, the teacher can still provide material and assignments through Edmodo. That's why Edmodo is easy to use for them to communicate with the lecturer.

Item10. I can easily interact with my classmate using Edmodo The results of this item indicate that students who choose strongly agree were 4% and students who choose to agree were 92%. Only 4% of students choose disagree and no students choose strongly disagree about the statement that they can easily communicate with friends using Edmodo. That means all students agree with this statement because the total percentage of students who agree shows 96%.

Item10. **I believe that learn News and Report Writing will be easier through Edmodo.** Based on the results show that Edmodo is one of the effective learning media that can make them more interested in writing news reports. Because, they can make and share news reports that they write to teachers and friends without having to use paper and can be directly examined by the teacher.

Item11. **I am happy to use Edmodo in News and Report writing class.** The results of this study indicate that 8% of students choose strongly agree and 80% of students choose to agree to this item 32 statement. None of student who chooses strongly disagrees and only 12% of students choose disagree. So, students who agree about their statements like to use Edmodo for writing class news reports more than students who disagree.

Item12. **I believe that the use of Edmodo in News and Report Writing makes me easier to do my assignment.** Since the level of the agreement was high, it could be assumed that the 17 students got a favorable reaction, which meant that they thought Edmodo made it simpler for them to do their works in News and Reports Writing.

Item13. My lecturer always provides feedback or correction for my assignment It can be seen that most of students or for about 22 students agree that the lecturer always consistently provide comment or correction for their task. The lecturer's comment can lower students' mistake in News and Report writing. After receiving the comment, they corrected their job directly to make their news reports more comprehensible.

Item14. **I always get advice to revise my writing, especially in the writing of news reports.** The results of the last item of questionnaires in this section show that 4% of students strongly agree and 80% agree with this statement. There is no student choose strongly disagree and only 16% of students disagree. So, the total percentage of students who agree was 84% and the total percentage of students who disagree was only 16%.

That means, students have a positive response about the statement that their friends always give suggestions on their assignments. Because when they share their duties through Edmodo media, their

friends often give comments that contain opinions.

3.3 Students' Perceptions on the Use of Edmodo in News and Report Writing

The purpose of this part is to show and discuss the result of the research about student opinions using Edmodo in news and report writing classes.

Table 4: The Students' Perception on the Use of Edmodo in News and Report Writing

ITEM	Number of Students			
	Strongly Agree	Agree	Disagree	Strongly Disagree
16	1	23	1	0
17	0	8	14	3
18	0	16	8	1
19	1	18	6	0
20	2	14	9	0
21	2	12	11	0
22	2	12	11	0
23	1	12	12	0
24	2	10	13	0

Item16. I am motivated to learn News and Report Writing by using Edmodo. It can be concluded, students have a positive response to this statement because Edmodo is very easy to use in learning News and Report Writing so they are more interested in learning News and Report Writing through Edmodo.

Item17. I do not feel enthusiastic to learn News and Report Writing through Edmodo. The students who agree less than students who disagree with this statement. It means that, most students do not agree with the statement that they do not feel enthusiastic learning when using Edmodo, because they were of course enthusiasm in leaning News and Report Writing using Edmodo. It is in line with finding that discussed in item 16 that students feel motivated.

Item18. I believe that News and Report Writing is enjoyable through Edmodo. From the finding of the research, it could be said that the students who thought Edmodo was enjoyable to learn News and Report Writing were regarded as the students who were interested and happy when their lecturer was teaching through Edmodo. They received a favourable reaction from Edmodo, which made them readily learn News and Report Writing.

Item19. I have more motivation to do my assignment in by using Edmodo. From the total percentage of students who agree with the statement that they are more driven to do the assignments through Edmodo shows that they have a positive response to the statement. They were more active and try to accomplish their tasks faster by using Edmodo, because every student who completes the task first will be known by the teacher by using Edmodo and also they will get good points. of course if they can complete the task quickly and well.

Item20. I believe that Edmodo is an efficient website for learning News and Report Writing, particularly for writing skills and News and Report Writing. From the result, it could be concluded that most students reacted favourably to the statement based on the complete proportion. In other words, most students believed that Edmodo was an efficient website for news and report writing class.

Item21. I believe that Edmodo can help me to develop my Writing skill in writing news report text (grammar accuracy and spelling). The results of the total percentage of students who chose to agree were 56% and this showed that students believed that using Edmodo could help them to develop their ability in writing news report text (grammar accuracy and spelling). Because, every word in Edmodo uses English, because of that, they can learn spelling grammar and even can add their vocabulary.

Item22. I believe that my News and Writing ability can be improved through Edmodo. In this 22nd item we can know that the total percentage of students who agree was 60% and the total percentage of students who disagree was 40%. No student chooses strongly disagree and 40% who choose do not agree. it means, students have a positive response to the statement that they believe that using Edmodo motivates them to improve their ability to write text reports, because Edmodo is one of the media in learning that is easy to use.

Item23. I believe Edmodo is beneficial to improve my Writing skill in news and report writing. Based on the percentage of the data, it could be concluded that more than half of students or about 13 students thought that using Edmodo would help them enhance their ability to write news and reports (spelling and grammar accuracy)

Item24. I am not satisfied to use Edmodo in news and report writing. The result of the last item of questionnaire in the second category presented that there were 8% of the students who strongly agreed and 40% of the students agreed with the statement. In other hand, there were 52% of the students who disagreed and none of the students strongly disagreed that they were not satisfied to use Edmodo in news report writing.

Based on the result of the questionnaire, the total

percentage of the agreement level was 48% and total percentage of the students who disagreement level was 52%. It could be assumed that almost all of the students were satisfied to use Edmodo in writing news report. The students were happy when they were using Edmodo in news report writing class. They could make a good writing in terms of news report writing class.

4 CONCLUSIONS

This study has shown that students had varied feelings concerning the use of Edmodo in language classes. The researcher has found the perception of students' using Edmodo were the students have positive response in using Edmodo in news report writing, students felt happy and they said that Edmodo easy to use and interesting application. And the disadvantages of Edmodo was only If a student does not have access to computer and the internet, or a mobile device they would not be able to use the tool.

REFERENCES

Cauley, P. (2014). A guide to explain it all. *Retrieved May*, 19:2014.

Chaedar Alwasilah, A. (2006). Pokoknya kualitatif: Dasar-dasar merancang dan melakukan penelitian kualitatif.

Charoenwet, S. and Christensen, A. (2016). The effect of edmodo learning network on students' perception, self-regulated learning behaviors and learning performance. *no. Imsci*, pages 297–300.

Ekmekçi, E. (2016). Integrating edmodo into foreign language classes as an assessment tool. *Participatory Educational Research (PER)*, 1(1):1–11.

Flanigan, R. L. (2012). Professional learning networks taking off. *Education Digest: Essential Readings Condensed for Quick Review*, 77(7):42–45.

Hourdequin, P. (2014). Edmodo: A simple tool for blended learning. *The Language Teacher*, 38(1):34–45.

Johnson, R. B. and Christensen, L. (2019). *Educational research: Quantitative, qualitative, and mixed approaches*. SAGE Publications, Incorporated.

Mohan, R. S. K. (2002). *Business Correspondence and Report Writing, 3e*. Tata McGraw-Hill Education.

Patton, M. Q. (2005). Qualitative research. *Encyclopedia of statistics in behavioral science*.

Sudijono, A. (2005). *Pengantar statistik pendidikan*. PT Raja Grafindo Persada.

Prototype the Economic of Coconut Farmer Household in Indragiri Hilir Municipality, Riau Province

Heriyanto[1], Asrol[1] and Detri Karya[2]

[1]*Department of Agribusiness, Faculty of Agricultural, Universitas Islam Riau, Pekanbaru, Indonesia*
[2]*Department of Management, Faculty of Economics, Universitas Islam Riau, Pekanbaru, Indonesia*
{*heriyanto, asrol*}*@agr.uir.ac.id, detri.k@eco.uir.ac.id*

Keywords: Impact, Economic Decisions, Coconut Farmer Households.

Abstract: Coconut farming is the main livelihood of the majority of households in Indragiri Hilir. Although the penetration of oil palm plantations has entered the region, the existence of palm, coconut smallholders, in particular, is still maintained. In order to maintain the existence of the coconut as a commodity with a great contribution to the economy Indragiri Hilir, it is necessary to alignments economic policy. This study was conducted with the aim of analyzing the impact of economic policies on household economic decisions coconut farmers associated with the production, allocation of working time, income, consumption, and investment. Simultaneous equations econometric approach with two stages least square method (2SLS) was used to answer the research objectives. The result of the analysis showed that the increase in coconut prices and the hired labor in coconut farming impact contrary to the policy of increasing wages. Increasing the price of coconut and the use of hired labor a positive impact on farm household economy in terms of increased production, income, household consumption, and investment, but a negative impact on the allocation of working time. Meanwhile, wage increases have a negative impact on production, income, consumption and business investment, but a negative impact on the allocation of working time. Therefore, the policy of increasing the price of coconut through the government's efforts to encourage an increase in the price of coconut through the coconut pricing policies or to realize the strong bargaining position of farmers against market structures tend to be oligopsony needs to be done. In addition, it is also necessary to encourage household persuasive farmers to be more focused on making coconut farming by allocating more time working on his coconut farm.

1 INTRODUCTION

The mining sector still provides the largest contribution to GRDP of Riau Province, but with a declining trend, which is 51.49 percent in 2008 to 45.48 percent in 2012. Resource mining, especially oil and gas, which includes unrenewable resources with a downward trend suggests that this sector can not rely on contribution to long-term development. It is, therefore, necessary in addition to efforts to develop mining resources (especially oil and gas) in order to realize sustainable economic growth.

Based on the GDRP without oil and gas of Riau Province (BPS Riau Province, 2018) shows the agricultural sector is the sector with the largest contribution, which is 31.57 percent of total GDRP, respectively, followed by trade, hotels, and restaurants 17.09 percent, and the industrial sector processing 17.09 percent. A plantation subsector

with the largest contribution compared with other agricultural subsectors. Contributions subsector plantations 44.37 percent of the total GDP of agriculture, followed by forestry subsector 27.41 percent, the food crops subsector 11.22 percent, the fisheries subsector 11.14 percent, and the livestock and the results subsector 5.85 percent.

Three plantation crops which a mainstay in the development of agriculture in the Riau Province are oil palm, coconut, and rubber. Acreage and production of palm oil are the biggest, followed by coconut and rubber. Acreage and production of palm oil are likely to increase. Meanwhile, acreage and production of coconut and rubber tend to decrease. Data of acreage and production of three major plantation commodities in Riau Province respectively presented in Tables 1 and 2

Coconut and rubber are the commodities that have been cultivated for generations by the people in the

Table 1: The Area of Three Major Commodities Crops in the Riau Province, 2013-2017

Commodity	2013	2014	2015	2016	2017
Coconut	521,038	521,792	520,260	516,895	515,168
Rubber	504,139	500,851	505,264	502,906	501,788
Palm Oil	2,258,553	2,372,402	2,399,172	2,411,820	2,424,545
Others	118,082	118,924	119,018	119,591	118,688

Source: Central Bureau of Statistics of Riau Province, 2018

Table 2: The Production of Three Major Commodities Crops in the Riau Province, 2013-2017

Commodity	2013	2014	2015	2016	2017
Coconut	481,087	473,221	427,080	421,654	421,465
Rubber	333,069	350,476	354,257	367,261	374,465
Palm Oil	7,047,221	7,343,498	7,570,854	7,761,293	7,841,947
Others	304,802	302,796	143,230	356,740	383,134

Source: Central Bureau of Statistics, of Riau Province, 2018

Riau Province. However, in the last two decades, people like hypnotized to massively develop oil palm, while the benefits of coconut and rubber are not the same as the benefits of palm oil. In other words, the products of coconut, rubber and palm oil have economic benefits or its own market share. Therefore earnest efforts need to be done so that people continue to develop coconut and rubber as a commodity that has high economic value for the social welfare and the economic resilience of Riau Province.

This study focused on the effort to assess conditions in the household economy coconut farmers because it is believed to still potential developed as one of the community's main source of livelihood in the Riau Province, especially coastal communities. It is based on the idea that natural coastal areas are prime habitat for the development of coconut.

This study was conducted in Indragiri Hilir municipality because it has a land area and the largest oil production compared to other municipality/cities in Riau Province. Acreage and production of coconut in Indragiri Hilir 440.821 hectares and 298.599 tonnes, respectively (Table 3).

The success in the development of coconut farming is largely determined by the economic efficiency of households involved in the business. The success of these households not only resulted in increased household income but can contribute to national revenue and providing employment opportunities. Activities of households include consumption and production are carried out simultaneously. Theoretically, households as consumers aim to maximize their utility, while as producers to maximize profit (Lipsey et al.,).

To achieve the desired objectives, households as consumers and producers should be able to make choices and take the right decision in conducting economic activities. Decisions taken include: (1) the decision to allocate working time and earnings in the activities of coconut farming and other business, and (2) the decision in the activities of private consumption.

Decision-making by households is very directly related to internal factors households, include: education level of the head and household members, age and work experience at the head of the household business activity are practiced as well as other internal factors. In addition, household economic decisions are also influenced by external factors, such as wages, input prices, and output prices. Various actions taken by households and the prevailing economic policies will greatly affect economic decision making coconut farmer households.

Table 3: The Distribution Area and Production of Coconut According to the Municipality/City in the Riau Province in 2017

No.	Municipality /City	Area (Ha)	Production (Ton)
1.	Kuantan Singingi	2,761	1,925
2.	Indragiri Hulu	1,828	250
3.	Indragiri Hilir	440,821	298,599
4.	Pelalawan	16,789	17,430
5.	Siak	1,628	1,193
6.	Kampar	1,714	529
7.	Rokan Hulu	1,139	620
8.	Bengkalis	10,020	9,728
9.	Rokan Hilir	5,362	4,412
10.	Kepulauan Meranti	31,453	27,384
11.	Pekanbaru	15	9
12.	Dumai	1,638	876
	Total	515,168	362,955

Source: Central Bureau of Statistics of Riau Province, 2018

Various studies on household economies have a lot to do in Indonesia, among others: Firstly, a study on the economic analysis of industrial finished products rattan household with two stages least squares method (2SLS) conducted by (Elinur,). Secondly, study on the household economy analysis to develop a theory of agricultural household model through the interrelation between the technological aspects of conservation and non-food consumption by a 2SLS method performed by (Koestiono, 2004). Thirdly, (Priyanti et al., 2007) conducted a study on the economic model of farmer households in crop-livestock integration system. Finally, (Husin and Sari, 2011) conducted a study on the economic behavior of coconut farmer households in the

allocation of labor, production, and consumption in Prabumulih, also using 2SLS.

In general, this study aimed to analyze the impact of economic policies on the economy of coconut farmer households in Indragiri Hilir. Specifically, the objective of this study was to analyze the internal and external factors that affected the allocation of work time, income and consumption expenditure of household coconut farmers.

2 THEORY OF HOUSEHOLD ECONOMIC

Household economic model initiated by Neoclassical economic theory. Later this model was developed by Chayanov then called model Chayanov (Chen and Dunn, 1996). Furthermore, the model of the economy continues to grow through research conducted by (Becker, 1965), (Barnum and Squire,) and (Singh et al., 1986).

Neoclassical economic theory is the beginning of a basic model with a unit of household economic analysis underlying this theory is a microeconomic analysis at the level of consumers and producers. The model developed by integrating Kasyanov between production and consumption decisions to analyze the farmer households (Chen and Dunn, 1996). The household economic models can be used to analyze the economic behavior of agricultural companies entirely using the allocation of working time and sell the entire production is generated to the market. In contrast to the subsistence agriculture that relies on labor in the family so that there is no market surplus. The household economic model based on the theory of households with an integrated treatment between the production and consumption decisions (Barnum and Squire,). (Singh et al., 1986) initiated a model household that can be used to analyze the household farmer and the household in addition to agriculture. The assumptions used in this model is that the household has always worked with maximizing utility, where utility derived from the consumption of goods produced by households, goods purchased in the market and the leisure.

Research on the economic of households conducted simultaneously, in general use the household economic model formulated by Becker (1965). Becker (1965) formulate an agricultural household model which integrates the activity of production and consumption as a whole and the use of labor in the household. There are a number of assumptions used in the economic model of these households, namely:

- The satisfaction of households to consume is not only determined by the goods and services acquired in the market but is also determined by a variety of commodities produced in the household,
- An element of satisfaction is not only goods and services, but including time,
- The time and the goods or services can be used as a production factor in the production of household activity
- Households act as producers and consumers.

In accordance with the theory of household behavior developed by Becker (1965), that the utility does not depend on the number of goods and services purchased, but rather by the number of commodities household-they produce, include: the quality and quantity of children, dignity, recreation, companionship, affection, health status and marital status, then this assumption is the basis of household economic models Becker. Mathematically, the model household Becker formulated as follows:

$$U = f(z) \tag{1}$$

$$Z = g(X,t) \tag{2}$$

Where:

U = utility

Z = household commodities

X = market commodities

t = non-work activity

The household members will always maximize the utility to maximize its income constraints and Z with certain time constraints. Mathematically, it can be formulated as follows:

$$Max\ Z = x(x_1, x_2, ..., x_m; t_1, t_2, ..., t_k; E) \tag{3}$$

Subject to:

$$\sum^m p_i x_i = \sum^k w_j I_j + v \tag{4}$$

$$I_j + t_j = T \tag{5}$$

Where

x_i= market commodity i

p_i= price of market commodity i

t_j = leisure

I_j = working time

T = total time

V= property income

With substitute of equation (5) to equation (4), then:

$$\Sigma^m p_i x_i + \Sigma^k w_j t_j = \Sigma^k w_j T + v = s \qquad (6)$$

Equation S is called constraint of a full income because S is *full income*.

Assumptions proposed by Becker is that the decline in the total output of household did not make one in the household members become better off and some members of the household become worse off. In other words, what matters is the total output of the household, so that every member of the household willing to cooperate in managing time and commodity markets in order to maximum Z households. To maximize Z households, there requirements (Necessary condition) that must be met such as the following equation:

$$\frac{\text{MP}t_j = (\partial Z / \partial t_i)}{\text{MP}t_j = (\partial Z / \partial t_i)} = \frac{W_i}{W_j}, \text{ for all } 0 < t < T \quad (7)$$

If the allocation of working time of household member k = T, then:

$$\frac{\text{MP}t_k}{\text{MP}t_j} = \frac{\mu k}{W_j} \qquad (8)$$

Where: $\mu_k \geq W_k$ is shadow price of time k.

$$\frac{\text{MP}x_i}{\text{MP}t_j} = \frac{P_i}{W_j}, \text{ , for all } x_i > \text{ and } 0 < t_j < T \qquad (9)$$

Meanwhile, Singh et al. (1986) suggest that household utility is a function of consumption of goods produced by household, consumer goods purchased in the market, and leisure. Mathematically, formulated as follows:

$$U = u(X_\partial, X_m, X_1) \qquad (10)$$

Where:

X_a = consumption goods produced by household

X_m = consumption goods purchased in the market

X_1 = leisure

The difference between the model Becker (1965) and models Singh (1986) was on the income equation, the satisfaction-maximizing household income and faced with the constraints of time, but on a model developed by Singh et al. (1986) not only faced with two obstacles, but also incorporate production constraints in the model.

These constraints consecutive ranging from income constraints, the allocation of time and production, formulated as follows:

$$P_m X_m = p_a (Q - X_\partial) - w(L - F) \qquad (11)$$

$$T = X_1 + F \qquad (12)$$

$$Q = q(L, A) \qquad (13)$$

Where:

P_m = price of good purchased in the market

Pa = price of good produced by household

$(Q - X_a)$ = surplus production to be marketed

w = wages

L = total of labor

F = family worker

T = household working time

A = fixed input (land)

From equation (11), when the element (L-F) positive means that households hire labor outside the family, otherwise if (L-F) negative means households supply labor outside the family. Third constraints faced by the household can be unified by distributing the time constraints (equation 12) and production (equation 13) into a revenue constraint (equation 11), so that the resulting equation 14 below:

$$P_m X_m + p_\partial x_\partial + w X_1 = w T + \pi \qquad (14)$$

$$\pi = P_\partial Q(L, A) - w(L - F) \qquad (15)$$

Where:
π = Profit

The equation on the left side (14) is the total expenditure of households on goods (X_m and X_a) and time (X1) are consumed, and the right side shows the development of the concept of full income developed by Becker (1965), where the value of the time available (wT) explicitly noted. Singh et al. (1986) to expand the model Becker (1965) to include the measurement of the level of business profits, namely π = PAQ - wL (equation 15), where the entire workforce is calculated based on market wages.

From equation (10) and (14) can be stated that the households in maximize satisfaction can have a level of consumption of goods purchased on the market (Xm), goods produced by households (Xa), the time consumed by households (X1) and energy labor (L) used in production activities. Taking into account the use of labor input, the condition of the first-order condition can be derived as follows:

$$P_\partial \, \partial Q / \partial L = W \qquad (16)$$

From equation (10) and (14) can be stated that the households in satisfaction-maximizing can have a level of consumption of goods purchased on the market (Xm), goods produced by households (Xa), the time consumed by households (X1), and labor (L) used in production activities. Taking into account the use of labor input, the condition of the first-order condition can be derived as follows:

$$L^* = L^*(w, p_\partial, A) \qquad (17)$$

Then equation (17) substituted into the right side of the equation (14) produces a full income when profit is maximized through the choice of labor input. Thus, equation (14) can be written as follows:

$$P_m X_m + P_\partial X_\partial + w X_l = Y^* \qquad (18)$$

Where: Y^* = Full income when maximum profit.

Equation (18) is now a new constraint in the model, the results of calculation of the first-order condition in succession against Xm, Xa, and X1 as follows:

$$\partial U / \partial X_m = \tau p_m \qquad (19)$$

$$\partial U / \partial X_\partial = \tau p_\partial \qquad (20)$$

$$\partial U / \partial X_1 = \tau w \qquad (21)$$

$$p_m X_m + p_\partial X_\partial + W X_1 = Y^* \qquad (22)$$

Referring to the stages in the completion of the equation (16), by simultaneously solving, resolving equation (19) to (22) generates a demand function as follows:

$$X_m = X_m(p_m, p_\partial, w, Y^*) \qquad (23)$$

$$X_\partial = X_\partial(p_\partial, p_m, w, Y^*) \qquad (24)$$

$$X_1 = X_1(w, p_m, p_\partial, Y^*) \qquad (25)$$

From equation (23), (24) and (25), we can say that the amount of demand (consumption) of goods, goods, and services is a function of the price of the goods, the price of other goods, wages, and full income when the maximum profit.

From equation (24), if the assumed price of goods produced by households increased, it will have an impact on the household income gains, mathematically expressed as follows:

$$\frac{dX_a}{dp_a} = \frac{dp_a}{dp_a} + \left(\frac{\partial X_a}{\partial X_a}\right)\left(\frac{\partial Y^*}{\partial X_a}\right) \qquad (26)$$

The first element on the right side of equation (26) is expressed as the effect of price changes, which in the case of normal goods had a negative slope, meaning that if the price increases, the demand for these goods and services will comply. Meanwhile, the second on the right side declare the income effect, meaning that if the price of goods produced household increases, the income earned that household will increase, so does the full household income will increase.

In analyzing the economic to note two things: Firstly, it should be emphasized that the price of goods and services consumed by households is considered the market price. Secondly, it should be ensured that the behavior of households in the activity of production and consumption is separable (separate) or non-separable (simultaneously). If the equations of production, the allocation of working time and consumption are included in the model are separable, the estimated system of equations of production and consumption can be done separately, for example, analyze the system of equations of production with an educated guess through profit function or a function of cost, while the system of equations consumption by using approaches Almost Ideal Demand System (AIDS) (Sadoulet and De Janvry, 1996). Whereas, if the system of equations of production and consumption as well as the allocation of working time labor is nonseparable, then the more complex estimation techniques need to be done. Estimation among others can be done by using a Two-Stage Least Square (2SLS) or Three-Stage Least Square (3SLS).

3 RESULT AND DISCUSSION

3.1 Research Location and Time

The study was conducted in February 2017 until December 2017 in Indragiri Hilir, Riau Province, with sampling locations in four districts, namely Mandah, Pulau Burung, Enok, and Keritang. Location of study was determined by deliberate consideration that this area is an area that has a fairly extensive coconut plantation in Indragiri Hilir.

3.2 Data and Sampling Techniques

The data collected in this study include primary and secondary data. The primary data obtained from

interviews with respondents, namely coconut farmer households. Secondary data was collected from the Plantation Office, the Central Bureau of Statistics and other sources. Secondary data used to support the primary data and refine the analysis in this study.

The sampling was done by multi-stages purposive sampling. The number of samples taken for household coconut farmers deliberately taken in the area Indragiri Hilir which of the 12 districts, selected four districts that have a population of households coconut farmers are pretty much the Mandah, Pulau Burung, Enok, and Keritang. For each district was selected three villages, and each village took as many as 15 samples, so that the number of samples taken to local households, the coconut is as many as 180 samples.

3.3 Model Specification

The first stage in the study with the econometric approach is a model specification. At this stage can be illustrated a diagram of the relationship between the variables entered into the model, which then formulated into a number of the equation of structural and identity (Koutsoyiannis, 1977; Interligator, 1978). Simplification of the economic model of coconut farmer households in Indragiri Hilir is presented in Figure 1 below.
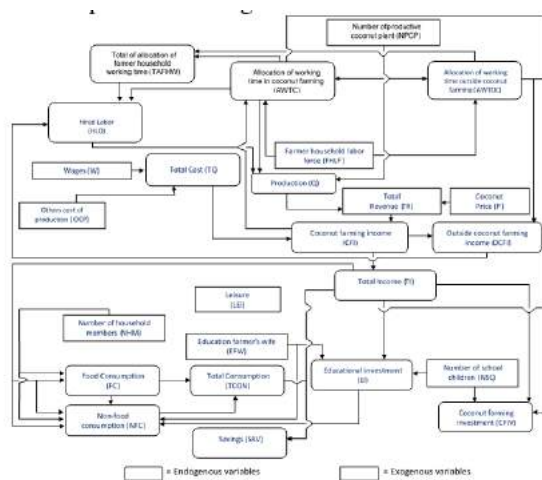
Figure 1: Simplification of Economic Model of Coconut Farmer households

3.4 Model Identification and Method of Estimation

Models are built to be identified first and then estimated. Identification of the model is done by order condition, according to the formula:

$$(K–M) \geq (G–1) \qquad (27)$$

Where:

K = total variables in the model (endogenous and exogenous variables)

M = number of endogenous and exogenous variables in the equation are identified

G = number of equations (the number of endogenous variables).

If $(K-M) > (G-1)$, then the equation is overidentified; if $(K-M) = (G-1)$, the equation is exactly identified; and if $(K-M) < (G-1)$, then the equation is unidentified (Koutsoyiannis, 1977; Interligator, 1978).

The identification results of the economic model of coconut farmer households is overidentified (K = 27, M = 4 and G = 16). Based on the results of this identification, the most appropriate estimation method is used the Two-Stage Least Square (2SLS). Needs to be informed that the level of significance is used in discussing the results of this study using the tolerance level of Significantly, up to 20 percent (α = 20%).

3.5 Model Validation and Simulation

Model validation was conducted in order to determine whether a model is valid is used for simulation analysis. Validation of the model performed in this study using the statistical criteria, i.e. RMSE (Root Mean Square Error), RMSPE (Root Mean Square Percent Error), U-Theil and UM-Bias (Pindyck and Rubinfeld, 1991).

In the economic model of coconut farmer households in Indragiri Hilir, economic policies simulated include:

- an increase in the coconut price by 13 percent,
- an increase in the wages by 14 percent, and
- an increase in the hired labor by 6 percent.

4 RESULT AND DISCUSSION

4.1 Results of Model Estimation

The results of the estimation of the economic model of coconut farmer households in this study are quite good as seen from the coefficient of determination (R^2) of every equation in the model. The coefficient of determination is ranged from 0.4407 to 0.9753 by F test statistic values are quite high (34.48 to

2313.56) and significantly different from zero at the 1 percent level. The coefficient of determination of the smallest (less than 0.5) is only found in household food consumption equation. However, in general, exogenous variables are included in each equation better able to explain the endogenous variables.

Table 4 presents the results of testing on 16 equations in the economic model of coconut farmers household in Indragiri Hilir. From Table 4, it can be stated that the overall sign estimated parameters as expected.

The results of estimation indicate that coconut production is positively influenced but not responsive to changes in the number of productive coconut plant, the allocation of working time in coconut farming, and hired labor. From the aspect of the allocation of work, time can be stated that: Firstly, allocation of working time in coconut farming is not responsive to changes in the coconut farming income (positive), the allocation of working time outside coconut farming (negative), and the household labor force (positive). Secondly, hired labor influence positively but not responsive to coconut farming income. And thirdly, the allocation working time outside coconut farming responsive to outside coconut farming income (positive) and unresponsive influenced by education level farmer's wife this is in line with studies (Nurhayati et al.,) and (Mariyanto, 2015).

The results of the estimation equation household income and expenditure show that:

Firstly, outside coconut farming income responsive to changes in the allocation of working time outside coconut farming (positive), and unresponsive influenced by coconut farming income (negative). Secondly, there are no internal and external factors that are responsive affect food consumption expenditure of coconut farmer households. Instead, there are several factors that are responsive affect non-food consumption expenditure, the total income (positive), food consumption expenditure (negative), and savings (negative). Thirdly, educational investment is positively influenced by the total income, and the number of school children, but unresponsive. Fourthly, coconut farming investment is positively influenced and responsive by total income. Finally, household savings responsive to changes in total income (positive). Savings are also responsive to changes in household total consumption (negative).

4.2 Validation and Simulation Model

The results of the analysis of model validation show RMSE value of all variables endogenous to the economic model of coconut farmer households less than 50 percent, except for variable of hired labor, the allocation of working time in coconut farming, outside coconut farming income, educational investment, leisure, and savings. Furthermore, if the observed value of the U-Theil for each variable endogenous to the economic model of coconut farmer households are quite small, which is less then 0:20, except variables of hired labor, the allocation of working time outside coconut farming, outside coconut farming income, the non-food consumption, total consumption, educational investment, coconut farming investment, and savings have U-Theil value greater than 0.2.

Some endogenous variable that has a value RMSPE more than 50 percent and U-Theil more than 0:20 indicate bias in the estimation models. But when seen from the UM value for all endogenous variables are equal to zero, it can be stated that no systematic bias occurs. Therefore, the economic model of coconut farmer households who built quite well and can be used for policy simulation analysis.

The simulation results show that: Firstly, the increase in coconut prices as well as increased use of hired labor a positive impact on coconut production and the allocation of working time in coconut farming. Instead both these policy simulations negative impact on the allocation of working time outside coconut farming. In a total of allocation of farmer household, working time has increased. The increase in coconut prices is a positive impact on coconut production further positive impact on coconut farming income. On the other hand, the increase in coconut prices that negatively impact the allocation of working time outside coconut farming further negative impact on coconut farming income. Nevertheless, the total income of farmers has increased. The increase in total income is followed by an increase in non-food household consumption, coconut farming investment, educational investment, and household savings. The decline in food consumption is very rational, which according to the Engel law which states that the higher the income, the proportion of income used for food consumption will decrease.

Secondly, the increase in the wage impact at odds with the rising prices and increased outpouring of working families in coconut farming. A wage increase indicates increased costs of production in coconut farming which further negatively impact the

Table 4: The Results of Parameters Estimate and Values Elasticity of Household Economic Model of Coconut Farmer Households in Indragiri Hilir

Equation/Variable	Notation	Parameter Estimate	t-test	Pr >|t|	Elasticity
1. Production of coconut Intercept Number of the productive coconut plant Allocation of working time in coconut farming Hired Labor	Q - NPCP AWTC HLO	-2145.84 17.05593 5.561301 6.494564	-2.85 6.75 6.72 9.08	0.0049 <.0001 <.0001 <.0001	0.3813 0.4843 0.2111
2. Allocation of working time in coconut farming Intercept Coconut farming income Allocation of working time outside coconut farming Farmer household labor force	AWTC - CFI AWTOC FHLF	486.0200 0.000036 -0.28702 238.4417	2.47 11.75 -0.78 1.57	0.0144 <.0001 0.4375 0.1185	0.5079 0.3448
3. Hired Labor Intercept Coconut farming income Allocation of working time outside coconut farming Farmer household labor force	HLO - CFI AWTOC FHLF	-151.558 0.000038 0.363197 -176.828	-0.78 12.47 1.00 -1.18	0.4337 <.0001 0.3173 0.2377	0.0001
4. TAWTC = AWTC + HLO		TAWTC = Total of allocation of working time in coconut farming			
5.Allocation working time outside coconut farming Intercept Outside coconut farming income Education farmer's wife	AWTOC - OCFI EFW	-17.8683 0.000052 21.07800	-0.19 14.00 2.13	0.8474 <.0001 0.0345	1.9075 0.1935
6. TAFHW = AWTC + AWTOC		TAFHW = Total of allocation of farmer household working time			
7. CFI = TR - TC		TR = Total revenue TC = Total cost			
8. TC = W + OCP		W = wages OCP = others cost of production			
9. Outside coconut farming income Intercept Allocation of working time outside coconut farming Coconut farming income Farmer household labor force	OCFI - AWTOC CFI FHLF	122263.9 14085.08 -0.03643 1051644	0.08 5.05 -1.56 0.92	0.9346 <.0001 0.1206 0.3614	1.9075 -0.1516
10. TI = CFI + OCFI		TI = Total income			
11. Food consumption Intercept Total income Number of household members Educational investment Savings	FC - TI NHM EI SAV	5075269 0.261552 1349970 -0.27642 -0.23613	3.91 3.28 4.47 -2.58 -2.56	0.0001 0.0012 <.0001 0.0108 0.0115	0.6653 0.3299 -0.0554 -0.2244
12. Non-food consumption Intercept Total income Food consumption Educational investment Savings	NFC - TI FC EI SAV	651523.1 0.607739 -0.60712 -0.64552 -0.59526	1.41 19.54 -11.46 -18.73 -17.86	0.1591 <.0001 <.0001 <.0001 <.0001	5.3647 -2.1009 -0.4489 -1.9633

Equation/Variable	Notation	Parameter Estimate	t-test	Pr >—t—	Elasticity
13. TCON = FC + NFC + LEI		TCON = Total consumption LEI = Leisure			
14. Educational investment Intercept Total income Number of school children	EI - TI NSc	-1874864 0.049803 3354331	-3.89 5.18 12.35	0.0001 <.0001 <.0001	0.6238 0.9302
15. Coconut farming investment Intercept Total income Number of school children	CFIV - TI NSc	5699621 1.790429 -0.78841	0.35 13.72 -0.66	0.7304 <.0001 0.5114	1.0812
16. Savings Intercept Total Income Total consumption	SAV - TI TCON	1985529 0.952118 -1.20417	0.91 41.19 -9.12	0.3623 <.0001 <.0001	2.4345 -1.6017

decline in household income of coconut farmers. The decrease in income will affect the decline in consumption, investment and household savings.

5 CONCLUSION

Theoretically, household economic decisions are influenced by internal factors and external factors. Nevertheless, empirical analysis of household economic decisions coconut farmers in Indragiri Hilir, only internal factors that are responsive influence the economic decisions of households. From the aspect of production, can not be found factors both internal and external factors affecting responsive, but the variables that most influence is the allocation of working time in coconut farming. From the aspect of the allocation of working time, internal factors that responsive it's affected is the outside coconut farming income. Meanwhile, from the aspect of income, internal factors that responsive affected income of coconut farmers household is the allocation of working time outside coconut farming. Further aspects of expenditures of coconut farmer households in Indragiri Hilir, internal factors that responsively affected are total income and savings.

The policy of increasing coconut prices and hired labor have a positive impact on the economy of coconut farmer households in Indragiri Hilir. Conversely, an increase in wages on coconut farming has a negative impact on the economy of coconut farmer households. This implies that the government's efforts to encourage an increase in the coconut price through the coconut pricing policies or to realize the strong bargaining position of farmers on market structure tends to be oligopsony needs to be

done. In addition, it is also necessary to encourage farming households persuasively to focus on doing the coconut farming by allocating more working time on his coconut farm.

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REFERENCES

Barnum, H. and Squire, L. 1979. *An Econometric Application of the Theory of the Household. Journal of Development Economics*, 6:79–102.

Becker, G. S. (1965). A theory of the allocation of time. *The Economic Journal*.

Chen, M. A. and Dunn, E. (1996). Household economic portfolios.

Elinur. *2004*. The Analysis of Household Socio-Economic of Rattan Finish Product in Pekanbaru City. Thesis.

Husin, L. and Sari, D. W. (2011). *The Economic Behavior of Coconut Farmer households in Prabumulih in Allocation of Working Time, Production, and Consumption*. Research Report of Indonesia Managing Higher Education for Relevance and Efficiency (I-MHERE).

Interligator, M. D. (1978). *Econometric Model, Techniques, and Applications*. Prentice Hall Inc., Hew Jersey.

Koestiono, D. (2004). *The Economic Analysis of Farmer households in Conservation Effort*. Thesis.

Koutsoyiannis, A. (1977). *Theory of Econometrics*. Harper and Row Publisher Inc., New York.

Lipsey, R. G., Steiner, P. O., and Purvis, D. D. *1995*. Economics.

Mariyanto (2015). J. *Dwiastuti. R and Hanani. N. 2015. Household Economics Model of Dryland Agriculture In Karanganyar Regency, Central Java Province. Journal Habitat*, 26(2).

Nurhayati, B., D, and Yusmini. 2012. *Factors Affecting The Decision of The Economic Household Cocoa Farmers in Kuantan Singingi. Indonesian Journal of Agricultural Economucs (IJAE)*, 3(2):105–116.

Priyanti, A., Sinaga, B. M., and Syaukat, Y. (2007). dan s. *U. Kuntjoro. 2007. The Economic Model of Farmers Household in Integration System of Crops-Livestocks: Conception and Empirical Study. Wartazoa*.

Singh, I., Squire, L., and Strauss, J. (1986). A survey of agricultural household models: Recent findings and policy implications. *The World Bank Economic Review*, 1(1):149–179.

Application of a Fuzzy Set and Fuzzy Logic to Economic Problems: Study Literature Review of Journal

Suripah, Zetriuslita

Department of Mathematics, Universitas Islam Riau, Pekanbaru, Indonesia
{rifah, zetriuslita}@edu.uir.ac.id

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Abstract: This article aims to describe the set of application and fuzzy logic on the economy. The problems still faced over the years is still the presence of obstacles how to create a formula approach to economic modeling. But with the development of increasingly sophisticated technology, it must be followed by the progress of the method approach refers to the development of mathematics and computer technology. Based on a review, several studies in the field of economics has been developed to address the existing problems. As one alternative approaches to modelling and in providing system solutions in the real world, especially for the complexity of the system that are not easy to approach through mathematical modelling, fuzzy logic method can be used as an alternative to solve the economic problems.

1   INTRODUCTION

The problems that occurred during this are the constraints related to the discovery of a method for the formulation and economic modelling approach. (Flood and Marion, 1998) to suggest that there are still challenges to find new methods for the formulation and estimation of economic modeling in order to obtain a high flexibility in the formulation of functional; parametric assumptions as little as possible; a good look for a data bit or a lot; as well as the possibility of computing to support large number of variables.

A long with the development of increasingly sophisticated technology, it must be followed by the progress of the method approach refers to the development of mathematics and computer technology. In the development of the past, for modeling a system used a statistical method based on the theory of probability that represent uncertainty. However, this model has not succeeded in providing an accurate prediction for a few series for the linear structure and a few otherlimitations (Lin et al., 2002). Therefore, around 1965, Professor LA Zadeh of the University of California at Berkeley introduced a vague set theory. Indirectly, this theory suggests that there is a theory that can be used to represent uncertainty. That is, as one alternative is fuzzy logic.

Fuzzy logic as a main component builder, softcomputing has been shown to have excellent ability to overcome the problems of uncertainty. The set and fuzzy logic increasingly attracted many researchers to be used as an alternative to data analysis in research. Fuzzy logic implementation is already very extensive, both in the fields of education, agriculture, health, engineering, psychology, no less important social and economic field.

In economics, has had its own association which is named SIGEF (The International Association for Management and Economy Fuzzyset), which was formed on November 30 through December 2, 2006, and hold the 13th congress in Morocco (Muslim, 2007). The congress is a forum for associations of academics, professionals and practitioners in the field of economics, management, finance, and organizations to exchange ideas and experiences in research, based on fuzzy logic, ant system, neural systems, genetic algorithms, the theory of uncertainty , complexity theory and softcomputing.

2   DISCUSSION

The discussion of several journal. articles application of research results fuzzy set and fuzzy logic in the economic that has been conducted by researchers between 1987 to 2007. The results of the application of the model used and to look into further fields are described as follows.

2.1 Fuzzy Logic

Theory of probability during the period of this century, plays an important role to explain the notion of uncertainty. In 1965, Prof. Lotfi A. Zadeh of the University of California at Berkeley introduced the concept of fuzzy sets indirectly this theory states that in addition to the probability approach, the uncertainty can also be done with a different approach in this case using the concept of fuzzy set.

Fuzzy set theory is a mathematical framework used to represent uncertainty, vagueness, inaccuracy, lack information and partial truth (Studer and Masulli, 1997). Basically, vague set is an extension of classical set (crisp), the classical set A an element will have two possibilities, namely membership A member denoted by uA (x). In the classical set of two memberships are uA (x) = 1 if x is a member of A and uA (x) = 0 when x is not a member of A.

In contrast to the classical set of fuzzy sets treating elements in the degree of membership. For example if the price of rice Rp 5,500 relatively expensive or mediocrity? In the concept of fuzzy sets and in the real world "both statements are true" and perhaps as an answer. The figure below shows the representation of the price of rice in conventional sets and fuzzy sets.
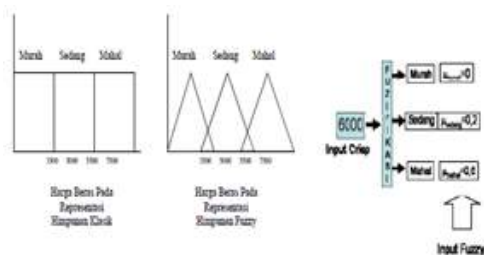
Figure 1: Representation of the Association and Fuzzyfikasi Value Crisp. Source: Adapted from Muslim (2017)

In classical logic truth values of right and wrong is only worth it in the fuzzy logic truth values are in the interval [0,1] which can be determined by its membership function (Kaneko, 1996). Fuzzy logic is an appropriate way to map an input space into an output space based on the concept of fuzzy sets (Velasco, 1987). As a general overview say we have grouped the data into the data input and output data of other groups is, between the input and output are mapping process called black box, black box where it describes a process that is not known. To analyze the contents of the black box, there are several approaches that can be used such as: linear systems approach, econometrics, interpolation, expert systems, fuzzy logic, etc. However, as disclosed Lotfi Zadeh: "In almost every case, fuzzy way faster and cheaper"(Muslim, 2017).

2.2 Fuzzy Logic Applications on Economic Affairs

Use of Fuzzy Logic for Research in Economics Compared to conventional methods, for example OLS, the application of fuzzy logic approach on research in economics is still not a done deal. However, this method can be used as an alternative to modeling economic behavior. Economic modeling is a form of abstraction of economic behavior in the real world, in order to obtain a picture that is simpler and easier to understand by humans. The modeling used for "real world" is too complex to be described in detail. Although the details are not described by the model, but a good model should be able to represent anything that you want to know from the real world, and also can predict the conditions that occur in the real world. The following is some research in the field of economics that uses fuzzy logic.

(Flood and Marion, 1998) in the "Output convergence and International Trade: Time Series and Fuzzy Clustering Evidence for New Zealand and Her Trading Partners" introduces a new way to measure the convergence in the form of time series data, using the fuzzy c-means application in the clustering algorithm. Fuzzy Grouping provide a clearer picture of that difference in output will converge in groups. In the same year, Giles on "Econometric Modeling based on Pattern Recognition via the Fuzzy C-Means Clustering Encryption" using fuzzy logic in particular grouping of fuzzy c-means in economic modeling as a model of money demand with annual data 1960-1983 American trade department, models Kuznets' U-Curve "with a Gini coefficient data and US real GDP from 1947 to 1991 and the results show that the approach is better than the OLS and non-parametric models.

Accurate prediction of stock market indices is very important for certain reasons. Chief among the needs of investors is the potential to hedge against market risks, opportunities for market speculators and to make profit by trading indices. Estimating the stock market index accurately has profound and important implications for researchers and practitioners.

The most commonly used technique for predicting stock prices are the regression method and ARIMA models (Box et al., 1970). Various models and methods have been used extensively in the past. However, they failed to provide accurate prediction for several other limitations. Although there are models of ARCH / GARCH Eichengreen, (Eichengreen et al., 1995); (Bollerslev, 1986) models to overcome non-linear variance, there are still some series cannot be predicted satisfactorily. Recent

Table 1: Part 1. Selected literature on predictive economics problem mapping.

Study	Modelling Method	Variables	Fields	Goals attained
Achsani, NA. 2003	Auto Regressive Conditional Heteroskedastic (ARCH)	Y: national product at 1993 prices R: interest rate (long-term) M: Money stock. P: Consumer price index. Mr: logarithmic real balances.	Finance	If the μ coefficient increases, the interest rate elasticity decreaces after the Asian crisis
Agenor, PR, JS Bhandari, and RP Flood. 1992	Linear regression	Payments Crises and financial aspects	Finance	There is a relationship between payments crises and financial aspects
Al-Shammari, M. and Shaout, A. 1998	Fuzzy personnel performance model	Teaching and instruction, research and scholarly, activities, service to the department, output from the fuzzy relations, merit increase, promotions, and tenure.	Organisation /managerial	The modified model offers a better evaluation performance system since it allows for dynamic changes in the strength effect of the input variables on output performance.
Bollerslev, T. 1986.	ARCH, Regression models	Autoregressive conditional heteroskedasticity	General economics	Empirical example relating to the uncertainty of the inflation rate is represented
Box, G. and Jenkins, G. 1970.	ARIMA		Busines	
Buyukozkan. G., &Feyzioglu. O. 2004	Membership function	New product development	Manajemen product	An increase in accuracy of decision-making in NPD underuncertainty
Chowdhry, B., Goyal, A. 2000	Survey	Exploring the financial crisis in Asia	Finance	Represent the introduction
Dash, P. K., Liew, A. C., Rahman, S., & Dash, S. 1995	Fuzzy expert system and a hybrid neural network-fuzzy expert system	Load Forecasting	General field	Represent the introduction
Draeseke, R & Giles, D.E. 2002	Multiple indicators, multiple causes (MIMIC)	Tax rate and an index of the degree of regulation.	Economic	Relatively achieved
Eichengreen, B., AK Rose, and C. Wyplosz. 1996	ARCH/GARCH	The causes and consequences.	Busines	Answer the problem statement

Table 2: Part 2. Selected literature on predictive economics problem mapping.

Study	Modelling Method	Variables	Fields	Goals attained
Engle, RF. 1982	ARCH, Regression models	United kingdom inflation	Finance	ARCH effects is found to be significant and the estimated variances increase substantially during the chaotic seventies.
Flood, R. and N. Marion. 1998	Fuzzy c-Means Clustering	Perspectives on the recent currency crisis	Finance	Represent the introduction
Giles, DEA. 2005	Both bivariate and multivariate time-series	Time-series data and fuzzy clustering evidence for New Zealand and trading partners	Busines	Time-series methods are able to predict existing problems.
Giles, DEA and R. Draeseke. 2017	Fuzzy c-mean Encryption,	Econometric modelling recognition via pattern	Economic	Represent the introduction
Kahraman, C, Tolga, E, and Ulukan, Z. 2000	Fuzzy benefit /cost ratio analysis	Justification of manufacturing technologies	Manufacturing	The method of operating cost ratio (B/C) fuzzy logic is used to justify the making technology
Kaneko, Takaomi. 199	Fuzzy Logic and Fuzzy Logic Production System (FLOPS)	Financial diagnosis	Finance	FLOPS is recommended as a function of financial diagnosis
Karsak, E. E., & Tolga, E. 2001.	Fuzzy Multiple Criteria Decision Making (MCDM)	Evaluating advanced manufacturing system investments.	Manufacturing	The fuzzy decision-making approach appears as a consistent and computational-efficient alternative to existing methods.
Lie, TT and Sharaf, AM. 1995	Neuro-fuzzy short-term load forecasting (STLF)	Self-correcting online electric load forecasting model	Economic	Vector input affects the estimated the short-term forecast load.
Lin, CS et al. 2006	Neuro-fuzzy	Currency crises	Finance	The neuro-fuzzy approach produces better predictions significantly.
Lin, CS; Khan, HA & Huang, CC. 2002	Neuro-fuzzy	Stock indexes	Busines	Neuro fuzzy models predict stock indexes better than its rivals, neuro fuzzy consistent over time.

Table 3: Part 3. Selected literature on predictive economics problem mapping.

Study	Modelling Method	Variables	Fields	Goals attained
Munakata, Toshinori, and Jani, Yashvant. 1994	Fuzzy system include fuzzy sets, logic, algorithms, and control	-	An overview	Fuzzy system are most suitable for uncertain or approximate reasoning, particularly systems with a algorithm model that is difficult to be controlled.
Muslim, Aziz. 2017	Fuzzy logic	Fuzzy logic in economics	Economic	In almost every case, fuzzy way faster and cheaper
Obstfeld, M. 1994	Linear example	Balance-of payments crisis and Devaluation	Finance	Thre are effects of the influence of the balance of payments crisis
Okada, H., Watanabe, N., Kawamura, A., and Azakawa, K. 1992	Artificial Neural Network (ANN)	combination of fuzzy logic and ANN to describe the input	An overview	The system produces bond ratings that are very suitable for human experts, and are able to generalize better than a simple three-layer neural network.
Ozkan, FG and A. Sutherland. 1995	Fuzzy system modelling, type-I, FCM	Currency crises	Finance	The predictive power of RBFSM is very encouraging.
Padmakumari, K. Mohandas, KP, and Thiruvengadam, S. 1999	ANN Neuro-Fuzzy, Radial Basis Function Network (RBFN),	Land use based load forecasting	Busines	The RBFN is found to be more suitable for long-term prediction.
Studer, L. and Masulli, F. 1997	Neuro-Fuzzy system (NFS) mackey Glass time series	Layer of singleton inputs, a hidden layer of Gaussian membership functions and one output unit	Organisation	The use of a Neuro-Fuzzy system for forecasting time is promising
Velasco, A. 1987.	Linear regression	Bank crisis and payments crisis	Finance	There is a relationship between bank crisis and payments crisis
Zavadskas, E. K and Turskis, Z. 2011	Fuzzy Multiple Criteria Decision Making (MCDM)	Multiple Criteria Decision Making in Economics	Economic	MCDM is effective for supporting decisions in several conditions.

research in neural network engineering has shown that neural networks have the properties needed for relevant applications, such as nonlinearity and fine interpolation, the ability to learn nonlinear complex mapping, and self-adaptation for different statistical distributions.

However, neural networks cannot be used to explain the causal relationship between input and output variables. This is because the black box is like the natural of most neural network algorithms. Neural networks cannot be named with the underlying knowledge. Networks must learn from the beginning, while the learning process itself does not guarantee success.

On the other hand, the expert system's fuzzy approach has been applied to the forecasting of different problem (Bolloju, 1996), (Kaneko, 1996), (Shaout and Al-Shammari, 1998), where the operator's knoeledge to predict results. Although forecasting is based on Fuzzy logic, the results show that the process for constructing fuzzy- logic system is subjective and depends on the heuristic process. The choice of membership function and basic rules must be developed heuristically for each case. Rules in this way do not always produce the best predictions, and the choice of membership function still depends on trial and error. The strengths and weaknesses of Neuro-fuzzy and fuzzy logic, have combined the ability to learn from neural networks and the functions of fuzzy expert systems. Application can be found in (Dash et al., 1995), (Studer and Masulli, 1997), and (Padmakumari et al., 1999). For example the hybrid model is expected to provide understanding to humans about the meaning of 'Fuzzy' through the various advantages can be used as a concept of knowledge by studying neural networks.

Some researchers such as (Jacobs and Levy, 1989), have claimed that the stock market is not a system that can be explained by simple rules, nor is it a random system that is impossible to predict. In fact, they claim that the market is a complex system, where the behaviour of the system can be only be explained and predicted by a complex set of relationships between variables.

Recognizing the complex characteristics of the stock market to invites the researchers to further investigate whether index variations can be improved to predict nonlinear models using the neuro-fuzzy approach. (Lin et al., 2002) in the "Can the neuro-fuzzy models predict stock indexes better than its rivals?" Develop a model based on a trading system by using a neuro fuzzy model to predict stock indexes better. Thirty well-known stock indexes were analyzed with the help of the developed model. Empirically shows the corresponding non-linear results in stock indexes using the KD technical index. Analysis of trading points and analysis of trade costs indicate endurance and opportunities for profit, it is recommended to use nonlinear neuro fuzzy systems. The analysis also shows that the recommended neuro fuzzy is consistent over time.

In 2003, (Özkan et al., 2004) in the "Currency Crises Analyzed By Type-I Fuzzy System Modelling", implementing softcomputing in the analysis of a currency crisis, with test data time series of data is the currency of Turkey. The method used is the approach of macroeconomic time series data, the Rule-based Fuzzy System Modelling (RBFSM) become the focus of research and compared to GARCH /ARMAX and ANFIS. The results show that the GARCH approach / ARMAX and ANFIS no better than predicted RBFSM.

Achsani, (2003) using a fuzzy cluster algorithm to model the demand for Indonesia with the data in 1993: 4 to 2002: 3 even though the results are not as good as the econometric model approach because it does not consider the effect of autocorrelation and seasonality of data, however, can explain in more detail the grouping of economic periods. In the same year, Achsani, (2003) back to do research using Fuzzy-Clustering in data ASEAN + 3 as the ratio of debt / GDP, exchange rate stability, inflation rate, and the long term interest rate to determine the relative position of Indonesia in the constellation of Asian economies East.

In previous years some researchers report that their concern for the problems of economic crisis. They are concerned about theadverse consequences of the policies needed to maintain economic variables (Agenor et al., 1992; Flood and Marion, 1998; Flood and Marion, 1998). While the traditional approach emphasizes the role played by a decline in foreign reserves in triggering the collapse of the fixed exchange rate, some of the latest models suggest that the decision to abandon the parity may occur based on concerns about the evolution of the economic authorities. On the other hand, variables indicate that groups of other variables can be useful for predicting the currency crisis (Ozkan and Sutherland, 1995) and (Velasco, 1987). In addition, the latest model also suggested that the crisis can develop in the absence of fundamental changes in the real economy. This model emphasizes that the nature of the contingency of economic policy may pose some equlibria and produce that meets its own crisis (Obstfeld, 1983). Some recent research has focused on the effects of the balance of payments crisis (Eichengreen et al., 1995).

All these models recommend possible variables as the main indicators of crisis. However, some new works are opposing, for example (Chowdhry and Goyal, 2000), the results of the sample data forecasting beyond a theoretical model for the case of the Asian financial crisis is largely disappointing.

(Lin et al., 2002) in "A New Approach to Modeling Early Warning Systems for Currency Crises: can a machine-learning fuzzy expert system predict the currency crises Effectively?". Back conduct research using Neuro-Fuzzy approach to predict the crisis in Indonesia, Philifina, Thailand, and Malaysia. This model integrates the learning ability with fuzzy logic inference. The empirical it shows that the neuro-fuzzy approach produces significantly better predictions. Compared to traditional approaches such as logit techniques.

In 2007, (Muslim, 2007) in the "Implementation Algorithms and Neuro Fuzzy Fuzzy Cluster Case Studies Indonesia's exports to Japan" provide an alternative modeling especially data modeling Indonesian exports to Japan by applying algorithms and Neuro Fuzzy Fuzzy Cluster. MAPE size and Theils Inequality shows that both methods have a good performance to estimate export. When compared to conventional methods OLS-AR fuzzy method provides better results. Prediction of the input-output relationship on Fuzzy Cluster Algorithm can predict their objective structural break in 1993: Q2 and 1997: Q4 and evidenced by subjective methods chow-test. Modeling indicates that there is a conditional relationship in the model of Indonesian exports to Japan, in the context of these relationships are fuzzy low, medium, high, while in the context of time is pre Japanese Slump, after the Japanese Slump, post-crisis Indonesia.

2.3 Fuzzy Logic Applications in the Field of Business

Use information technology becomes an important part in business management in the 21st century now. Today information technology were mostly used to process data and efficient support effective communication in business management. Predictions of the future of information technology will be used as a decision-making tool automatically, have the intelligence capability to analyze and be able to do the learning to make optimal decisions. For that we need a system that is able to behave like a human being in terms of thinking and make decisions rationally. Fuzzy logic is a concept that can be used to meet the demands of the system. In the business world has made several application programs based

on fuzzy logic are: (Munakata and Jani, 1994), early application in the trading world using fuzzy approach. The system handles 65 industrial stocks in the Dow and the Nikkei 800 rule prescribed by the experts and if necessary repaired by senior business analyst. This system has been tested for 2 years and performance by using Nikkei Average showed an increase of over 20%. When tested this system recommends "sell" 18 days before the "Black Monday" in 1987. The system is operated commercially in 1988. Most financial analysts, agree to say that the "rule" for the trade was "fuzzy". Convertible Bond Rating, Nikko Securities, has been using ANN to raise the rating convertible bond since twenty seven years ago (Okada et al., 1992). This system of learning from expert instruction reaction rating, which change according to economic circumstances. The system will analyze the results, and using the results to advise. The system consists of a combination of fuzzy logic and ANN to describe the input. Ratio of the correct answer is 96%.

In (2000) (Kahraman et al., 2000) in the "Justification of manufacturing technologies using fuzzy benefit or cost ratio analysis". The application of fuzzy logic is used for the application of cash discount techniques to justify the manufacturing technologies studied many documents. The net value of the country's stock and stochastic value now are two examples of this application. This application is based on data that is outside the range. If we have the faint of data such as interest rates and cash applying the techniques of cash discounts, fuzzy set theory can be used to resolve this uncertainty. Fuzzy set theory has the ability to represent data and the vague and allows the operator to apply mathematical programming fuzzy domain. This theory is primarily concerned with measuring uncertainty in the mind and human perception. On paper, with the assumption that we have data that is not clear, the method of operating cost ratio (B/C) fuzzy logic is used to justify the making technology. After calculating the B/C ratio based on annual values, it turns out that the two manufacturing systems have different cycles.

(Draeseke and Giles, 2002) in the "A fuzzy logic approach to modeling the New Zealand underground economy". Implementing fuzzy logic to analyze the importance of the availability of data on the size of the economy "under" (EU) for macroeconomic policy. They use fuzzy set theory and fuzzy logic to draw up an annual time series for New Zealand unobserved EU during the twenty six year. Two input variables used in effective tax rate and the index of the level of regulation (REG). The result of time series UE compared to the previously built. Second, the authors use the model of "multiple

indicators, multiple cause" (MIMIC) structural. Both approaches produce each UE Photo New Zealand sensible but somewhat different during this period. The fuzzy logic approach to this problem involves several subjective considerations, but the results are quite satisfactory.

Research activities in the economic field during the last five years it has increased significantly. (Zavadskas and Turskis, 2011; Büyüközkan and Feyzıoglu, 2004; Karsak and Tolga, 2001). Conducting research in the "Multiple Criteria Decision Making (MCDM) Methods In Economics: An Overview". Suggests that the main research field is the study of operations and sustainable development. That philosophy of decision-making in the economic field is to assess and choose the most recommended solution, apply it and to get the greatest benefits. Alternatives methods applied in problematic conditions both in the decision-making process of individuals or organizations. Several of effective decision making methods support decisions in conditions where several criteria have emerged in the last decade. The Paper's presents methods of decision-making in the field of economics and a summary of results and important applications over the last five years. The paper considers the decision making considering the development of some of the latest methods of decision-making criteria (for the classic method is discussed in many previous publications). Researchers here using a different approach, pioneering studies and papers presented briefly.

The comparative analysis results of the reviewed article are presented in the following table:

3 CONCLUSIONS

The rapid development of technology and computers to follow the development of economic modeling representative. As one alternative approaches to modeling and in providing system solutions in the real world, especially for the complexity of the system that are not easy to approach through mathematical modeling, can be used as an alternative method of fuzzy logic to solve problems. As for some reason it is advisable to use fuzzy logic is:

- Conceptually easy to use because it is based on a simple mathematical concept.

- Their tolerance to uncertainty data;

- Program to model the system that is not linear and complex;

- Working system is based on everyday human communication.

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REFERENCES

Agenor, P.-R., Bhandari, J. S., and Flood, R. P. (1992). Speculative attacks and models of balance of payments crises. *Staff Papers*, 39(2):357–394.

Bollerslev, T. (1986). Generalized autoregressive conditional heteroskedasticity. *Journal of econometrics*, 31(3):307–327.

Bolloju, N. (1996). Formulation of qualitative models using fuzzy logic. *Decision support systems*, 17(4):275–298.

Box, G. E., Jenkins, G. M., and Reinsel, G. (1970). Time series analysis: forecasting and control holden-day san francisco. *BoxTime Series Analysis: Forecasting and Control Holden Day1970*.

Büyüközkan, G. and Feyzıoglu, O. (2004). A fuzzy-logic-based decision-making approach for new product development. *International journal of production economics*, 90(1):27–45.

Chowdhry, B. and Goyal, A. (2000). Understanding the financial crisis in asia. *Pacific-Basin Finance Journal*, 8(2):135–152.

Dash, P., Liew, A., Rahman, S., and Dash, S. (1995). Fuzzy and neuro-fuzzy computing models for electric load forecasting. *Engineering Applications of Artificial Intelligence*, 8(4):423–433.

Draeseke, R. and Giles, D. E. (2002). A fuzzy logic approach to modelling the new zealand underground economy. *Mathematics and computers in simulation*, 59(1-3):115–123.

Eichengreen, B., Rose, A. K., and Wyplosz, C. (1995). Exchange market mayhem: the antecedents and aftermath of speculative attacks. *Economic policy*, 10(21):249–312.

Flood, R. and Marion, N. (1998). 0perspectives on the recent currency crisis literature. 1 national bureau of economic research workm ing paper no. 6380.

Jacobs, B. I. and Levy, K. N. (1989). The complexity of the stock market. *Journal of Portfolio Management*, 16(1):19.

Kahraman, C., Tolga, E., and Ulukan, Z. (2000). Justification of manufacturing technologies using fuzzy benefit/cost ratio analysis. *International Journal of Production Economics*, 66(1):45–52.

Kaneko, T. (1996). Building a financial diagnosis system based on fuzzy logic production system. *Computers & industrial engineering*, 31(3-4):743–746.

Karsak, E. E. and Tolga, E. (2001). Fuzzy multi-criteria decision-making procedure for evaluating advanced manufacturing system investments. *International journal of production economics*, 69(1):49–64.

Lin, C.-S., Khan, H. A., Huang, C.-C., et al. (2002). Can the neuro fuzzy model predict stock indexes better than its rivals? *Discussion Papers of University of Tokyo CIRJE-F-165*.

Munakata, T. and Jani, Y. (1994). Fuzzy systems: an overview. *Communications of the ACM*, 37(3):69–77.

Muslim, A. (2007). *2007*. Cluster Algorithm Implementation of Fuzzy and Neuro Fuzzy Model Case Studies Indonesia's exports to Japan.

Muslim, A. (2017). 2017. *The use of fuzzy logic in economics. (2017). Retrieved on December*, 28.

Obstfeld, M. (1983). Balance-of-payments crises and devaluation.

Okada, H., Watanabe, N., Kawamura, A., Asakawa, K., Taira, T., Ishida, K., Kaji, T., and Narita, M. (1992). Initializing multilayer neural networks with fuzzy logic. In *[Proceedings 1992] IJCNN International Joint Conference on Neural Networks*, volume 1, pages 239–244. IEEE.

Ozkan, F. G. and Sutherland, A. (1995). Policy measures to avoid a currency crisis. *The Economic Journal*, 105(429):510–519.

Özkan, I., Türksen, I., and Aktan, O. (2004). Currency crises analyzed by type-i fuzzy system modelling. *Fuzzy Economic Review*, 9(1):35.

Padmakumari, K., Mohandas, K., and Thiruvengadam, S. (1999). Long term distribution demand forecasting using neuro fuzzy computations. *International Journal of Electrical Power & Energy Systems*, 21(5):315–322.

Shaout, A. and Al-Shammari, M. (1998). Fuzzy logic modeling for performance appraisal systems: a framework for empirical evaluation. *Expert systems with Applications*, 14(3):323–328.

Studer, L. and Masulli, F. (1997). Building a neuro-fuzzy system to efficiently forecast chaotic time series. *Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, 389(1-2):264–267.

Velasco, A. (1987). Financial crises and balance of payments crises: a simple model of the southern cone experience. *Journal of development Economics*, 27(1-2):263–283.

Zavadskas, E. K. and Turskis, Z. (2011). Multiple criteria decision making (mcdm) methods in economics: an overview. *Technological and economic development of economy*, 17(2):397–427.

Achievement Motivation of Civil Engineering Students of Universitas Islam Riau

Ida Windi Wahyuni[1], Anas Puri[2]

[1]*Faculty of Islamic Study, Universitas Islam Riau, Pekanbaru, Indonesia*
[2]*Department of Civil Engineering, Universitas Islam Riau, Pekanbaru, Indonesia*
idawindi@fis.uir.ac.id, anaspuri@eng.uir.ac.id

Keywords: Achievement Motivation, Motivating Factors, Inhibitor Factors, Training.

Abstract: Achievement motivation is an encouragement to overcome obstacles, strength training and trying to do a difficult job in a good way. In other terms, achievement motivation is one's attempt to find and exceed the standard of excellence. There is no enough information about achievement motivation and motivating factors of students of Civil Engineering Department Universitas Islam Riau. This information is important for the arrangement of teaching strategies and the maintaining program. This paper is intended to describe the student's achievement motivation according to motivating factors as well as inhibitors of achievement motivation of research subjects. The sample of this research is a student of Civil Engineering Department Universitas Islam Riau. The method to be used is qualitative descriptive research in which the data is analyzed by the description of regular sentences in order to be easily understood the meaning contained therein. Results show that the current students of Civil Engineering Department of Universitas Islam Riau have high achievement motivation.

1 INTRODUCTION

One of the basic needs that must be fulfilled by every individual is education. Through the educational process that, every individual is able to learn and develop all their potential and characteristics. The learning process in higher education requires motivation for every student. Motivation means generating motives, generating mobility, or moving a person or self to do something in order to reach a decision or goal. Biogenetic motives such as hunger, thirst, the need for rest and the driving of human activities that are innate to him and that of him from birth can distinguish one's nature (Wahyuni, 2011).

Motivation is one of the aspects that need to be considered to keep students achieving. Motivation plays an important role in achieving one's goals. Achievement motivation is needed in the learning process because if everything is forced it will affect the results obtained. This is a sign that if something is done not according to his needs, will make a person unmotivated. Achievement motivation gives a great influence on the achievement of the students. Students with high achievement motivation will always be passionate and ambitious, perform the tasks assigned to them as well as possible, learn faster, and

have achievements in their skills (Santrock, 2008).

The Ministry of National Education of the Republic of Indonesia generally provides criteria for outstanding students, i.e students who achieve high achievement in academic and non-academic, able to communicate with Indonesian and English, positive attitude, and spirit of Pancasila view of life (Tinggi, 2010). (Akpan and Umobong, 2013) stated that motivating students to succeed in school is one of the greatest challenges of the century. Getting students to learn and retaining their interest in what they learn is one of the main goals of teachers in the classroom.

A student is a call for a person who is currently studying at a university or college (http://id.wikipedia.org/wiki/Mahasiswa). The task of students in the campus is (1) to deepen and apply the lecture material presented by the lecturer; (2) learning to explore the potential within oneself through organizational training, (3) The main task of the students is the obligation to study and finish college. A student who is capable of accepting oneself will have a high appreciation against him and have an elastic view of his limitations, will be better able to establish relationships with the Creator (Wahyuni, 2011).

Civil engineering is the science that studies about

building construction in all areas of development. All related to development must involve the civil engineering sciences. Some students claim that the civil engineering department is a difficult department in terms of building drawings, counting courses, lecturers difficult, and many big tasks to be completed. However, the civil engineering department is in great demand by young people who have an interest in the challenge. The civilian scholar is not only expected to be a planner, but also an executive in the field.

Civil engineering students have more time for field activities. They are faced with practical concrete and steel structures, drawings of building techniques, etc. In addition, they also often practice surveying and measurement by using theodolite in the field with hot or rainy conditions. This affair is no less extreme than duty and overtime. Because most students have eye bags like pandas. After graduating many become successful with various projects that they did (https://www.anakteknik.co.id/a/bhrearka/Ciri-Ciri-Mahasiswa-Teknik-Berdasarkan-Jurusannya).

There is no enough information about achievement motivation and motivating factors of students of Civil Engineering Department Universitas Islam Riau. Information about achievement motivation and motivating factors of students is important for arrangement of teaching strategies and the maintaining program. Based on the above description, this research problem can be formulated that is (1) how civil engineering student achievement motivation; and (2) what is the motivating factors and inhibitors of student achievement motivation? The purpose of this research was conducted to determine the motivation of student achievement as well as the factors driving and inhibiting student achievement motivation.

2 MOTIVATION ACHIEVEMENT

(Winkel, 1996) asserts that achievement motivation is the driving force in the individual to achieve the highest level of academic achievement for self-esteem. In achieving the highest possible achievement, every individual must have a strong desire to achieve his goal. It really depends on the effort, ability, and willingness of the individual itself. Achievement motivation has a big effect on learning achievement (Achmad et al., 2018) (Lutan, 1988) revealed that someone who has high achievement motivation level shows a tendency of a positive approach in performing their duties and always oriented to achievement.

Research conducted by (Kavousipour et al., 2015) revealed that the achievement motivation level in SUMS students was higher than average and did not decrease during the school year. The six most influential factors in academic motivation are family attitudes, getting good jobs in the future, respecting themselves, the ability to learn, believing in their role in victory and defeat and optimism about themselves. The results of the study also show that personal, social and educational factors influence the motivation of more than economic and environmental factors.

According to (McClelland, 1987), there are several factors of high achievement motivation, namely:

- Responsibility. Individuals with high achievement motivation will have more responsibility for the results of their work because then the individual is satisfied when completing the task properly.

- Risk of task selection. Individuals who have high achievement motivation will consider in advance of the risks it faces before starting the job, in other words, the action will be done will be adjusted to the limits of ability it has.

- Requires feedback. Individuals with high achieving motivation prefer to work in situations where the individual gets concrete feedback about what he or she has done.

- Innovative. Individuals with high achievement motivation will be more active to seek information in order to find better ways or other new ways to accomplish a task and do not like routine matters.

- Time of completion of the task. Individuals with high achieving motivation can complete tasks quickly and do not like to postpone work.

- The desire to be the best. Individuals will try their best to be the best of others. Individuals with high achievement motivation will not only be satisfied with being able to do a task but will strive to achieve certain performance standards in doing it.

(McClelland, 1987) also reveals that individuals with high achieving needs will prefer tasks with moderate difficulty levels because the task has a challenging element of ability and is still within the limits of a person's ability to work. Conversely, individuals who have lower *n-ach* choose tasks with high or very low difficulty. This happens because they do not like situations where there are challenges and threats to their abilities. This difference is also seen in problem-solving strategies. Individuals with high *n-ach* have problem-solving strategies that support their efforts in achieving desired outcomes.

In contrast, individuals with low *n-ach* do not have a problem-solving strategy and tend to be easily frustrated in the face of adversity. Factors that influence the achievement motivation that can be an extrinsic factor and intrinsic factor. Intrinsic factors that play a role are the possibilities for success, self-efficacy, value, and previous experience. While the extrinsic factors that play a role are the family, school, and friends (Haryani and Tairas, 2014). Achievement motivation is a crucial factor in achieving academic success and human resource excellence (Kuntjojo, 2015). A person with a success-oriented, high-motivated approach to success and fearful achieves a low failure, is very involved in various achievement activities and not anxious or worried about performing well (Schunk, 2012).

3 RESEARCH METHODS

3.1 Location and Sample

This research was conducted at the Civil Engineering Department of Universitas Islam Riau, a university located in the city of Pekanbaru, Riau Province in Sumatera Island, Indonesia. The university was founded in 1962. The engineering faculty was established in 1964. Currently, the Engineering Faculty has 6 courses of civil engineering, mechanical engineering, petroleum engineering, regional and municipal planning techniques, informatics engineering and geological engineering. Students came from different regions, among others from Pekanbaru and some districts around Riau. There are also those from outside of Riau. The sample of research is all students of the second semester of Civil Engineering Department, Faculty of Engineering Universitas Islam Riau, amounting to 85 people.

3.2 Type of Study

In accordance with the purpose of research, then this research is qualitative research. This study using a descriptive study method. The purpose of descriptive research in this research is to explain and describe (descriptive) the results of research in a systematic, factual and accurate about the facts and the properties of a population. Descriptive method is not intended to test a hypothesis but aims to create a description of things to be studied (Suryabrata, 2000). In this study to be studied is the motivation for student achievement.

3.3 Type of Study

Data collection techniques used is a questionnaire technique conducted on April 2018. Instrumentations were designed based on McClelland [10]. This study uses an instrument of achievement motivation scale as shown in Table 1. There are three categorizations; hight, medium, and low achievement motivation. The number of instruments composed is 26 items with score 1, 2, 3 and 4 on the achievement motivation scale.

Table 1: Nonlinear Model Results

Score		Categorization
$(\mu+1,0\,\partial) \leq X$	$78 \leq X$	High
$(\mu+1,0\,\partial) \leq X$ $< (\mu+1,0\,\partial)$	$52 \leq X < 78$	Medium
$X < (\mu-1,0\,\partial)$	$X < 52$	Low

4 RESULTS AND DISCUSSION

The sample of this research is all students of the second semester of the Department of Civil Engineering Faculty of Engineering Universitas Islam Riau which amounted to 85 students. They consisted of 71 (84%) male and 14 (16%) female.
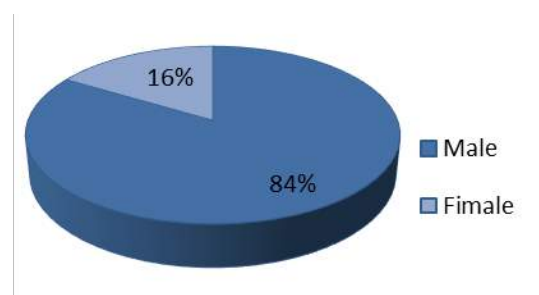
Figure 1: Most of the students were male.
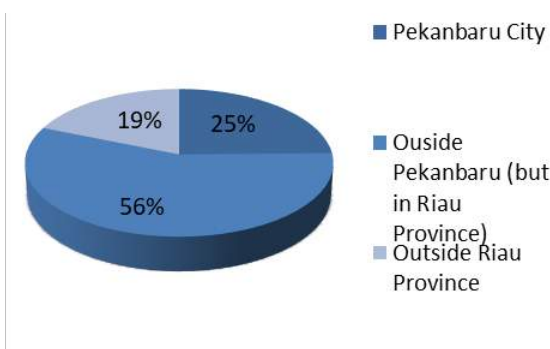
Figure 2: Number of students based on place of origin.

Students come from different regions (Fig.2), such as Pekanbaru City is 21 people (25%), outside Pekanbaru City (but still in Riau Province) is 48 people (56%), and from outside of Riau there are 16 people (19%). Most of the students come from Riau Province. Based on the calculation of the results of the data obtained the mean value of all subjects is 85.4. There was a maximum value of 102 and a minimum value of 68 with an aggregate total value of 7255.

Based on Fig. 3 is clearly visible about the categorization of student achievement motivation in stages in accordance with the results of research.

To know the categorization of stratified levels for respondents in placing individuals into groups that are separated in stages are done according to a continuum based on attributes measured. The continuum levels used consisted of high, medium and low categorization (Azwar, 2007).
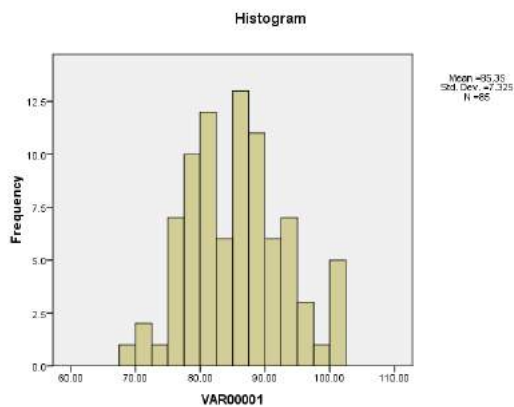
Figure 3: The motivation for Student Achievement.

This study revealed that the score 1, 2, 3 and 4 on the achievement motivation scale with the number of items as much as 26 items and the number of respondents 85 students have the minimum range is $1x26 = 26$ and the maximum range $4x26 = 104$. Thus, it can be seen that the maximum range of the minimum range is $104 - 26 = 78$, the standard unit of population deviation $(\partial) = 78 : 6 = 13$, while the mean is $\mu = (26 + 104) : 2 = 65$. Table 2 states that subjects had 69 subjects (81.2%) and 16 subjects (18.8%) for the high category and medium category respectively. And there were no subjects fulfilled in the low category. Thus, it can be concluded that the current students of civil engineering department have high achievement motivation.

The results revealed that the high achievement motivation shown by the civil engineering students stated that students have a great responsibility for

Table 2: Results of Categorization Norm Score

Score	Number of Subjects	Percentage	Categorization
78 ≤ X	69	81.2	High
52 ≤ X <78	16	18.8	Medium
X <52	0	0	Low
Total	85	100	

the tasks that have been given, dare to take risks in taking tasks by completing large tasks that must be gathered in a timely manner, requiring feedback on the big task that has been done, has a high innovation in completing a task and do not like things that are routines, and have a passion and a strong desire to be the best. Individuals with high achievement motivation will not only be satisfied with being able to do a task but will strive to achieve certain performance standards in doing it.

5 CONCLUSION

According to achievement motivation scale (high, medium, and low) it can be concluded that the current students of Civil Engineering Department of Universitas Islam Riau have high achievement motivation. This achievement motivation should be kept consistency to ensure students graduate their study well.

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REFERENCES

Achmad, R. I., Mujasam, M., Yusuf, I., and Widyaningsih, S. W. (2018). Hubungan antara motivasi berprestasi dan kebiasaan belajar terhadap prestasi belajar fisika. *Prosiding*, 3(1).

Akpan, I. D. and Umobong, M. E. (2013). Analysis of achievement motivation and academic engagement of students in the nigerian classroom. *Academic Journal of Interdisciplinary Studies*, 2(3):385.

Azwar, S. (2007). Penyusunan skala psikologi (edisi pertama). *Yogyakarta: Pustaka Pelajar Offset*.

Haryani, R. and Tairas, M. (2014). Motivasi berprestasi pada mahasiswa berprestasi dari keluarga tidak mampu secara ekonomi. *Jurnal psikologi pendidikan dan perkembangan*, 3(01):30–36.

Kavousipour, S., Noorafshan, A., Pourahmad, S., and Dehghani-Nazhvani, A. (2015). Achievement motivation level in students of shiraz university of medical sciences and its influential factors. *Journal of advances in medical education & professionalism*, 3(1):26.

Kuntjojo (2015). 2015. *Perbedaan Motivasi Berprestasi Mahasiswa Program Studi PG-PAUD Universitas Nusantara PGRI Kediri Ditinjau dari Status Pekerjaan*, 02.

Lutan, R. (1988). Belajar keterampilan motorik, pengantar teori dan metode. *Jakarta: Depdikbud*.

McClelland, D. C. (1987). *Human motivation*. CUP Archive.

Santrock, J. W. (2008). *Educational psychology*. Jakarta: Kencana.

Schunk, D. (2012). Motivasi dalam pendidikan teori, penelitian, dan aplikasi (original title motivation education, theory, research, and aplication).

Suryabrata, S. (2000). Pengembangan alat ukur psikologis. *Yogyakarta: Penerbit Andi*.

Tinggi, D. J. P. (2010). Pedoman umum pemilihan mahasiswa berprestasi. *Departemen Pendidikan Nasional Indonesia*.

Wahyuni, I. W. (2011). Hubungan kematangan beragama dengan konsep diri. *Al-Hikmah: Jurnal Agama dan Ilmu Pengetahuan*, 8(1):1–8.

Winkel, W. (1996). Psikologi pengajaran, jakarta: Pt. *Gramedia Widiasarana Indonesia*.

The Role of Social Media Adoption as Mediating Variable between Environment Context and SME Performance

Neva Novianti[1], Zaitul[1], Desi Ilona[2] and Herawati[1]

[1]*Faculty of Economics and Business, Universitas Bung Hatta, Indonesia*
[2]*Faculty of Economics, Universitas Putra Indonesia YPTK, Padang, Indonesia*
{*nevanovianti, zaitul*}*@bunghatta.ac.id, desiilona@upiyptk.ac.id, hera_devopi@yahoo.com*

Keywords: Environmental Factors, Social Media Adoption, Business Performance.

Abstract: Acceptance of social media in small and medium businesses has been largely achieved through previous studies. However, previous literature paid less attention to Indonesia's small-medium enterprise (SME). This study aims to explore the role of social media adoption as a mediator between environmental factors and the economic performance of SMEs. To understand the relationship of these variables, researchers use Technology-organization-environment (TOE). SEM-PLS is used to analyse the primary data. The results show that environmental factors have a positive correlation with the adoption of social media. Futhermore, the environmental factor is also associated with business performance. however, social media adoption does not play the role of mediator between the environmental factor and business performance of SME. Theoretical and practical implication are discussed in this article.

1 RESEARCH BACKGROUND

One important aspect of technology is social media and being used by many organizations in their activities. (Kaplan and Haenlein, 2010) said, Social media refers to a class of cyberspace derived discharge that develop in the principle and state of the art foundation of Web 2.0, and that enable the exchange and creation of user produced contents. In addition, (Constantinides and Fountain, 2008) add that social media entail exchanging content generated by user, taking feedback in real-time basis and constructing society of customers to sustain the process. Social media adoption by business organization has been enhancing to many functional management areas, like customer support, operation, sales and marketing, and research and development (Bernoff and Li, 2008). Social media adoption in business is a part of technology information implementation and it can allow business organizations to performance better in the competitive edge (AlSharji et al., 2018). Technology innovation adoption has been explained by many theories (Rogers, 2010; Tornatzky et al., 1990; Swanson, 1994). In organization level, TOE is famous theory used to underpin the technology & environment and organization outcome relationship.

Social media can be utilized by enterprise (SME)

to gain the competitive advantage due to minimal technical requirement and its low cost (Ferrer et al., 2013). Technology adoption among SME has been documented by many researchers (Ahmad et al., 2015; Gangwar et al., 2015; Maduku et al., 2016; Shi and Yan, 2016). (Ahmad et al., 2015) examine the introduction of retail e-business in many countries and use regulatory support and competitive pressure like environmental factors. In addition, (Gangwar et al., 2015) examine cloud computing in Indian SMEs and consider competitive pressures as environmental factors. Further, (Maduku et al., 2016) examine the e-marketing taken by SMEs in South African and involve external factors such as customer pressure, supplier support and competitive pressures. Moreover, (Ramdani et al., 2013) examine the takeover of business applications by SMEs in north-west England and include industry, market support, competitive pressure and external support for ICT as environmental factors. (Shi and Yan, 2016) investigate the adoption of RFID by agriculture SME in China and apply the environment factor, such as competitive pressure, uncertainty and government support.

Study on social media adoption also has been done by previous researchers (Ahmad et al., 2018; Ainin et al., 2015; Carlos Martins Rodrigues Pinho and Soares, 2011). (Ahmad et al., 2018) examine

the social media adoption among UAE SME by examining the effect of organization context, environment factors, technology factor on social media adoption. (Ainin et al., 2015) investigate the factor affecting the Facebook usage and its relationship with Malaysia's SME non-financial and financial performance. (Paniagua and Sapena, 2014) examine the impact of social media adoption on business success. (Parveen et al., 2015) use the qualitative approach to analyse the usage of social media purpose and its influence on organizational outcome. (Carlos Martins Rodrigues Pinho and Soares, 2011) survey the university student regarding to social network adoption and ascertain TAM explanatory power in the social network adoption. Based on extensive literature review above, study on social media adoption among SME is limited. Even thought, there is one study that examines the adoption of social media using Indonesia's SME (Sarosa, 2012), but the study use the qualitative approach. Therefore, it needs the further study that investigate the adoption of social media using an Indonesia's SME. The aim of this of this study is to analyse the function of social media adoption as mediating variable between environmental factor and business performance of SME. This paper is organised as follow. The background to the study was explained in the first session. It continues to discuss theory and hypothesis development. Following session is research method. The results and discussion are in the fourth session. Last session is conclusion and recommendation.

2 THEORETICAL ASPECT AND HYPOTHESIS

2.1 Social Media Adoption

The important of social media adoption among small and medium enterprise have been documented by social media experts. However, there is no consensus among experts about definition of social media. In addition, social media can be employed for various management functional sectors, like operation, research and development, sales and marketing, customer support and etc (Bernoff and Li, 2008). Social media adoption improve an interaction and information sharing, enhancing brand visibility, leveraging community service, and building customer relationship and social interaction, and reaching wide range of customers and expanding existing markets (Ahmad et al., 2018). The relationship between

adoption of social media with business performance has been researched by previous researchers. (Ahmad et al., 2018) found that there is no relationship between adoption of social media with business performance of SME in UAE. (Ahmad et al., 2018) documented that adoption of social media improve the performance outcome:

- improve costumer clientele,
- increase brand awareness, loyalty, and reputation,
- reducing communication and marketing cost,
- revenue generation,
- attracting new customers and
- increase the competitive advantage.

(Bakri, 2017) found no significant effect of social media application on SME's business performance. (Ainin et al., 2015) conclude that adoption of social media adoption and business performance has positive impact. (McCann and Barlow, 2015) also conclude that the positive impact of the social media adoption and business performance. Furthermore, the hypothesis can be developed as follows.

H1: Social media adoption positively affect Business performance

Previous research on relationship between environmental factors and technology adoption has been done by several studies (Lippert and Govindarajulu, 2006; Pan and Jang, 2008). (Lippert and Govindarajulu, 2006) examine the impact of environmental factors on the introduction of web services and suggest that the higher the competitive pressure, the more likely the introduction of web service technologies. In addition, (Pan and Jang, 2008) studied the relationship between environmental factors and enterprise resources planning (ERP) adoption and conclude that the environmental factor is not an important factor for the introduction of ERP. Study on relationship environmental and technology adoption among small-medium enterprise has been done by (Ahmad et al., 2018; Ahmad et al., 2015; Scupola and Nicolajsen, 2013). (Ahmad et al., 2018) concluded that there was a positive influence of environmental factor and adoption of social media by UAE's SME. (Ahmad et al., 2015) have shown that there is a link between the environmental factor (external change agent) and the takeover of electronic commerce by SMEs in Malaysia. (Scupola and Nicolajsen, 2013) describe level of adoption e-commerce among Australia's SME. Due to competitiveness intensity and industry, small-medium enterprise will adopt the technology and several management areas, such as operation, customer support, sales and marketing,

and research and development areas, are becoming value for money (efficient, effective and economics). Therefore, the business outcome will be enhanced and profitability as one of business performance measurement finally increase. Previous studies on the relationship between the environmental factors with SME business performance has been done (Aziz and Yassin, 2010; Gaur et al., 2011). However, the effect of environmental factors on business performance might be through technology adoption (adoption of social media). Further, there is a insufficiency of studies investigating this social media role as mediator. Based on the explanation above, we develop three hypotheses as follow.

H2: Environmental factors positively affect Social media adoption

H3: Environmental factors positively affect Business performance

H4: Social media adoption mediated relationship between Environmental factors and Business performance

2.2 Environmental Factors

Environmental factors are factors from business environment where business operates. business environment has been becoming competitive (Wang, 2016). In fact, the business environment requires innovative behavior and a higher level of risk (José Ruiz-Ortega et al., 2013). Environmental factors could stem from technological development, globalization and the rapid spread of new technologies (Derham et al., 2011). In addition, (Tornatzky & Fleischer, 1990) argue that environmental factors might be categorised as industry structure, regulatory system and suppliers. There are three environmental factors: a industry competitiveness (Thong and Yap, 1995); Train pressure (Sun, 2013); and competitive pressures (Gutierrez et al., 2015). The competitive intensity of the sector is the pressure of impending competitive advantages (Zhu et al., 2003). In addition, if a business organization adopt the technology, it has a large opportunity to gain the competitive advantage. Thus, bandwagon pressure is a psychological phenomenon and a business organization use the technology or innovation largely due to its peer doing so (Ahmad et al., 2018), and not because the technology fit with its own strategy. Finally, competitive pressure refers to level of competitiveness inside industry (Lertwongsatien and Wongpinunwatana, 2003). Another word, a business organization will adopt a technology because of its business partner has adopted that technology.

3 RESEARCH METHODS

This research object is owner/manager of small medium enterprise (SME). This study uses the simple random sampling. This study applies primary data and gathered via online survey. Latent variables in this study consisted of three types: independent latent variable (environmental factor), mediation latent variable (social media adoption), and dependent latent variable (business performance). Environmental factor consists of eight items which were developed by (Gutierrez et al., 2015; Sun, 2013; Thong and Yap, 1995). Social media adoption has five items which gathered from (Cesaroni and Consoli, 2015). Finally, business performance construct has six items was taken from (Ahmad et al., 2018). SEM-PLS is used to analysis the data. PLS is used because of relatively new research phenomena (adoption of social media in Indonesian SMEs), which is why a PLS approach is often more appropriate (Chin et al., 1998). Smart-pls is used and includes two model evaluations (Wang, 2016): measurement model and structural model. The measurement model includes two validity tests: convergent validity and discriminant validity (Wong, 2013). In addition, discriminant validity use Fornell-Lacker criterion (Fornell and Larcker, 1981), crossloading (Henseler et al., 2015), and Heterotraits-heteromethod (HTMT) ratio (Hair Jr et al., 2016; Henseler et al., 2015). The structural model assessment applies bootstrapping and aims to determine the predictive relevance and power as well as testing the hypothesis.

4 RESULT AND DISCUSSION

4.1 Demographic Variable

This styudy employs twenty-nine small middle entreprises (SME). 20.69% SMEs run the business in Padang city. SMEs operates in Payakumbuh city is 24.14%. in addition, 27.59% SMEs run its business in Bukittinggi city. the rest is in other city in west sumatra. Regarding to SME's business category, three SMEs (10.34%) has in the restourant and catering business. Further, three SMEs (10.34%) is categorised as profesional service business. One SME (3.45%) is classified as tour and travel business. Finally, the rest of SME is in other business type.

4.2 Measurement Model Assessment

This section discusses the results of the assessment of the measurement model (convergence validity and

discriminatory validity). Table 1 shows the result of the convergence validation test. Four properties are used to evaluate the convergent's validity (Hair Jr et al., 2016): "outer loading, Cronbach's alpha (CA), composite reliability (CR) and average variance extracted (AVE)". he results show that the external load of all constructions is greater than 0.700 (Hulland, 1999). Environmental factor construct has eight items and two items have outer loading lower than 0.700 (eci1 and eci2) and they are, therefore, excluded in next analyse. Besides, social media adoption construct also has two items that have outer loading lesser than 0.700 (sma1 and sma5). Internal consistency of all construct are reliable due to the CA and CR value are greater than 0.700 (Bagozzi and Yi, 1988). Finally, AVE for all construct is also greater than cut-off value, 0.500 (Bagozzi and Yi, 1988).

Table 1: Convergent validity.

construct	items	outer loading	CA	CR	AVE
business performance	bp1	0.919	0.963	0.97	0.845
	bp2	0.963			
	bp3	0.947			
	bp4	0.919			
	bp5	0.933			
	bp6	0.827			
environmental factors	ebp1	0.905	0.960	0.968	0.836
	ebp2	0.932			
	ebp3	0.956			
	ecp1	0.941			
	ecp2	0.911			
	ecp3	0.836			
social media adoption	sma2	0.809	0.718	0.842	0.639
	sma3	0.802			
	sma4	0.787			

Table 2 provides us with result of discriminant validity that indicates the uniqueness of a construct compared to another construct. There are three types of discriminant validity tests: the Fornell-Lacker criterion, crossloading, and the heterotrait-monotrait ratio (HTMT). Table 3 shows the result of discriminant validity using the Fornell-Lacker criterion. The diagonal value (in bold) corresponds to the square root of the AVE, while the value outside the diagonal corresponds to the correlation. (Chin et al., 1998), (Fornell and Larcker, 1981) the squared correlations between the latent variable and all latent variables should be lower than the latent variable AVE. For example, square root of environmental factor's AVE (0.914) is greater than relationship between this construct and all other constructs (business performance and social media adoption).

Second discriminant validity test using cross strain. The cross-burden is the burden of one indicator for the identified latent variable, which must be higher than that of all other latent variables (Hair Jr et al.,

Table 2: Discriminant validity-Fornell-Lacker Criterion

construct	1	2	3
Environmental factors (1)	0.914		
business performance (2)	0.790	0.919	
social media adoption (3)	0.652	0.623	0.799

2016; Henseler et al., 2015). Jörg (Henseler et al., 2015) argue that the lack of discriminant validity, when two constructs are perfectly correlated, is a defect that is not effective for empirical research. As shown in Table 3, the load of one indicator of the latent variables associated with it is greater than that of the other latent variables. For example, indicator of bp1 to bp6 loaded to business performance construct and have a higher loading value (bold).

Table 3: Questionnaire's Indicators.

Items	Environmental factors	business performance	social media adoption
bp1	0.632	**0.919**	0.573
bp2	0.697	**0.963**	0.574
bp3	0.689	**0.947**	0.583
bp4	0.721	**0.919**	0.496
bp5	0.800	**0.933**	0.614
bp6	0.785	**0.827**	0.578
ebp1	**0.905**	0.710	0.622
ebp2	**0.932**	0.744	0.674
ebp3	**0.956**	0.732	0.623
ecp1	**0.941**	0.786	0.591
ecp2	**0.911**	0.742	0.542
ecp3	**0.836**	0.611	0.511
sma2	0.562	0.525	**0.809**
sma3	0.448	0.515	**0.802**
sma4	0.547	0.452	**0.787**

The third discriminant validity test is heterotrait-monotraits ratio (HTMT). The HTMT ratio is the mean heterotropy-heteromethod correlation to mean single heteromethod correlations (Hair Jr et al., 2016; Henseler et al., 2015). The HTMT value near 1 indicates a lack of discriminatory validity. The HTMT value of more than 0.85 indicates a insufficiency of discriminant validity (Kline, 2005)(Kline, 2011). As can be seen from the Table 4, all value of HTMT is lesser than 0.85. The measurement model is shown in Figure 1.

Table 4: Discriminant validity-HTMT

construct	Environmental factors	business performance	social media adoption
Environmental factors			
business performance	0.814		
social media adoption	0.779	0.745	

4.3 Structural Model Assessment

Based on the measurement model assessment, the measurement model is valid. Therefore, it continues to the structural model assessment. This assessment is for hypothesis testing and is related to the relationship between latent variables. we use the bootstrapping technique. In addition, bootstrapping is a test that indication whether the relationship is significant. SEM-PLS aims at maximizing R2 of endogenous variable in a path model. R2 measure a predictive power of model and predictive relevance is measured by Q2. The value of Q2 for business performance and social media adoption is 0.481 and 0.234 respectively. In addition, business performance has a large predictive relevance and medium predictive relevance (Henseler et al., 2009) for social media adoption construct.

Table 5: Discriminant validity-HTMT

endogenous construct	Q square	decision	R square	decision
business performance	0.481	large	0.645	moderate
social media adoption	0.234	medium	0.425	moderate

relationship	path coef.	t statistic	p-value	decision
Environmental factors -> business performance	0.669	3.558	0.000	supported
Environmental factors -> social media adoption	0.652	6.984	0.000	supported
social media adoption -> business performance	0.186	1.015	0.311	not supported

R^2 for both endogenous constructs are 0.654 and 0.425 respectively. Both constructs have moderate predictive power due to their value around 0.50 (F. Hair Jr et al., 2014). The first assumption is that there is a positive relationship between the environmental factor and the company's performance because the p value (0.000) is below 0.05. In addition, its path coefficient is positive (0.669). The second hypothesis is developed as follow: environmental factor has a positive influence on the acceptance of social media. The result show that this hypothesis is supported because of its p-value lower than 0.010 (0.000) and positive path coefficient (0.652).

Table 6: Assessment of mediation

relationship	Indirect effect (p-value)	direct effect (p-value)	conclusion	decision
Environmental factors -> social media adoption -> business performance	0.351	0.000	no mediation	not supported

The third hypothesis is not supported because the value p is greater than 0.050 (0.311). As a result, there is no link between social media adoption and business performance. The fourth hypothesis is analyzed using the evaluation approach of mediation proposed by (Zhao et al., 2010). (Zhao et al., 2010) argue that

there should be a precondition for the establishment of mediation (the indirect effect (axb) is significant and it is not necessary that an "effect is mediated" (path c) The Sobel test compares to a low bootstrap test (Zhao et al., 2010). According to the result of the indirect effect its p-value is greater than 0.050 (see Table 6) and therefore there is no mediating effect. Thus, the fourth hypothesis is not supported. The figure below shows the mediation analysis.

Contrary to expectation, the influence of social media adoption on business performance of SME is not significant. Although, this finding diverge from some published studies (Ahmad et al., 2018; Ainin et al., 2015; McCann and Barlow, 2015), it is consistent with those of (Ahmad et al., 2018; Bakri, 2017). It is difficult to explain this result, but it may be related to the sample size of this study is small. Other possible explanation is that the low level of social media adoption among SME and its customer, suppliers and other stakeholders are less familiar with social media or technology. Even though, SME has adopted the social media for promotion (for example), its customers don't use the social media. Therefore, they don't know about SME product or service and they would not buy the product or service. Finally, marketing or financial performance as measure of business performance would not increase. Second hypothesis is the effect of environmental factor is positively related to social media adoption and hypothesis is supported (β=0.652, p-value=0.000). This finding confirm the previous studies (Ahmad et al., 2018; Ahmad et al., 2015; Scupola and Nicolajsen, 2013). However, the reason why SME adopted the social media in this case is bandwagon pressure and competitive pressure.

Adoption of social media among SME is due to psychological phenomena or SME adopted the social media because of others doing so (Ahmad et al., 2018). Second reason why SME adopt SME is because of its business, such as supplier or customers, use the social media (Lertwongsatien and Wongpinunwatana, 2003). If they do not use the social media, they would lose the opportunities and lose the competitive advantages. The third hypothesis is also supported which means that there is a positive effect of environmental factors on business performance (β=0.669, p-value=0.000). This finding is conformable with those of other studies (Aziz and Yassin, 2010; Gaur et al., 2011) and suggest the higher the environmental factors, the higher of SME business performance. Last hypothesis state that social media adoption mediated the relationship between environmental factors and business performance of SME. The result show that

there is no role of social media adoption as mediator. The possible explanation why this happened is because of small sample size, social media adoption level, and other stakeholders might not familiar with technology or social media.

5 CONCLUSION AND RECOMMENDATION

Social media usage among SME has been critical and discussed by practitioners and academician recently. However, there is limited previous studies investigating this subject matter, especially using an Indonesia's SME. This study investigates the role of social media adoption among SME as mediating variable between environmental factors and business performance of SME. Besides, this study also analyses the effect of environmental factors on social media adoption and business performance. SME which is familiar with and adopter of social media is research object. Business operation of SME is in west Sumatra, Indonesia. Using smart-pls, we conclude that there is a positive relationship between environmental factors and adoption of social media between SMEs and business performance. However, the effect of social media adoption on business performance of SME is not supported. Further, the role of social media adoption as mediating variable between environmental factors and business performance is also not supported. Theoretically, this finding partially contributes to TOE in the sense that social media adoption among SME is also pressured by external factors, such as business partner. Practically, the positive effect of the environment factors on social media adoption and business performance of SME imply that the local government can improve the adoption of social media among SME by educating the society in order to be familiar with social media and other technology break-through. Finally, number of limitations need to be considered. First, this study uses a limited number of small-medium enterprise. Second, this study applies a limited number of independent variables as factor affecting social media adoption and business performance. finally, detail investigation need to be conducted asking why SME adopt social media. Future research in regarding to role of social media adoption in mediating the relationship between environmental factors and business performance would be of great help by adding the number of sample size. Further investigation into social media adoption is strongly recommended by adding other independent variables from other perspective, such as

technology context. Finally, more research is needed to better understand by using other approach, such as qualitative approach.

REFERENCES

Ahmad, S. Z., Abu Bakar, A. R., Faziharudean, T. M., and Mohamad Zaki, K. A. (2015). An empirical study of factors affecting e-commerce adoption among small-and medium-sized enterprises in a developing country: Evidence from malaysia. *Information Technology for Development*, 21(4):555–572.

Ahmad, S. Z., Ahmad, N., and Bakar, A. R. A. (2018). Reflections of entrepreneurs of small and medium-sized enterprises concerning the adoption of social media and its impact on performance outcomes: Evidence from the uae. *Telematics and Informatics*, 35(1):6–17.

Ainin, S., Parveen, F., Moghavvemi, S., Jaafar, N. I., and Mohd Shuib, N. L. (2015). Factors influencing the use of social media by smes and its performance outcomes. *Industrial Management & Data Systems*, 115(3):570–588.

AlSharji, A., Ahmad, S. Z., and Abu Bakar, A. R. (2018). Understanding social media adoption in smes: Empirical evidence from the united arab emirates. *Journal of Entrepreneurship in Emerging Economies*, 10(2):302–328.

Aziz, N. A. and Yassin, N. M. (2010). How will market orientation and external environment influence the performance among smes in the agro-food sector in malaysia? *International Business Research*, 3(3):154.

Bagozzi, R. P. and Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the academy of marketing science*, 16(1):74–94.

Bakri, A. A. A. (2017). The impact of social media adoption on competitive advantage in the small and medium enterprises. *International Journal of Business Innovation and Research*, 13(2):255–269.

Bernoff, J. and Li, C. (2008). Harnessing the power of the oh-so-social web. *MIT Sloan management review*, 49(3):36.

Carlos Martins Rodrigues Pinho, J. and Soares, A. M. (2011). Examining the technology acceptance model in the adoption of social networks. *Journal of Research in Interactive Marketing*, 5(2/3):116–129.

Cesaroni, F. M. and Consoli, D. (2015). Are small businesses really able to take advantage of social media? *Electronic Journal of Knowledge Management*, 13(4):257.

Chin, W. W. et al. (1998). The partial least squares approach to structural equation modeling. *Modern methods for business research*, 295(2):295–336.

Constantinides, E. and Fountain, S. J. (2008). Web 2.0: Conceptual foundations and marketing issues. *Journal of direct, data and digital marketing practice*, 9(3):231–244.

Derham, R., Cragg, P., and Morrish, S. (2011). Creating value: An sme and social media. *PACIS*, 53:1–9.

F. Hair Jr, J., Sarstedt, M., Hopkins, L., and G. Kuppelwieser, V. (2014). Partial least squares structural equation modeling (pls-sem) an emerging tool in business research. *European Business Review*, 26(2):106–121.

Ferrer, E., Bousoño, C., Jorge, J., Lora, L., Miranda, E., and Natalizio, N. (2013). Enriching social capital and improving organizational performance in the age of social networking. *Business and Management*, 5(2):94–281.

Fornell, C. and Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics.

Gangwar, H., Date, H., and Ramaswamy, R. (2015). Understanding determinants of cloud computing adoption using an integrated tam-toe model. *Journal of Enterprise Information Management*, 28(1):107–130.

Gaur, A. S., Mukherjee, D., Gaur, S. S., and Schmid, F. (2011). Environmental and firm level influences on inter-organizational trust and sme performance. *Journal of Management Studies*, 48(8):1752–1781.

Gutierrez, A., Boukrami, E., and Lumsden, R. (2015). Technological, organisational and environmental factors influencing managers' decision to adopt cloud computing in the uk. *Journal of Enterprise Information Management*, 28(6):788–807.

Hair Jr, J. F., Hult, G. T. M., Ringle, C., and Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage publications.

Henseler, J., Ringle, C. M., and Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the academy of marketing science*, 43(1):115–135.

Henseler, J., Ringle, C. M., and Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. In *New challenges to international marketing*, pages 277–319. Emerald Group Publishing Limited.

Hulland, J. (1999). Use of partial least squares (pls) in strategic management research: A review of four recent studies. *Strategic management journal*, 20(2):195–204.

José Ruiz-Ortega, M., Parra-Requena, G., Rodrigo-Alarcón, J., and García-Villaverde, P. M. (2013). Environmental dynamism and entrepreneurial orientation: The moderating role of firm's capabilities. *Journal of Organizational Change Management*, 26(3):475–493.

Kaplan, A. M. and Haenlein, M. (2010). Users of the world, unite! the challenges and opportunities of social media. *Business horizons*, 53(1):59–68.

Kline, R. B. (2005). Principles and practice of structural equation modeling 2nd ed. *New York: Guilford*.

Lertwongsatien, C. and Wongpinunwatana, N. (2003). E-commerce adoption in thailand: an empirical study of small and medium enterprises (smes). *Journal*

of Global Information Technology Management, 6(3):67–83.

Lippert, S. K. and Govindarajulu, C. (2006). Technological, organizational, and environmental antecedents to web services adoption. *Communications of the IIMA*, 6(1):14.

Maduku, D. K., Mpinganjira, M., and Duh, H. (2016). Understanding mobile marketing adoption intention by south african smes: A multi-perspective framework. *International Journal of Information Management*, 36(5):711–723.

McCann, M. and Barlow, A. (2015). Use and measurement of social media for smes. *Journal of Small Business and Enterprise Development*, 22(2):273–287.

Pan, M.-J. and Jang, W.-Y. (2008). Determinants of the adoption of enterprise resource planning within the technology-organization-environment framework: Taiwan's communications industry. *Journal of Computer information systems*, 48(3):94–102.

Paniagua, J. and Sapena, J. (2014). Business performance and social media: Love or hate? *Business horizons*, 57(6):719–728.

Parveen, F., Jaafar, N. I., and Ainin, S. (2015). Social media usage and organizational performance: Reflections of malaysian social media managers. *Telematics and Informatics*, 32(1):67–78.

Ramdani, B., Chevers, D., and A. Williams, D. (2013). Smes' adoption of enterprise applications: A technology-organisation-environment model. *Journal of Small Business and Enterprise Development*, 20(4):735–753.

Rogers, E. M. (2010). *Diffusion of innovations*. Simon and Schuster.

Sarosa, S. (2012). Adoption of social media networks by indonesian sme: A case study. *Procedia Economics and Finance*, 4:244–254.

Scupola, A. and Nicolajsen, H. W. (2013). Using social media for service innovations: challenges and pitfalls. *International Journal of E-Business Research (IJEBR)*, 9(3):27–37.

Shi, P. and Yan, B. (2016). Factors affecting rfid adoption in the agricultural product distribution industry: empirical evidence from china. *SpringerPlus*, 5(1):2029.

Sun, H. (2013). A longitudinal study of herd behavior in the adoption and continued use of technology. *Mis Quarterly*, pages 1013–1041.

Swanson, E. B. (1994). Information systems innovation among organizations. *Management science*, 40(9):1069–1092.

Thong, J. Y. and Yap, C.-S. (1995). Ceo characteristics, organizational characteristics and information technology adoption in small businesses. *Omega*, 23(4):429–442.

Tornatzky, L. G., Fleischer, M., and Chakrabarti, A. K. (1990). *Processes of technological innovation*. Lexington books.

Wang, Y. (2016). Environmental dynamism, trust and dynamic capabilities of family businesses.

International Journal of Entrepreneurial Behavior & Research, 22(5):643–670.

Wong, K. K.-K. (2013). Partial least squares structural equation modeling (pls-sem) techniques using smartpls. *Marketing Bulletin*, 24(1):1–32.

Zhao, X., Lynch Jr, J. G., and Chen, Q. (2010). Reconsidering baron and kenny: Myths and truths about mediation analysis. *Journal of consumer research*, 37(2):197–206.

Zhu, K., Kraemer, K., and Xu, S. (2003). Electronic business adoption by european firms: a cross-country assessment of the facilitators and inhibitors. *European Journal of Information Systems*, 12(4):251–268.

The Influence of Coping Skills on Psychological Distress and Suicide Attitude among University Students in Malaysia

Norhayati Ibrahim[1,2], A'isyah Mohd Safien[1], Ching Sin Siau[1]

[1] *Health Psychology Program, Faculty of Health Sciences, Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia*
[2] *Research Centre for Healthy Aging and Wellness, Faculty of Health Sciences, Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia*
norhayati70@gmail.com

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Abstract: Suicide is a leading cause of death among university students worldwide. The reduction of psychological distress and suicidality is related to the adoption of effective coping strategies. This study sought to explore the associations between psychological distress, coping style and suicide attitude among university students in Malaysia. This study was conducted upon 178 students in two universities from public and private settings. Participants completed four self-report questionnaires, namely the Kessler Psychological Distress Scale (K10), Brief COPE and Yatt Suicide Attitude Scale (YSAS). Students from the private university showed significantly higher levels of psychological distress compared to students from the public university, but their suicide attitude did not differ significantly. There is a significant relationship between psychological distress and suicide attitude participant (r= .263, p < .001) and the most commonly employed coping strategies among them were the Religion and Positive Reframing domains. Behavioral Disengagement and Self-Blame predicted higher psychological distress, whereas participant were Substance Use, Planning and Self-Blame predicted higher suicide attitude. The suicide rate is rising and young adults need to adopt appropriate and effective coping strategies, especially among university students. Both public and private university students should be targeted for regular screening for psychological distress and suicidality as they are a psychologically vulnerable population.

1 INTRODUCTION

Suicide is a public health issue globally, as there are about about 800,000 suicide deaths annually (Organization, 2 28). Up to 60% of the world's deaths from suicide occur among the Asian population (Beautrais, 2006). Lower and middle- income countries (LMICs) in southern and eastern regions in Asia recorded the highest suicide rate in the world, at 17.7 per 100,000 population. The number of suicide cases in Malaysia is rising, and a systematic review revealed a rate of 6 to 8 per 100,000 population (Armitage et al., 2015). However, suicide prevention research in Asia is scarce (Chen et al., 2011).

Suicide is the second leading cause of death among young people between the ages of 15 to 24 years old (Organization, 2 28). Notably, suicide is a leading cause of death among college students (Ross, 1969; Taub and Thompson, 2013), with rising incidence and prevalence in Asian countries (Garlow et al., 2008). Even in Muslim majority countries

where suicide is largely prohibited, suicide ideation and attempt among university students from 12 nations, including Malaysia, was as high as 22% and 8.6% respectively (Eskin et al., 2018). In Malaysia, suicide occurs more commonly among younger Malaysians, as opposed to a higher prevalence among older adults in the US (Maniam et al., 2014). A study among adolescents in Malaysia reported that 12.6% of the participants indicated severe suicidal ideation (Ibrahim et al., 2014). Another study among Malaysian medical students reported about 7% were suicidal (Tan et al., 2015). As suicide is a significant problem among university students, it is imperative to examine the factors leading to suicidal ideation and its protective factors in Malaysia (Abdollahi et al., 2015).

There were a number of factors which predicted suicidality among university students, among which stress is a salient issue (MacKean, 1 06). Being a university student involves an important transition to living independently and facing challenges academically (Shamsuddin et al., 2013). (MacKean, 1

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06) stated that university students are exposed to two

sources of stressors: stress related to the transition from high school to university, and stress related to the transition from adolescence to adulthood. Stressors which originate from academic (personal expectations, performance and homework) and non-academic issues (body image, social issues, relationships, violence and death) (Chao,) could lead to psychological distress.

In Malaysia, according to (Shamsuddin et al., 2013) study on 506 university students across four universities in the Klang Valley, 18.6% reported moderate and 5.1% reported severe or extremely severe stress. Another study among medical students in Malaysia indicated that 29.6% reported suffering from stress, of which the top 10 sources of stress were related to academic problems (Yusoff et al., 2010). Other stressors affecting facing young people originate from relationship problems, family problems, academic issues, and emotional problems (**?**; Smith et al., 2015). The relationship between psychological distress and suicide have been well-established (Grover et al., 2009; Zhang et al., 2012) and stressful life events are power predictors of suicidality (Bantjes et al., 2016).

Coping refers to an individual's cognitive and behavioral efforts to master, reduce, or tolerate internal and external stressors (Folkman and Lazarus, 1980). Folkman and Lazarus (1980) proposed two methods an individual usually employs to deal with negative situations: problem-focused coping, where efforts, by any means, are made to change the stressful situation, and emotion-focused coping, in which an individual tries to reduce the negative emotional state without changing the actual circumstances. Problem-focused coping includes Confrontative Coping, Seeking Social Support and Plan Full Problem-Solving, whereas emotion-focused coping includes Self-Control, Seeking Social Support, Distancing, Positive Appraisal, Accepting Responsibility, and Escape/Avoidance. Another model of coping proposed by (Carver et al., 1989) grouped Active Coping, Planning, Restraint Coping, Seeking Social Support for Instrumental Reasons, and Suppression of Competing Activities into problem-focused coping and Positive Reinterpretation and Growth, Religion, Humor, Acceptance, and Seeking Social Support into emotion-focused coping. They also introduced a new domain of coping strategy, namely Dysfunctional Coping which comprises of Venting of Emotions, Denial, Behavioral Disengagement, Mental Disengagement and Alcohol/Drug Use (Carver et al., 1989).

Coping styles have been associated with university students' level of psychological distress and suicidality. Therefore, it is important for researchers to look into the types of coping skills practiced by universities students. Recognition of this factor will help in reducing the direct effect of psychological distress as discussed above. This study aims to examine the level of psychological distress, suicide attitude and coping styles of university students, and the interrelationship between these variables.

2 METHODS

2.1 Research Design

This cross-sectional study using survey method was carried out among university students from March to April 2019.

2.2 Participants

A total of 178 Malaysian students from a public and a private university were recruited.

2.3 Instruments

2.3.1 Psychological Distress

Students' stress level was measured using the Kessler Psychological Distress Scale (K10) which was developed by (Kessler and Mroczek, 3 10) to screen for psychological distress in the general population. The scale consists of 10 questions addressing the level of anxiety and depressive symptoms a person may have experienced in the recent four-week period. Each item was assessed with a 5-point Likert Scale ranging from 1="none of the time" to 5="all of the time". The internal reliability of this scale is high with Cronbach's alpha value of .0.91 among a student sample in Malaysia (Rajiah et al., 2014). The reliability value of the K10 scale for schizophrenia caregivers in Malaysia was 0.87 (Ong et al., 2016).

2.3.2 Suicide Attitude

The Yatt Suicide Attitude Scale (YSAS) was developed in Malaysia to measure suicidal ideation and suicide attempt (Ibrahim et al.,). This questionnaire consisted of 10 items, of which five items questioned the participants' experiences with suicidal ideation and suicide attempt respectively. Participants answer on a 5- point Likert scale ranging

from 1="Never" to 5="Very Frequently". The questionnaire was validated among Malaysian youth aged between 18 and 25 years old, confirming the two-factor structure of suicidal ideation and suicide attempt. The reliability of this scale was further evaluated in a group of 219 Malaysian students from a public university, with Cronbach's alpha value of .840.

2.3.3 Coping Skills

To measure the coping skills among the participant, the researchers employed the brief form of COPE scale (Carver, 1997). The COPE Inventory was first developed to assess a broad range of coping responses, several of which had an explicit basis in theory. The Brief COPE inventory consisted of 28 items under 14 domains of coping strategies. Participants answer on a 4-point Likert scale ranging from 1="I have not been doing this at all" to 4="I have been doing this a lot". The questionnaire subscales showed Cronbach's alpha coefficients ranging from 0.39 (Restraint Coping) to 0.92 (Humor) in undergraduate students in Turkey (Bacanli et al., 2013).

The total alpha value of the Malay version of Brief COPE was validated by (Yusoff, 2011) on secondary school students was 0.83. Some of the coping skill showed high internal consistency and some of them showed acceptable internal consistency [self-distraction (0.58), Active Coping (0.73), Denial (0.34), Substance Abuse, Emotional Support (0.67), instrumental support (0.77), Behavioral Disengagement (0.82),Venting (0.44), Positive Reinterpretation (0.75), Planning (0.69), Humor(0.51), Acceptance (0.02), Religion (0.84), Self-blame (0.83)].

2.4 Procedures

The participants were approached before their lectures. They completed the questionnaires in about 5 to 10 minutes. This study was approved by the Universiti Kebangsaan Malaysia Research Ethics Committee (NN- 2018-060) and was funded by Geran Galakan Penyelidikan Universiti Kebangsaan Malaysia (GGP- 2017-059).

2.5 Data Analysis

This study used the Statistical Package of Social Sciences (SPSS) version 22 software for Windows to analyses the data. During data analysis, descriptive and categorical variables were summarized as frequencies and percentages. The independent sample t-test was conducted to compare psychological distress and suicide attitude according to type of institution. The Pearson's correlation test was performed to test for significant relationships between coping style with psychological distress and suicide attitude. Significant variables were entered into multiple linear regression models to test the significance of the coping skills as predictors of psychological distress and suicide attitude.

3 RESULTS

The participants of this study were Malaysian students from a private (55.1%) and a public university (44.9%). Female participants were dominant in the sample, which constitutes up to 66.9% of them. Most of the participants were aged between 20 to 21 years old (49.4%), Malay (78.7%). In terms of monthly household income, the highest number of them came from families with RM3001 to RM5000 (25.3%) and households with less than RM1000 monthly income make up the smallest group (5.6%). This study involved mostly first and second year students (80.3%) and more than half of them were scholarship recipients (50.6%) (Refer Table 1).

Private university students indicated significantly higher levels of psychological distress (*Mean*=2.71, *SD*=.73) in comparison with the public university students, t (142.333) = 2.266, p = .025.

However, there were no significant differences in suicide attitude between the two groups t (176) = .065, p = .949 (Refer Table 2).

Based on mean, students from private and public universities shared the highest coping skills in two domains, namely Religion (*Mean*=3.64, SD = .53; *Mean*=3.38, SD = .76) and Positive Reframing (*Mean*=3.45, SD=.61; *Mean*=3.22, SD = .76). Similar trends were also reported in coping skills which were less used by the participants, i.e. the Substance Use domain (*Mean*=1.23, SD=.60; *Mean* = 1.12, SD = .47) and Behavioral Disengagement domain (*Mean*=2.38, SD = .79; *Mean*=1.66, SD = .70).

Psychological distress showed a significant positive relationship with YSAS ($r = .263, p < .001$). This means, the higher the psychological distress level of a person, the more likely it is for him/her to report suicidal ideation and suicide attempt. A Pearson correlation was conducted between coping styles with psychological distress and suicide attitude in order to determine significant variables to be inserted into the multiple regression models (refer

Table 1: Demographic data of participants

Characteristics	Frequency	Percentage (%)
University		
Private	98	55.1
Public	80	44.9
Gender		
Male	59	33.1
Female	119	66.9
Age		
18-19 years old	14	7.9
20-21 years old	88	49.4
22-25 years old	76	42.7
Race		
Malay	140	78.7
Chinese	17	9.6
Indian	12	6.7
Others	9	5.1
Family Income		
<RM1000	19	10.7
RM1001-3000	39	21.9
RM3001-5000	45	25.3
RM5001-7000	38	21.3
RM7001-10000	27	15.2
10001 and above	10	5.6
Year of Study		
1-2	143	80.3
3-4	35	19.7
Source of Fee		
Scholarship	90	50.6
Parents	44	24.7
Half Sponsored	44	24.7

Table 3).

A multiple linear regression was conducted to test if Denial, Behavioral Disengagement, Humor, Acceptance and Self-Blame significantly predicted participants' psychological distress. The results of the regression indicated the predictors accounted for 19.7% of the variance in psychological distress ($R^2 = 0.197$, adjusted $R^2 = 0.173$, F (5, 177) = 8.42, $p < .001$. Only two domains in coping skills significantly predicted psychological distress after adjusting for other coping skills, namely Behavioral Disengagement ($\beta = 0.260, p < 0.01$) and Self-Blame ($\beta = 0.372, p < .01$) (refer Table 4).

Another multiple linear regression was conducted to test if Substance Use, Positive Reframing, Planning, and Self-Blame significantly predicted participants' suicide attitude. The results of the regression indicated the predictors accounted for 13.7% of the variance in suicide attitude ($R^2 = 0.137$, adjusted $R^2 = 0.117$, F (4,177) = 6.89, $p < 0.001$. Suicide attitude was significantly predicted by Substance Use ($\beta = 0.270, p < .001$), Planning ($\beta = 0.024, p < .01$) and Self-Blame ($\beta = 0.189, p < 0.05$).

4 DISCUSSION

This study aimed to examine the levels of, and associations between psychological distress, suicidality and coping style. There is an association between psychological distress and suicidality. Those who used behavioral disengagement and self-blame were more likely to be psychologically distressed, while those who had higher substance use, higher self-blame and lower planning coping styles indicated higher suicidality.

In the current study, the results indicated that private university students were more psychologically distressed compared to public university students. This is similar to (Babar et al., 2015) study, where the perceived stress level of dental students in private universities in Malaysia were higher than that of dental students from public universities. The same trend was also observed in (Saravanan and Wilks, 2014) study. A possible explanation could be the high tuition fees in private universities, as the fees may cost 3 to 5 times higher than public institutions (Digest, 2014). The higher fees may translate into higher psychological distress experienced by private students for fear of unemployment upon graduation and as a consequence, being unable to repay student loans (Babar et al., 2015).

Psychological distress is an independent factor affecting suicidality among university students. This is in congruent with the former findings by (Mitchell et al., 2008), (Krysinska and Lester, 2010), (Lane et al., 2012) and (Davis et al., 2014), who found that psychological distress is a major risk factor for suicidal ideation and suicide attempt. (Laurence et al., 2009) found that academic factors (exams, fear of falling, a shortage in clinical time) as well as decrease in self-esteem were a source of stress among their participants. (Cheng, 1999) reported that high expectations of teachers, parents, and self were also stress factors to be considered.

It is interesting to note that the risk factors discussed above only affects a number of people. This may due to the student's coping strategies in dealing with the stressful situations. (Compas et al., 2001) suggest that coping is a means to resolve the stressful situation and minimize emotional reaction. It is the type of coping style that determines the psychological health of a person (Seiffge-Krenke, 2004; Loukzadeh and Bafrooi, 2013). As in the current study, Behavioral Disengagement and Self-Blame domain were significantly related to Psychological distress

Table 2: Independent t-test results comparing Psychological Distress and Yatt Suicide Attitude Scale according to type of institution

Variable	Private		Public		p
	M	SD	M	SD	
Psychological Distress	2.71	.73	2.41	.98	.025*
Yatt Suicide Attitude Scale	1.12	.24	1.12	.19	.949

Note. $p < .05$

Table 3: Correlations between coping styles with the psychological distress and suicide attitude

Coping Styles	Correlation coefficient	
	Psychological Distress	Yatt Suicide Attitude Scale
Self-Distraction	.143	.074
Active Coping	.046	-.035
Denial	**.237****	.039
Substance Use	-.014	**.287****
Emotional Support	-.077	-.072
Instrumental Support	-.126	-.087
Behavioral Disengagement	**.351****	.113
Venting	.127	.034
Positive Reframing	-.028	**-.161***
Planning	-.087	**-.236****
Humor	**.313****	.102
Acceptance	**.190***	-.067
Religion	.090	-.126
Self-Blame	**.375****	**.147***

Note. $*p < .05, **p < .0.01$

Table 4: Multiple linear regression coping styles with psychological distress and suicide attitude

Coping Style	Psychological Distress			Yatt Suicide Attitude Scale		
	B	SE B	β	B	SE B	β
Denial	.093	.402	.019			
Substance Use				.534	.143	**.270****
Behavioral Disengagement	1.347	.447	**.260****			
Positive Reframing				-.322	.116	**-.204****
Planning				-.009	.098	-.007
Humor	-1.479	.939	-.194			
Acceptance	.504	.467	.079			
Religion						
Self-Blame	1.922	.609	**.372****	.245	.106	**.189***
R^2; adjusted R^2		.197; .173			.137; .117	
F		8.42***			6.89***	

while suicide behavior was positively related to different style of coping skills. (Horwitz et al., 2011), (Fear et al., 2009) and (Ullman and Najdowski, 2009) found that behavioral disengagement and self-blame were predictive of higher levels of depression and suicidal ideation. Although the directionality of the associations is unknown, behavioral disengagement is one of the symptoms of depression (Horwitz et al., 2011). Self-Bame played both roles; it may stimulate adaptive coping, on the other hand, it may lead to guilt and, subsequently, depression (Blakely et al., 1991; Karlsen and Bru, 2002). That may be the reason why

the Self-Blame domain is correlated to both of the instruments measuring suicidal behavior.

Another two coping skills, namely Substance Use and Planning also correlated significantly with the suicide attitude of the participants. (Wilcox et al., 2004) described the suicide risk in substance abusers in their meta-analysis study where individuals with an alcohol use disorder increased their suicide risk by approximately 9.8 times, 13.5 times for opioid use disorder and 16.9 times among those with polysubstance use. The disinhibition caused these substances, such as alcohol, may lead to a higher likelihood to carry out a more lethal suicide attempt. Another study on university students in Malaysia revealed that those who utilized an evasive coping style were more likely to have higher suicidal ideation (Din et al., 2018). This is in line with those who used substance abuse to escape their problems rather than resolve them.

The significant negative correlation between the Planning domain of coping skills with suicide attitude in this study is in agreement with (Pollock and Williams, 2004; Konkan et al., 2014). (Pollock and Williams, 2004) suggested that reducing the use of problem-focused coping strategies such as planning may increase the probability to a suicide attempt and a tendency to ruminate on rather than proactively resolve the problem. As a result, the individual may not be able to see a way out of their problem, and increase their likelihood of ideating and attempting suicide.

This study may contribute to the benefit of the society considering that some of the coping skill are a strong risk factors for psychological distress and suicidal especially among university students. These findings should serve as a guide for the improvement of psycho-education efforts by improving students coping skill in all academic settings as they will directly influence the mental health and thus providing a knowledge on specific cultural context of psychological distress and suicide attitude in Malaysia.

This study has a few limitations. First of all, this a cross-sectional study limited to students of two universities, therefore the results need to be compared with other studies obtained in Malaysia. However, the results indicate that there is a need to conduct future prevalence studies on students' psychological distress and suicidality in tandem with their coping skills. In order for the data obtained to be generalized to the Malaysian population, future studies should employ cluster randomized sampling to involve both rural and urban areas of Malaysia.

5 CONCLUSIONS

Stress and depression have been well-known predisposing factors for increased suicidality among university students globally. Effective programs and professional help in fostering their active and adaptive coping strategies must be established by the university administration, generally, and adopted by students specifically, so the negative emotions can be managed well. This is turn will benefit for psychological health of the students.

REFERENCES

Abdollahi, A., Abu Talib, M., Yaacob, S., and Ismail, Z. (2015). The role of hardiness in decreasing stress and suicidal ideation in a sample of undergraduate students. *Journal of Humanistic Psychology*, 55(2):202–222.

Armitage, C., Panagioti, M., Rahim, W., Rowe, R., and O'Connor, R. (2015). Completed suicides and self-harm in malaysia: a systematic review. *General Hospital Psychiatry*, 37(2):153–165.

Babar, M., Hasan, S., Ooi, Y., Ahmed, S., Wong, P., Ahmad, S., and Malik, N. (2015). Perceived sources of stress among malaysian dental students. *International Journal of Medical Education*, 6:56.

Bacanli, H., Surucu, M., and Ilhan, T. (2013). An investigation of psychometric properties of coping styles scale brief form: A study of validity and reliability. *Educational Sciences: Theory and Practice*, 13(1):90–96.

Bantjes, J., Kagee, A., McGowan, T., and Steel, H. (2016). Symptoms of posttraumatic stress, depression, and anxiety as predictors of suicidal ideation among south african university students. *Journal of American College Health*, 64(6):429–437.

Beautrais, A. (2006). Suicide in asia. *Crisis*, 27(2):55–57.

Blakely, A., Howard, R., Sosich, R., Murdoch, J., Menkes, D., and Spears, G. (1991). Psychiatric symptoms, personality and ways of coping in chronic fatigue syndrome. *Psychological Medicine*, 21(2):347–362.

Carver, C. (1997). You want to measure coping but your protocol's too long: Consider the brief cope. *International Journal of Behavioral Medicine*, 4(1):92.

Carver, C., Scheier, M., and Weintraub, J. (1989). Assessing coping strategies: a theoretically based approach. *Journal of Personality and Social Psychology*, 56(2):267.

Chao, R. Managing perceived stress among college students: The roles of social support and dysfunctional coping. *Journal of College Counseling*, 15(1):5–21.

Chen, Y., Chien-Chang Wu, K., Yousuf, S., and Yip, P. (2011). Suicide in asia: opportunities and challenges. *Epidemiologic Reviews*, 34(1):129–144.

Cheng, C. (1999). *Life Stress of and Guidance for Adolescents*. Psychological Publishing Co., Ltd, Taipei.

Compas, B., Connor-Smith, J., Saltzman, H., Thomsen, A., and Wadsworth, M. (2001). Coping with stress during childhood and adolescence: Problems, progress, and potential in theory and research. *Psychological Bulletin*, 127(1):87–127.

Davis, M., Witte, T., and Weathers, F. (2014). Posttraumatic stress disorder and suicidal ideation: The role of specific symptoms within the framework of the.

Digest, M. (2014).

Din, N. C., Ibrahim, N., Amit, N., Kadir, N. B. A., and Halim, M. R. T. A. (2018). Reasons for living and coping with suicidal ideation among adolescents in malaysia. *The Malaysian journal of medical sciences: MJMS*, 25(5):140.

Eskin, M., Albuhairan, F., Rezaeian, M., Abdel-Khalek, A., Harlak, H., El-Nayal, M., and Hamdan, M. (2018). Suicidal thoughts, attempts and motives among university students in 12 muslim-majority countries. *Psychiatric Quarterly*, page 1–20.

Fear, J., Champion, J., Reeslund, K., Forehand, R., Colletti, C., Roberts, L., and Compas, B. (2009). Parental depression and interparental conflict: Children and adolescents' self-blame and coping responses. *Journal of Family Psychology*, 23(5):762.

Folkman, S. and Lazarus, R. (1980). An analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior*, page 219–239.

Garlow, S., Rosenberg, J., Moore, J., Haas, A., Koestner, B., Hendin, H., and Nemeroff, C. (2008). Depression, desperation, and suicidal ideation in college students: results from the american foundation for suicide prevention college screening project at emory university. *Depression and Anxiety*, 25(6):482–488.

Grover, K., Green, K., Pettit, J., Monteith, L., Garza, M., and Venta, A. (2009). Problem solving moderates the effects of life event stress and chronic stress on suicidal behaviors in adolescence. *Journal of Clinical Psychology*, 65(12):1281–1290.

Horwitz, A., Hill, R., and King, C. (2011). Specific coping behaviors in relation to adolescent depression and suicidal ideation. *Journal of Adolescence*, 34(5):1077–1085.

Ibrahim, N., Amit, N., and Suen, M. (2014). Psychological factors as predictors of suicidal ideation among adolescents in malaysia. *PLoS One*, 9(10):110670.

Ibrahim, N. D., N., A. N., Ghazali, S., and Mohd Safien, A. Development and validation of yatt suicide attitude scale. In *(YSAS) in Malaysia. PLos One*, page 14–2.

Karlsen, B. and Bru, E. (2002). Coping styles among adults with type 1 and type 2 diabetes. *Psychology, Health & Medicine*, 7(3):245–259.

Kessler, R. and Mroczek, D. (1994-03-10). Final versions of our non-specific psychological distress scale. memo yeard.

Konkan, R., Erkuş, G., Güçlü, O., Şenormanci, ., Aydin, E., Ülgen, M., and Sungur, M. (2014). Coping strategies

in patients who had suicide attempts. *Nöro Psikiyatri Arşivi*, 51(1):46.

Krysinska, K. and Lester, D. (2010). Post-traumatic stress disorder and suicide risk: A systematic review. *Archives of Suicide Research*, 14(1):1–23.

Lane, M., Hourani, L., Bray, R., and Williams, J. (2012). Prevalence of perceived stress and mental health indicators among reserve-component and active-duty military personnel. *American Journal of Public Health*, 102(6):1213–20.

Laurence, B., C., and Eiland, D. (2009). The prevalence and socio-demographic correlations of depression, anxiety, and stress among a group of university students. *Journal of American Health*, 58:94–105.

Loukzadeh, Z. and Bafrooi, N. (2013). Association of coping style and psychological well-being in hospital nurses. *Journal of Caring Sciences*, 2(4):313.

MacKean, G. (2011-06). Mental health and well-being in post-secondary education settings. In *CACUSS preconference workshop on mental health*.

Maniam, T., Marhani, M., Firdaus, M., Kadir, A., Mazni, M., Azizul, A., and Jasvindar, K. (2014). Risk factors for suicidal ideation, plans and attempts in malaysia—results of an epidemiological survey. *Comprehensive psychiatry*, 55:121–125.

Mitchell, A. M., Crane, P. A., and Kim, Y. (2008). Perceived stress in survivors of suicide: psychometric properties of the perceived stress scale. *Research in nursing & health*, 31(6):576–585.

Ong, H., Ibrahim, N., and Wahab, S. (2016). *Psychology Research and Behavior*, 2016(9):211–218.

Organization, W. H. (2014-02-28). Preventing suicide: A global imperative. geneva: World health organization. *Retrieved*.

Pollock, L. and Williams, J. (2004). Problem-solving in suicide attempters. *Psychological Medicine*, 34(1):163–167.

Rajiah, K., Coumaravelou, S., and Ying, O. (2014). Relationship of test anxiety, psychological distress and academic motivation among first year undergraduate pharmacy students. *Int J Appl Psychol*, 4(2):68–72.

Ross, M. (1969). Suicide among college students. *American Journal of Psychiatry*, 126(2):225.

Saravanan, C. and Wilks, R. (2014). Medical students' experience of and reaction to stress: the role of depression and anxiety. *The Scientific World Journal*.

Seiffge-Krenke, I. (2004). Adaptive and maladaptive coping styles: Does intervention change anything? *European Journal of Developmental Psychology*, 1(4):367–382.

Shamsuddin, K., Fadzil, F., Ismail, W., Shah, S., Omar, K., Muhammad, N., and Mahadevan, R. (2013). Correlates of depression, anxiety and stress among malaysian university students. *Asian Journal of Psychiatry*, 6(4):318–323.

Smith, S., Smith Carter, J., Karczewski, S., Pivarunas, B., Suffoletto, S., and Munin, A. (2015). Mediating effects of stress, weight-related issues, and depression on suicidality in college students. *Journal of American College Health*, 63(1):1–12.

Tan, S., Sherina, M., Rampal, L., and Normala, I. (2015). Prevalence and predictors of suicidality among medical students in a public university. *Medical Journal of Malaysia*, 70(1):1–5.

Taub, D. and Thompson, J. (2013). College student suicide. *New Directions for Student Services*, 2013(141):5–14.

Ullman, S. and Najdowski, C. (2009). Correlates of serious suicidal ideation and attempts in female adult sexual assault survivors. *Suicide and Life-Threatening Behavior*, 39(1):47–57.

Wilcox, H., Conner, K., and Caine, E. (2004). Association of alcohol and drug use disorders and completed suicide: an empirical review of cohort studies. *Drug and Alcohol Dependence*, 76:11–19.

Yusoff, M. (2011). The validity of the malay brief cope in identifying coping strategies among adolescents in secondary school. *International Medical Journal*, 18(1):29–33.

Yusoff, M., Rahim, A., and Yaacob, M. (2010). Prevalence and sources of stress among universiti sains malaysia medical students. *The Malaysia Journal of Medical Sciences*, 17(1):30.

Zhang, X., Wang, H., Xia, Y., Liu, X., and Jung, E. (2012). Stress, coping and suicide ideation in chinese college students. *Adolescence*, 35(3):683–690.

Autonomous Learning Readiness and English Language Performance of English as a Foreign Language (EFL) Libyan Secondary School Students

Siti Maziha Mustapha and Fadhil Tahar M Mahmoud

Infrastructure University Kuala Lumpur,Kajang, Malaysia

{*maziha,faridah*}*@iukl.edu.my*

Keywords: Autonomous Learning, English Language Performance, EFL Libyan students.

Abstract: This study examined students' readiness to be autonomous and how it connected and influenced their English language performance. The research design was a mixed method (convergent parallel design). The data were collected from a Libyan Secondary school in Malaysia. 103 students were selected to answer the questionnaire and 10 for interviews. All the data collected were analysed by using the (SPSS) version 24 and NVivo pro 10. The findings showed that the Libyan secondary school students were ready to carry out autonomous learning. Students preferred to learn English outside the classroom and they aimed at improving their mastery of the English language to an advanced level. Gender was significantly correlated to learner autonomy and had a moderate influence on learner autonomy. Students' autonomous learning readiness was significantly correlated to English language performance. Recommendations were made to enhance students' autonomous learning

1 BACKGROUND OF STUDY

In the 1970s, the Council of Europe's Modern Languages started a project which was aimed at giving opportunities to adults to continue learning a foreign language or better known as lifelong learning. Since then, the theory and practice of autonomy in language learning has gained momentum and importance. Studies on learner autonomy began to be published by researchers (Benson, 2001a; Benson, 2001b; Benson, 1997; Dam, 2011; Dickinson, 1995; Holec, 1981; Little, 1990; Palfreyman and Smith, 2003).

(Benson, 2001a) explained that autonomy is about learners' readiness to be in charge of their own learning. The learners "initiate and manage their own learning, set their own priorities and agendas and attempt to control psychological factors that influence their learning". Learning English has been a challenging task for many people around the world especially for the Libyan students. (Sawani, 2009) stressed that the Libyan education system has been suffered from lack of manpower. There were not enough English teachers. This created a situation where many learners are placed together in a class. The big class size limits interaction opportunities among learners or reduces opportunities for teachers to use the English language in the

classroom. Therefore, encouraging students to be autonomous would serve as an economical solution for the lack of manpower. By being autonomous students can compensate for the lack of opportunities to use English in class by taking control of their own learning and creating their own opportunities to use English (Sawani, 2009). Over the years, there have been many studies on learner autonomy which were mainly focussed on the Western context. However, studies on Libyan students are very limited. Thus, this study attempted to investigate Libyan students' readiness toward learning English autonomously and its effect on their English language performance.

2 PROBLEM STATEMENT

The teaching of English in Libyan schools begins from the fifth grade. The English language curriculum is normally designed to serve all students' needs in learning the four skills, listening, speaking, reading and writing. The teachers are supposed to use the communicative approach in conducting the English classes. However, many teachers still use grammar-translation method in teaching the language skills. In class, lessons are focused mainly on English grammar rules rather than the other language skills. The grammar-translation method clearly played a

major role in the English classroom in the past and remains in practice to the present day (Altaieb, 2013). EFL Libyan learners struggle to memorize English grammar rules and are given less opportunities to use and be exposed to the real language. Hence, the learners basically learn two things: English word forms and their Arabic translation.

In the experience and observation of the researchers, English language learners in preparatory and high school had to memorize the grammatical rules and lists of new vocabulary given by the teachers on a daily basis. Students were forced to memorize large number of new vocabulary items with Arabic translation during the whole course. The learners became less motivated to be exposed to and learn the real language. There is a need to consider encourage and enable learners to take more control of their learning so their performance in the English language could be improved. (Benson, 2001a) stressed the importance and the need to implement practices which motivate learners to be more autonomous in all aspects of their learning, will help them to become better language learners. The present study aims to examine whether Libyan learners are ready and willing to accept their responsibility of learning the English language autonomously, whether their gender influences their autonomy and whether their autonomy influences their English language performance.

3 RESEARCH QUESTIONS

At a broader level, the current study aimed to investigate the learner autonomy and how it influences students' English language performance.

The following are the research question:

- What are the perceptions of students toward autonomous learning?

- To what extent does gender influence students' autonomous learning readiness?

- Is there a significant relationship between autonomous learning readiness and English language performance of students

4 LITERATURE REVIEW

In language learning, learner autonomy concept plays a significant role. An emphasis is put on the new form of learning which enables learners to direct their own learning (Orawiwatnakul and Wichadee, 2017). A main element of language learning that is

considered significant is learner autonomy and it has been given a great deal of consideration from second language researchers and practitioners over the years (Dam, 2011). According to (Gardner et al., 1996) autonomous language learners have the ability to plan and do their own learning to meet the goals they set for themselves. Therefore, acquiring that how to learn is an important component of all self-sufficient learning schemes (Little, 2007), shows progress, and interprets individual learning performance (Benson et al., 2014). These studies have tended to focus on examining the readiness of learner autonomy rather than the behavioural intention to complete a course (Rienties et al., 2012).

There are few empirical researches investigating whether Asian students have the tendency for autonomy. (Chan et al., 2002) conducted a study and distributed questionnaires to 508 university students in Hong Kong to find out more on this issue, taking the relationship between autonomy and motivation into consideration. Their development of the questionnaire was based on Holec's (1981) idea of autonomy The results of the study showed that students had readiness for autonomy to some extent and motivation seemed to be a requirement for their autonomy. However, it was not clear whether these results can be generalized to Asian students in other contexts, who have less opportunity to use English outside the class.

(Rungwaraphong, 2012) examined readiness for autonomy in students at a university in Thailand. He investigated three areas which were learner autonomy; learner's perception of teacher's roles and their roles, locus of control and strategies they used in learning. He found that learners took responsibility for their learning both due to them being intrinsically responsible and also being coerced by some other external factors. (Richards, 2015) identified two critical dimensions in order to be successful in learning a second language: the activities inside the classroom and the activities outside of the classroom. Previous studies such as (Fathali and Okada, 2016), (Lai et al., 2011), and (Yoon, 2012) provided proof that out-of-class study played a major role in language learning process and it helped learners become proficient in many ways. (Mobarhan et al., 2014) and (Reinders, 2014) found self-determined behaviour had a major influence on out-of-class learning.

The core debate and emphasis behind why students or learners may be made autonomous and not dependent on teachers is because autonomous learners are better engaged in learning and are better in end results compared to others. In addition, such learners are more motivated towards

learning, intrinsically. (Hamilton, 2013) stated that in cases when learners are cognitively connected in learning and solving problems, they become better at maintaining robust approach in making effective decision and problem solving. Accordingly, such learners are also very good at developing attitudinal resources to overcome any transitory setbacks. Engaged autonomous learners are more effective in learning any language which also enables them to develop productive and receptive skills for better command over the language. In an overall manner, they are better learners compared to conventional classroom set ups. Notably, literature on the topic has also highlighted that leveraging autonomy to learners is one of the basic individual rights. According to (Ismail et al., 2013) such freedom towards learning requires holistic access to notes, goals, materials, curriculum, methodology and progress of learning in order to take complete responsibility of learning. Being independent of the teachers does not refer to full autonomy as students in distance learning courses also have no teaching supervision yet still they are restricted through some processes and strategies.

Alongside this, it is also accepted that attainment of complete autonomy is nearly impossible and too idealistic when it comes to any Arabian economy. Instead, different ranges and degrees of autonomy can be made possible in different cultures. According to (Macaro, 1997), this is known as functional autonomy which refers to autonomy in realtion to some functions. (Macaro, 1997) explained that autonomy in language learning occurs when learners manage to obtain significant cognitive learning skills through which they can actively reproduce and re-use such skills to further master the language. In simple words, it entails to the acquisition of knowledge and the strategies necessary to enable learning of a subject matter.

According to (Holec, 1981), as mentioned in (Little and Dam, 1998) autonomy in learning asserts that learners take responsibility and accountability of their learning in all aspects positively. They may work on setting goals and targets for themselves and choose the right strategies for their learning.

There have been Libyan studies relating to autonomy and English language learning. (Emhamed and Krishnan, 2011) and (Abukhattala, 2016) conducted studies on using language games in the EFL Libyan classroom. (Aldabbus, 2008) studied teachers' positive attitudes towards learner-centred approach. Students and teachers readiness for learner autonomy was also investigated (Elmahjoub, 2014). However, the researchers found that most of the attempts which had been made towards implementing

these new ideas were not successful and many difficulties have been stated. The findings of a recent study conducted by (Jha, 2015) revealed that autonomous language learning was rarely used in the Libyan context. Teachers' lack of understanding of this concept and its principles and practices can be one of the possible reasons for not promoting it successfully to the Libyan students.

Based on previous studies, it is assumed that students already have a certain degree of autonomy, but each learner is different and that teachers should employ different approaches to promote autonomy. In English as a Foreign Language (EFL) environment, obtaining a high score in English tests is an indicator of good achievement. There were a few researches into autonomy and language proficiency. (Sakai and Takagi, 2009) found positive correlation between EFL Japanese student readiness to autonomous learning and their English proficiency. The findings of (Zarei et al., 2015) revealed that language proficiency is not an influential factor for developing learner autonomy.

It has been established that that learners' gender has an influence on language learning (Brown, 2007). In his study, Brown found that there were differences between males and females in terms of their language use which reflected that learners have different choices when it comes language learning. Over the years, the studies delving into learner autonomy are limited when it comes gender . (Üstünlüoğlu, 2009) investigated Turkish university students' autonomy in relation to gender and found that there was no significant difference in the autonomy perception between students of different gender reflected that learners have different choices when it comes language learning. The studies delving into learner autonomy are limited when it comes gender. (Üstünlüoğlu, 2009) investigated Turkish university students' autonomy in relation to gender and found that there was no significant difference in the autonomy perception between students of different gender.

5 METHODOLOGY

The current study used the mixed method approach to collect and analyse data. A convergent parallel design was utilized. In this design, researcher collected the quantitative and qualitative data, then analysed the data separately. Finally results of both were compared to see whether the findings were confirming or disconfirming each other (Creswell, 2013).

A Libyan secondary school that follows the Libyan national curriculum which taught all the

courses in Arabic language excluding English language subject were selected. The target respondents were EFL Libyan secondary school students in Malaysia. There were 140 students as a total for the enrolment. 103 students were selected to answer the questionnaires. The sample size was chosen based on Krejcie & Morgan's table (Krejcie and Morgan, 1970). Based on their table, required sample size for any population of a defined (finite) size N= 140 was 103. 49 students were male and 54 were female. The students have learnt English for more than four years on average. Based on the interviews conducted, the researcher reached saturation point with the 10 informants.

The first instrument that was used in this study was a questionnaire that was adopted from (Chan et al., 2002). It was used to find out EFL Libyan students' readiness for autonomous English language learning. The second instrument was student interview to investigate their perceptions to the learning autonomy. Lastly students' performance measurement was determined by using their results in the English language subject.

The instrument for this study was piloted. The reliability of the instrument was checked and the Cronbach's alpha was 0.781. SPSS statistical package for social science version 24 was used for data analysis and interpretation. NVivo Pro version 10 was used to analyse qualitative data from student interviews.

6 RESULTS AND DISCUSSION

To answer the first research question, the data collected from the interviews with the students were transcribed verbatim and analysed using NVivo.

Research Question 1: What are the perceptions of students toward autonomous learning? To investigate the perceptions of students toward autonomous learning they were asked to respond to the following questions:

- Which do you prefer: learning English in a class or learning English on your own out of class?

- Do you do any activity to learn English out of class? If yes, please tell me what are the activities you have used to learn English?

It was found that all 10 students interviewed preferred to learn English on their own, out of class to improve their English instead of learning English in a class as indicated in Table 1 and 2.

The students answered that they carried out activities like speaking to friends or people, listening

Table 1: Themes Frequency: Perceptions of students toward autonomous learning

Themes	Refs
Which do you prefer: learning English in a class or learn English on your own out of class?	
Sub-Themes	
In class	0
Out of class	10

to music, reading, watching movies and YouTube, Writing, Practice speaking and texting (Figure 1). They spent an average of 4 to 6 hours in a week doing the reported activities.

Table 2: Themes Frequency: Activities to learn English out of classroom

Themes	Refs
Do you do any activities to learn English out of class? If yes, please tell what are the activities you use to learn English?	
Sub-Themes	
Yes	10
No	0
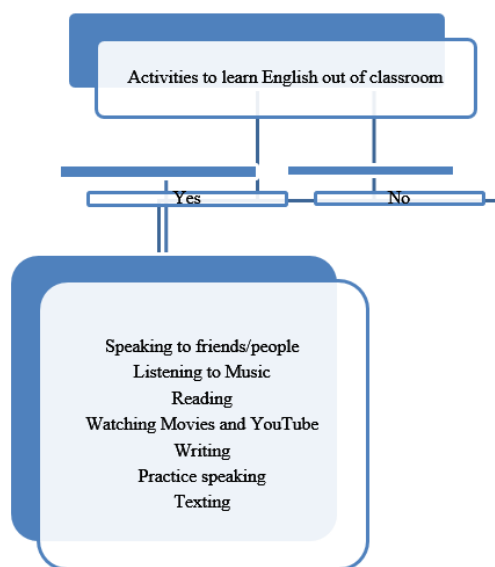
Figure 1: Activities carried out outside of class

When asked on the activities they did and how

much time they spent in a week to carry out the activities, the students gave the following answers:

Interviewee 1 : Yes, I do learn English out of classroom. Like I use to talk to friends and listen music. In average I used to spend about 4 to 5 hours in learning English in a week.

Interviewee 2: Yes, I learn English out of class. I read stories novels and talk in English with my friends for about 5 hours.

Interviewee 3: Yes, along with classroom learning I use to learn English out of classroom also. In form of talking with friends, reading novels, watching movies and you tube. I spend 5 hours in learning English.

Interviewee 4: Yes, I speak with my friends and read books. About 8 hours.

Interviewee 5: Yes, I love to learn English out of class like speaking with people and friends, not mush but 3 to 4 hour in average.

Interviewee 6: Yes, I talk to friends and read books. About 7 hours.

Interviewee 7: Yes, chatting or texting with friends. About 4 to 5 hours.

Interviewee 8: Yes, talking with friends. There is no limit to hours.

Interviewee 9: No limit for time.

Interviewee 10: Yes, talk to friends. Around 6 hours.

The students were then asked whether they enjoyed learning English and what level of English do they want to achieve before they enter university. Interestingly, all of them admitted to enjoying learning English, except for one student who admitted that learning English was hard but interesting (Table 3).

Table 3: Themes Frequency: Feelings towards learning English

Themes	Refs
Do you enjoy learning English?	
Sub-Themes	
Enjoy	9
Hard	1

The students were also asked to what level of English they wanted to achieve before entering university. It is interesting to note that the students were motivated to learn English until they reached advanced level before enrolling in the university. Only 1 student preferred to reach intermediate level.

Details of the answers given during the interviews were as follows:

Interviewee 1 : Yes, I enjoy. I want to achieve advance level. Be fluent in English.

Interviewee 2: Yes, I do enjoy. I want to learn up till advance level before going to university.

Interviewee 3: Yes, I enjoy. I want to learn up till advance level.

Interviewee 4: Yes, I enjoy. I want to take advance level.

Interviewee 5: It's hard but interesting. I want to learn advance level.

Interviewee 6: Yes, I enjoy. I want to learn advance level.

Interviewee 7: Yes, I enjoy. I want to achieve advance level. Be fluent in English.

Interviewee 8: Yes, I enjoy. Intermediate level of English is fine for me.

Interviewee 9: Yes, I enjoy. I want to learn up till advance level.

Interviewee 10: Yes, I enjoy. I want to earn advance level.

Majority of the students' responded positively and showed their willingness and readiness to learn English autonomously. The interview session revealed that the learners were ready to be autonomous because majority had carried out activities outside the classroom to learn English. It indicated that they accepted the responsibility of learning. When asked whether they wanted to learn English out of class room or inside the class learning, and what were their preferences or choices to learn English language? In answering these questions, all ten students gave positive response that they preferred to learn out of the class by using various methods like speaking with friends, listening to English music, reading English magazines, books and novels. (Richards, 2015) have categorized language learning into two dimensions: what goes on inside the classroom and what goes on outside of the classroom which seemed to be more interesting from learners' perspective. This study confirms the findings from previous studies that provided evidence that out-of-class study has a significant role in language learning as it improved performance (Fathali and Okada, 2016; Lai et al., 2011; Yoon, 2012) and self-determined behaviour motivated students to learn out of classroom (Mobarhan et al., 2014; Reinders, 2014).

To test the extent of the influence of gender on learner autonomy, Pearson correlation was carried out.

Table 4: Gender and Learner Autonomy Readiness Correlation

		Gender	LA
Gender	Pearson Correlation	1.000	.598**
	Sig. (2-tailed)		.002
	N	103	103
Learner Autonomy	Pearson Correlation	.598**	1.000
	Sig. (2-tailed)	.002	
	N	103	103
**. Correlation is significant at the 0.05 level (2-tailed).			

A Pearson product-moment correlation coefficient was computed to assess the relationship between gender and learner autonomy readiness of students. Table 4 shows that there was a positive correlation between the two variables, r = 0.498, n = 104, p = 0.002. Overall, there was a moderate, positive and significant correlation between gender and learner autonomy. This finding contrasted the findings from (Üstünlüoğlu, 2009).

Research Question Three Is there a significant relationship between autonomous learning readiness and English language performance of students?

A Pearson product-moment correlation coefficient was used to analyze the relationship between students' autonomous learning readiness and English language performance.

The results showed in Table 5 indicated that Autonomous Learning Readiness had a positive significant relationship (r = 0.791, p = 0.000) with English Language Performance. The Results showed that the p-value is smaller than (P<0.05). The results proved that overall, there was a significant, strong and positive correlation between autonomous learning readiness and English language performance.

Table 5: Learner Autonomy and English Language Performance

		LA	ELP
LA	Pearson Correlation	1.000	.711**
	Sig. (2-tailed)		.000
	N	103	103
ELP	Pearson Correlation	.711**	1.000
	Sig. (2-tailed)	.000	
	N	103	103
**. Correlation is significant at the 0.05 level (2-tailed).			

Increases in autonomous learning readiness were correlated with increases in English language performance. This is in line with the findings from (Rienties et al., 2012). The findings of the research indicated the students' readiness towards outside the classroom dominates at large in comparison with the classical view of classroom learning. A large number of students either interviewed were more motivated towards out of classroom learning. However, there were a few students who found learning English difficult but interesting.

The students' experience of learning English was on average above four years which means that all the students have a basic level knowledge and mastery of the English language. That could explain their confidence to learn English on their own which was reflected in their readiness to learn English autonomously. (Little, 2007) and (Benson et al., 2014) stated that learning how to learn is a crucial and central component of all autonomous learning schemes, displays progress, and evaluates individual learning outcomes. This is shown in all the ten students who were interviewed.

When the students were asked whether they wanted to learn English out of classroom or inside the classroom, all ten students gave positive response that they preferred to learn out of the classroom by using various methods like speaking with friends, listening to English music, reading English magazines, books and novels. They also spent hours in doing so. (Richards, 2015) categorized language learning into two dimensions: what goes on inside the classroom and what goes on outside of the classroom which seemed to be more interesting from learners' perspective. This study confirms the findings from previous studies that provided evidence that out-of-class study has a significant role in language learning process and it can enhance learners' educational output in multiple ways (Fathali and Okada, 2016); (Lai et al., 2011; Yoon, 2012) and out-of-class learning is mainly influenced by self-determined behaviours and self-regulated actions (Mobarhan et al., 2014; Reinders, 2014).Gender has a moderate effect on learner autonomy readiness.

The results showed that there was a significant relationship between autonomous learning readiness and English language performance. The results proved that autonomous learning readiness contributed significantly to the English language performance. This is in line with the findings from (Rienties et al., 2012). There is little empirical research investigating whether Libyan students have the propensity for autonomy. Hence this study gives a comprehensive example of Libyan students having readiness towards English language learning autonomy.

7 CONCLUSIONS

The findings of this study showed that students were ready for autonomous learning. It is clear that Libyan students have the propensity for autonomy and their autonomy has a positive effect on their English language performance. Through help,

understanding, guidance, support, and care of the teacher, these students will be successful autonomous language learners. However, since autonomy can be incrementally developed by the teacher, students can be gradually given full learning responsibility in the hope that they will one day become fully autonomous.

Social collaborative learning amongst peers is the most significant long-term motivational factor for students to become involved with learning English (Hughes et al., 2011). The results on the readiness for learner autonomy and students' performance in English language can help EFL teachers to be aware of readiness of learner autonomy of students and improve their educational methods or approaches in order to promote learner autonomy and help students to work together collaboratively and appreciate the value of autonomous learning with more concentration since it will lead to learning effectiveness.

Based on the findings on the readiness for learner autonomy and students' English language performance, secondary schools' administrators and Libyan Ministry of Education could evaluate whether autonomous learning is appropriate for the Libyan learning framework and use the findings to strategize further actions or implementations of autonomous learning.

REFERENCES

Abukhattala, I. (2016). The use of technology in language classrooms in libya. *International Journal of Social Science and Humanity*, 6(4):262.

Aldabbus, S. (2008). An investigation into the impact of language games on classroom interaction and pupil learning in libyan efl primary classrooms.

Altaieb, S. (2013). Teachers' perception of the english language curriculum in libyan public schools: An investigation and assessment of implementation process of english curriculum in libyan public high schools.

Benson, P., , and Voller, P. (2014). *Autonomy and independence in language learning*. Routledge.

Benson, P. (2001a). *Teaching and Researching Autonomy in Language Learning*. Pearson Education Limited Education Limited, England.

Benson, P. P., editor (1997). *Autonomy and independence in language learning*. Longman, London.

Benson, P. S. (2001b). Learner autonomy 7: Challenges to research and practice.

Brown, H. (2007). *Principles of Language Learning and Teaching*. Pearson Education Inc, New York.

Chan, V., Spratt, M., , and Humphreys, G. (2002). Autonomous language learning: Hong kong tertiary

students' attitudes and behaviours. *Evaluation and Research in Education*, 16(1):1–18.

Creswell, J. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.

Dam, L. (2011). Developing learner autonomy with school kids: Principles, practices, results.

Dickinson, L. (1995). Autonomy and motivation a literature review. *System*, 23(2):165–174.

Elmahjoub, A. (2014). *An Ethnographic Investigation into Teachers' and Learners' Perceptions and Practices in Relation to Learner Autonomy in a Secondary School in Libya*. University of Sheffield.

Emhamed, E. and Krishnan, K. (2011). Investigating libyan teachers' attitude towards integrating technology in teaching english in sebha secondary schools. *Academic Research International*, 1(3):182.

Fathali, S. and Okada, T. (2016). On the importance of out-of-class language learning environments: A case of a web-based e-portfolio system enhancing reading proficiency. *International Journal on Studies in English Language and Literature*, 4(8):77–85.

Gardner, D., , and Miller, L. (1996). *Tasks for Independent Language*. Learning: ERIC.

Hamilton, M. (2013). *Autonomy and foreign language learning in a virtual learning environment*. AandC Black.

Holec, H. (1981). *Foreign Language Learning*. Pergamon Press, Oxford.

Hughes, L., Krug, N., , and Vye, S. (2011). Advising practices: A survey of self-access learner motivations and preferences. reading.

Ismail, N., Singh, D., , and Abu, R. (2013). Fostering learner autonomy and academic writing interest via the use of structured e-forum activities among esl students. In *Proceedings of EDULEARN 13 Proceedings*, page 4622–4626.

Jha, S. (2015). Exploring desirable characteristics for libyan elt practitioners. *Journal of English Language and Literature (JOELL)*, 2(1):78–87.

Krejcie, R. and Morgan, D. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30:607–610.

Lai, C., , and Gu, M. (2011). Self-regulated out-of-class language learning with technology. *Computer Assisted Language Learning*, 24(4):317–335.

Little, D. (1990). Autonomy in language learning. teaching modern languages.

Little, D. (2007). Language learner autonomy: Some fundamental considerations revisited. *International Journal of Innovation in Language Learning and Teaching*, 1(1):14–29.

Little, D. and Dam, L. (1998). Learner autonomy: What and why? *Language Teacher-Kyoto-Jalt-*, 22:7–8.

Macaro, E. (1997). Target language, collaborative learning and autonomy (vol. 5): Multilingual matters.

Mobarhan, R., Majidi, M., and Abdul Rahman, A. (2014). Motivation in electronic portfolio usage for higher education institutions. information systems and

technology for organizational agility, intelligence, and resilience.

Orawiwatnakul, W. and Wichadee, S. (2017). An investigation of undergraduate students' beliefs about autonomous language learning. *International Journal of Instruction*, 10(1).

Palfreyman, D. and Smith, R. (2003). *Learner autonomy across cultures: Language education perspectives*. Palgrave Macmillan, Basingstoke.

Reinders, H. (2014). Personal learning environments for supporting out-of-class language learning. Paper presented at the English Teaching Forum.

Richards, J. (2015). The changing face of language learning: Learning beyond the classroom. *RELC Journal*, 46(1):5–22.

Rienties, B., Giesbers, B., Tempelaar, D., Lygo-Baker, S., Segers, M., and Gijselaers, W. (2012). The role of scaffolding and motivation in cscl. *Computers and Education*, 59(3):893–906.

Rungwaraphong, P. (2012). Student readiness for learner autonomy: Case study at a university in thailand. *Asian Journal on Education and Learning*, 3(2):28–40.

Sakai, S. and Takagi, A. (2009). Relationship between learner autonomy and english language proficiency of japanese learners. *The Journal of Asia TEFL*, 6(3):297–325.

Sawani, F. (2009). Factors affecting english teaching and its materials preparation in libya.

Üstünlüoğlu, E. (2009). Autonomy in language learning: Do students take responsibility for their learning? *Journal of Theory & Practice in Education (JTPE)*, 5(2).

Yoon, T. (2012). Are you digitized? ways to provide motivation for ells using digital storytelling. *International Journal of Research Studies in Educational Technology*, 2(1).

Zarei, A., , and Zarei, N. (2015). On the effect of language proficiency on learners' autonomy and motivation. *Journal of English Language and Literature*, 3(2):263–270.

Macroeconomics and Jakarta Composite Index

Restu Hayati, Poppy Camenia Jamil and Azmansyah

Department of Management, Universitas Islam Riau, Pekanbaru, Indonesia
{*restuhayati, poppycameniajamil, azman*}*@eco.uir.ac.id*

Keywords: Jakarta Composite Index (JCI), Macroeconomics, Dow Jones Index, BI 7 Days Rate, The Fed Rate, Exchange Rate, World Oil Prices

Abstract: This study was conducted to determine the effect of macroeconomic variables on the Jakarta Composite Index (JCI). By using time series data from 2016-2018, multiple regression analysis with the least square model is used to prove the influence of dow jones index (DJIA), BI 7 days rate, fed rate, exchange rate, inflation and world oil prices against the Jakarta Composite Index. After going through the data stationary test and classic assumption test, the results of the study prove that there is no significant effect both simultaneously and partially between macroeconomic variables on the Jakarta Composite Index (JCI) on the Indonesia Stock Exchange (IDX).

1 INTRODUCTION

As a developing country, Indonesia has enormous potential in the growth of investment, especially in financial assets. This potential is evidenced by the growth of the Jakarta Composite Index (JCI) in the last 10 years which reached 200%. JCI is the weighted average price of all shares of companies listed on the Indonesia Stock Exchange. The increase in JCI will be an indicator of the improving investment climate of Indonesia's financial securities. The JCI price increase also followed by the growth of market capitalization originating from foreign investment and domestic investment. At the end of 2018, market capitalization in Indonesia reached almost 7,000 trillion rupiah, an increase of 7 times compared to the previous 10 years. Even though in 2019, domestic market capitalization in Indonesia has reached 50% compared to foreign market capitalization, but the composition of foreign investment in the country continues to increase, thereby reducing the composition of domestic investment. The investment growth is an opportunity that foreign and domestic investors can use in investing in the indonesian capital market.

An increase in market capitalization will certainly increase demand and supply of shares in Indonesia. Although fundamental financial performance factors play an important role in the investor's consideration of investment policies, macroeconomic factors and competition in developing countries' stock exchanges can also influence the flow of funds and thus affect JCI price levels. It cannot be denied that investors are eagerly always trying to find information related to macroeconomics which will be a consideration of investment policies. (Barakat et al., 2016) (Barakat, Elgazzar and Hanafy, 2016) explain that macroeconomic variables can explain and have an important role in market fluctuations. News about the increase in the domestic interest rate (BI 7 days rate), the foreign interest rate (the fed rate), the development of the Dow Jones index price, the rupiah exchange rate against the USD, inflation, and even the development of world oil prices has always been highlights in financial media. And this is also supported by the opinions of several experts from securities companies (Paramitra Alfa Sekuritas, 2018) (Artha Sekuritas, 2019) (OSO Securities, 2019) (Bina Artha Sekuritas, 2019), and also by the Indonesian Stock Exchange representatives (Wintoro, 2014). Some studies that support the influence of the macro economy on the stock index that are (Samadi et al., 2012) (Vejzagic and Zarafat, 2013), (Sudarsana and Candraningrat, 2014), and (Barakat et al., 2016).

Whereas some studies have found that macroeconomics factors do not contribute to stock index price. (Wijayaningsih et al., 2016) found that the fed rate had no significant effect on JCI. (Salameh and Alzubi, 2018). found that the Stock Exchange in the United Arab Emirates was influenced by the Stock Exchange in the UK, but not by the stock exchange in the USA. (Ullah et al., 2014) found

that in the long run the exchange rate and interest rate have a significant effect while inflation has no effect on the stock market. Likewise with research (Asmara and Asmara, 2018) which found that there was no relationship between inflation and JCI. (Sir, 2012) found that there is a causality relationship between macroeconomic variables on stock returns. This study will prove whether these macroeconomics number really affect investor behavior that will significantly change JCI prices.

2 RESEARCH PROBLEM

The problem in this study is the value of JCI which continues to increase with a significant increase over the past 10 years reaching 200%. By ignoring the fundamental factors, this study focuses more on macroeconomic variables that have been trusted and have been proven by various studies to affect stock indexes.

In Indonesia in the last 2 years (2016-2018), the pattern of JCI change is very much in accordance with the changing pattern of macroeconomic variables. JCI in the last two years has increased by 30% where there has been a decline in interest rates by 17%, a decrease in inflation by 24%, a decline in the exchange rate by 4.5%, an increase in DJIA by 42%, an increase in world oil prices by 81%, and an increase The Fed's interest is 995%.

So, the research problem that we want to prove in this research is "Are there significant influences between macroeconomic factors on the Jakarta Composite Index (JCI)?"

3 LITERATURE REVIEW

3.1 Macroeconomic Variables

Research that links macroeconomic variables to stock returns begins to be enlivened by (Fama and Schwert, 1977) and (Fama, 1981). By using inflation as the main macroeconomic variable that is most influential so that it causes a stock anomalous return. After that, more and more studies using other macroeconomic variables are used in predicting stock prices, stock returns, and also stock index prices.

Macroeconomic variables used in this study are:

- Dow Jones Industrial Average (DJIA) The DJIA is the index used to determine the weighted average of the 30 largest companies in the United States which was founded by The Wall Street

Journal. This index is used as a measure of the performance of the largest companies in America that will determine the condition of the USA economy.

- BI & Days Rate The 7 days BI rate is the reference interest rate of banks in Indonesia, which has been determined by Bank Indonesia as the central bank. 7 days showing a period of 7 days used Bank Indonesia s to evaluate monetary policy in setting the benchmark interest rate.

- The Federal Reserve Rate (The Fed Rate) The Fed Rate is the interest rate at which depository institutions (banks and credit unions) lend reserve balances to other depository institutions overnight, on an uncollateralized basis (wikipedia).

- The exchange rate of the rupiah against the dollar An exchange rate is an agreement known as a currency exchange rate for payments now or later, between two currencies of each country or region (wikipedia).

- Inflation Inflation is an increase in the prices of goods in general and continously. Inflation data in Indonesia is obtained from the publication of Bank Indonesia as the central bank in Indonesia.

- Oil Prices oil price is the price of petroleum that uses the West Texas Intermediate (WTI) standard. WTI is a world standard of petroleum produced from North America which is in great demand, especially in the USA and China.

3.2 Jakarta Composite Index

The Jakarta Composite Index is the average daily stock of all shares listed on the Indonesia Stock Exchange. JCI is seen as the most commonly used general index in Indonesia as a measurement of the average performance of all shares.

4 METHODOLOGY

4.1 Population and Sample

The population and sample in this research are Jakarta Composite Index (JCI) in Indonesia Stock Exchange. Secondary data used is from 2016 - 2018 so the overall data is 36 (n = 36).

4.2 Data Analysis

Data were analyzed using multiple regression analysis using software EViews. The multiple

regression equation from the study is as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 \\ + b_6X_6 + e \quad (1)$$

Where,

- Y = Jakarta Composite Index
- X_1 = Dow Jones Index (DJIA)
- X_2 = BI 7 Days Rate
- X_3 = The Federal Reserve Rate
- X_4 = Exchange Rate (IDR to USD)
- X_5 = Inflation
- X_6 = Oil Price
- a = constanta
- $b_1, b_2, b_3, b_4, b_5, b_6$ = The Federal Reserve Rate
- e = error

Before the multiple regression testing is carried out, each variable is subjected to data stationarity testing to determine whether or not there is a trend pattern on time series data. This is done to avoid spurious regression in research.

After that, classical assumptions were tested on the data, namely multicollinearity and normality so that best linear unbiased estimator (BLUE) requirements were fulfilled in the regression with the least squares model.

Furthermore, the F test is used to determine the simultaneous effect between all macroeconomic variables on JCI. Likewise, with the t test, it is used to determine the partial effect of each macroeconomic variable on JCI. The hypothesis is accepted if the significance value < 0.05.

5 RESULTS

5.1 Data Stationarity

Data stationarity is tested using a unit root test at various levels until it reaches stationary. The probability of the unit root test can be seen in the table below:

At level 0, all time series data on each variable forms a trend pattern with a probability value > 0.05. Therefore, stationary testing is carried out at level 1st difference. Based on the table above the data at the 1st difference is stationary with all probability values in each variable ¡ 0.05. Furthermore, multiple regression analysis is done using the 1st difference data.

Table 1: Unit Root Test

Variable	Level	1st difference
Jakarta Composite Index (JCI)	0.4476	0.0004
Dow Jones Index (DJIA)	0.4490	0.0004
BI 7 Days Rate	0.0609	0.0008
The Fed Rate	0.9997	0.0002
Exchange Rate	0.7247	0.0000
Inflation	0.1724	0.0000
Oil Price	0.2295	0.0023

5.2 Classical Assumption Test

Classical assumption test is done so that the multiple regression equation model satisfies the best linear unbiased estimator (BLUE).

5.2.1 Multicollinearity

Multicollinearity is used to determine the correlation between independent variables.

Table 2: Multicollinearity Test

Variable	Centered Variance Inflation Factor (VIF)
Dow Jones Index (DJIA)	1.310733
BI 7 Days Rate	1.250585
The Fed Rate	1.133625
Exchange Rate	1.308130
Inflation	1.180933
Oil Price	1.457788

Based on the table above, there is no correlation between the independent variables with the centered VIF value <10. This means that each independent variable in the study has no resemblance so that it is suitable to be used as an economic macro variable that can affect Jakarta Composite Index (JCI).

5.2.2 Normality

The normality test aims to test whether in the regression model, the residual confounding variable has a normal distribution.

The data in this study are normal with a Jarque Beta> 0.05 probability value, which is 0.643257.
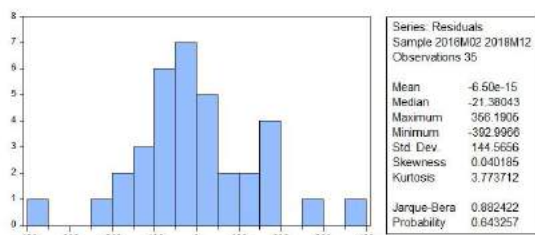
Figure 1: Jarque Beta Normality Test

5.3 Hypothesis Test

5.3.1 Simultaneous Effect

The value of F and its probability that determines the influence all macroeconomic variable on the Jakarta Composite Index can be seen in the table below:

Table 3: Simultaneous Effect

F-statistic	Probability
0.79	0.585318

The calculated H^{456} F value is 0.79, smaller than the F table value of 2.42. In addition, the probability F value > 0.05, which is 0.58. Based on the statistical analysis, the decision was that there was no significant simultaneous effect between the DJIA, the BI 7 days rate, the Fed rate, the rupiah exchange rate, inflation and world oil prices against the Jakarta Composite Index (JCI).

5.3.2 Partial Effect

The value of t and its probability that determines the influence of each macroeconomic variable on the Jakarta Composite Index can be seen in the table below:

Table 4: Partial Effect.

	t-statistic	Probability
Dow Jones Index (DJIA)	1.122180	0.2713
BI 7 Days Rate	-0.882821	0.3848
The Fed Rate	1.648327	0.1105
Exchange Rate	0.508940	0.6148
Inflation	0.426376	0.6731
Oil Price	-0.898726	0.3765

The t value of statistics for each variable does not exceed t table, which is 2.03. Likewise, the probability value of each variable is more than 0.05. This means that none of the macroeconomics variables have a partial effect on JCI.

5.3.3 Contribution of Macroeconomic Variables to JCI

The contribution of Dow Jones Index (DJIA), BI 7 days rate, fed rate, exchange rate, inflation and world oil prices against the JCI are 0.1447 or 14.47%. With no significant influence between all macroeconomic variables on JCI it is reasonable that macroeconomic contributions are 14.47%. The rest, 85.53% is influenced by other variables outside of this study.

Following are the multiple regression equations that explain the effect of macroeconomics on JCI:

$$JCI = 4.64 + 0.07DJIA - 94.53BI7DaysRate + 495.03TheFedRate + 0.06ExchangeRate + 41.54Inflation - 6.9OilPrice \quad (2)$$

Based on the regression equation above it is known that the variable domestic interest rate (BI 7 Days Rate) and oil prices, have a negative relationship while other macroeconomic variables have a positive relationship. If the Indonesian government increases the benchmark interest rate, JCI will decline even though the decline is not significant. Likewise, with world oil prices. The increase in world oil will add to the average operational burden of public companies in Indonesia, especially manufacturing companies so that it will reduce the company's stock price even though the decline is not significant.

6 DISCUSSION

The results prove that suprisingly macroeconomic factors do not have a significant influence on JCI. During this time, every financial media and even investment managers from securities companies always make a fuss if macroeconomic changes occur that could affect investors' decisions. This research proves the opposite.

The Down Jones Index is often seen as a baromater of world market performance consisting of 30 companies. When market experts say the market is going up or down, it illustrates that DJIA is experiencing fluctuations. The stock price of the 30 best companies in America is a reference to the state of the world economy. The rising price of Dow Jones provides information that the world economy is improving which should affect the economies of other countries including Indonesia. The rising price of DJIA has often been responded positively by domestic investors related to the hope of future economic conditions. If economic conditions improve, stock prices will also experience

an increase. But, in fact, DJIA did not significantly influence JCI. This might be due to the lack of direct connection between these 30 companies and companies in Indonesia. Dow Jones has also been criticized as no longer a reflection of market prices in the world economy.

BI 7-days rate does not contribute to JCI because the offered interest rate is not too competitive so investors tend not to mind the fluctuation in the BI 7 Day Rate. The 7 days BI rate in Indonesia, which were around 4-6% in the past two years, did not provide an incentive for investors to moved their funds to financial institutions that provide less risk.

The Federal Reserve Rate has no effect on the JCI, this can be caused by the average company incorporated in the Indonesia Stock Exchange which is represented through the JCI is a company that operates almost entirely in Indonesian territory and is not directly related to The Federal Reserve Rate. From the investor side, it might be preferable to invest in Indonesia despite the opportunity to increase profits with promising interest rates in America. Exchange rate risk will be an additional consideration for investors in transferring funds from Indonesia.

Changes in the exchange rate of the rupiah against the dollar also did not contribute to fluctuations in the value of the JCI. Investors who invest in the Indonesia Stock Exchange usually have their own preferences on the choice of industrial sectors that are of interest so that even if there are significant changes to the exchange rate it will not affect investor interest in investing. In addition, in terms of companies in general, they have carried out exchange rate risk management so that it does not affect the company's financial performance. Likewise, inflation is not the main focus of investors in investing which is supported by research (Ullah et al., 2014) and (Asmara and Asmara, 2018) and (Geetha et al., 2011).

Oil Price should be a consideration because it can affect production costs but not the entire company is in the manufacturing production sector. Of the 600 companies listed on Indonesia Stock Exchange, only about 23% are manufacturing companies. JCI is a combination of all sectors in the Exchange, because on the average there is no effect of oil price on the value of the JCI.

Based on the results it is known that overall macro factors do not affect the JCI, assuming that the round of funds that occur in the capital market already has its own investment preferences by each investor.

7 RESEARCH DEFICIENCY

Due to limitations in data collection, this study uses short-term time frames, from 2016 to 2018. Future research is expected to use a span of 10 years so that it can see changes in macroeconomic strength towards JCI from year to year.and add a comparison of the influence of fundamental and macroeconomic factors on JCI.

8 CONCLUSIONS

The results of this study prove that although the JCI change pattern follows the changing pattern of macroeconomic variables, but after it has been proven by a series of statistical tests, none of the macroeconomic variables affect JCI in the short run. This might be caused by investors in Indonesia pay more attention to the fundamental factors which are the company's financial performance. In addition, stock indices in a country do have a tendency to increase due to developments in a country's Stock Exchange.

REFERENCES

Asmara, W. P. and Asmara, I. P. W. P. (2018). Pengaruh variabel makro ekonomi terhadap indeks harga saham gabungan. *None*, 7(3).

Barakat, M. R., Elgazzar, S. H., and Hanafy, K. M. (2016). Impact of macroeconomic variables on stock markets: Evidence from emerging markets. *International journal of economics and finance*, 8(1):195–207.

Fama, E. F. (1981). Stock returns, real activity, inflation, and money. *The American economic review*, 71(4):545–565.

Fama, E. F. and Schwert, G. W. (1977). Asset returns and inflation. *Journal of financial economics*, 5(2):115–146.

Geetha, C., Mohidin, R., Chandran, V. V., and Chong, V. (2011). The relationship between inflation and stock market: Evidence from malaysia, united states and china. *International journal of economics and management sciences*, 1(2):1–16.

Salameh, H. M. and Alzubi, B. (2018). An investigation of stock market volatility: evidence from dubai financial market. *Journal of Economic and Administrative Sciences*, 34(1):21–35.

Samadi, S., Bayani, O., and Ghalandari, M. (2012). The relationship between macroeconomic variables and stock returns in the tehran stock exchange. *International Journal of Academic Research in Business and Social Sciences*, 2(6):559.

Sir, M. M. (2012). Impact of the macroeconomic variables on the stock market returns: The case of germany and the united kingdom. *Global Journal of Management and Business Research*, 12(16).

Sudarsana, N. M. A. D. and Candraningrat, I. R. (2014). Pengaruh suku bunga sbi, nilai tukar, inflasi dan indeks dow jones terhadap indeks harga saham gabungan di bei. *Jurnal Fakultas Ekonomi dan Bisnis Universitas Udayana (Unud), Bali, Indonesia, hlm. 3291*, 3308.

Ullah, F., Hussain, I., Rauf, A., et al. (2014). Impacts of macroeconomy on stock market: Evidence from pakistan. *International journal of management and sustainability*, 3(3):140–146.

Vejzagic, M. and Zarafat, H. (2013). Relationship between macroeconomic variables and stock market index: Cointegration evidence from ftse bursa malaysia hijrah shariah index. *Asian journal of management sciences & education*, 2(4).

Wijayaningsih, R., Rahayu, S. M., and Saifi, M. (2016). Pengaruh bi rate, fed rate, dan kurs rupiah terhadap indeks harga saham gabungan (ihsg)(studi pada bursa efek indonesia periode 2008-2015). *Jurnal Administrasi Bisnis*, 33(2):69–75.

Wintoro, D. (2014). Structural model of the idx credibility. *Indonesian Capital Market Review*.

The Development of Integration Technique Teaching Materials based on Problem Based Learning in Integral Calculus Course

Zetriuslita and Rezi Ariawan

Mathematics Education Study Program, Universitas Islam Riau, Pekanbaru, Indonesia
{zetriuslita, reziariawan}@edu.uir.ac.id

Abstract: This study aims to develop teaching materials of integration technique in Calculus course based on Problem Based Learning approach that meet valid and practical criteria. The research method is development research which consists of three stages: planning, development, and testing. The subjects of this study were the third semester students of Mathematics Education involving 40 people. The data collection instrument consists of validityand practicality sheets of teaching materials. The data collection technique was conducted with non-test technique. The data analysis used descriptive quantitative technique. Based on the results of the study, the teaching materials have met the valid criteria by 88.96% with Very Valid criteria. Furthermore, the teaching materials also met practical criteria by 88.75%)with Very Practical criteria. Therefore, the findings of this study indicate that the integration technique teaching materials based on Problem Based Learning in Integral Calculus course meet very valid and very practical criteria.

1 INTRODUCTION

To improve the nation's competitiveness in facing the globalization era, higher education is needed to develop science and technology. Higher education as part of the National education system has a strategic role in educating the nation's life and advancing science and technology. According to Law Number 12 of 2012 concerning Higher Education Article 4, the functions of higher education are: (1) developing capabilities and forming dignified national character and civilization in order to educate the nation's life; (2) developing academicians who are innovative, responsive, creative, skilled, competitive, and cooperative through the implementation of Tridharma Perguruan Tinggi (the University's three main purposes); (3) developing science and technology by paying attention to and implementing the values of humanities.

As one of the formal education institutions, Universitas Islam Riau (UIR) is one of the institutions which take part in realizing the function of higher education that has been described above. In the field of teacher training and education, FKIP (Fakultas Keguruan dan Pendidikan—Faculty of Teaching Training and Education) is a pioneer in producing professional and reliable education personnel.

So far, the Mathematics Education, one of the study programs in FKIP UIR, has tried to take various actions in order to achieve the goals of higher education, namely by trying to produce professional and reliable education personnel. There are several important elements, one of which is teaching staff or lecturers. Law Number 12 of 2012 concerning Higher Education Article 12 states that: (1) lecturers as members of the academic community have the task of transforming the knowledge and/or technology they master to students by creating a learning atmosphere so that active students develop their potential; (2) lecturers as scientists have the task of developing a branch of science and/or technology through reasoning and scientific research and disseminating it; (3) lecturers individually or in groups must write academic textbooks, which are published by universities and/or scientific publications as a source of learning and for the development of academic culture and civilization of writing activities.

The reality, however, contradicts the statement above. Scientific writing in Indonesian universities is unsatisfactory. The contribution of scientific publications by Indonesian universities is only 0.0125% (Suroso, 2004; Mokhtar et al., 2010). He supposes that Indonesia has 45 state universities and 1400 private universities with a total of 1,850,000 lecturers. If every lecturer in one year writes a book, there will be 1,850,000 titles. But in reality, it is

different. He added that the cause of lecturers' weak writing ability is the low activity of accessing the internet. Lecturers do not have writing facilities such as availability of collections, laziness in library visits or downloading on the website. Furthermore, the ability of lecturers to buy books, subscribe to journals, and allocate a portion of their money to complete their writing activities is also low, and include poor translation skills. Besides, their weak writing ability is also caused by people's low interest in buying books.

Meanwhile, according to Team Jago Nulis Publisher Deepublish (2016), there are several benefits from writing activities, including: (1) obtaining passive income; (2) as a medium for promotion / position; (3) self-promotion and institution of work; (4) obtaining invaluable pride; (5) getting credit points; (6) giving valuable contribution to the people; (7) avoiding senility and improving self-quality; (8) passing on the knowledge of future civilizations.

Due to the benefits and the effort to carry out the Law on Higher Education, the researchers are interested in developing teaching materials. In addition, the development of teaching materials is based on several observations, experiences and interviews that the researchers have done as the permanent lecturers in the Mathematics Education Study Program. The researchers found that: (1) most teaching materials are not available for each subject, so that this can raise doubts about the professionalism of the lecturers who teach the subject; (2) learning resources available to students are very limited, especially textbooks that are prepared exclusively for certain subjects by lecturers; (3) the interaction of students in the class when lecturing takes place is very low because some students do not bring the learning resources and some bring the intended learning resources but they have difficulties in learning and understanding the material.

In addition, based on an unstructured interview with several students during the lecture process in the second semester in the academic year of 2017/2018, it was found that; (1) students are easy to find book references related to the subjects, but find difficulties in determining which material should be studied in accordance with the competencies that must be possessed while participating in the course. Then, there are several materials in many different books. Consequently, students must have many books as learning resources, while they have financial constraints to buy them. (2) students often find learning resources that are invalid (incomplete); (3) the authors of the books (articles) they find on the internet are often ambiguous especially from blogs; (4) if the lecturer assigns certain materials to the students, then they only take what is relatively easy to understand, while the relatively difficult one is disposed because it is not understandable, so the urgency or point of learning is not achieved; (5) students are most happy during the group's paper presentations, because their presentations are clarified by lecturers in the class.

The findings presented above also occur in the subjects that the researchers have been able to teach so far, namely Integral Calculus. Integral Calculus is one of the compulsory courses in Mathematics Education study program. With 3 credits, students are required to pass this course, because this course is prerequisite for advanced calculus courses, Differential Equations, and Initial Value Problem and Boundary Condition Problem. Therefore, it must be mastered by the students.

It is considered important and urgent to do a development research that can produce Integral Calculus teaching material.In the teaching of science and biology the didactic materials are fundamental tools in the taeching-learning process, being an important and variable alternative in schools of public scholls system. Teh use of these materials can help the student in the contextualization of knowledge, filling many gaps felt during learning, facilitating the students to build their own conceptions of scientific knowledge in relation to common knowledge, and the socialization to common knowladge and the use the contruction of new designs more elaborate. The availability of references for Integral Calculus is now very large and accessible. However, the references do not support the achievement of competency standards. In addition, several references only teach students to calculate. Even though the demands of integral calculus courses do not only provide skilled students in calculating integrals, but also provide understanding about integrals and using them in solving various problems associated with them. Therefore, teaching materials must be created to teach and encourage students to actively involve and construct their own knowledge.

To be able to develop teaching materials, the teaching materials can be arranged based on problem based learning. Problem-based learning is an alternative learning model that allows students to develop thinking skills (reasoning, communication, and connection) in solving mathematical problems (Rusman, 2010). Ben Martz and Morgan Shepherd. (2005: 1-2) states, *"PBL at its core is an interactive tool that uses prolems as the context for students to acquire knowledge. Problem Based Learning in*

centered on providing the student with a problem environment which that students can create and store memories and meanings".

Furthermore, Wina Sanjaya (2011) suggests that there are 3 main characteristics in a problem-based learning strategy, namely: (a) a problem-based learning strategy is a series of learning activities, meaning that in implementing a problem-based learning strategy there are a number of activities that students must do. The problem-based learning strategy does not expect students to simply record, listen, then memorize the subject matter, but through problem-based learning strategies students actively think, communicate, search and process data, and finally conclude; (b) learning activities are directed at solving problems, meaning that problem-based learning strategies place problems as keywords of the learning process, without problems there is no possible learning process; (c) problem solving is done by using a scientific thinking approach. This is similar to what was conveyed by Savin-Baden in Wendy Barber, et al (2015):

"There are significant characteristics of PBL that include: (1) Complex real world situations that have no one 'right' answer are the organizing focus for learning; (2) Students work in teams to confornt the problem, to identify gaps, and to develop variabel solutions; (3) Students gain new information through self-directed learning; (4) Staff act as facilitators; (5) Problems lead to the development of clinical problem-solving capabilites".

Based on the problems above and due to time constraints, the researchers are interested in conducting this research entitled "The Development of Integration Technique Teaching Materials in Integral Calculus Courses Based on Problem Based Learning". The textbook is systematically organized as follows: Cover, chapter titles, material concepts, competency standards, basic competencies, indicators, sub-chapter headings, material presentation that directs students to do activities with the following steps entitled: (1) let's focus on the problem; (2) let's collaborate with your group members; (3) let's start working; (4) let's innovate and understand the results; (5) let's analyze and evaluate, examples of exercises, summaries, exercises.

2 RESEARCH METHODS

Research that produces a product is known as development research. According to Sugiyono (2010), research and development is a research method used to produce certain products and test the effectiveness of these products.

Nana Syaodi Sukmadinata (2008) (Sukmadinata, 2011) stated that the steps of research and development broadly consist of: (1) a preliminary study consisting of literature review. In the literature review, find and read articles in international journals and national journals as well as source books related to the textbook material that you want to develop; (2) product development; activities carried out from drafting instruments, validating instruments and revising instruments, lastly (3) product testing. The activity is to test the testing instruments that have been valid and revised by the validators, and carry out the analysis. Thus, in general the research design consists of three stages including: development stage (conducting observations and interviews, conducting material analysis, analysis of competency standards and learning indicators), planning stage (compiling teaching materials according to material that has been analyzed at the planning stage, compiling the validity sheet and practicality sheet of teaching materials, validating teaching materials to 3 experts, conducting an analysis of the validity result, revising the teaching materials that have been validatedby the experts, and the testing stage (conducting trials and revise teaching materials based on the result of the tests).

This research was conducted in the Mathematics Education Program FKIP UIR in the odd semester of 2018/2019. The subjects in this study were the third semester students of the FKIP UIR Mathematics Education study program who had taken part in Integral Calculus course. The location, research time and the subject of this study were selected on certain considerations, namely:

- Ease of communication between researchers and students because researchers are lecturers from the students concerned.

- A research on the development of teaching materials for integration techniques based on Problem Based Learning in integral calculus course has never been conducted in Mathematics education study program.

The research instrument used to collect data in this study is the validity sheet of teaching materials compiled using several aspects: presentation, content, compatibility with the principles of problem based learning and mathematical critical thinking skills, and language. Then, the practicality sheet of teaching materials is compiled using the following indicators: Interest in mathematics teaching materials based on Problem Based Learning, Effect of Problem Based Learning teaching materials on student learning activities and motivation, Use of sentences in teaching

materials based on Problem Based Learning, Ease of understanding material in teaching materials based on Problem Based Learning, teaching materials support mastery of material, teaching materials based on Problem Based Learning in accordance with students' thinking background, Teaching materials help construct understanding of a material, Delivery of the material is associated with daily life, Teaching materials help facilitate the students' mathematical critical thinkingability, Questions based on Problem Based Learning are straightforward and challenging, and It is good or not to be used in Mathematics learning.

Data collection technique is carried out with non-test technique. To get the data about the validity of teaching materials, the researcher requested validity from the experts by using the validity sheet that had been designed. Lastly, to obtain the data about the practicality of teaching materials, the researchers used a practicality sheet given to students during the testing process.The result of validity test was analyzed in the following stages:

- Add the values of each indicator of the validity sheet.

- Find the average value of each indicator given by the validator with the following formula:

- Determine the combined validity with the following formula:

- Determine the average value category based on the Likert scale and determine the textbook validity category. The following are the validity categories of teaching materials.

Table 1: Interpretation Criteria for Teaching Material Validity

Mean Score	Category
$85,01\% \leq V \leq 100\%$	Very practical, or can be used without revision
$70,01\% \leq V < 85,01\%$	Quite practical, or can be used with minor revisions
$50,01\% \leq V < 70,01\%$	Less practical, it is recommended not to use because it requires major revisions
$V < 50,01\%$	Not practical, or may not be used.

Source: Sa'dun Akbar, 2013

Next, the data from the practicality questionnaire was analyzed by calculating the percentage of practical teaching materials. According to Sudijono (2008), the percentage of a value can be calculated using the following formula:

$$P = \frac{f}{N} \times 100\% \qquad (1)$$

Description:
P: Percentage of assessment

f: Score obtained
N: Total Score

The category of mean score and textbook validity is determined based on the Likert scale. The following table describes the categories of teaching material validity.

Table 2: Interpretation Criteria of Teaching Material Practicality

Mean Score	Category
$85,01\% \leq V \leq 100\%$	Very valid, or can be used without revision
$70,01\% \leq V < 85,01\%$	Quite valid, or can be used with minor revisions
$50,01\% \leq V < 70,01\%$	Less valid, it is recommended not to use because it requires major revisions
$V < 50,01\%$	Not valid, or may not be used.

Source: Modified from Sa'dun Akbar, 2013

Figure 1 describes the procedures of this research.
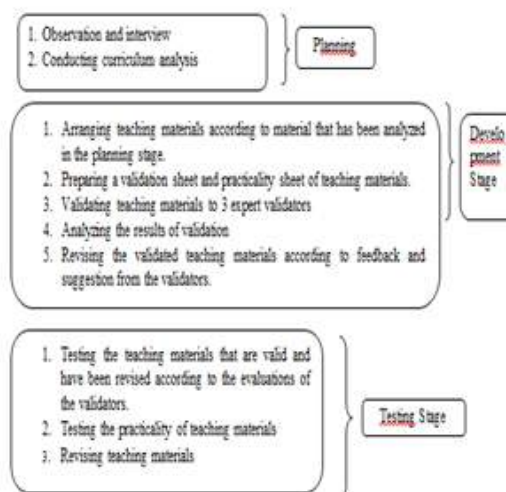
Figure 1: Procedures of the Research

3 FINDINGS AND DISCUSSIONS

3.1 Findings

Based on the development procedure in the planning stage, the researcher conducted several things, including:

3.1.1 Planning

The planning phase gins by analyzing the curriculum. Curriculum analysis is carried out by conducting reviews and discussions. The results of curriculum analysis of the teaching material to be examined are presented in Figure 2.

Moreover, in the planning stage, researchers have also done observations and interviews with the
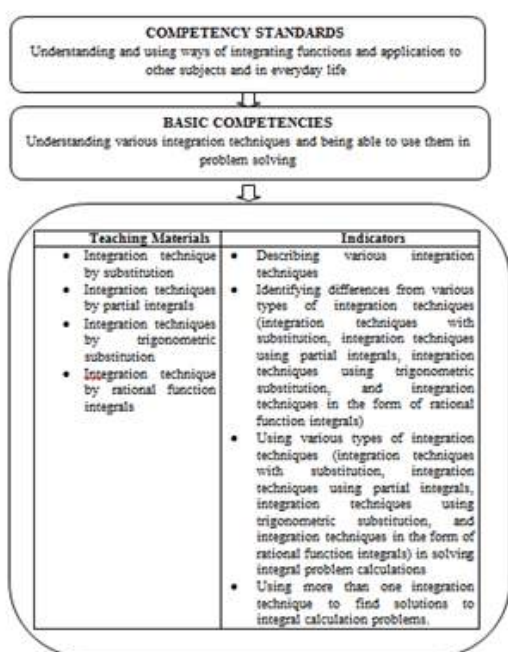
Figure 2: Curriculum analysis of the teaching material.

lecturers who teach integral calculus courses. The information was obtained that innovation is needed in conducting integral calculus learning. One of the innovations is the development of teaching materials that can involve students actively. In addition, most students want integral calculus material to be straightforward especially the material of integration technique. Then, the learning process can involve students and improve their mathematical thinking ability.

3.1.2 Development

After the planning stage is carried out, the next step that the researchers do is to develop teaching materials. Teaching materials include: (1) cover; (2) introduction; (3) table of contents; (4) Explanation of basic learning competencies; (5) Explanation of learning indicators; (6) A description of the focus of teaching materials; (7) Instructions for using teaching materials; (8) Exposure to teaching material presented with the following activities namely let's focus on the problem, let's have a discussion with your group members, let's start working, let's innovate and understand the results, let's analyze and evaluate ; (9) Sample Questions; (10) Summary; (11) Exercise.

The draft of teaching materials will be validated by 3 experts. Experts will provide validity of teaching materials with aspects of presentation feasibility, content feasibility, conformity with the principles of

Problem Based Learning and mathematical critical thinking skills and language feasibility. The results of the validity can be seen in Table 3 and Figure 3 below.

Table 3: Teaching Material Validity Result by Experts

Aspects Assessed	Percentage (%)	Criteria
Presentation Feasibility	95.83	Very Valid
Content Feasibility	88.72	Very Valid
Conformity with the principle of problem based learning and mathematical critical thinking skills	82.29	Quite Valid
Language Feasibility	86.46	Very Valid
Overall Percentage (%)	88.96	Very Valid

tSource: Processed Data
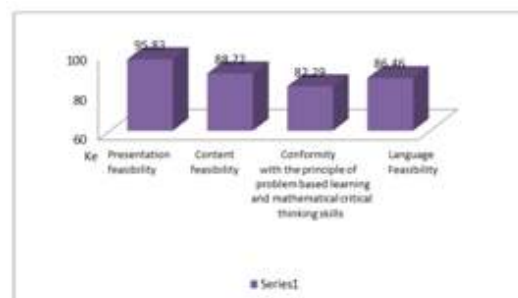
Figure 3: Curriculum analysis of the teaching material.

Based on the result of the validity from the experts, it can be seen that overall the validator assessed that the teaching material has been very valid and feasible for testing with minor revisions. At last, referring to the feedback from the experts, the researchers revised the teaching material that had been developed.

3.1.3 Testing

The product testing was conducted on 40 third semester students of Mathematics Education who had attended Calculus II course. The test was conducted on October 18, 2018 in room 6.09 Building A, 2nd floor. The trial process started from 13.30 - 16.00 WIB. The test was carried out in several stages, including: (1) Opening lessons by conveying apperception, giving motivation, delivering learning objectives, and explaining the steps of learning to be carried out by students in the class; (2) instructing students to study in groups that have been formed at the beginning of the meeting; (3) Providing revised teaching materials; (4) Instructing students to study

with other group members by following the learning steps contained in the teaching material; (5) At the end of the meeting, the researcher distributed questionnaire to students which serves to provide an assessment of the new instructional materials in terms of practicality.Table 4 shows the result of the practicality of teaching materials according to students.

Table 4: Practicality Result of Teaching Materials

No.	Indicators	Percentage (%)	Criteria
1	Interest in mathematics teaching materials based on Problem Based Learning	87.5	Very practical
2	Effect of Problem Based Learning based learning materials on student learning activities and motivation	86.56	Very practical
3	Use of sentences in teaching materials based on Problem Based Learning	90	Very practical
4	Ease in understanding the material in teaching materials based on Problem Based Learning	84.06	Quite practical
5	Teaching materials support mastery of the material	86.88	Very practical
6	Teaching materials based on Problem Based Learning are in accordance with students' thinking backgrounds	88.75	Very practical
7	Teaching materials help construct understanding of the subject	84.34	Quite practical
8	Submission of material is associated with everyday life	88.13	Very practical
9	Teaching materials help facilitate students' mathematical critical thinking skills	79.69	Quite practical
10	The questions given in teaching materials based on Problem Based Learning are straightforward and challenging	70	Quite practical
11	It is good or not to be used in mathematics learning	88.75	Very practical
	Overall Percentage (%)	88.75	Very practical

After testing and getting the students' practicality result of teaching materials with very practical criteria, it can be stated that the final product of teaching materials has been produced.

3.2 Discussion

In developing both the development of mathematical critical thinking ability test instruments and teaching materials, researchers have followed the stages and procedures. Testing and processing of test result have also been done by researchers with the procedures and steps stated in chapter 3. The results of the validity test showed that the teaching material falls into a very valid category, can be used with a slight revision. But there is avalidator who considers that the sample

questions and exercises presented in the teaching material have not been able to stimulate students' HOT skill. It is mentioned that the sample questions and exercises are too easy for students, even though they are based on indicators of mathematical critical thinking. Meanwhile the other validators consider the sample questions and exercises to be appropriate but the variations are lacking, so it must be added. The feedback is actually good, but the researchers have other considerations, related to the difficulty level of the sample questions and exercises. The researchers consider that the sample questions that the researcher presents with steps , but students also still have to find it themselves, adjusted to the level of ability and needs that researchers get based on research and experience of researchers as the lecturer who teach integral calculus course. It is assumed that such teaching materials can help the students' learning process in integral calculus. We can compare this with the results of the practicality questionnaire obtained from the testing of the use of integral technique teaching materials based on *Problem Based Learning*.

The result of the testing shows that that the teaching materials are "very practical". However, there are Problem Based Learning indicators in teaching materials that are straightforward and challenging. Teaching materials that help facilitate the students' mathematical critical ability have practical criteria and have the smallest percentage score compared to other indicators. This was in line with the statement that the sample questions and exercises had not been able to stimulate HOT students. But based on the interviews with the students, the sample questions and exercises were too difficult for them to complete. Based on these statements, the researcher assumed that the statement by the validators and the students had different meanings. The former stated that the questions and exercises must be changed and the level of difficulty increased so as to stimulate students' higher order thinking skills, while the latter stated that the sample questions and exercises were too difficult for them. In conclusion, the teaching materials that the researchers have developed are "very valid" and "very practical".

4 CONCLUSIONS AND SUGGESTIONS

In conclusion, teaching materials of integration technique based on Problem Based Learning are considered very valid and very practical. The researchers have developed valid and practical materials to be used in teaching integration technique

in integral calculus course. The researchers suggest that the practicality of students in using teaching materials should not be used as a benchmark in determining or seeing an increase in students' abilities. The practicality does not describe their abilities. Then, teaching materials must be presented in steps with a variety of problems that are more straightforward.

ACKNOWLEDGMENTS

REFERENCES

Akbar, S. (2013). *Instrumen Perangkat Pembelajaran*. Rosda karya, Bandung.

Barber, W., King, S., and Buchanan, S. (2015). Problem based learning and authentic assessment in digital pedagogy: Embracing the role of collaborative communities. *Electronic Journal of E-Learning*, 13(2):59–67.

Martz, B. and Shepherd, M. (2005). Problem Based Learning and the business school environment. *Proceedings of the Annual Hawaii International Conference on System Sciences*, 00(C):40.

Mokhtar, M., Tarmizi, R. A., Ayub, M., and Tarmizi, M. A. A. (2010). Enhancing calculus learning engineering students through problem-based learning. *WSEAS transactions on Advances in Engineering Education*, 7(8):255–264.

Rusman (2010). *Model-model Pembelajaran (Mengembangkan Profesionalisme Guru)*. Rajawali Pers, Jakarta.

Sanjaya, W. (2011). *Strategi Pembelajaran Berorientasi Standar Proses Pendidikan*.

Sudijono, A. (2008). *Pengantar Statistik Pendidikan*. Jakarta: Raja Grafindo Persada.

Sugiyono (2010). *Metode Penelitian Pendidikan (Pendekatan Kuantitatif, Kualitatif dan R&D)*. Alfabeta, Bandung.

Sukmadinata, N. S. (2011). *Metode Penelitian Pendidikan*. Rosdakarya, Bandung.

Suroso (2004). Penulisan Buku ajar Perguruan Tinggi. Makalah disampaikan Dalam Penulisan Buku Sekolah Alkitab Baptis.

Knowledge Organization of Historical Events in Thailand

Ekkachai Sae-Jueng and Kulthida Tuamsuk

Information and Communication Department, Faculty of Humanities and Social Sciences, Khon Kaen University, Thailand
ekkachai@sci.rmuti.ac.th, kultua@kku.ac.th

Keywords: Knowledge Organization, Historical Events, Thailand, Semantic Web, Linked Data, Getty Vocabularies.

Abstract: The purpose of this research is to analyse and organize the knowledge of historical events in Thailand in order to construct the knowledge structure and its relationship for further use in a linked data system. A qualitative research based on content analysis and development of knowledge organization approach is used. Related information resources included research publications from the e-Library of Thailand Research Fund, Getty Vocabularies, and Geographic Information System of Cultural Heritage Site of Thailand have been studied and used for the knowledge organization. The research results provide the knowledge structure of historical events in Thailand that contain five classes and relationships of the terms in each class and between classes. This can be further used for development of linked data and semantic web in the future.

1 INTRODUCTION

History learning can support to understand the changes and to recognize the civilization in which we live. Historical study is the method of systematically learning from past events to give an account of what has happened in the past (Carr, 2018). Historical studies effort to provide information and understanding of past historical, legal and policy events and this is certainly one of the reasons all modern nations encourage its teaching in some learning model. Because chronological event is a continuous, systematic description of past events as relating to the country, people, period, person, and phenomena that reflects the socio-cultural and economic aspects (Matthews, 1937), the knowledge of historical events of the nations can always been the valuable learning resources. In contexts of information science, knowledge organization research has been successfully used the content analysis approach integrating with technological techniques, such text mining, data analytics, ontology modelling, etc. to collect and manage the knowledge domain of valuable topics (Ibekwe-Sanjuan and Sanjuan, 2011). In this research, therefore knowledge organization of the knowledge on historical events of Thailand has been conducted so that the domain knowledge on the selected events can be scoped and structured, and then used for further studies in the field to ontology, linked data and semantic web by following the digital humanities research (Tuamsuk,

2015).

At present, many organizations have been developing the knowledge based system in historical contents and providing for open learning. For example, the development of "Museum Finland" or "Culture Sampo" by using Finnish Ontology Library Service, metadata schemas, and semantic technology tool such as ONKI – is a Finnish ontology library service, SAHA – is a browser based semantic annotation tool, POKA – is a framework for automatic annotation, and VERA - is a validation and quality assistant for Semantic Web data. The "Museum Finland" system can integrate the Finnish cultural heritage data from related information sources in the nation including museums, national library, and national archives and use a single search technique to retrieve and present the historical information by time dimension, location, map, and event chronicle (Hyvönen et al., 2009).

The history of Thailand has been recorded traced back about 800 years ago, divided into four kingdoms: Sukhothai, Ayutthaya, Thonburi, and Rattanakosin, Kingdoms. The learning resources for Thai history available in libraries and media are in the narrative and documentary formats. This research attempts to develop the tools for organizing and searching the knowledge on Thai history so that the data will be standardized and enabling for semantic search and linked with the well-known data sources such as Getty Vocabularies (Harpring and Baca,

2013) and Schema.org Vocabularies (Schema.org Community Group,).

This paper presents the research results of historical events knowledge structure in Thailand which was studied by using a content analysis and knowledge organization technique in order to identify the scope and related information resources. The knowledge structure of Thai historical events will be use for the development of semantic web for Thai historical events system (THES) in next research phase.

2 OBJECTIVES

This research was aimed at analyzing and organizing the knowledge of historical events in Thailand in order to identify the scope and develop the structure of the knowledge for further use as a resource for ontology and semantic web.

3 BACKGROUND AND RELATED RESEARCH

The history of Thailand comprised five periods by kingdom including the Sukhothai kingdom (1238–1538 A.D.), the Ayutthaya kingdom (1350–1767 A.D.), the Thon Buri kingdom (1767–1782 A.D.), the Rattanakosin kingdom (1782 A.D. – present), and Democratic period (1932 A.D. – present). In each period has important events that Thai people known. For instance, the Thon Buri kingdom under the reign of King Taksin the Great occurred between 1767 A.D. and 1782 A.D. It is 15 years there were 4 major events: 1) the recovery of Siam independence, 2) the kingdom establishment, 3) the kingdom enlargement, and 4) Thon Buri kingdom ending.

Nowadays information and communication technology or ICT was used for increasing chronological learning. There are numerous ICT-based learning platforms, for example, A WebQuest is an inquiry-oriented lesson format. It provides tools and medias for self-learning, multidisciplinary learning, external classroom, sharing learning experience, and virtual learning on its platform (Ott and Pozzi, 2011). Literature reviews found that there were many research projects based-on ICT for cultural heritage information management. For instance, the study "Culture Sampo: A National Publication System of Cultural Heritage on the Semantic Web 2.0" has developed

the Museum Finland on web platform which can associated cultural heritage information from museums, archives, and libraries in Finland. So it can presented the information in the features of maps, times, and history in sequential order (Hyvönen, 2009). The cultural heritage information presentation or "CHIP project" of Rijks Museum in Netherlands which is the artwork recommender based on semantic web technology. It can provide semantic browsing, searching, semantic recommendations (Wang et al., 2010).

This research uses the simple knowledge organization systems (SKOS) for knowledge classification and collection. It is a field of study to support the use of knowledge organization systems (KOS). There are many tools or categorize technics for KOS including thesauri, subject heading systems, Web Ontology language (OWL), classification schemes, taxonomies, Resource Description Framework (RDF) within the framework of the Semantic Web (Zeng and Mayr, 2018).

The Semantic Web or "Web of data" is useful to enhance web content by machine that can process in semantic way. The way to approach the Semantic Web is based on semantic annotations. It uses to describe the meaning of certain parts of web information. The major purpose of the Semantic Web is to enable machines(computers) to do more advantage work and to develop systems that can provide trusted collaborations over the computer network (Antoniou and Plexousakis, 2016). There are many technologies such SKOS, SPARQL, OWL, and RDF is a subset in Semantic Web technologies. It can support people to build data stores on the Web, create new vocabularies, and create rules for handling data.

In Thailand, the Princess Maha Chakri Sirindhorn Anthropology Centre developed the key archaeological sites system. This project used Dublin core metadata schema for data description and presented the information of archaeological sites on the common name, bibliography, geological context, topography, artifacts of the site, waterways, location, archaeological summary, route to site, tourism potential, responsible organization, etc. (SAC, 2019)

A number of projects have used the Getty vocabularies which comprise controlled terminology for arts, architecture, geographic names, artist names and bibliographic materials for linked data development. The Getty vocabularies are assembled to let their use in the linked data and can be published into the linked open data or LOD. The Getty vocabularies collect terminology in several subjects including Union List of Artist Names (ULAN), Thesaurus of Geographic Names (TGN) and Art and

Architecture Thesaurus (AAT) which are existing as LOD Getty Research Institute (2019).

AAT, TGN and ULAN are controlled vocabularies. For examples of each controlled vocabularies, TGN comprises place name, place descriptions, ancient cities, kingdoms, archaeological sites, physical features and etc., AAT contains terms, descriptions, and other attributes related to art, architecture, decorative arts, archival materials, conservation and etc., and ULAN contains person name, biographies, related people, and other attributes related to artists, architects, organizations (Getty Research Institute, 2019).

4 RESEARCH METHODOLOGY

A qualitative research based on content analysis and development of knowledge organization approach is used for this research which comprises of the following steps.

4.1 Identification of Information Resources

4.1.1 The e-Library of Thailand Research Fund

The research publications that contained the term "history" in the subject headings and keywords in its records were retrieved from the e-Library of Thailand Research Fund. It was found that there were 428 items. An analysis of data of each research items was conducted to identify whether there were research that have already focused on historical knowledge structure development. It was found that there were six research documents providing the knowledge structure on the historical contents relating to the specific topics of each study. The titles of these six documents were:

Doc.1- The study on relationship of the ancient through present culture for the development of cultural and civilization database for GMS and Malay Peninsula Regions Phase 1.

Doc.2- The study on relationship of the ancient through present culture for the development of cultural and civilization database for GMS and Malay Peninsula Regions Phase 2.

Doc.3- Exploration and sustainable heritage management in Pai-Pang Mapha- Khun Yuam Districts, Mae Hong Son Province

Doc.4- Living Angkor Road Project Phase I

Doc.5- Living Angkor Road Project Phase II

Doc.6- Research and development project on community-based museums, phase 2: Digital archives on community-based museums in Thailand.

The examples of knowledge structure from Doc.1 and Doc.2 are in Figure 1 and Figure 2.

Figure 1: Example of a knowledge structure from research literature (Doc.1)
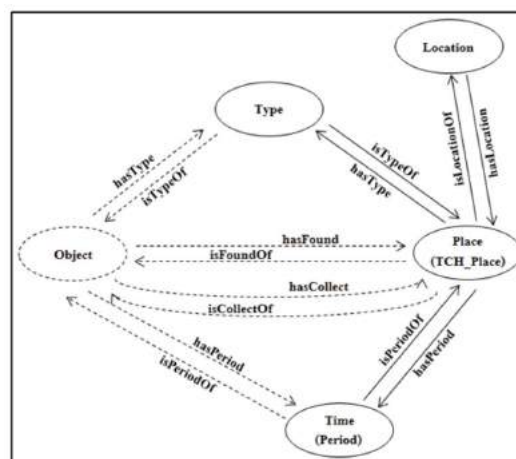
Figure 2: Example of a knowledge structure from research literature (Doc.2)

4.1.2 The Study of Getty Vocabularies

The AAT, CONA, TGN, and ULAN of the Getty Vocabulary Program have been created, compiled, and disseminated in the Getty Research Institute, with the purpose of improving access to various information about art, architecture, decorative arts, archival materials, conservation, visual surrogates, and bibliographic materials. There are compliant with international standards and provide authoritative information for catalogers, librarian, researchers, software developer, and data providers (Getty Research Institute, 2019).

This research explored the Getty vocabularies structures including AAT (the Art and Architecture Thesaurus), TGN (Thesaurus of Geographic Names), ULAN (Union List of Artist Names) to identify the terms and concepts that can be used for historical events topic.

The relationship between controlled vocabularies can be shown in human-readable formats and machine-readable formats. For example, a human-readable format was used for human can read related contents about controlled vocabularies in a webpage format or hierarchy are format in Figure 3, and a machine-readable format was used for a computer programming, application programming interface(API) that its five most common formats: JSON, JSONLD, RDF/XML, N3/Turtle and N-Triples.
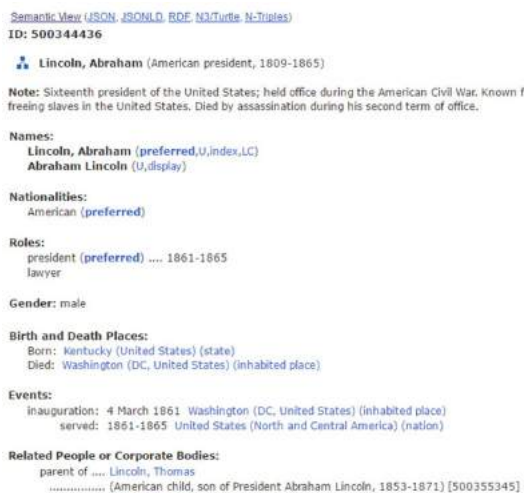
Figure 3: Associative relationships of ULAN (Image from http://vocab.getty.edu/ulan/500344436)

The Getty Vocabularies can serve in many format include XML/RDF, JSON, N-Turtles, Relational Tables, Linked Open Data (LoD), and through application programming interface (APIs). The figure 4 shows an example application of knowledge about "Person" in Thai historical events, Phraya Phichai (thes_person:1004) that linked with TGN and AAT.
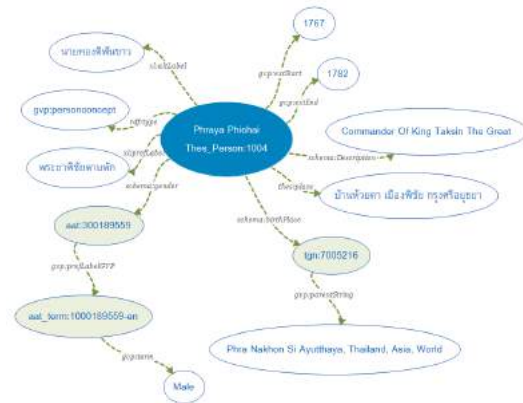
Figure 4: Example of person's linked data

4.1.3 Information Resources for Geographical Names

The Geographic Information System (GIS) of Cultural Heritage Site from the Fine Art Department of Thailand was used as the information resources for geographical names in Thailand. In this database, the data on cultural heritage site includes location, address, age, period, and important note as shown in Figure 5.

4.2 Knowledge Organization

The data, elements, attributes, and knowledge from all information resources were collected and analyzed by using SKOS principle. Similarity terms were grouped and categorized into the subject domains or classes as shown in Table 1.

The controlled vocabularies by the Getty vocabulary is matched with these knowledge structure in the context of historical events. The terminologies on "place" were derived from TGN, "object" were derived from CONA, and "person" were derived from ULAN.

5 RESULTS

The results of these analysis and organization of knowledge on the historical events in Thailand reveals that the knowledge can be classified into 5 classes. The details of each class are shown in Figure 6.

(1) **Period** comprises of name of the historical period and timespan of the period.

- Archaeological site(โบราณสถาน)
  - official name(ชื่อโบราณสถาน)
  - Other name(ชื่ออื่น(ถ้ามี))
  - Is World Heritage Sites(แหล่งมรดกโลก)
- Archaeological site(ลักษณะโบราณสถาน)
  - Religion and Beliefs(ศาสนาและความเชื่อ)
  - Type(ประเภทของแหล่ง)
  - Commercial site(แหล่งการพาณิชย์)
  - Government site(แหล่งสถานที่ราชการ)
  - Monument(อนุสาวรีย์หรืออนุสรณ์สถาน)
  - Cave/cliff (แหล่งถ้ำ/เพิงผา)
  - Old industry site(แหล่งอุตสาหกรรมโบราณ)
  - Ancient City(เมืองโบราณ)
  - Construction materials(วัสดุในการก่อสร้าง)
- Address(ที่ตั้ง)
  - Province(จังหวัด) / District(ตำบล/นเขวง) / Postcode(รหัสไปรษณีย์)
- Age(ยุคสมัย)
  - Prehistory(ยุคก่อนประวัติศาสตร์)
    - Paleolithic(สมัยหินเก่า)
    - Metal Age(ยุคโลหะ)
  - Thailand history(ยุคประวัติศาสตร์)
    - Sukhothai period(สมัยสุโขทัย)
    - Ayutthaya period(สมัยอยุธยา)
    - Thonburi period(สมัยธนบุรี)
    - Rattanakosin period(สมัยรัตนโกสินทร)
- Important(ความสำคัญ)
  - History note(ประวัติโบราณสถานหรือข้อมูลแหล่ง)
  - Architecture(ลักษณะทางสถาปัตยกรรม ศิลปกรรม หรือสภาพแหล่ง)
  - Current condition(สภาพปัจจุบัน และลักษณะการใช้งานปัจจุบัน)

Figure 5: Example of data in the GIS Cultural Heritage Site

Table 1: Analysis of knowledge structure from identified information resources.

Knowledge structure		Research project and Related software							Similar count	Require items
		Doc.1	Doc.2	Doc.3	Doc.4	Doc.5	Doc.6	GIS System		
Period	Period name	✓	✓			✓		✓	4	✓
	Timespan	✓	✓	✓		✓		✓	5	✓
Historical site / Place	Historical site name	✓	✓	✓		✓	✓	✓	6	✓
	Other name	✓	✓	✓				✓	4	✓
	Address	✓		✓	✓	✓	✓	✓	6	✓
	Province	✓			✓		✓	✓	4	✓
	Place type	✓				✓	✓	✓	6	✓
	Is Registered	✓						✓	2	✓
	Geographic coordinates	✓		✓		✓		✓	3	✓
	Image	✓		✓		✓		✓	4	✓
	Timespan	✓ Period	✓ Timespan	✓ Timespan		✓ Period			4	✓
	Aged							✓	1	✓
	Architecture type			✓		✓ Area type		✓	3	✓
	Current condition			✓		✓		✓	3	✓
	History note							✓	1	✓
	Religion and Beliefs	✓	✓		✓			✓	4	✓
Antique / Object		✓	✓			✓			3	✓

(2) **Event** comprises of name of the historical event and timespan of the event.

(3) **Object** comprises of name of object or antique in the historical event and its story (history note) that can be link to other controlled vocabularies.

(4) **Person** comprises of name of the person in the historical event and its story (history note) that can be linked to other controlled vocabularies.

(5) **Place** comprises of name of place or historical

1) Period
- Period name
- Timespan

2) Event
- Event name
- Timespan

3) Object/Antique
- Object name
- History note
- CONA id (http://vocab.getty.edu)

4) Person
- Person name
- History note
- ULAN id (http://vocab.getty.edu)

5) Place/Historical site
- Place name
- Other name
- Address
- Province
- Place type
- Is registered
- Geographic coordinator
- Image
- Timespan
- Age
- Architecture type
- Current condition
- History note
- Religion and beliefs
- TGN id (http://vocab.getty.edu)

Figure 6: Knowledge structure of Historical Events in Thailand.

site in the historical event, address, province, place type, historical registered status in Thailand, geographic coordinator, image, timespan, age, architecture type, current condition, religion and beliefs and its story (history note) that can be linked to other controlled vocabularies.

The sub-event class is a sub class of event class can be linked with every classes as the relationship between classes shown in Figure 7.
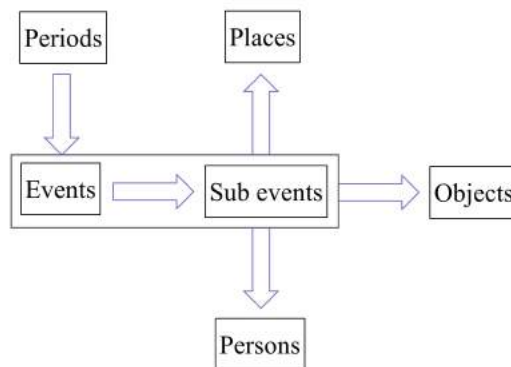
Figure 7: Relationship between classes.

6 CONCLUSION AND FUTURE WORK

The knowledge structure of historical events in Thailand resulted from this research that was collected and analyzed from many information sources. The results were based on existing standard dataset (The Getty vocabularies), therefore it can be

connected to other systems via linked data concept. Knowledge classification of historical events covers all components of the contents that can describe the historical events of Thailand. For example, the historical event on the recovery of Siam independence in the Thon Buri period comprises of the knowledge on "Person" such as King Taksin the Great and Nai (Mr.) Thong In. The knowledge on "Place" include the places such as the Pho Sam Ton Camp and the Chao Phraya River near Thonburi city. These "Person" and "Place" can be occurred in other historical events in the Thonburi period, and may be other Thai historical periods. These can be linked by using the relationship model between classes and sub-classes. When these data are published within linked data concept that it can be linked to other controlled vocabularies, for example, Thonburi city is in the TGN data (Subject_ID:7005221) in the Getty vocabulary; Thonburi is the preferred term for the concepts in similar terms Thon Buri and Dhonburi. It is currently located under the facet World, Asia continent, Thailand nation and Bangkok province.

Future development of this research will be the development of semantic web of historical events in Thailand, of which the knowledge structure in this study will be used for linked data (RDF) implementation.

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REFERENCES

Antoniou, G. and Plexousakis, D. (2016). *Semantic Web*, pages 1–5. Springer New York, New York, NY.

Carr, E. H. (2018). *What is history?* Penguin, UK.

Getty Research Institute, . (2019). *Getty Vocabularies*. http://www.getty.edu/research/tools/vocabularies/ (accessed January 20, 2019).

Harpring, P. and Baca, M. (2013). *Introduction to controlled vocabularies: Terminology for art*. architecture, and other cultural works.

Hyvönen et al. *2009*. The semantic web: Research and applications, Lecture Notes in Computer Science.

Ibekwe-Sanjuan, F. and Sanjuan, E. (2011). Knowledge organization research in the last two decades: 1988-2008. *arXiv preprint arXiv:1110.5419*.

Matthews, D. W. R. (2019). What is an historical event? *Proceedings of the Aristotelian Society*, 38:207–216.

Ott, M. and Pozzi, F. (2011). Towards a new era for cultural heritage education: Discussing the role of ict. *Computers in Human Behavior*, 27(4):1365–1371.

SAC (2019). *The development of database of key archaeological sites in Thailand*. Princess Maha Chakri Sirindhorn Anthropology Centre.

Schema.org Community Group, . *Schema.org vocabularies*. https://schema.org/docs/ (accessed January 20, 2019).

Tuamsuk, K. (2015). Digital humanities research at Khon Kaen University, Thailand. Vol. 9469:334-335.

Wang, Y., Wang, S., Stash, N., Aroyo, L., and Schreiber, G. (2010). Enhancing content-based recommendation with the task model of classification. In *International Conference on Knowledge Engineering and Knowledge Management*, pages 431–440. Springer.

Zeng, M. L. and Mayr, P. (2018). Knowledge Organization Systems (KOS) in the Semantic Web: a multi-dimensional review. *International Journal on Digital Libraries*, pages 1–22.

Gratitude and Happiness among Indonesian Youngster

Tengku Nila Fadhlia, Dina Puspita Surya

Faculty of Psychology, Universitas Islam Riau, Pekanbaru, Indonesia
tengkunila@psy.uir.ac.id, dips.puspita@gmail.com

Keywords: Happiness. Gratitude, Adolescent, Resilience

Abstract: Changes in the millennial era should not destabilize the development of Indonesian youngster as citizens. Indonesian youngster is the next generation who will continue the national struggle. Previous research showed that adolescents who have a positive mindset tend to live healthier as adults rather than unhappy one. Moreover, as the next generation of Indonesia, the youngster needs to be resilient in facing globalization challenges. The more resilient youngster the more resilient Indonesia as a nation. This article describes correlation between gratitude and happiness based on empirical data from 329 adolescents in Pekanbaru, Riau Province, Indonesia, who were selected by random sampling technique. The data were collected by two questionnaires which measured gratitude and happiness, then analyzed using Pearson's correlation product moment. This research showed a positive correlation between gratitude and happiness in adolescent. The higher gratitude the higher happiness in adolescent, and vice versa. It can be concluded that gratitude is one of the influencing factor in happiness, the more we feel grateful the happier we will be.

1 INTRODUCTION

According to the data from Central Statistics Bureau of Indonesia (BPS), index of happiness of Indonesian citizen is currently at the level of 68.28%, up from last year's level of 65%, of which increased by 3.17 percent. Head of Indonesia Central Statistics Bureau explained several aspects of life forming the composite level. These aspects are 71.74% free time availability, 74.29% having social relations, 78.89% family harmony, 76.63% security condition, and 74.86% environmental condition.

The interview result with Head of BPS showed that the happiness index in Indonesian from social relation aspect was high. This is to explain why Indonesian citizens tend to have a high social relation, they love to build friendship and secure when leaving the house. This is the basic component that makes Indonesian citizen happy.

Adolescents whose psychological needs are met will gain life satisfaction such as feeling joy, harmony, and productiveness. Conversely, the adolescent will experience disappointment, dissatisfaction, or even frustration, at the end will disrupt their growth and development if their psychological needs are not met (Ali and Asrori, 2012). As the needs of adolescents is increasing, resulting in new tasks that must be completed by adolescents, called developmental task.

Adolescents who have a positive outlook tend to live healthier as adults than an unhappy one. This conclusion is based on a survey in 2001 over 10,000 adolescents in America. Adolescents who feel happy are fewer in having problematic behavior, such as smoking, alcohol, or drug abuse. In general, happiness resulted in adolescents' good physical health.

In majority, adolescents' problems are failure in relationship, impulsivity, and depression (Kim, 2008). Failure in solving their problems will result in low level of happiness. Adolescents with high level of happiness shows good functioning in personal aspects, such as high motivation, positive thinking, prejudice free, and high acceptance of environmental condition (Argyle, 2013).

Happiness is one of the measuring constructs in psychology. The development of positive psychology study in the new millennium era has led to the emergence of various kinds of psychological research publications with the theme of happiness. One of them is the concept of subjective well-being, which is then widely used in studies of individual happiness (Diener and Schwarz, 2008). Some psychology studies tend to equate the term happiness with the term subjective well-being (Uchida et al., 2004). Nevertheless, there are also those who argue that subjective well-being is a broader and more

comprehensive concept that covers happiness itself. (Seligman, 2013), one of the founders of positive psychology, defines happiness as an emotional charge and positive activity.

According to Seligman (2013), happiness is a pleasant life by believing what we choose for the choice itself. Whereas about feeling happy and that the way we choose our way of life is to try to maximize our feelings. Happiness is usually characterized by life satisfaction, high positive affect such as happy, content, and proud. Someone who feels his life is not joyous will experience negative affects such as feeling disappointed, anxious, and frightened. Happiness is not only seen objectively, but happiness can also be seen subjectively because happiness depends on how much a person is able to measure and create happiness by himself.

Suryamentaram (Saksono, 2013) states that the lower the level of desire, the higher the level of happiness. Thus it can be said that looking for a happy life is not the same as trying to meet the needs or abundance of life. Happiness is the extent to which a person evaluates the overall quality of his life positively (Seligman, 2002)(Seligman, 2002).

(Eddington and Shuman, 2014) explain that the frequency of positive events correlate with positive affect. Someone who experiences a pleasant event tends to have a high level of happiness. Furthermore, Eddington & Shuman (2005) state there are several factors that influence happiness, such as gender, age, education, income level, and important events in life.

Gratitude makes a person have more positive thoughts and perspectives on life, the thought that life is a gift (Peterson et al., 2004). Being grateful can make someone get emotional and interpersonal benefits in their lives. If someone considers suffering as something positive, then he will improve his new coping skills consciously or unconsciously, this can lead to the emergence of self-views that will direct one's life in a more positive direction (Krause, 2006). Furthermore, several studies also show that being grateful can prevent depressive and pathological conditions (McCullough et al., 2004; Peterson et al., 2004).

According to the American Heritage Dictionary of the English Language (2009)(NN, 2009), the word gratitude comes from Latin, namely gratus or gratitude which means thanking or praise. In Indonesian, thankful can be equated with grateful. Referring to Emmons and Shelton in (Snyder and Lopez, 2001), gratitude shows the tendency of individuals to see their lives as valuable. Gratitude has several concepts, which are emotions, attitudes, virtue morals, habits, personality traits, and coping actions.

As a psychological state, gratitude is a feeling of awe, thanks and appreciation for life. Gratitude can be expressed to others and also to other beings such as nature or other sources other than humans.

Someone who has gratitude will usually have higher control over their environment, personal development, life goals, and self-acceptance. Grateful people also have positive coping in facing life's difficulties, seeking social support from others, interpreting experiences with different perspectives, having plans to solve problems (McCullough, Tsang, & Emmons, 2004).

Therefore, the authors came to the research question "Is there any correlation between gratitude and happiness among late adolescent?". So, the aim of this research is to get empirical evidence about the correlation between gratitude and happiness among late adolescent.

Based on the description of the theory above, the authors put the hypothesis that there is a relationship between gratitude and happiness in a late adolescent. The higher gratitude, the higher happiness in the late adolescent, on the contrary, the lower gratitude, the lower happiness in the late adolescent.

2 METHOD

2.1 Population and Sample

The population in this research was 17-20 years old adolescents, domicile in Rumbai Pesisir District, Pekanbaru, Indonesia. It consisted of 1.869 college students in one private university in that district. The sample in this study were 329 college students selected by simple random sampling technique based on the Slovin formula (Bungin, 2005) with an error rate of 5% so that the sample determination was 95%.

2.2 Data Collection Method

The data was collected by using questionnaire to assess gratitude and happiness. The questionnaire adopted the Likert model scale using five categorizations; very agree, agree, neutral, disagree and strongly disagree. Happiness was measured by Scale of Happiness which consisted of 25 items with aspects proposed by Seligman (2002): (a) satisfaction of the past, (b) happiness in present and (c) optimism of the future. Meanwhile, gratitude was measured by 30 items scale which consisted of three aspects proposed by (Fitzgerald, 1998): (a) having a sense of appreciation to others or God and life, (b) Positive

feelings towards life owned and (c) Acting positively as an expression of positive feelings and appreciation that is owned.

2.3 Data Analysis

The statistical technique used in this study is Pearson Product Moment correlation technique, to test the hypothesis of the relationship between one independent variable and one dependent variable simultaneously and partially to the dependent variable.

3 RESULT

The correlation between two variables of this research was examined using Pearson correlation coefficient. Table 1 displays a positive correlation between gratitude and happiness in moderate level (r= 0.529; p=0,00; p <0.05).

Table 1: Hypotheses Test Result

Variable	Correlation Coefficient (r)	Sig. (2-Tailed)
Gratitude	0,529	0,00
Happiness	0,529	0,00

Meanwhile, the regression analysis was conducted to know effective contribution of gratitude to happiness, as seen on the table 2 below:

Table 2: Determination Test Result Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,529[a]	0,280	0,278	7,097

The table depicts effect size of gratitude towards happiness, which is 28% and the remaining 72% is influenced by other variables which is not included in this study. Based on previous research, other influencing factors could be positive affection, family support, peer interaction, optimism, subjective well-being, prosocial, and religiosity.

4 DISCUSSION

Result of data analysis indicated a positive correlation between gratitude and happiness in late adolescents. The higher gratitude, the higher happiness, and vice versa. Thus, the hypotheses in this study is accepted. It means that gratitude plays a role in creating happiness. This is in line with research by (Safaria, 2014) that the biggest source of happiness is gratitude.

Gratitude becomes one important contributing factor to happiness.

(Kristanto, 2016), grateful individual is be able to enjoy a positive life experience because gratitude is one form of expression of happiness which is closely related to well-being. Grateful individual tend to show expression of happiness (Rohma, 2013). Study conducted by (Eriyanda and Khairani, 2018) also found that there is a relationship between gratitude and happiness. This means that the higher the gratitude, the higher the happiness. This happens because gratitude affects happiness.

Gratitude as a cognitive construction is shown by acknowledging mercy and kindness for the blessings that we have received and focusing on the positive things. As an emotional construction, gratitude is characterized by the ability to change emotional response to make an event becomes more meaningful (McCullough et al., 2004). Gratitude involves feeling of amazement, thankful, appreciation, and happiness for abundant gifts in life. Gratitude as construction of behavior is expressed by giving something in return to others.

Being grateful can help someone to improve their ability to solve problems and to manage daily life challenge. (Watkins et al., 2003) state that gratitude indicates someone's well-being and life satisfaction. Gratitude is conceptualized in various ways, most often as moral traits or emotional states (Froh et al., 2009). The two constructs are clearly subjective-welfare, suggesting that happy people tend to be grateful people (Watkins et al., 2003). Research conducted by (Rusdiana, 2017) showed that 11% of adolescents have high concept of authentic positive happiness according to Myers' happiness indicator. As much as 30% of adolescents have concept of authentic happiness in the middle level, while 59% of adolescents have the concept of negative authentic happiness. With this percentage, adolescents are still vulnerable to the threat of problems, both personal and social.

Being thankful is also one way to acknowledge life meaning, since gratitude becomes predictor of happiness. In addition, gratitude causes individual to have a positive view of life and a spirit to improve and benefit from life (Froh et al., 2009).

5 CONCLUSION

There is a positive correlation between gratitude and happiness in late adolescents. It is concluded that the higher gratitude the higher happiness, in contrary, the lower gratitude the lower happiness.

REFERENCES

Ali, M. and Asrori, M. (2012). Psikologi remaja perkembangan peserta didik, jakarta, pt. *Bumi Aksara*.

Argyle, M. (2013). *The psychology of happiness*. Routledge.

Bungin, B. (2005). Metodologi penelitian kuantitatif. *Jakarta: Kencana*.

Diener, E. and Schwarz, N. (2008). *Well-being: The foundation of hedonic psychology*. Russell Sage Foundation, New York.

Eddington, N. and Shuman, R. (2014). *Subjective well being (happiness*. Retrieved on 28.

Eriyanda, D. and Khairani, M. (2018). Kebersyukuran dan kebahagiaan pada wanita yang bercerai di aceh. *PSIKODIMENSIA*, 16(2):189–197.

Fitzgerald, P. (1998). Gratitude and justice. *Ethics*, 109(1):119–153.

Froh, J. J., Yurkewicz, C., and Kashdan, T. B. (2009). Gratitude and subjective well-being in early adolescence: Examining gender differences. *Journal of adolescence*, 32(3):633–650.

Kim, E. (2008). *Aggressive in Children European Psychiatry*. London: SAGE Publication.

Krause, N. (2006). Gratitude toward god, stress, and health in late life. *Research on Aging*, 28(2):163–183.

Kristanto, E. (2016). Perbedaan tingkat kebersyukuaran pada lakilaki dan perempuan. In *Dipresentasikan pada seminar ASEAN 2nd Psychology and Humanity, Malang*.

McCullough, M. E., Tsang, J.-A., and Emmons, R. A. (2004). Gratitude in intermediate affective terrain: links of grateful moods to individual differences and daily emotional experience. *Journal of personality and social psychology*, 86(2):295.

NN (2009). *American Heritage Dictionary of the English Language*. Hoghton Mifflin.

Peterson, C., Seligman, M. E., et al. (2004). *Character strengths and virtues: A handbook and classification*, volume 1. Oxford University Press.

Rohma, N. H. (2013). Hubungan antara kepuasan hidup remaja dengan bersyukur pada siswa SMAIT Abu Bakar boarding school Yogyakarta. *Empathy*, 2:1–16.

Rusdiana, I. (2017). Konsep authentic happiness pada remaja dalam perspektif teori myers. *Ibriez: Jurnal Kependidikan Dasar Islam Berbasis Sains*, 2(1):35–44.

Safaria, T. (2014). Forgiveness, gratitude, and happiness among college students. *International Journal of Public Health Science (IJPHS)*, 3(4):241–245.

Saksono, G. (2013). *Kaya Miskin (Bisa) Hidup Bahagia*. Yogyakarta: Ampera Utama.

Seligman, M. E. (2002). *Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment*. Simon and Schuster.

Seligman, M. E. (2013). Beyond authentic happiness, menciptakan kebahagiaan sempurna dengan psikologi positif. *Bandung: Kaifa*.

Snyder, C. R. and Lopez, S. J. (2001). *Handbook of positive psychology*. Oxford university press.

Uchida, Y., Norasakkunkit, V., and Kitayama, S. (2004). Cultural constructions of happiness: theory and emprical evidence. *Journal of happiness studies*, 5(3):223–239.

Watkins, P. C., Woodward, K., Stone, T., and Kolts, R. L. (2003). Gratitude and happiness: Development of a measure of gratitude, and relationships with subjective well-being. *Social Behavior and Personality: an international journal*, 31(5):431–451.

PP No. 11 Years 1979 about Occupational Safety for the Purification and Management of Petroleum and Gas: Integrated into Occupational Safety and Health (OSH) Policy

Amiroel Oemara Syarief

Department of Industry, Sekolah Tinggi Teknologi Dumai, Jl. Utama Karya Bukit Batrem II Dumai, Riau, Indonesia
amiroel.syarief@yahoo.co.id

Keywords: OSH policy, PP No. 11 Years 1979, Purification and Management of Petroleum and Gas

Abstract: Occupational Safety and Health (OSH) becomes a public policy that can protect workers in both the formal and informal sectors. The OSH policy can prevent the possibility of accidents and occupational illness and ensure the integrity and perfection of both the physical and spiritual workforce. This research aims to identify and analyze OSH policy against PP No. 11 Years 1979 Occupational Safety on the purification and processing of petroleum and gas. This type of research is a normative (juridical) legal research that aims to examine legal principles, legal systematics, proper synchronization, legal history, and legitimate comparisons using a method of statutory approach. The results showed that the OSH problem is not on the existence of legislation itself, but government supervision is still weak about the implementation of OSH according to PP No. 11 the year 1979 on the purification and processing of petroleum and gas. Also, the awareness, support, and involvement of operations management against the efforts of Hazard control are verylacking.

1 INTRODUCTION

Sustainability of Occupational Safety and Health (OSH) integration is critical to the useful (realization of increase working productivity (Schulte et al.,). Industry competition requires the company to increase working productivity through an occupational health and Safety Program (OSH) applied by the company. According to Okky in (G. and Nugraheni, 2013) Occupational Safety and Health (OSH) is a program created by the government that has to be followed and implemented by entrepreneurs and workers in an effort to prevent a work accident with Identify potential accidents and occupational diseases and anticipatory actions in cases of accidents and occupational illness. Safety, health, and welfare people closely related to occupational safety and Health (OSH) in work. It aims to promote and maintain the mental and social welfare of workers as part of adaptation to the working environment (Micheli et al., 2018) The goal is to create a comfortable and healthy workplace that can suppress as low as a possible risk of accidents and disease. Efforts that have been made to minimize the risk of workplace accidents in construction become a concern until now that the critical component of risk management for the industry is Occupational Health

(OSH) (Zhao et al., 2016). Occupational Health and Safety (OSH) is an effort to protect workers and other people entering the workplace against the dangers of disasters. Even cancel the risk of illness and work accident (CAC) and improve worker health so that the productivity of work increases (Purnomo et al., 2018).

Conditions that occur in the field on safety issues and occupational accidents in Indonesia are still often ignored; this can see from the still high number of occupational accidents. Manpower Social Security Administering Agency (BPJS) records the number of occupational accidents in Indonesia tends to continue to increase. A total of 123 thousand cases of occupational accidents recorded throughout 2017. Total work accidents in 2017 as many as 123 thousand cases with a claim value of Rp 971 billion. This figure increased from 2016 with a claim value of only Rp 792 billion. Also, based on data obtained in the year 2017, there is a working accident in PT. Pertamina RU V Balikpapan Two people have suffered severe burns due to the generating to get medical treatment in hospital. The form of efforts to create a safe, healthy, free of occupational accident and occupational disease and environmental pollution-free to increase productivity

is to be the implementation of occupational health and Safety (OSH). The design, implementation, and evaluation of Occupational Health and Safety (OHS) have become a destination in legislation (McNamara et al., 2017). As mandated in government regulation No. 11 years 1979 about occupational safety on the purification and processing of petroleum and gas reads:

- The work of installation, maintenance, and repair of electrical installations shall only be carried out by or under the supervision of the expert appointed by the Head of engineering.

- The work intended in paragraph (1) can do against the aircraft and the distributor being envied the low voltage electric current by heeding the accident precautions. Work with the high-voltage electrical current on aircraft and envy distributors are forbidden to perform jobs on aircraft

As for this research is to identify and analyze OSH policy against PP No. 11 Years 1979 Occupational Safety on the purification and processing of petroleum and gas.

2 METHODS

This research is normative (juridical) law, which aims to examine the principles of law, legal systematics, proper synchronization, legal history, and legitimate comparisons using the approach. The approach conducted by analyzing the OSH policy in government regulation No. 11 Years 1979 about occupational safety on the purification and processing of petroleum and gas.

3 RESULT AND DISCUSSIONS

Indonesian state is the legal state. Development in the field of law is a necessity as an unavoidable consequence. It is a constitutional foundation that Indonesia is a country based on the law, the code place as the only rule of play in the Life of society, nation, and State (supremacy of law). The opening act of the Constitution of the Republic of Indonesia year 1945 mandated that the State and Government were established to protect all nations and land of Indonesia's blood, educate the nation's life, and the general welfare. The government in a country must have the highest authority (supreme) and unlimited. The consequence of Indonesia as a welfare country, the state must intervene in people's lives, including meddling in the field of employment.

According to Ismail Sunny in (Charda, 2015), provisions of article 27 sentence (2) CONSTITUTION 1945 above is a paper constitutional or a semantic constitutional by recognizing the right of citizens to get the job, then, in fact, Indonesia has determined and decided to eliminate unemployment, so the country dared to put the article in its Constitution. Meanwhile, in Law No. 13 of the year 2003 further governing the direction of government policy in the development of labor law is to involve the business element of the world and the community, conducting the construction of all Employment-related activities are carried out in an integrated and coordinated. Under Law No. 13 of 2003, that known the legislator requires the creation of a law that provides legal protection to the workforce, given its essential role and position as Actors and development objectives.

Labour must obtain legal protection against safety in work for the welfare of life and increase production and national productivity. Based on the law of the Republic of Indonesia No. 13, 2003 on employment Chapter X Section 5 of the paragraph of the Occupational Health and safety, in chapters 85 and 86 shall be governed by the rights of workers to occupational health and safety and the company's obligations to implement occupational health and safety management. Occupational health and safety is an essential part of labor protection, therefore in its implementation, occupational safety and Health (OSH) is a crucial element to be considered and implemented optimally Maybe that the risk of accident work on the construction can reduce to a minimum (Hidayat et al., 2014). Therefore, the application of occupational health and safety (OSH) in the construction projects of the building must be made correctly and adequately by the provisions of the legislation. Regarding the requirements of the bill can be seen in government regulation number 11 Years 1979 Occupational Safety on purification and processing of oil and gas, there is an OSH policy in article 8 reads:

- The workplace must be clean and well maintained.

- The workplace must be equipped with proper illumination by the requirements of occupational safety and health.

- The workspace must have appropriate ventilation adjusted to the number of people, and the air condition contained in the room.

- The workroom must arrange, so that the noise is below the specified threshold or if it is not achievable, the workers must equip with personal

protective equipment.

- The workspace must be reachable and abandoned quickly and securely through particular doors and must be well maintained.

- An appropriate place for emergencies should be available rescue tools to suit the needs.

Based on Government Regulation No. 11 Years 1979 about occupational safety in the purification and processing of oil and Gas, there is OSH policy in article 8 that the workplace should be clean and well maintained. According to (Busyairi et al., 2014) The company must understand that safety of good work is to give employees a personal protective equipment, pay attention to the condition of the work tools, do maintenance tools, provide suitable raw materials, Provide good lighting on the job site, as well as cleanliness and maintained order. The hygiene-well-maintained workspace makes the job fun, easy, and fast. One of the ways to manage the workplace is to move items that are no longer needed and maintain cleanliness by storing goods in a suitable place neatly for easy retrieval.

For the workplace must be supplemented with proper illumination, by the terms of occupational safety and health, allowing the workforce to see the work meticulously, quickly and without unnecessary effort. Adequate and well-arranged lighting will also help create a safe and comfortable work environment. The background of external human experiences such as light, sound, temperature, color, and other natural elements related to the environment, described according to Potter & Perry in (Kristian et al., 2018). According to Brewer and Sakai (Prayoga, 2014), Symptoms include headaches, decreased intellectual ability, concentration, and speed of thought. Poor lighting can lead to eye fatigue by diminishing power of work efficiency, mental fatigue, sore complaints in the eye area and headaches around the eye, visual impairment, and increased accidents. The potential of poor lighting can prevent or reduce, workplace lighting must be eligible to do the job. In-workplace lighting improvements, results are seen directly in improving productivity and reducing errors while working. Direct light tends to be comfortable with the number 200, which is a safe boundary of comfort (Kristian et al., 2018).

Furthermore, the workspace must have proper ventilation adjusted to the number of people, and the air condition contained in the room. Indoor air quality is primarily determined by the use of the KOLOWA ventilation so that the movement of air from outer space to the place becomes easy (Vidyautami et al., 2015). Based on the research conducted by Indrani in (Pandiangan et al., 2013) The

existence of ventilation on buildings in the tropics is very important for thermal comfort and role in supporting the increase of productive working time. The dimensions of ventilation openings designed according to (Pandiangan et al., 2013) are 24 x 1.25 meters for the northern wall and 23 x 1.25 meters for the west wall and at a height of 3 meters above the factory floor to be able to improve the comfort In working mainly for production rooms using machines that emit heat.

Also, the noise factor affects OSH so that workers need personal protective equipment. Based on the data from the WHO in (Dewanty and Sudarmaji, 2015) is known that the hearing loss due to noise is the second most work caused by a lifetime accident. The machine has noise with high strength sound. The negative impact it brings to the employee is the noise. This condition can result in hearing loss known as Noise-Induced Hearing Loss. Hearing-impaired due to noise or Noise-Induced Hearing Loss is a hearing loss arising from repeated exposure, and long can be chronic that is after working more than 10-15 years according to Adding in (Dewanty et al., 2015). Research conducted by (Fithri and Annisa, 2015) several factors, namely environment influenced noise disturbance, inspection, and human. Noise level measurements are not routine and less thorough. Noise level is due to lack of human resources to perform noise measurements and when measurements are carried out only in a few samples, not exhaustive. While in terms of human, time is exposed to the noise of workers too long, this is because noise does not correspond to the level of noise that occurred expose the length of the worker. Also, many workers ignore personal protective equipment (PPE) on the grounds of discomfort when working with PPE, and a long working period for senior workers. Actual hearing loss can prevent in the following ways:

- Using an ear protector
  Using earplugs when working with high noise exposure is the most significant preventative effort. You can use an earplug or earmuff that has an NRR (Noise Reduction Rate) value according to the noise value in the work area or with the largest NRR.

- Know the work area with high noise risk
  Not all workers carry a Sound Level Meter (Noise level gauge) or Noise Dosimeter (noise gauge for personal monitoring) at work, so they do not know the magnitude of the noise frequency in the work area. Therefore, the company should install the ear protective safety sign for a working area with a high noise level exceeding 85 dBA. Also, workers should even know which areas of work can pose a

risk of hearing loss due to noise.

- Technical control in Sound source
  Work Area with a noise level above 85 dBA for 8 hours, 40 hours per week, the law requires companies to reduce the level of noise in the area. The control of techniques in sound sources is entirely sufficient for reducing noise.

The workspace must be reachable and abandoned quickly and securely through particular doors and must be well maintained. A workspace is a place to spend most of the time each day. Because of this, it is essential to create a healthy working environment to make the workers feel comfortable. But not only that, the healthy working environment turns out to have a significant benefit for the company. In the event of emergency or employee work accident can quickly enter and leave the workspace immediately through particular doors so as not to inflict casualties. The infrastructure needed is a means of an exit for the building dwellers, methods of the entrance of the Fire Brigade/ambulance, plywood, assembly area, Technical command post. The required facilities include a page hydrant, a building hydrant, water that is minimal for a 30-minute blackout, an APAR, an alarm system, a detector, and a pressurized blower for the emergency stairs. The particular place for emergencies should be available rescue tools that suit the needs of many companies that still underestimate the safety, health, and safety procedures. The position of the body (ergonomics) and the location of work aids in the office is very close to work productivity. The provision of facilities and work, accident management equipment, is necessary to protect all assets of the company, especially the safety of all employees who are an essential part of the process of production. Emergency response facilities are indispensable for the rescue of building dwellers and assets of office buildings.

In the implementation of OSH policy based on PP No. 11, Years 1979 still has not been observed by some companies and not yet integrated so that the application of course not useful. The company has been implementing occupational safety and health, but there are still cases of occupational accidents. According to research (Aryantiningsih and Husmaryuli, 2015), the company has prepared the APD, but always, many workers do not use the complete APD. APD is due to the size or size of the inappropriate APD as well as the hot working environment making workers feel uncomfortable in using. Additionally, the provision of the APD depends on each type of work but the APD provided by the same company for each unit of work.

Pangka Sugar Factory installation unit still has a working accident case which annually. The factory has set rules always to use the PPE when working and the provision of the PPE in each unit of work has been following the required, but the self-awareness of workers did not exist to use the APD for their safety with the reason APD damaged and have not bought APD. Based on the results of the study (Afini et al., 2012) showed that the characteristics of the worker's personality have less excellent features in working and violating the rules that have been established by the Pangka sugar factory. Also, the K3 training held that have not been routinely carried out by the factory is not thoroughly followed by workers because the K3 trainees' representatives supported of each section. In addition to the use of PPE and K3 training, noise is still a distraction for workers while working. Whereas every year do noise measurement reported to the head office. But the fact of field obtained noise level is still under the raw for the condition 8 hours working IE 53.8 dBA.

From the case of work accident above in the implementation encountered obstacles and constraints. There are macro barriers (at the national level) there are micro barriers (within the company) consist of:

- Macro Barriers
  - The government
    There is still a lack of problems in coaching (formal & non-formal), guidance (Information Services, standards, Code of Practice), supervision (regulation, monitoring/monitoring and sanctions against violations).
  - Technology
    Technological developments need to anticipate to minimize or eliminated at all with the utilization of skills in the area of hazard control.
  - Social culture
    The existence of social culture gaps in the form of low discipline and public awareness of occupational safety issues. Insurance policies that are not oriented to hazard control, behavior of people who have not fully understood the dangers that exist in the industry with advanced technology as well as the culture of "relaxed" and "no matter" from the community or in other words there is no "culture" put safety in the society/workers.

- Micro Barrier
  - awareness, support, and involvement
    The knowledge, support, and involvement of operations management against the effort of Hazard control felt still very lacking. This situation will be culturally ranging from the

bottom layer so that many employees have a low safety awareness, besides their knowledge of engineering and safety management is also very limited. Moreover, the assumption that OSH is the cost center that is quite the opposite.

– The limited ability of officers

The strength of occupational safety officers in operation Engineering, Industrial Safety engineering, management of hazard control feel less so that it is a constraint gained excellent professional safety performance. As a result of this deficiency, there is a gap between the advancement of applied technology and the higher negative impact with the ability of professional safety officers in anticipation of more dangerous conditions. Due to the lack of human resources development in the OSH field or the development of educational events in this field.

– Standard and Code of Practice

Still, the lack of standard-standard and code practice in the field of occupational safety and dissemination of information in the area of industry hazard control that is still limited will increase the risk faced.

4 CONCLUSIONS

Based on Government Regulation No. 11 Years 1979 concerning occupational safety on the purification and processing of petroleum and gas the implementation of OSH policy is still not observed by some companies and has not integrated so that application is not sufficient. In the implementation of government regulations are found, obstacles and constraints are the problems of coaching (formal & non-formal) in terms of guidance (information Services, standards, Code of Practice). Supervision (regulation, monitoring/monitoring and sanctions Against violations), the dangers of technological developments have not to anticipate, the existence of social-cultural gaps in the form of low discipline and public awareness of occupational safety issues. Insurance policy not orient to Hazard control, community behavior that has not fully understood the dangers in the industry with advanced technology. Awareness, support, and involvement of operations management against the efforts of Hazard control felt still very less. The ability of safety workers in the field of operations engineering, industrial Safety engineering, management hazard control felt very less, and again lack of standard-standard and code practice in the area of occupational safety and

dissemination of information in the field of industrial hazard control is limited.

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REFERENCES

Afini, P. N., Koesyanto, H., and Budiono, I. (2012). Faktor penyebab kecelakaan kerja di unit instalasi pabrik gula pangka. *Unnes Journal of Public Health. 1(1)*, 1(1):45–50.

Aryantiningsih, D. S. and Husmaryuli, D. (2015). Kejadian kecelakaan kerja pekerja aspal mixing plant (amp) & batching plant di PT. *LWP Pekanbaru Tahun 2015. Jurnal Kesehatan Masyarakat Andalas. 10(2)*, 10(2):145–150.

Busyairi, M., Tosungku, L. O. A. S., and Oktaviani, A. (2014). Pengaruh keselamatan kerja dan kesehatan kerja terhadap produktivitas kerja karyawan. *Jurnal Ilmiah Teknik Industri. 13(2)*, 13(2):112–124.

Charda, U. (2015). Karakteristik undang-undang ketenagakerjaan dalam perlindungan hukum terhadap tenaga kerja. *Jurnal Wawasan Hukum. 32(1)*, 32(1):1–21.

Dewanty, R. A. and Sudarmaji (2015). Analisis dampak intensitas kebisingan terhadap gangguan pendengaran petugas laundry. *Jurnal Kesehatan Lingkungan. 8(2)*, 8(2):229–237.

Fithri, P. and Annisa, I. Q. (2015). Analisis Intensitas Kebisingan Lingkungan Kerja pada Area Utilities Unit PLTD dan Boiler di PT. *Pertamina RU II Dumai. Jurnal Sains, Teknologi dan Industri. 12(2)*, 12(2):278–285.

G., I. and Nugraheni, R. (2013). Analisis pengaruh keselamatan dan kesehatan kerja terhadap kinerja karyawan (studi pada pt. *Apac Inti Corpora Bawen Jawa Tengah Unit Spinning 2). Jurnal Studi Manajemen & Organisasi. 10(2)*, 10(2):160–166.

Hidayat, S., Putranto, E. H. D., and Syarifudin, N. (2014). Pengaruh penerapan keselamatan dan kesehatan kerja (k3) terhadap kualitas hasil kerja dan kenyamanan pekerja pada proyek pembangunan gedung di probolinggo. *Jurnal Info Manajemen Proyek. 5*, 5:27–36.

Kristian, M. S., Leonardo, H., and A., E. (2018). Pengaruh cara distribusi pencahayaan buatanpada kenyamanan bercengkerama pengunjung kafe. *Serat Rupa Journal of Design. 2(2)*, 2(2):148–162.

McNamara, J., Griffin, P., Kinsella, J., and Phelan, J. (2017). Health and safety adoption from use of a

risk assessment document on irish farms. *Journal Of Agromedicine. 22(4)*, 22(4):384–394.

Micheli, G. J. L., Cagno, E., and Calabrese, A. (2018). The Transition from Occupational Safety and Health (OSH) Interventions to OSH Outcomes: An Empirical Analysis of Mechanisms and Contextual Factors within Small and Medium-Sized Enterprises. *International Journal of Environmental Research and Public Health. 15*, 15:1–22.

Pandiangan, K. C., Huda, L. N., and Rambe, A. J. M. (2013). Analisis perancangan sistem ventilasi dalam meningkatkan kenyamanan termal pekerja di ruangan formulasi pt XYZ. *e-Jurnal Teknik Industri FT USU. 1(1)*, 1(1):1–6.

Prayoga, H. A. (2014). Intensitas pencahayaan dan kelainan refraksi mata terhadap kelelahan mata. *Jurnal Kesehatan Masyarakat. 9(2)*, 9(2):131–136.

Purnomo, D. H., Indasah., and Melda, B. (2018). Analysis of implementation safety and health occupational management system in kertosono general hospital. *Journal for Quality in Public Health. 1(2)*, 1(2):78–85.

Schulte, P. A. et al. 2013. *Occupational safety and health, green chemistry, and sustainability: a review of areas of convergence. Environmental Health. 12(31)*, 12(31):1–9.

Vidyautami, D. N., Huboyo, H. S., and Hadiwidodo, M. (2015). Pengaruh penggunaan ventilasi (ac dan non ac) dalam ruangan terhadap keberadaan mikroorganisme udara (studi kasus: Ruang kuliah jurusan teknik sipil universitas diponegoro). *Jurnal Teknik Lingkungan*, 4(1):1–8.

Zhao, D., Mccoy, A., Kleiner, B., and Feng, Y. (2016). Integrating safety culture into osh risk mitigation: A pilot study on the electrical safety. *Journal Of Civil Engineering And Management. 22(6)*, 22(6):800–807.

Mobile Technology in Mathematics: Students' Perspective towards Their Cognitive Styles and Academic Ability

Sari Herlina, Aulia Sthephani

Department of Mathematics Education, Universitas Islam Riau, Pekanbaru, Indonesia
sariherlina99@edu.uir.ac.id, sthephania@edu.uir.ac.id

Keywords: Mobile Technology, Mathematics, Cognitive Styles, Academic Ability

Abstract: The aim of this research was to look at student's perspectives in mathematics learning who had been applied mathematical learning assisted by mobile technology based on cognitive styles and academic ability. The type of research is Mixed Method, which was a combination of qualitative and quantitative. The sample in this study was students in the even semester of the academic year 2017/2018 in the calculus II course who received mathematics learning with using mobile technology. The instruments were questionnaires of interest in using mobile technology and interviews. The data analysis technique carried out was the analysis of qualitative data for data from interviews and quantitative data analysis for data from the questionnaire of interest in learning mathematics after using mobile technology. The results showed that the perspective of interest in mathematics learning by mobile technology was in the moderate category, meaning that almost all students were interested in mathematics learning by this mobile learning application. The interest in mathematics learning with mobile technology in terms of academic ability was high, medium and low ability, while the interest in mathematics learning with mobile learning applications in terms of cognitive styles learning, that is field dependent and field independent, had a view of interests that almost the same, this is indicated because in general, the average questionnaire score is in the "medium" category. This is also supported by the results of interviews in which students were very interested if this application is used in mathematics learning, and they also hoped that it will also be developed in different subjects.

1   INTRODUCTION

Technological advances can provide new methods of learning. It provides a new challenge for teaching staff or educators to be able to use optimally and provide new learning experiences for students. In some education institutions, the use of technology has been widely used such as online scoring systems, online registration, online credits programming printing, payment of online education fees, and others. Those utility of mobile devices are currently developing, including Android, iPads and Tablets. Mobile devices today are not luxurious items anymore and have become common daily thing making this mobile device can be interesting in the learning process in the classroom (Skillen, 2015).

The learning process in the classroom is an interaction between teachers and students or students with other students. The good quality of learning will certainly support the quality of education. However, the world of education continues to move in terms of creating interactive media and learning methods in

a comprehensive manner. Hence, educators should concern the technological advancements in order to achieve quality education goals.

Recently, higher technology enthusiasts can be seen from the results of existing surveys. Based on the survey results of the Indonesian Internet Service Entrepreneurs Association (APJII), the profile of internet use in Indonesia was obtained in 2014 at 34.9% and 78.5% of all internet users living in the western part of Indonesia. Regarding internet-based technology, 85% of total users in Indonesia access the internet using mobile phones as stated by Pusakom in (Herlina and Istikomah, 2018). Based on the age of the user, the majority of internet users are 18-25 years old, which is equal to almost half of the total internet users in Indonesia, which is 49% and 60% who use mobile phones to access the internet. Based on the results of other surveys, the highest demand for mobile applications (StatCounter, 2016), can be seen in the following figure:

Based on the results of the questionnaire about the use of computers and mobile phones distributed to 50
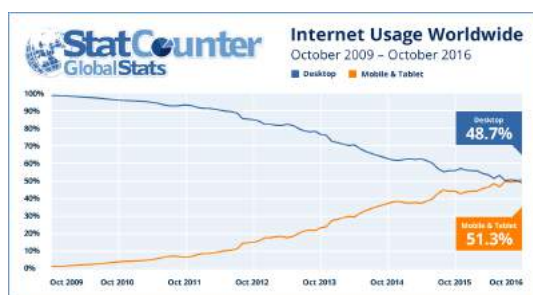
Figure 1: This caption has more than one line so it has to be justified.

students of FKIP UIR mathematics education, there are 3 people who do not have computers/laptops, all students have their mobile phones using them for the internet, accessing social media, and entertainment (Herlina and Istikomah, 2018). To access the internet, 36 out of 50 people access with personal data packages and 16 other people use Wi-Fi provided by the university.

Based on the survey data mentioned above, it shows the community's high interest in using technology. The high interest in using this mobile application is integrated with student interest in using applications in their learning process. However, can the differences in individual abilities and differences in the learning styles of each individual be overcome by the application of this mobile learning technology? Thus, based on the survey results researchers are interested in conducting research to see the interest perspective of mathematics education students who have implemented mobile technology-assisted mathematics learning based on academic abilities and cognitive style. By knowing student interest in mobile learning applications, educators can develop mobile technology application or mobile learning in mathematics learning in order to improve the quality of education.

2 RESEARCH METHOD

The type of research used in this study is mix method research (Creswell, 2014). The research was conducted at the Mathematics Education Study Program FKIP Riau Islamic University, which was addressed at Jalan Kaharudin Nasution No. 113 Perhentian Marpoyan, Pekanbaru. This research was carried out in the Even Semester 2017/2018 academic year, which was in February 2018 until May 2018. The research sample was students in the Mathematics Education Study Program FKIP Riau Islamic University, who too calculus 2 courses.

The selection of sample members by purposive sampling technique was in the calculus class 2B. There are 2 research instruments, which are: Questionnaire Interest on the use of mobile learning applications, interview sheets and questionnaire to show cognitive style (Doc, 2017) and validity of test (Mohammad, 2015). The mathematics learning interest questionnaire sheet in this study aims to see the perspective of student interest after applying mobile technology-assisted mathematics learning or mobile learning. The questionnaire indicators in this study were developed by Djamarah in (Hendriana, 2017). Indicators of learning interest were linked to the use of mobile learning applications. The following are the number of statements before and after validation.

Table 1: Results of before and after validation.

No	Indicator	Statement Number	
		Before Validation	After Validation
1	Like or enjoy	1, 2, 3, 4, 5, 6	1, 3, 5, 6
2	Statement of like something more	7, 8, 9, 10, 11, 12, 13, 14	7, 8, 10, 11, 12
3	There is interest	15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28	15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 28
4	There is awareness to learn on their own without being told	29, 30, 31, 32	29, 30, 31, 32
5	Participate in learning activities	33, 34, 35, 36, 37, 38	34, 35, 38
6	Willing to pay attention	39, 40, 41, 42, 43, 44	39, 41, 42, 43, 44

In addition to use interest questionnaire validation with Anates v 4.0, this interest questionnaire was also done to the validator. The results obtained from the validator are in the form of language changes or editorial and adjustments to the statements with the given indicators. For the interview sheet (Sujarweni,), it is used to explore data verbally. Esterberg in (Sugiyono, 2013) suggested that interviews are exchanging information and ideas so that meaning can be constructed in a particular topic. In this study, researchers conducted an unstructured interview to 5 research subjects outside learning to explore the interests of learning mathematics after using the mobile learning application (Sugiyono, 2013).

The technique to fill the interest questionnaires in this study is each respondent filled out a questionnaire with a check mark (v). The format of the questionnaire response interest in learning mathematics after applying a mobile learning application uses a Likert scale (Brown, 2010). According to Likert in filling out the questionnaire, the choices are based on four answers which are: Strongly Agree (SS), Agree (S), Disagree (TS), and

Strongly Disagree (STS). In collecting interview data, the researcher made a list of questions related to the research problem that had been proposed. Data analysis which was conducted in this study was: 1) Questionnaire Data Analysis Interests; 2) Analysis of Interview Results; 3) Questionnaire Analysis of Interest in Cognitive Learning Styles and academic abilities.

The results of the interest questionnaire distributed were obtained criteria (Azwar, 2007) as follows:

Table 2: Criteria for Questionnaire Interest.

No	Score	Category
1.	$\bar{x} \leq 113$	Low
2.	$113 < \bar{x} \leq 156$	Medium
3.	$\bar{x} \geq 113$	High

3   RESEARCH RESULT

This study discusses the results of the use of mobile learning applications in terms of student interest in the use of the application and sees students who are interested in using mobile learning applications in terms of cognitive learning styles. Based on the results of the research, the findings of the research results will be described as follows:

3.1   Mobile Learning Interest Questionnaire Analysis

In this study, the interest questionnaire on mobile learning applications was validated in 59 students. After testing the validation of the questionnaire instrument, there were 34 valid statements from 44 statements. The following are the results of research on the profile of student interest after using the mobile learning application in calculus learning II. The following table 3 is regarding the indicators of interest questionnaire used in this study.

Based on the table 3, it can be seen that student interest in this mobile learning application is still in the moderate category. However, it is interesting to the indicator that there is a sense of attraction and the awareness to learn on their own, including the lowest percentage among other indicators. It shows that the interest for independent learning is still low, but in students there is an interest in using mobile learning applications, hoping that this application in the future can also improve the ability to learn independently.

Table 3: Summary of interest questionnaire score average results for mi

No	Indicator	Percentage (%)	Average of Questionnaire Score	Criteria
1	Like or enjoy	72,01	132,50	Medium
2	Statement of of like something more	71,09	130,80	Medium
3	There is interest	75,92	139,69	Medium
4	There is awareness to learn on their own without being told	69,43	127,75	Medium
5	Participate in learning activities	71,38	131,33	Medium
6	Willing to pay attention	75,54	139,00	Medium
	Total	72,56	133,54	Medium

3.2   Analysis of Interview Results

Before conducting the interview, the researcher asked whether the mobile learning application can be downloaded on the Smartphone they have. It turns out that there were those who could not download the application, after being investigated, it showed that this mobile learning application could only be opened on an android application, meanwhile in IOS, mobile learning application cannot be downloaded and opened. However, on some Android phones, it can be opened but there are some programs that are unreadable.

Based on the results of the interview, the display presented was good, but there were also students who said that the appearance was still monotonous. In the aspects of the material presented, some of them were easy to understand the material provided, and there were also students delivering material on the mobile learning application to be more detailed. For the training and evaluation aspects presented in the mobile learning application, generally, they asked for more and more variety. In addition, in terms of answers, they also hoped for a complete solution.

Students were also interested if this application is used in other subjects. They also hoped that there is a video in the mobile learning application. Students also said they were happy with this application because if they forget to bring books, the materials are already on their laptops. In addition, they can learn independently whenever and wherever, there are lecturers or not.

Based on the results of interviews with students about the interest in learning about the mobile

learning application that was made, it can be concluded that basically they like the mobile learning application that can be used in mathematics learning. However, there are many findings from the interviews so that the mobile learning application needs further improvement and development.

3.3 Analysis of Interest Questionnaire Reviewed Cognitive Style

In this section, researchers want to see whether there are differences in learning interest in mathematics by using mobile learning applications in terms of cognitive styles (Kozhevnikov, 2007), which is Field Dependent and Field Independent (Blanton, 2004). However, the researchers had a little difficulty analyzing this because when filling in the questionnaire of interest, most students did not want to fill their names. Thus, the data that can be analyzed is only student data that is known by name. Out of 46 students, only 20 wrote the name on the interest questionnaire sheet. Meanwhile, from the average mathematics learning interest questionnaire scores to the use of mobile learning applications it can be concluded that the Independent and Field Dependent Field cognitive styles have almost the same interest views, this is indicated because in general the average questionnaire scores are in the "medium" category. Thus, the researchers concluded that if the mobile learning application was developed again, it could facilitate different student learning abilities

3.4 Analysis of Interest Questionnaire Reviewed Cognitive Style

This analysis is based on student interest questionnaires and academic abilities. Academic ability here is taken from student learning outcomes consisting of high, medium and low abilities. Likewise, on the value of the interest questionnaire that has been filled by students, the average score of the questionnaire scores is grouped into three parts, which are: high, medium and low. The mathematics learning interest questionnaire analysis in terms of student academic ability can be summarized in the following table 4:

Table 4: Summary of interest questionnaire score average results for mi

Average of Questionnaire Score	Academic Competence			Total
	High	Medium	Low	
High	-	2	-	2
Medium	3	28	12	43
Low	-	-	1	1
Total	3	30	13	46

Based on the table above, it can be seen that in general, students for high, medium and low ability provide interest in learning mathematics by using mobile learning applications in the medium category. It means that students have a positive response to the application made. From the data above, there were also two students who were capable of giving interest in the high category in the use of mobile learning applications. It means that the mobile learning application can help them to learn. However, there is one person who showed low interest in using this application, it can be used as input for researchers so that the mobile learning application in the development process can facilitate high, medium and low academic abilities. Thus, the hope is that there is no longer a gap in the academic ability of students or it can be said that the ability of students can increase.

4 DISCUSSION

Based on the results of the research that has been conducted, the profile of interest in learning mathematics towards the use of mobile learning applications includes interest. This is based on the results of the interest questionnaire and the results of the interviews conducted. From the interest questionnaire distributed to 46 students, their interest in this application is in the medium category. In addition, from the results of interviews, their interest was shown in the presence of similar applications in other subjects other than II calculus courses that the researchers designed.

The design of this mobile learning application consists of front view, material, practice questions and evaluation. Then, this application can be downloaded on the Playstore, in the application entitled "Cara Mudah Belajar Kalkulus (How to easily learn calculus)". Here is a picture of the mobile learning application (Figure 2).

Figure 2: Mobile leaning application on Google Play.

Before students filling out a questionnaire on learning interest in mathematics by using a mobile learning application, they downloaded on the Google Playstore on their respective Smartphone, then, they were involved in classroom learning. When downloading this application, based on interviews

and observations while carrying out research, there were 6 students who could not download this application. It was because their Smartphones were not Android but IOS. Meanwhile, most of them were able to open this application. There were some students who could not open the application, when opening it, there was only a blank screen. Thus, in the future, this application still needs improvement. Furthermore, here is the display inside the application (Figure 3).

Figure 3: Some parts of a mobile learning application.

In the evaluation section, the evaluation question only contains five questions. Each student's question was asked to analyze the wrong answer. When they worked on the problem, most of the students had difficulty finding the answers, they conveyed the questions presented were quite difficult, but there were several students who wanted the evaluation questions to be presented from easy to difficult. After they worked on the evaluation questions, they could see the complete answer key, so they could evaluate themselves the answers they have found. The following is a picture of the evaluation section displayed on the mobile learning application (Figure 4).

In this evaluation section, students were not able to see the answers before completing the test questions given. The weakness of this evaluation problem is that students could answer by guessing from the answers given. This application is just designing questions and is answerable for students to analyze their answers. Their interest in the evaluation section is quite good.

Based on the results of research, findings during interviews and observations while conducting the learning process in the classroom using this mobile learning application, this application is good to develop. Development of this application really needs to be done in order to improve the quality of the content or material presented so that it can provide benefits in its use. Seeing the good interest of students in this mobile learning application, researchers will continue the development of mobile learning applications so that they can be used in
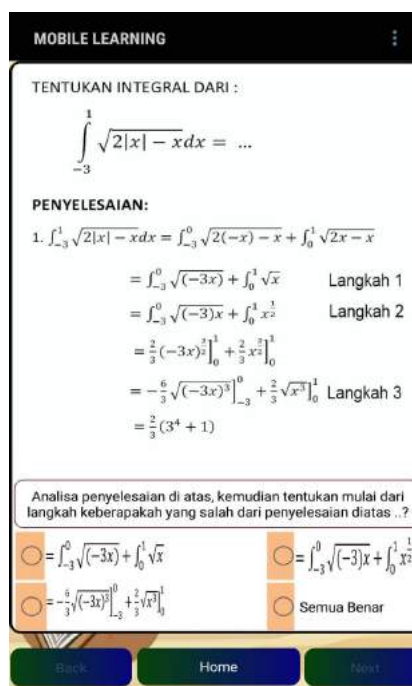
Figure 4: Display of the Evaluation Section of the Mobile Learning Application.

mathematics learning. Moreover, it is expected that this application can be used as one of the new learning methods that can improve student learning outcomes (Slavin, 2006) because it makes students easier to study anywhere and anytime without carrying a book (Skillen, 2015).

5 CONCLUSION

Based on the results of the research and discussion, it was concluded that the perspective of interest in learning mathematics by using mobile learning applications was included in the "medium" category. Overall, the use of mobile learning applications is in demand for the learning process in the classroom and for independent learning. This application is an innovative application for learning mathematics in the future and can give new contribution toward the teaching method.

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REFERENCES

Azwar, S. (2007). *Sikap Manusia Teori dan Pengukurannya*. Pustaka Pelajar, Yogyakarta.

Blanton, E. L. (2004). *The Influece of Student*. Cognitive Style on a Standarized Reading Test Administreted in Three Different Format'.

Brown, S. (2010). *Likert Scale Examples for Surveys Dichotomous Scales : Three-Point Scales*.

Creswell, J. W. (2014). *Research Desain: Quantitative, Qualitative, and Mixed Method Approaches*. California: SAGE.

Doc, I. (2017). *Instrument Group Embeded Figure Tesy (GEFT)*.

Hendriana (2017). *Soft Skills and Hard Skills*. Bandung: Refika Aditama.

Herlina, S. and Istikomah, E. (2018). Mobile learning: Implementation on MathematicsLearning. *Mathematics Research and Education Journal*, 2(1):36–41.

Kozhevnikov, M. (2007). Cognitive styles in the context of modern psychology : Toward an integrated framework of cognitive style. *133(3)*, 10.:464–481.

Mohammad, K. (2015). On the validity of the group embedded figure test (GEFT). *(May 2011). doi:*, 10.

Skillen, M. A. (2015). *Mobile Learning : Impacts on Mathematics Education*.

Slavin, R. E. (2006). *Educational Psychology: Theory and Practice*. Newyork: Johns Hopkins University.

StatCounter (2016). *Mobile and Tablet Internet Usage Exeeds Destop for First Time Wordwide*.

Sugiyono (2013). *Metode Penelitian Pendidikan (Pendekatan Kuantitatif, Kualitatif dan R & D)*. Alfabeta, Bandung.

Sujarweni, W. *(2014) Metodologi Penelitian*. Yogyakarta: Pustaka Baru Press.

The Effectiveness of Problem Based Learning (PBL) in Increasing Student Creative Thinking and Self-efficacy

Risnawati[1], Zubaidah Amir[1], Mana Samin Lubis[2], Muhammad Syafri[1], Dedek Andrian[3]

[1]*Department of Mathematics Education, State Islamic University of Sultan Syarif kasim, Pekanbaru, Indonesia*
[2]*Department of Mathematics Education, State Islamic University of Sumatera Utara, Sumatera Utara, Indonesia*
[3]*Department of Mathematics Education, Universitas Islam Riau, Pekanbaru, Indonesia*
{*risnawati, zubaidah*}*@uin-suska.ac.id, marasmin@yahoo.com, syafri267@gmail.com, dedekandrian@edu.uir.ac.id*

Keywords: Problem Based Learning, Self-Efficacy, Creative Thinking Ability

Abstract: Creative Thinking and Self-Efficacy are needed in mathematics because these factors are the determining factors in the mathematical success. The purpose of this study was to see the influence of Problem Based Learning (PBL) in increasing the ability of student's Creative Thinking and Self-Efficacy on Junior High School at Pekanbaru Riau Province. This research was quantitative with Quasi-Experimental approach. The design of this study is the Randomized Control-Group Post-test Only Design. The population of this research was junior high school student at Pekanbaru Riau Province. The data collection technique is used in this research was a mathematical creative thinking test. The data analysis technique is used in this research were descriptive statistics and ANOVA. The results showed that the Problem Based Leaning gave significant influences in increasing the students and self-efficacy. These results were proven from the significant value of ANOVA analysis less 0.05 for creative thinking and self-efficacy.

1 INTRODUCTION

One of science which is very important in the development of education and technology is Mathematics. Mathematics is a science that explains abstract concepts to those that can be clearly defined (Himmah et al., 2014). This is because mathematics is not an observation activity, but from ideas, processes, and deductive evidence. to translate this abstract thing, we need an active learning process in teaching and learning mathematics. In learning mathematics, students are brought to observe, guess, do, try, be able to answer the question of why even argue. These principles are expected to be able to realize the goals of creative and critical mathematics learning (Suherman, 2001). According to (Sukmadinata, 2012) creative thinking is a habit of thinking that is embodied in the principles of exploring, reviving imagination, intuition, fostering new potential, opening views that create admiration, stimulating unexpected thinking.

Several national and international studies have found that students' creative thinking skills are still low. This fact is proven by research conducted by the International Student Assessment Program (PISA) team in 2015 which found that Indonesia ranked 69th out of 76 countries. The PISA results are strengthened by the average 2016/2017 National Exam results in each province in Indonesia are still not as expected. These results indicate that mathematics is still a difficult subject for students. for in Riau Province, the value of the National Mathematics Student Examination in particular in Pekanbaru, the National Exam results are still relatively low.

Based on the problems have found above. The Mathematics Education Experts seek strategy and have found several strategy or models that can make student actively involved in building creative thinking skills. The model can increase creative thinking and self-efficacy student have created by experts is problem-based learning (PBL) model. PBL is a problem-based learning model that enables student can develop the thinking skills. PBL makes student can learn through various real problems in student daily life. PBL goals are how to make students can get and shape their knowledge in various way of learning. (Sungur and Tekkaya, 2006) state that, with the PBL model, students can interact with the environment, classmates which the PBL will guide students in improving their skills.

In addition to creative thinking, self-efficacy is an important variable in learning mathematics because

of students' attitude like self-efficacy one aspect that makes student success in learning mathematics. (Bandura, 1997) says Self-efficacy is an individual believes that student can do something like other friends in the classroom in a certain condition. in other words, self-efficacy is students' confidence in teaching and learning process that makes it get the best result in learning mathematics. Self-efficacy is a concept of the cognitive personal which is had by students and formed from main components, namely students' experience, through observation of other people's experiences, social or verbal media, physical and students' emotional conditions. Students' experience is the source most influential because students' experience about success or failure of students can increase or decrease self-efficacy

The self-efficacy is trust in one's abilities, specifically in the belief in a particular field or concept. Confidence is needed to be able to compete in the globalization era and the work world, as well as in the education world. In teaching and learning process, the teachers are often found that students lack confidence and unsure of their abilities. If this condition doesn't improve, it will give a bad impact on the students quality on future. In the learning activities, they can not answer the teacher question and they usually turned left and right as if looking for support to a friend next to them. The students are seemed to be unsure that he/she could answer the questions given by teachers. Because of the teacher have accountabilities on all problem the student found, the teachers need to always look for a solution to fix education quality.

Mathematics is a subject that could give a solution about how to develop students' confidence. Various studies have been conducted related to the students' self-efficacy. (Pajares and Miller, 1994), (Pajares, 1996) have found that self-efficacy influences student success in mathematics. (Kabiri and Zohuriaan-Mehr, 2003) found that self-efficacy affects mathematical anxiety and mathematical success, namely mathematics anxiety is an influence of mathematical self-efficacy or mathematical performance. (Bandura, 1997) state that self-efficacy is not something that is acquired from birth or permanent from an individual but as a result of cognitive processes through teaching and learning that experienced by students in a certain period. This means that students' self-efficacy can be developed through various strategy because cognitive processes someone occur when teaching and learning process in the classroom. the self-efficacy can be formed and driven through daily activities have done by teachers and students in the classroom.

The PBL model is begun by giving authentic problems to students. According to (Choridah, 2013) PBL model can fix students' mathematical thinking skills on a high level. In the learning process, PBL involves groups of students who are supported to communicate with their friends. when presenting group results, students have understood the materials are asked for communicating with friends and teachers. In PBL, the student is demanded to use the all experience and knowledge have acquired from the various strategy.

PBL will guide individuals and group to investigate students to exchange answers and produce various solutions to existing problems. the ideas conveyed by student come from themselves (original). This strategy can improve students' creative thinking skills. Group discussions have created making students have many experiences through interaction between students and others. Students are also trained to give a suggestion, comment or express opinions in their groups, this activity can increase their verbal abilities. Then, some students present the discussion results in detail to their friend in the classroom. In addition, the experience that acquired from discussing will make students feel satisfied with the achievement of their performance.

2 RESEARCH METHOD

This research was quantitative research with a quasi-experimental approach. The design is used in this research was the Nonequivalent Control Group Design where is there are two groups were studied, namely; the treated group (X) and the untreated group. the treated group is called the experimental group and the untreated group is called the control group. The population in this research were students of Junior High School in Pekanbaru consisted of 36 schools.. The samples in these study were Public Junior High School 4 for high level, Public Junior High School 20 for middle level, Public Junior High School 21 for low level. The instruments used in this research were tests of creative thinking skills and students' self-efficacy questionnaires. The data analysis technique that will be used in this study was Descriptive Statistics and Two Way ANOVA.

3 RESULT AND DISCUSSION

3.1 Creative Thinking

The scores of students' creative thinking were analyzed through post-test data. The score from the post-test results were presented in the table below. The scores of average and standard deviation were obtained after processing data from the results of the test of students' creative thinking tests based on PBL model.

Table 1: Student Creative Thinking Scores

Score of School Level	Model of Learning					
	PBL			Conventional		
	Mean	SD	N	Mean	SD	N
High	88,6	8,5	31	77,8	6,3	30
Middle	83,4	9,7	41	75.5	6,9	41
Low	79,9	8	39	74,2	3,4	39
Total	83,9	8,7	111	75,9	5,9	110

Based on the table above, students at high level schools have a higher average score of creative thinking of the PBL class, compared to students at the middle school level and low school level students, namely 88.6. In Conventional classes, high school level students get a higher average value of creative thinking compared to middle school level students and low school level students which are 77.83. Then it can be seen whether there are significant differences between the three levels of the school based on learning that uses PBL with conventional. This result can be seen in Table 2.

Table 2: Summary of ANOVA analysis of Creative Thinking

Tests of Between-Subjects Effects

Source	Mean Square	F	Sig.
Corrected Model	1,028,952	19,063	,000
Intercept	1326446,40	24574,85	,000
Model	31,403	,582	,000
School Level	1,000,635	18,539	,000
Model * School Level	1,700,026	31,496	,003
Error	53,976		

From the results of the calculation, obtained a significant value based on the difference in the model used in the learning of 0.00. This value indicates that there is a significant difference between the experimental class using the PBL Model and control class using the conventional model. Based on the analysis result was obtained a significant value at school levels have used as treatment. From analysis was obtained the significant value of 0.00. This result shows that there is a significant difference between experiment class and control class based on school level, that is; high, middle, and low. Result analysis

shows have happened an interaction between the learning models used with school level used in this research. This result indicates that The PBL learning model can increase the outcome result based on the school level. The next step can be checked which one of the best level for used in the PBL learning model. the result can be seen in Table 3.

Table 3: Scheffe Multiple Comparisons

	(I) IQ	(J) IQ	Mean Difference (I-J)	Std. Error	Sig.
Scheffe	High	Middle	26,104	13,071	,139
		Low	6,8391*	12,956	,000
	Middle	High	-26,104	13,071	,139
		Low	4,2286*	11,272	,001
	Low	High	-6,8391*	12,956	,000
		Middle	-4,2286*	11,272	,001

Based on Table 3 obtained the multiple comparisons between school levels that is; high, middle, and low. From analysis result can be seen that there is significant difference between high level schools with low level. This result is proven from the significant value has obtained is 0.00. There is no significant difference of high level school with middle level school. This result can be checked from the significant value is 0.139. There is the significant difference between middle level schools with low level schools. This result can be seen clearly at Figure 1.
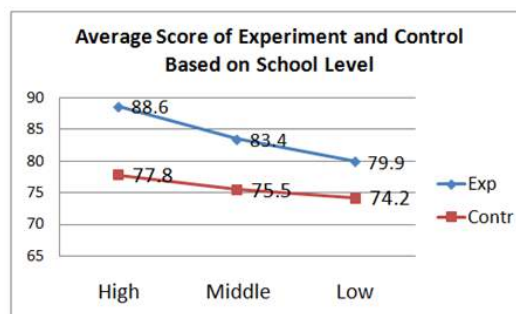
Figure 1: Difference between Experiment and Control Class

Figure 1 shows that the experimental class has a higher average of creative thinking ability than the control class. This result can be generalized as a whole that the group of exponents using the PBL model is better than conventional classes, both from high, middle, and low levels.

3.2 Self-efficacy

Self-efficacy scores are acquired from data analysis uses questionnaire instruments. The score of average, standard deviation, and number of students obtained

after processing data from the instrument in the form of the student self-efficacy questionnaire.

Table 4: Student's Mathematical Self-Efficacy Score Based on Model of learning and level of schools.

Self-Efficacy	Learning Model					
	PBL			Convensional		
	Mean	SD	N	Mean	SD	N
High	121	10,6	31	119	9,4	30
Middle	113	11,8	41	111	12,0	41
Low	122	10,4	39	104	9	39
Total	117,7	10,9	111	110,67	10,1	110

Based on the table above, in the class of PBL model with low-level students having a higher score of students' mathematics self-efficacy than the two school levels others, namely 121. In the conventional class students with high-level schools have higher average scores of self-efficacy from the two school levels others that is 118. Then it can be seen whether the comparison between the experimental class self-efficacy is better than the control class. these results can be seen in Table 5.

Table 5: Tests of Between-Subjects Effects

Source	Mean Square	F	Sig.
Corrected Model	1,791,604	16,013	,000
Intercept	2,674,375,337	23903,38	,000
Model	1,914,772	17,114	,000
School Level	646,666	5,780	,004
Model * School Level	2,236,776	19,992	,000
Error	111,883		

Based on the analysis above has acquired the significant difference between experiment class with control class. This result was proven from the analysis result with a significant of 0.00. When viewed from the school level aspect, obtained the significant difference between school levels from experiment class with control class. This result can be seen from significant value was 0.004. From the analysis, the result can be seen the interaction between Model and School levels (Model*Level Schools). This result shows that there is significant interaction between Model and Level School so that can be concluded that Model and Level School can give different result when Model and School Levels were used simultaneously. For check the difference result of interaction between Model and School Levels, multiple comparisons can describe it as in Table 6.

Table 6: Multiple Comparisons of Self-Efficacy

Dependent Variable: Self-Efficacy

	(I) IQ	(J) IQ	Mean Difference (I-J)	Std. Error	Sig.
Scheffe	High	Middle	5,28*	1,89	,02
		Low	7,74*	1,87	,00
	Middle	High	-5,28*	1,88	,02
		Low	2,46	1,63	,32
	Low	High	-7,74*	1,87	,00
		Middle	-2,46	1,63	,32

Based on Multiple Comparisons table, it can be seen that there is a significant difference between high levels school with middle school level in self-efficacy. This conclusion can be seen from significant value was 0.021. From the Mean Difference result that viewed from multiple comparisons, the high-level school was higher from middle-level school. The result analysis shows that there is a significant difference between the high-level school with the low-level school, this result can be seen form significant value was 0.021. From the result of Mean Difference, it can be made a conclusion that the high-level school was higher from the low-level school. Based on the result analysis, obtained a comparison between the middle-level school with the low-level school. The result analysis shows that there is no significant difference between the middle school level with the low-level school because of the significant value more 0.05 that is; 0.319. Although no significant difference but Mean Difference shows that the middle-level school is better from the low-level school. For describe clearly comparison of school levels of self-efficacy, figure 2 will show self-efficacy comparison based on the levels school as follow: Figure 2 shows that the experimental class
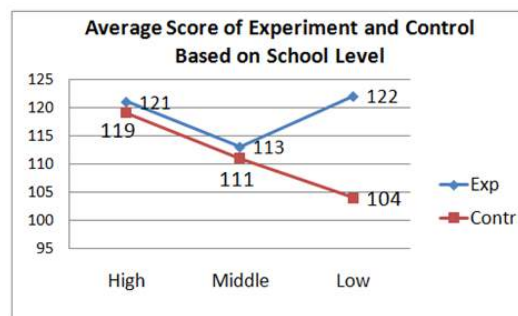
Figure 2: Line diagram between school levels of self-efficacy.

uses PBL model has a higher average than the control class use conventional model. For the high-level school the experimental class is 120 and for the control class is 118, the middle-level school in the experimental class is 112 and for the control class is 111, while for the low-level group the experimental class is 120 and the control class is 103. From this result, it can be concluded that the PBL Model was carried out at the experiment class effectively increase the student's self-efficacy.

The learning model is very important for increasing learning outcome in teaching and learning process because learning model can give a solution about weakness and deficiency of teaching and learning in the classroom (Risnawati, Andrian, Azmi,

Amir & Nurdin, 2019). Model and strategy of learning actively can increase learning outcome in the classroom (Moravec et al., 2010). Learning model can give a broad direction to the student for solving the problem about bad of learning outcome (Oxford, 2003). The learning will provide a solution about low student motivation, low student outcome, low ability of student during teaching and learning process, and low interest in following the learning process.

PBL is one of learning model can increase learning outcome. From this study, the conclusions have made that problem-based learning can increase the mathematics learning outcome and self-efficacy of mathematics student at junior high school of Pekanbaru, Riau Province. These results show that PBL gives a good effect in giving knowledge to the student to solve a problem in real life. PBL one a model that describes a learning environment with a problem and give a solution to solve it (Roh K H, 2003). PBL gives a positive effect in teaching and learning process, improve student understanding in mathematics subject, this model can increase student ability to use the concept in real life (Padmavathy and Mareesh, 2013). PBL is an effective and efficient model in increasing mathematics student's performance. PBL is a model can give a good solution in solving problems have found with good and effective procedures (Abdullah et al., 2010).

4 CONCLUSION

Based on the results of the research, it was concluded that there were differences in learning outcomes between the Problem Based Learning model applied to the experimental class and the conventional strategy applied in the control class. The results show that PBL can improve learning outcomes in the form skills of the creative thinking and self-efficacy of public junior high school Pekanbaru, Riau province.

REFERENCES

Abdullah, N. I., Tarmizi, R. A., and Abu, R. (2010). The effects of problem based learning on mathematics performance and affective attributes in learning statistics at form four secondary level. *Procedia-Social and Behavioral Sciences*, 8:370–376.

Bandura, A. (1997). *Self-Efficacy: The Exercise of Control*. W.H. Freman and Company, New York.

Choridah, D. T. (2013). Peran pembelajaran berbasis masalah untuk meningkatkan kemampuan komunikasi dan berpikir kreatif serta disposisi matematis siswa sma. *Infinity Journal*, 2(2):194–202.

Himmah, N., Noer, S. H., and Gunowibowo, P. (2014). Penerapan pbm untuk meningkatkan kemampuan berpikir kreatif matematis dan self-efficacy. *Jurnal Pendidikan Matematika Unila*, 2(2).

Kabiri, K. and Zohuriaan-Mehr, M. (2003). Superabsorbent hydrogel composites. *Polymers for Advanced Technologies*, 14(6):438–444.

Moravec, M., Williams, A., Aguilar-Roca, N., and O'Dowd, D. K. (2010). Learn before lecture: a strategy that improves learning outcomes in a large introductory biology class. *CBE—Life Sciences Education*, 9(4):473–481.

Padmavathy, R. and Mareesh, K. (2013). Effectiveness of problem based learning in mathematics. *International Multidisciplinary e-Journal*, 2(1):45–51.

Pajares, F. (1996). Self-efficacy beliefs and mathematical problem-solving of gifted students. *Contemporary educational psychology*, 21(4):325–344.

Pajares, F. and Miller, M. D. (1994). Role of self-efficacy and self-concept beliefs in mathematical problem solving: A path analysis. *Journal of educational psychology*, 86(2):193.

Roh K H, . (2003). *Problem-based Learning in Mathematics*. ERIC. Ohio.

Suherman, E. . d. (2001). *Strategi Pembelajaran Matematika Kontemporer*. JICA-Universitas Pendidikan Indonesia (UPI), Bandung.

Sukmadinata, N. S. (2012). *Kurikulum dan Pembelajaran Kompetensi*. PT Refika Aditama, Bandung.

Sungur, S. and Tekkaya, C. (2006). Effects of problem-based learning and traditional instruction on self-regulated learning. *The journal of educational research*, 99(5):307–320.

Behavioural E-Learning Adoption among Higher Education Institution Students: A Possibility for Mentawaian Students Living in Contemporary Culture

Elfiondri[1], Yetty Morelent[1], Desi Ilona[2], and Zaitul[1]

[1]*Universitas Bung Hatta, Padang, Indonesia*

[2]*UPI YPTK Padang, Padang, Indonesia*

elfiondri@yahoo.co.id, morelent104@yahoo.com, desiilona@upiyptk.ac.id, zaitul@bunghatta.ac.id

Keywords: Personalization, Responsiveness, Controllability, Two-Way Communication, Perceived Ease Of Use, Perceived Usefulness And Intention To Participate In E-Learning.

Abstract: This study aims to investigate the influence of personalization, responsiveness, controllability, and two-way communication on perceived ease of use and perceived usefulness. besides, this study also determines the influence of perceived ease of use and perceived usefulness on students' intention to participate in e-learning. Besides that the study also glances at a possibility of development of e-learning for Mentawaian students living in contemporary culture. Forty-four students were participating in this study and SEM-PLS is used to analyse the primary data collected through on-line survey. Ten hypotheses were developed. The study results in five hypotheses are supported and the rest rejected. The result show that personalization significantly effects on perceived ease of use and perceived usefulness. In addition, the controllability is positively related to perceived usefulness. Further, two-way communication is also positively associated with perceived ease of use. Finally, the perceived ease of use positively determines the students' intention to participate in e-learning. This study provide contribution to Technology acceptance model by extending this theory. Practically, this study highlights some findings which are contribute to the university management and they discuss in detail.

1 RESEARCH BACKGROUND

World is currently marked by new economy. (Cidral et al. 2018) argue that the new economy is characterised by the revolution of information technology (IT), reinventing of the classroom and etc. In fact, the great availability of devices to access the internet (e.g. computers, tablets, laptop and smartphones) and the population and access to the World Wide Web (www) learning utilizing e-learning practices has broadened quickly (Cidral et al. 2018). In addition, (Al-gahtani 2014) add that technology (the internet and network) transformed our world into ubiquitous connectivity. Thus, development on IT has brought about e-applications. (Alsabawy et al., 2016). System of E-learning is a system which enables the 21st-century education and it has a big effect on the educational environment (Aparicio et al., 2016). There is increasing dependents on e-learning usage to accommodate the knowledge transfer and generation in workplace (Fleming, Becker, and Newton 2017).

An e-learning can be defined as an information system in which various teaching-materials like text, video and audio media can be integrated are delivered in online learning (discussion, email and assignment (Lee et al., 2011). In addition, (Y. Cheng 2011) also defines that e-learning is a device employing the computer and instrument network such as extranets, internets and internet to convey the learning materials to learners. Such learning may return to the beginning of 1980's in which subjects on television were offered. The online learnings so-called virtual or distance learning were developed because technology and information develop fast. (Fleming, Becker, and Newton 2017). E-learning systems give chance to students to study regardless of place and time, and support them with new teaching methods (Alhabeeb and Rowley, 2018). Through E-learning, students also gain new techniques of learning, and lecturers can convey a learning guidance using audio, video, animation, text, and pictures, and can give online feedback and spaces on learning. (Abdullah and Ward, 2016). (Clay et al., 2008) argue that in order to be successful applying the devices and procesures, it depends on intention of students to

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receive or refuse the tool and systems. There have been many universities in the world implementing e-learning (Garrison, 2011), one of which is Bung Hatta University, Indonesia (Khairuddin et al. 2018). Unfortunately, even though e-learning gives benefits, the students and lecturers still use it in low level (Bhuasiri et al., 2012) included its use at Bung Hatta University (Khairuddin et al., 2018).

There are bundle of studies investigating the behavioural intention of using the e-learning (Cheng, 2014; Zhang et al., 2012; Roca et al., 2006; Rui-Hsin and Lin, 2018; Cheung and Vogel, 2013; Timothy, 2011; Khairuddin et al., 2018; Sánchez et al., 2013; Fleming et al., 2017; Abdullah and Ward, 2016; Al-Gahtani, 2016; Alhabeeb and Rowley, 2018; Alsabawy et al., 2016; Aparicio et al., 2016; Ching-Ter et al., 2017; Cidral et al., 2018; Hubalovsky et al., 2019; Khasawneh, 2015; Kimiloglu et al., 2017; Cheng, 2011; Bhuasiri et al., 2012). Based on previous studies, there is very limited studies investigating in Indonesia's environment. In addition, most of studies used the teachers, instructors and lecturers as research object and there is lack of studies using the students as object of research (Abdullah et al., 2016; Cheng, 2014; Rui-Hsin and Lin, 2018; Cheung and Vogel, 2013; Sánchez et al., 2013; Ali et al., 2018). Besides, studies which employ the external factors to technology acceptance model (TAM) variables are also lack. In addition, studies using an Indonesia's environment have seldom used the students as research object. Therefore, there is gap in literature. It needs further investigation in this field.

E-learning system participation is considered as adoption of technology. Several theories discuss adoption of the technology in organization and individual level, such as innovation diffusion theory (Rogers, 1962), and reason action theory (Fishbein and Ajzen, 1977), theory of plan behaviour (Ajzen, 1991), task-technology fit (Goodhue and Thompson, 1995). This research applies the model of technology acceptance (Venkatesh and Davis, 2000) and plan behaviour theory (Ajzen 1991). Theory of plan behaviour (Ajzen 1991) predicts that intention determines behaviour to behave. Additionally, determinants of intention to behave involves attitude on technology, subjective norm and control of perceived behaviour (Ajzen 1991). Based on model of technology acceptance (Venkatesh and Davis 2000), perceived ease of use and perceived usefulness determine acceptance of technology. (Abdullah and Ward 2016) and (Ching-ter, Su, and Hajiyev 2017) conclude that there are external variables influencing the variables of TAM. Experience,

subjective norm, enjoyment, computer anxiety and self-efficacy are used as antecedents of perceived ease of use (PEU) and perceived usefulness (PU) variable. (Y. Cheng 2011) classified the antecedents of PEU and PU into social, factors, and individual factors. (Al-Gahtani, 2016) involve the variables of subjective norm, image, job relevance, output quality, result demonstrability as determinants of PU. PEU determinants are computer self-efficacy, perception of external control, computer anxiety, and computer playfulness (Al-gahtani 2014). Only (Y. M. Cheng 2014) proposed a different external factors to PEU and PU: personality, controllability, two-way communication and responsiveness as antecedents of PEU and PU. This model is not yet applied in Indonesia's education environment and therefore, this study's objectives are to investigate the effect of these four external factors (personality, controllability, two-way communication and responsiveness) on PEU and PU. In addition, this research also determines the influence of PEU and PU on students' intention to participate in the system of e-learning. This paper is organised as follow (i) background, (ii) method and material, (iii) result and discussion, and (iv) conclusion and recommendation.

In the learning context, personalization deals with transmitting the learning contents that suit particular individual through the electronic learning system (Y. M. Cheng 2014). Therefore, personalised e-learning system is perceived as more useful (Baylari and Montazer 2009) and provides student with robust guidance mechanism, such as adaptive navigation support, curriculum ordering, tailored presentation and etc. (Papanikolaou et al. 2002). In addition, Controllability, in the context of learning, refers to students' capability to manage time, content and communication stream by means of e-learning system (Y. M. Cheng 2014). If the students think that they can manage the e-learning system, they believe that the e-learning is more useful and easy to use (Pituch and Lee 2006). Further, responsiveness refers to the extent to which students discern that the reaction from the learning system is consistent, fast and reasonable (Pituch and Lee 2006). If the students notice that the system is so, they are aware of system response useful and easy to use (Pituch and Lee 2006). Moreover, the ability of reciprocal communication between lecturer and students are suggested definition of two-way communication in the learning context (Pituch and Lee 2006) and they add that if this type of communication occurs, student will feel that the e-learning is useful and easily used. If it is usefully perceived and easily used, the students will create an intention to participate in the system of e-learning

(Abdullah and Ward 2016; Cheng 2011; Ching-ter, Su, and Hajiyev 2017; Al-gahtani 2014). Based on explanation above, we proposed the research framework as follow.
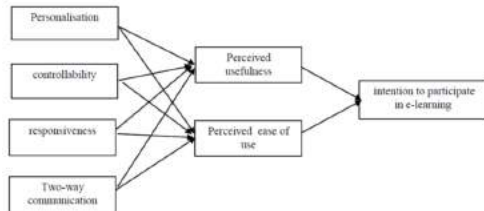
Figure 1: Research Framework

2 MATERIAL AND PROPOSED METHODS

This research uses the students in the semester six and above who are registered in faculty of business and economics and education as research object. Data in this research is primary data that gathered through online survey. The research uses intention to participate in e-learning as dependent variable and personalization, controllability, responsiveness, two-way communication, perceived ease of use, and perceived usefulness as independent latent variables. Intention to participate in e-learning has three items which developed by (Bhattacherjee, 2001; Roca et al., 2006). PEU and PU consist of three items each (Davis, 1989; Ngai et al., 2007). In addition, personalization has four items which was developed by (Papanikolaou et al., 2002; Wu and Guohua, 2006). Further, controllability has three items (Liu, 2003; Wu and Guohua, 2006). Thus, responsiveness also has three items (Liu, 2003; Pituch and kuei Lee, 2006; Song and Zinkhan, 2008). Finally, two-way communication employ four items (Liu 2003; Song and Zinkhan 2008). Five-scale Likert is used to measure all constructs. Structural Equation Modeling is used to run data. Smart-pls is employed due to benefit of smart-pls (Chin et al., 1998). It has two assessments: measurement model and structural model assessments (Hair Jr et al., 2017). Measurement model assessment has two criteria's: convergent validity and discriminant validity. Convergent validity is assessed using four properties (Hair et al., 19). In addition, Fornell-Lacker criterion (Fornell and Larcker, 1981)(Fornell and Larcker 1981) and cross-loading (Hair et al. 2017) are applied as base for discriminant validity evaluation. Further, value of Q square and R square is used to assess the structural

model. Acceptance or rejection of The hypotheses is based on the value of path coefficient and p-value. At last, the hypotheses are connected qualitatively with learning-culture of Mentawaian students to see a possibility for developing the e-learning in Mentawai.

3 RESULT AND DISCUSSION

This session would be discussed about result and discussion: demographic data, measurement model assessement, and structral model assessment. The result begins with demographic data. Table 1 provide us with data of gender, age, semester, CGPA and department of respondents. Based on gender, respondents are dominated by female respondents (86.36%). With regard to age, most of respondents is age of 21 to 22 years old (65.91%). Further, respondents are dominated by students in fourth and sixth semester. Based on CGPA, most of students is with CGPA of 3.00-3.50 (45.45%). Finally, respondents mostly are from accounting department, faculty of economic and business.

Table 1: Demographic Variables

Dem var	Category	Count	%
Gender	Female	38	86.36
	Male	6	13.64
	not answer	0	0
Age	19 to 20 years old	9	20.45
	21 to 22 years old	29	65.91
	23 to 24 years old	3	6.82
	¿ 24 years old	2	4.55
	not answer	1	2.27
Semester	4th to 6th	40	90.91
	7th to 9th	3	6.82
	¿ 9th	1	2.27
	not answer	0	0
CGPA	2.50 to 3.00	6	13.64
	3.01 to 3.50	20	45.45
	3.51 to 4.00	15	34.09
	not answer	3	6.82
Department	Accounting	38	86.36
	Elementary school teacher training	1	2.27
	Management	2	4.55
	English training	2	4.55
	not answer	1	2.27

Table 2 demonstrates the assessment result gained from measurement model (convergent validity). Based on outer loading, all items from all constructs have outer loading value which is bigger than 0.700. and it can be concluded that these value support the convergent validity (Hulland, 1999). Internal consistency of indicator is second criteria of convergent validity (CV). The consistency is determined by using Cronbach's Alpha (CA) and composite reliability (CR). Thus, the result show that value of CA and CR for all constructs is above 0.700 and it support the convergent validity (Bagozzi and Yi, 1988). Dealing with the average variance extracted (AVE), the result indicates that all constructs have the value of AVE exceed the

cut-off value, 0.500 (Bagozzi and Yi 1988). Based on four SEM properties above, it can be concluded that convergent validity requirement has been reached.

Table 2: Convergent Validity

Construct	items	outer loading	CA	CR	AVE
Intention to participate in e-learning	itp1	0.935	0.899	0.936	0.831
	itp2	0.923			
	itp3	0.875			
Controllability	con1	0.835	0.772	0.866	0.683
	con2	0.779			
	con3	0.863			
Personalization	per1	0.818	0.852	0.9	0.693
	per2	0.82			
	per3	0.887			
	per4	0.803			
perceived ease of use	peu1	0.86	0.875	0.923	0.801
	peu2	0.926			
	peu3	0.898			
perceived usefulness	pu1	0.898	0.873	0.922	0.798
	pu2	0.893			
	pu3	0.888			
Responsiveness	res1	0.862	0.882	0.927	0.81
	res2	0.896			
	res3	0.941			
two way communication	twc1	0.827	0.861	0.905	0.704
	twc2	0.909			
	twc3	0.777			
	twc4	0.838			

The result of second assessment (discriminant validity) of measurement model is presented in Table 3. In this case, we use the Fornell-Lacker criterion. Fornell-Lacker criterion must be reached by comparing the square root of a construct (Fornell and Larcker 1981). For example, the square root of controllability is 0.826 (bold) and this value is greater than correlation between controllability with other construct, such as intention to participate in e-learning (0.800), perceived ease of use (0.671) and so on. Thus, it can be concluded that the discriminant validity requirement is reached.

Table 3: Fornell-Lacker Criterion

Const	1	2	3	4	5	6	7
CON(1)	**0.83**						
ITP (2)	0.8	**0.91**					
PEU (3)	0.67	0.78	**0.9**				
PU (4)	0.79	0.73	0.84	**0.89**			
PER(5)	0.79	0.78	0.85	0.92	**0.83**		
RES (6)	0.82	0.74	0.68	0.82	0.86	**0.9**	
TWC(7)	0.79	0.82	0.81	0.76	0.84	0.78	**0.84**

Second criteria for discriminant validity is cross-loading. Table 4 provide us with result of discriminant validity assessment (cross-loading). Cross-loading is assessed by determining the loading of an indicator (item) to its assigned construct is higher compared to its loading to other construct (Hair et al., 2017). For example, loading of item of itp1, itp2, and itp 3 (ITP is its assigned construct) are higher to ITP (bold, 0.935, 0.923, and 0.875) compared to other constructs, such as PEU (0.627, 0.637, and 0.839). These values show that the discriminant validity is reached.

Second smart-pls assessment is structural model evaluation. It is to test hypothesis and about the

Table 4: Cross Loading

Items	CON	ITP	PEU	PU	PER	RES	TWC
itp1	0.779	**0.935**	0.627	0.622	0.683	0.695	0.687
itp2	0.74	**0.923**	0.637	0.643	0.706	0.698	0.741
itp3	0.674	**0.875**	0.839	0.713	0.738	0.64	0.791
con1	**0.835**	0.722	0.606	0.68	0.628	0.563	0.658
con2	**0.779**	0.618	0.405	0.464	0.513	0.685	0.559
con3	**0.863**	0.643	0.611	0.75	0.773	0.784	0.716
per1	0.668	0.687	0.609	0.738	**0.818**	0.816	0.694
per2	0.678	0.721	0.795	0.76	**0.82**	0.679	0.767
per3	0.717	0.644	0.773	0.845	**0.887**	0.692	0.698
per4	0.553	0.555	0.648	0.699	**0.803**	0.691	0.625
peu1	0.524	0.695	**0.86**	0.613	0.695	0.516	0.788
peu2	0.596	0.666	**0.926**	0.826	0.813	0.675	0.651
peu3	0.678	0.739	**0.898**	0.82	0.778	0.625	0.73
pu1	0.763	0.705	0.664	**0.898**	0.864	0.866	0.673
pu2	0.69	0.597	0.7	**0.893**	0.73	0.652	0.591
pu3	0.647	0.647	0.89	**0.888**	0.851	0.665	0.775
res1	0.675	0.612	0.575	0.647	0.731	**0.862**	0.604
res2	0.719	0.635	0.58	0.805	0.808	**0.896**	0.725
res3	0.804	0.753	0.666	0.756	0.785	**0.941**	0.767
twc1	0.579	0.587	0.79	0.655	0.718	0.572	**0.827**
twc2	0.65	0.724	0.823	0.66	0.759	0.604	**0.909**
twc3	0.663	0.675	0.485	0.558	0.636	0.691	**0.777**
twc4	0.786	0.786	0.561	0.683	0.682	0.795	**0.838**

relationship among latent variables as indicated by Table 5. Before presenting the hypotheses result, the Q square and R square should be interpreted firstly. Q square shows the predictive relevance of the model. In this study, the value of Q square is ranging from 0.460 to 0.590 and they fall into large predictive relevance categories (Henseler et al., 2009). It means that the structural model is very much relevance. In addition, R square is predictive power of structural model. Maximising of R square of endogenous variables is objective of the SEM-PLS (Chin 1998). R square of intention to join e-learning and perceived ease of use endogenous constructs is 0.633 and 0.663 respectively, and they are classified into moderate predictive power of structural model (Hair et al., 2014). R square of other endogenous construct (perceived usefulness) is 0.854 and it fall into substantial predictive power (J. Hair et al. 2014).

Table 5 presents hypotheses testing result.. P-value and path coefficient is used to see whether the hypothesis is supported or not supported. The significant level (1%, 5%, or 10%) or two tail of t-statistic (2.58, 1.96 or 1.645 respectively) (J. Hair et al. 2014). Relationship; positive or negative relationship is known through path coefficient. The result indicates that five hypotheses are supported. First, the personalization has significantly effect on PEU (β=0.811, p-value=0.000) as well and it can be concluded that H1 is supported. Second, the association between personalization and perceived usefulness is positively significant (β=0.813, *p*-value=0.000) and H2, therefore, is supported. Third, the effect of controllability on PU (β=0.180, *p*-value=0.036) is positively significant (H4 supported). Fourth, two-way communication

Table 5: Assessment of Structural Model

Endogenous construct	Q2	Dec.	R2	Dec.
intention to participate in e-learning	0.46	large	0.633	moderate
perceived ease of use	0.468	large	0.663	moderate
perceived usefulness	0.59	large	0.854	substantial
relationship	path coef	t stat	p value	concl
controllability − > perceived ease of use	-0.031	0.184	0.854	not supported
controllability − > perceived usefulness	0.18	2.107	0.036**	supported
perceived ease of use_ − > intention to participate in e-learning	0.577	2.332	0.020**	supported
perceived usefulness − > intention to participate in e-learning	0.245	0.836	0.404	not supported
personalization − > perceived ease of use	0.811	4.422	0.000***	supported
personalization − > perceived usefulness	0.813	3.58	0.000***	supported
responsiveness − > perceived ease of use	-0.295	1.322	0.187	not supported
responsiveness − > perceived usefulness	0.056	0.264	0.792	not supported
two-way communication − > perceived ease of use	0.385	2.683	0.008***	supported
two-way communication − > perceived usefulness	-0.103	0.665	0.507	not supported

Note: ***, ** and * (significant level at 1%, 5% and 10% respectively)

and perceived ease of use is positively significant (β=0.385, p-value=0.008) and H7 is supported. Finally, PEU and intention to participate in e-learning have positive related (β=0.577, *p*-value=0.020) and the ninth hypothesis is supported. Structural model is indicated in the following Figure 2.
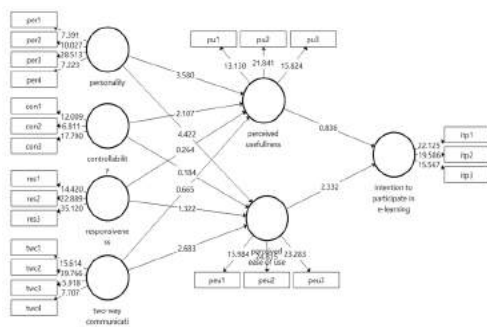
Figure 2: Structural Model

The positively significant effect of personalization on PEU and PU is consistent with finding of (Y. M. Cheng 2014). PEU and PE are achieved if the content of learning-system content being conveyed to the student is customised with the students' tastes. Such system would provide students with strong guidance mechanisms (Papanikolaou et al., 2002), such as adaptive navigations support, good material presentation, and curriculum sequencing. Therefore, the students feel the system useful and easy to use (Baylari and Montazer, 2009). (Y. M. Cheng 2014) also supports that controllability has positive effect on PU. The e-learning system has been perceived by student as useful due to the system is manageable, suitable and interesting content, and facilitating the stream of communication (Pituch and kuei Lee, 2006) because the student is able to do so. Therefore, the e-learning system of Bung Hatta University is perceived as useful (Pituch and Lee 2006; Y. M. Cheng 2014). Further, the significant association between two-way communication and perceived ease of use is also in line with (Y. M. Cheng 2014). Bung

Hatta university's e-learning has facilitated reciprocal communication between lecturers and students and this type of communication has been happening in the system. Some students are derived from Mentawai. Observations qualitatively show that there is no any complaint with the system. They follow and enjoy the system which makes them easier to understand lectures. Even though they are stereotyped as students from underdeveloped region, they can follow the higher education system. They have got used to "playing" with internet in their home region before they are sent to higher education. Therefore, the students feel that it is easy to use the e-learning system easy to use (Pituch and Lee 2006). Finally, the significant effect of perceived ease of use on intention to participate in e-learning is supported by (Abdullah and Ward 2016; Al-gahtani 2014; Y. M. Cheng 2014; Ching-ter, Su, and Hajiyev 2017). Students' intention to participate the e-learning class will increase if the system is easy to use.

4 CONCLUSION AND RECOMMENDATION

The industry revolution has changed the way things done, including teaching (e-learning). The important of learning has been raised by many experts. The intention to participate in e-learning very much depends on lecturers, students and support by prior-to-higher education environment of internet-development. There are few perspectives why an intention to use or participate in e-learning are varying from one lecture or student to another, such as technology acceptance model. In addition, technology acceptance model variables is influenced by external variables, such as personalization. However, there is lack of studies in Indonesia's learning environment investigating the effect of external factors on TAM's variables (perceived ease of use and perceived usefulness) and their impact on student's intention to participate in e-learning. we find that personalization has a positive relationship with perceived ease of use and perceived usefulness. In addition, we also documented the significant effect of controllability and perceived usefulness. Further, two-way communication also has a significant association with perceived ease of use. Finally, the perceived of ease of use positively determine an intention of student to participate in e-learning. This result has practical and theoretical implications.

Theoretically, this study presents the overwhelming subscription toward the existing state of the art in e-learning literature, especially students' intention to participate in e-learning. This paper provides with high point of the existing effect of personalization, controllability and two-way communication on TAM's variables. in addition, this paper also spotlights the relationship between perceived ease of use and students' intention to participate in e-learning. In addition, the implication of the positively significant relationship between controllability and perceived usefulness is that to increase the perceived usefulness of e-learning among students, the university management can improve the manageability, suitability, interested e-learning system, and the system provide the stream communication. Third, the positive effect of two-way communication and perceived ease of use of e-learning system implies that to improve perceived ease of use of the e-learning system by designing the system with reciprocal communication. Finally, University management can escalate the students' intention to participate in e-learning by improve the perceives ease of use: taking care of the personalized and two-way communication equipped e-learning system.

A number of caveats need to be noted regarding the present study. First, this study uses a limited sample size and it might not be gaining the rigorous result. Second, this study sees the students' intention to participate in e-learning from external factors of TAM's variables. Finally, this study did not test the mediating role of TAM's variables between external factors and the students' intention to participate in e-learning. Therefore, it is recommended that further research be undertaken in the following areas. First, future study can increase the number of students involving Mentawaian students in this study. Second, the students' intention to participate in e-learning also can be investigated using other perspective or theory, such as social cognitive theory. Finally, other future study also can investigate the role of perceived ease of use and perceived usefulness as mediator between external factors and TAM's variables.

REFERENCES

Abdullah, F. and Ward, R. (2016). Developing a General Extended Technology Acceptance Model for E-Learning (GETAMEL) by analysing commonly used external factors. *Computers in Human Behavior*, 56:238–256.

Abdullah, F., Ward, R., and Ahmed, E. (2016). Investigating the influence of the most commonly used external variables of TAM on students' Perceived Ease of Use (PEOU) and Perceived Usefulness (PU)

of e-portfolios. *Computers in Human Behavior*, 63:75–90.

Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2):179–211.

Al-Gahtani, S. S. (2016). Empirical investigation of e-learning acceptance and assimilation: A structural equation model. *Applied Computing and Informatics*, 12(1):27–50.

Alhabeeb, A. and Rowley, J. (2018). E-learning critical success factors: Comparing perspectives from academic staff and students. *Computers and Education*, 127(August):1–12.

Ali, M., Ali Raza, S., Qazi, W., and Puah, C.-H. (2018). Assessing the e-learning system in higher education institutes: Evidence from structural equation modelling. *Interactive Technology and Smart Education*.

Alsabawy, A. Y., Cater-Steel, A., and Soar, J. (2016). Determinants of perceived usefulness of e-learning systems. *Computers in Human Behavior*, 64:843–858.

Aparicio, M., Bacao, F., and Oliveira, T. (2016). Cultural impacts on e-learning systems' success. *Internet and Higher Education*, 31:58–70.

Bagozzi, R. P. and Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the academy of marketing science*, 16(1):74–94.

Baylari, A. and Montazer, G. A. (2009). Design a personalized e-learning system based on item response theory and artificial neural network approach. *Expert Systems with Applications*, 36(4):8013–8021.

Bhattacherjee, A. (2001). An empirical analysis of the antecedents of electronic commerce service continuance. *Decision support systems*, 32(2):201–214.

Bhuasiri, W., Xaymoungkhoun, O., Zo, H., Rho, J. J., and Ciganek, A. P. (2012). Critical success factors for e-learning in developing countries: A comparative analysis between ICT experts and faculty. *Computers and Education*, 58(2):843–855.

Cheng, Y. M. (2011). Antecedents and consequences of e-learning acceptance. *Information Systems Journal*, 21(3):269–299.

Cheng, Y. M. (2014). Roles of interactivity and usage experience in e-learning acceptance: A longitudinal study. *International Journal of Web Information Systems*, 10(1):2–23.

Cheung, R. and Vogel, D. (2013). Computers & Education Predicting user acceptance of collaborative technologies : An extension of the technology acceptance model for e-learning. *Computers & Education*, 63:160–175.

Chin, W. W. et al. (1998). The partial least squares approach to structural equation modeling. *Modern methods for business research*, 295(2):295–336.

Ching-Ter, C., Hajiyev, J., and Su, C. R. (2017). Examining the students' behavioral intention to use e-learning in Azerbaijan? The General Extended Technology Acceptance Model for E-learning approach. *Computers and Education*, 111:128–143.

Cidral, W. A., Oliveira, T., Di Felice, M., and Aparicio, M. (2018). E-learning success determinants: Brazilian empirical study. *Computers and Education*, 122:273–290.

Clay, M. N., Rowland, S., and Packard, A. (2008). Improving undergraduate online retention through gated advisement and redundant communication. *Journal of College Student Retention: Research, Theory and Practice*, 10(1):93–102.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, pages 319–340.

Fishbein, M. and Ajzen, I. (1977). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.

Fleming, J., Becker, K., and Newton, C. (2017). Factors for successful e-learning: does age matter? *Education and Training*, 59(1):76–89.

Fornell, C. and Larcker, D. (1981). Structural equation models with unobservable variables and measurement error Algebra and statistics. Journal of marketing research. *Advances Methods of Marketing Research*, 18(3):382–388.

Garrison, D. R. (2011). *E-learning in the 21st century: A framework for research and practice*. Routledge.

Goodhue, D. L. and Thompson, R. L. (1995). Task-technology fit and individual performance. *MIS quarterly*, pages 213–236.

Hair, J. F., Ringle, C. M., and Sarstedt, M. (19). 2011. *PLS-SEM: Indeed a Silver Bullet. Journal of Marketing Theory and Practice 19*, 2:2011.

Hair, J. F., Sarstedt, M., Hopkins, L., and Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, 26(2):106–121.

Hair Jr, J. F., Hult, G. T. M., Ringle, C., and Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage publications.

Henseler, J., Ringle, C. M., and Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. *Advances in International Marketing*, 20(2009):277–319.

Hubalovsky, S., Hubalovska, M., and Musilek, M. (2019). Assessment of the influence of adaptive E-learning on learning effectiveness of primary school pupils. *Computers in Human Behavior*, 92:691–705.

Hulland, J. (1999). Use of partial least squares (pls) in strategic management research: A review of four recent studies. *Strategic management journal*, 20(2):195–204.

Khairuddin, S. H., Ilona, D., and Zaitul (2018). *Antecedents of Intention to Use E-Learning*. In MATEC Web of Conferences.

Khasawneh, M. (2015). Factors Influence e-Learning Utilization in Jordanian Universities - Academic Staff Perspectives. *Procedia - Social and Behavioral Sciences*, 210:170–180.

Kimiloglu, H., Ozturan, M., and Kutlu, B. (2017). Perceptions about and attitude toward the usage of e-learning in corporate training. *Computers in Human Behavior*, 72:339–349.

Lee, Y.-H., Hsieh, Y.-C., and Hsu, C.-N. (2011). Adding innovation diffusion theory to the technology acceptance model: Supporting employees' intentions to use e-learning systems. *Journal of Educational Technology & Society*, 14(4):124–137.

Liu, Y. (2003). Developing a scale to measure the interactivity of websites. *Journal of Advertising Research*, 43(2):207–216.

Ngai, E. W., Poon, J. K., and Chan, Y. H. (2007). Empirical examination of the adoption of WebCT using TAM. *Computers and Education*, 48(2):250–267.

Papanikolaou, K. A., Grigoriadou, M., Magoulas, G. D., and Kornilakis, H. (2002). Towards new forms of knowledge communication: the adaptive dimension of a web-based learning environment. *Computers & Education*, 39(4):333–360.

Pituch, K. A. and kuei Lee, Y. (2006). The influence of system characteristics on e-learning use. *Computers and Education*, 47(2):222–244.

Roca, J. C., Chiu, C. M., and Martínez, F. J. (2006). Understanding e-learning continuance intention: An extension of the Technology Acceptance Model. *International Journal of Human Computer Studies*, 64(8):683–696.

Rogers, E. M. (1962). *Diffusion of Innovations*. New York, NY: The Free Press.

Rui-Hsin, K. and Lin, C.-T. (2018). The usage intention of e-learning for police education and training. *Policing: An International Journal*, 41(1):98–112.

Sánchez, R. A., Hueros, A. D., and Ordaz, M. G. (2013). E-learning and the University of Huelva: A study of WebCT and the technological acceptance model. *Campus-Wide Information Systems*, 30(2):135–160.

Song, J. H. and Zinkhan, G. M. (2008). Determinants of perceived web site interactivity. *Journal of marketing*, 72(2):99–113.

Timothy, T. (2011). Modeling the determinants of pre-service teachers ́perceived usefulness of e-learning. *Campus-Wide Information Systems*.

Venkatesh, V. and Davis, F. D. (2000). Theoretical extension of the technology acceptance model : Four longitudinal field studies. *Management Science*, 46(2):186–204.

Wu, G. and Guohua, W. (2006). Conceptualizing and Measuring the Perceived Interactivity of Websites. *Journal of Current Issues & Research in Advertising ISSN*, 28(1):87—-104.

Zhang, Y., Fang, Y., Wei, K. K., and Wang, Z. (2012). Promoting the intention of students to continue their participation in e-learning systems: The role of the communication environment. *Information Technology & People*, 25(4):356–375.

Hoax as a Reflection on the Low Digital Literacy in Indonesia

Muhammad Edy Susilo, Subhan Afifi and Senja Yustitia

Department of Communication Science, Universitas Pembangunan Nasional "Veteran" Yogyakarta, Indonesia
edysusilo@upnyk.ac.id, subhanafifi@gmail.com, senja.yustitia@upnyk.ac.id

Keywords: Digital Literacy, Hoax, Social Media, Civil Society.

Abstract: Social media users in Indonesia are increasing rapidly. This condition will have a bad impact if they have a low level of digital literacy. Digital literacy in this study is taken from Livingstone concept, that is how audiences have an access to the information, how they analyze and evaluate the information, and also how they have a skill to produce the message. The research question is, how is the condition of digital literacy in Indonesia. The purpose of the research is to find out the policies and roles of the Indonesian government in realizing digital literacy. This research was conducted using qualitative research methods. Data collected by in-depth interview technique. The informants in this study came from the government of Indonesia, especially fromThe Ministry of Communication and Information and The Public Relations of Indonesian National Police, social media specialists, political influencers, and social media researchers. The study was conducted ahead of the 2019 Indonesia General Elections, from April 2018 to March 2019. Data is processed by classifying or categorizing it based on several themes that are in accordance with the focus of the research. The results showed that social media users in Indonesia have inadequate digital literacy capabilities and therefore they are easily targeted by hoaxes, including political hoaxes. A few months before the 2019 elections, political hoaxes spread rapidly. The hoax category indicates that social media users are in the opposite position between the pros and cons of the government. The results showed that compared to the government, civil society had more efforts to realize digital literacy. Meanwhile, the government tends to use a curative approach, by blocking hoax sites or hoax account. The government also processes many hoaxes producers and spreaders in to court and sent them in to jail.

1 INTRODUCTION

Aufderheide provides an explanation of the five characteristics of the media: a) media reality is the result of construction, b) media has commercial implication, c) media has ideological and political implication, d) the form and content of each media have unique aesthetic, code and convention, e) recipient negotiates the meaning of the media (1992).

By looking at the characteristic of the media above, the importance of public education is a must. Educated audience will be able to digest media messages more carefully and can follow up messages proportionately. One important study in educating audiences is media literacy.

Potter defines media literacy as "set of perspective that we actively use to expose ourselves to the media to interpret the meaning of the message we encounter. We build our perspectives from knowledges structures. To build our knowledges structures, we need tools and raw material. These tools are our skills. The raw material is information

from the the media and from the real world. Active use means that we are aware of messages and consciously interacting with them" (Potter, 2005).

Another definition of media literacy is "At its most basic, media literacy is the active inquiry and critical thinking about the messages we receive and create," (Hobbs and Jensen, 2009), and most propositions emphasize this connection to critical thinking. The U.S. The National Association for Media Literacy Education (NAMLE) defines media literacy as "ability to access, analyze, evaluate, create, and act using all forms of communication." What is notable about these definitions, and what we will see often forms the basis of media literacy curricula, is a focus on the interpretive responsibilities of the individual (Bulger and Davidson, 2018). Livingstone provides a definition of media literacy that has similarity with the definition above, namely "the ability to access, analyze, evaluate and create messages across a variety of contexts" (Livingstone, 2019).

The last three definitions appear to be broader

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than Potter's definition because they have included the "create" element carried out by the audience or the recipient of the message. This shows that media literacy is a concept that continues to grow along with the development of communication technology. The "create" element done by the public is a consequence of the development of the internet with various platforms in it. Manuel Castell calls it as the Creative Audience, which is "the source of the remix culture that characterizes the world of mass self-communication" (2009).

However the presence of the internet has proven itself that this technology has characteristic with conventional mass media. Compared with previous media, the internet converges the combination of "3Cs", namely computing (digital media and information technologies), communication (networks, artefacts and practices) and content (media and information) (Barr, 2000; Flew, 2000). Dijk stated structurally, media convergence means integration of three aspects, namely telecommunication, data communication and mass communication in one medium (Dijk, 2006).

One of the distinguishing internet media with previous media is the nature of interactivity. The internet is a medium that allows the interaction between the sender and the recipient of the message. Information from the internet can be viral distributed so that it can quickly reach the world. The production of message through the internet also does not require expensive cost (Beers, 2006).

Based on Hootsuite Wearesocial research released in January 2019 social media users in Indonesia reach 150 million or 56% of the total population. The amount is up 20% from the previous survey. While mobile social media users (gadgets) reach 130 million or around 48% of the population (Databooks, 2019).

The data shows that the most widely used internet platform in Indonesia is social media. Boyd and Ellison defines social media networks as "web-based services" which allow user to 1) build public or semi-public profile in a system, 2) connect with other users where they can share, 3) see and enter in other user account that is in the system (Boyd and Ellison, 2007). Social media has a positive function on many areas. According to Sahar Shekaliu (Shekaliu et al., 2018) social media has a positive benefits on volunteerism. Based on their research, volunterism needs a unique platform to reach out to a massive audience. On the other hand, owing to its popularity to human support, social media should also give back to society by fostering community engagement, civic participation and highlighting the setbacks of marginalized and minority groups.

Currently Indonesia is listed as a large social media user. According to research conducted by We Are Social, a British media company in collaboration with Hootsuite, the average of Indonesian spends three hours 23 minutes a day in accessing social media. From a report entitled "Essential Insights Into the Internet, Social Media, Mobile, and E-Commerce Use Around the World" which was published on January 30, 2018, of Indonesia's total population of 265.4 million, social media active users reached 130 million with penetration 49% (Pertiwi, 2018). Consecutively, the most widely used social media in Indonesia are YouTube (43%), Facebook (41%), WhatsApp (40%), Instagram (38), Line (33), BBM (28) and Twitter (27%) (Databoks, 2018).

The different characteristic between social media and conventional mass media, the issue of media literacy is becoming increasingly relevant. The term used also differs into internet literacy (Livingstone, 2004). Martin uses the term digital literacy with the explanation that the awareness, attitude and ability of individuals to appropriately use digital tools and facilities to identify, access, manage, integrate, evaluate, analyse and synthesize digital resources, construct new knowledge, create media expressions, and communicate with others, in the context of specific life situations, in order to enable constructive social action; and to reflect upon this process (Martin, 2006).

Hoax is one of the contents of social media that has a negative impact. Moreover, hoaxes that spread on social media can turn into real world conflicts. Based on news in KBR.id in Pontianak, West Kalimantan, there is a hoax about kidnapping children resulted in the death of a 53 year old man. He is suspected of being a kidnapper killed by residents. Provocative information on social media also causes conflicts between community groups in Samarinda. Six temples in Tanjung Balai, North Sumatra, were attacked and burned by several hundred residents provoked by a hoax. Without serious efforts from the government, the bad impact of the hoax will continue; the worst impact is destroying the nation's integration.

Digital literacy is closely related to what is produced and shared by social media users. This is a very crucial problem and for that we need to put it in context. This study focuses on activities on social media ahead of election in Indonesia. Thus, political messages on social media are subject to study from this research. This is in line with the finding of Astrini (2017), which states that sensitive issue to social, political, ethnic, religious, racial, and inter-group issue, are used by the hoax spreaders to influence public opinion, as many as 91.8% of

respondents claimed most often receive hoax content about socio-politic, such as regional head election and government. Not much different from socio-politic, the issue of ethnicity, religion, race and inter-group relations (or SARA in Indonesia terminology) was in second place with 88.6%.

Based on a survey conducted by the Indonesian Telematic Society (Mastel) in 2017, the result showed that social media is the most often channel used to spread hoax news, with a percentage of 92.40%. In the second position, the spread of many hoax news was spread through chat applications, such as whatsapp, line and BBM with 62.80%. In the third position with a percentage of 34.90% is a website. Most of commonly accepted forms of hoax are written, with a percentage of 62.10%. it is continued in the second and third position are pictures and videos, each with a percentage of 37.50% and 0.40% (Mastel, 2017). These conditions underlie the existence of this research with two big questions that will be answered are: How is the condition of digital literacy in Indonesia? How are the policy and role of the Indonesia government in realizing digital literacy?

2 METHOD

The study was conducted using a descriptive qualitative approach. Data is obtained through in-depth interview and relevant reference investigation. Research data is carried out within a period of one year, from April 2018 to March 2019. The consideration of the selection of this period is because it is a "political year" in which in 2019 an Indonesian General Election will be held. In the lead-up to the election, activity on social media in search of political support increased. The same pattern has occurred in the 2014 General Election (Susilo, 2015).

The research informants consisted of political influencer, social media researcher, social media analyst and the Government of the Republic of Indonesia, especially the Ministry of Communication and Information of the Republic of Indonesia and the Public Relations of the Indonesian National Police. The criteria for selected influencer are those who have at least 100,000 followers and/or friends on social media. Social media researcher and social media analyst selected to be an informants because they are neutral person and formally has a research about social media.

In-depth interviews conducted with all informants based on interview guides that had been made. To achieve a good level of validity and to obtain

diversity of information, interviews were conducted several times for each informant. This study uses triangulation of sources, so that the results of the interview are complemented with observations and other relevant documents. The data analysis process begins by examining all data obtained from various sources, that is interviews, observations written in the field notes, documents and other sources. The next step is data reduction, which is checking and separating important data from irrelevant data. Afterwards, the researcher makes a categorization that suitable with the focus of the study. The final step is to interpret and display data, so that research can be understood easily.

3 RESULT AND DISCUSSION

3.1 Hoax as a Reflection on the Low of Digital Literacy

In this article, the concept of digital literacy uses the Livingstone model which is "the ability to access, analyze, evaluate and create messages in various contexts". First, access lies in dynamic and social process, not just one-time action. After initial access is established, literacy development directs users to significantly and continuously change access condition (updating, enhancing and expanding hardware and software application). Second, Analysis, the ability to understand message that comes to take advantage of online opportunity. Third, evaluation relates to the assessment of the good from the bad, credible or not. Fourth, it is content creation. The internet is a medium that offers unimaginable opportunity for ordinary people to create online content. If made in a diagram, it can be described as follows figure 1 :

By describing through the pyramid, it can be seen that the digital literacy level moves from the most basic level to the highest level. This level also has weighting property, where the ability of digital literacy at a high level is confirmed to have passed the level below it.

The lowest level illustrates how user has accessed to the media. In Livingstone's words, "Access rests on a dynamic and social process, not a one-off act of provision. Once initial access is established, developing literacy leads users to alter significantly and continually the conditions of access (updating, upgrading and extending hardware and software applications). Problematically, given socio-demographic inequalities in material, social and
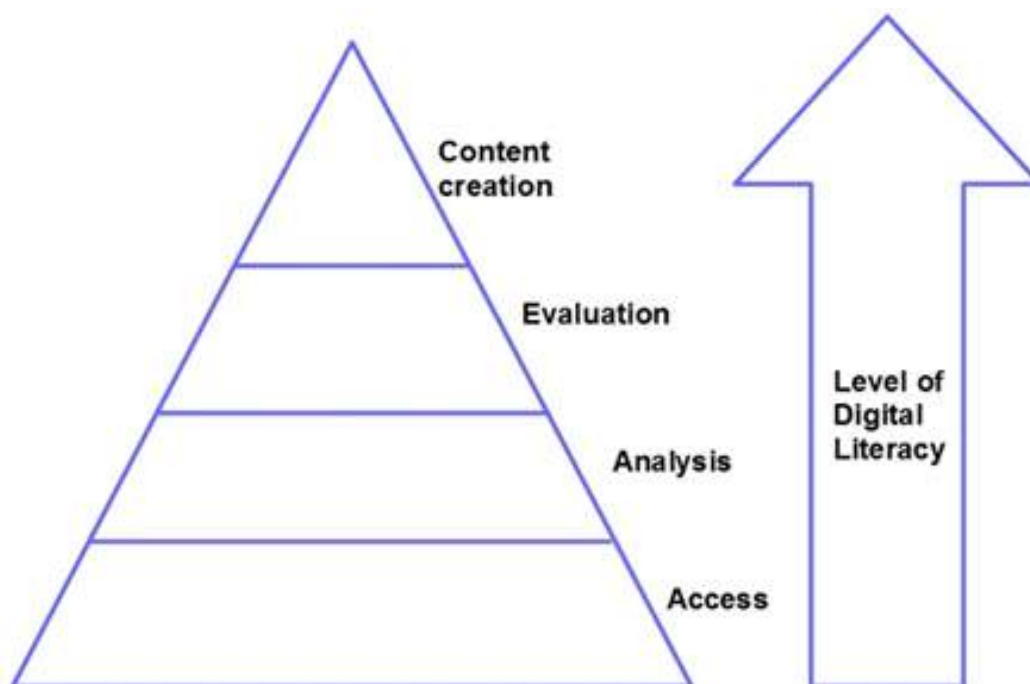
Figure 1: Digital Literacy Model with modification from Livingstone Model

symbolic resources, inequalities in access to online knowledge, communication and participation will continue" (2004)

Engagement of user against various media shows the range of analytical competency. On the internet, the analytical competency needed is more complex than print media and audiovisual media. High competence will enable them to take advantage of existing online opportunities.

At the third level, evaluation has a difficult question to determine and legitimize the foundation of critical literacy: aesthetic, politic and/or economic. The scope and purpose of the evaluation is also debated: is media literacy intended to promote a democratic, diverse, anti-elitist approach to online representation or to underlie more traditional, hierarchical discrimination regarding good and bad, authoritative or unauthoritative? Evaluation almost always involves judgment. What is considered good and bad will always be a crucial issue. Various interests such as politic, economic and ideology will be the locus in which assessment will be given.

All social media provide channels to deliver evaluations by giving a "like" response or various emoticons that reflect other judgments. Giving "like" to a message means it will make the message important. Not only that, "like" will place message on the top timeline and potentially make the message viral.

Not all definitions of media literacy include content creation as one ability. However, this is important for two reasons, first, people achieve a deeper understanding of convention and the benefit of professionally produced material if they have direct experience of content production. Second, the internet offers unimaginable advantage to create content, even for ordinary people. Leaving aside content creation aspect from the definition of media literacy will greatly reduce the potential of the internet for the public.

On social media, there is one other activity that is between level evaluation and content creation, which is "share" the message. "Share" message is done after the user assesses a message. "share" is not always an agreement with shared message, because sometimes "share" is done precisely to show disagreement with the message. But in general, "share" in the form of approval is much greater than the opposite. 'Share' message means the user is not doing content creation, but forwarding other people's message. However, "share" a message will expand the range of a message. The number of "shares" is sometimes used as a basis for evaluating the success of a message. The habit of sharing a message cannot be underestimated because it can make an enlarged message like a snowball that slides from the top of a hill. A message shared by a social media account has the opportunity to be read or seen by all followers or all friends of the account

owner.

3.2 Indonesian Political Conditions in Relations to Social Media Development

The election is a critical stage that will determine the fate of the nation during a certain period of time. For Indonesia, the period is 5 years. In election, all political forces mobilize their energy to gain broad support from the public. All actors see the election as an important milestone that must be fought for as much as possible.

Based on data from the Ministry of Information and Communication of the Republic of Indonesia, of all internet users, as many as 95% use the internet to access social network. The most widely accessed social media sites are Facebook and Twitter (http://kominfo.go.id/index.php/content/detail).

On the other hand, the rapid development of internet usage and especially social media in Indonesia coincides with several interesting phenomena in the political field. The election of President Joko Widodo who is familiarly called Jokowi cannot be separated from social media activity (both positive and negative) in 2014. Jokowi, who at that time served as governor of Jakarta and ran for President of Indonesia, became a very popular figure on social media.

Jokowi's leadership style is straightforward, his image is "clean" (from act of corruption) and his habit of going down to society makes some people "fall in love". Jokowi was also dubbed "media darling" because whatever Jokowi did and said was always reported in a positive tone by the media.

The interesting thing here is that both Jokowi and his party do not have their own mass media, print or television media, like their political rival. However, after the election result was announced, Jokowi managed to get the most votes, defeating political figures who had a media network. But behind that, it does not mean that there is no negative news that has plagued Jokowi. The black campaign also targeted Jokowi and his rival Prabowo Subianto. In addition, hoax or fake news is also a phenomenon that emerged at that time. Until this research was conducted, ahead of the 2019 election, the presence of hoax showed an increase. This shows that the contestation of Indonesian presidential election does not only occur in the real world but also in the realm of social media.

In general hoax is fake news. An act that is intended to trick people into believing something is real when it is not (Information, nd). Referring on a similar source, a word hoax has an etymology: the term hoax is believed to be from hocus or something spoken quickly and there is also hokum, which is a blend of hocus-pocus and "bunkum" or "bunk".

Although hoax has been around for a long time, but through the internet hoax is like finding fertile land. This is also due to the nature of the internet which has anonymity space. The account owner can only create an account for a while and then close the account (fake account).

3.3 Political Hoax in Indonesia

According to the informant of this study, Novi Kurnia, Researcher of Digital Literacy Researcher Network Indonesia (Japelidi), hoax is a fake news, information that does not contain accuracy, not because the author is not thorough, but because it is intentional (Kurnia and Astuti, 2017). The intentional aspect is important in talking about hoax production. She divides hoax actors as makers and spreaders.

"The maker intentionally makes hoax that is misleading according to what he wants, but for hoax spreaders, there can be other reasons why they spread hoax, such as low understanding of hoax, ignorance or following-up" Other informant, Fathul Wahid, social media researcher and academician, said that hoax is information, news or content that is not true. There is an element of lies in the informagtion. According to him there are habits that often occur in individual which makes the distribution of hoax more massive, namely the tendency of people to bias information and believe in information that supports his initial concept or preference. This is what he thinks can cause hoax to spread even more. There is no attempt to also consume different or conflicting information as part of the effort to cross check the information.

"Hoax distribution is increasingly prevalent when dealing with political problem because politics is closely related to conflict of interest. Secondly, hoax also thrives on religious issue. In political matter, hoax is more designed by political opponent. In broader term, these political opponents can be anyone, including those in power and opposition"

However, Fathul said that the hoax carried out by those who have power is far more dangerous because they have extraordinary resource. The magnitude is higher because it can mobilize mass and information to become more massive. From this explanation, it can be seen that hoax can be produced by anyone, but who is the producer can make this hoax have different meaning and destructive power. This is in line with Novi Kurnia's statement, that the individual level as

the producer of the message becomes very important.

The Ministry of Communication and Informatics (Kominfo) and the Indonesian National Police explained the high number of hoax news content distribution. Even in 2018, the number of hoax reached 800 thousand contents (Yuliani, 2017). With that much amount, the traffic of hoax distribution on Indonesian social media is definitely very dense.

Based on the research, there are many topics used as hoax, but what stands out is about the rise of the Indonesian Communist Party, the large number of foreign workers from China, harassment of Muslims and Ulama. For the Indonesian state, the communist party was the worst national trauma after the party's rebellion in 1948 and 1965. The previous government regime, it was always stressed how dangerous the communist ideology because communism was anti-God, anti-religious and justified any means to achieve its objective. This is also reflected in the propaganda delivered by the Indonesian government in every era that the PKI is a nightmare for the Indonesian state.

In the hoax circulating, President of Jokowi was always attached to the rise of the PKI. The circulating hoax tried to link President Jokowi's ancestor as communist. The supporting party, namely Partai Demokrasi Indonesia Perjuangan (PDI-P) with nationalism ideology was also linked to the Communist party.

The proximity of the Jokowi government with the Chinese government also made the hoax about the invasion of millions of Chinese illegal workers to Indonesia. Some hoax messages in the form of text, image or audiovisual seems so real, as if they are correct information.

The third issue that is used as hoax material is about how Muslim and Ulama in Indonesia are so marginalized in the era of Jokowi's leadership. This hoax found "the truth" when he saw some facts about the persecution of Ulama by unknown people and the number of Muslims who were arrested for being accused of being involved in the spread of hoax and hate speeche. At the same time, report of non-Muslim who spreads hate speech and hoax are not followed up by the police. Finally, Muslim in Indonesia feels that they are treated unfairly by the government even though in term of quantity the Muslim is the majority in Indonesia.

The expert staff of the Indonesian Minister of Communication and Information Henri Subiakto in his interview with researcher said that the figure of Jokowi and his supporting party namely Partai Demokrasi Indonesia Perjuangan (PDI-P) could not be separated. The number of hoax targeting the

president is actually difficult to separate from the existence of the party which is the bearer of Jokowi. That is why the issue circulating is also identical with the issue that attacked PDI-P. On one hand, the Ministry of Communication and Information has also made various efforts to overcome hoax, for example by conducting digital literacy activity and inviting various parties to sit together. Henri said that his party also invited religious institutions such as the MUI, NU and Muhammadiyah to jointly fight hoax.

He said that digital literacy program is the ministry's priority program with the development of human resource and digital engineering through internet screening. The three main activities that will be carried out are building negative anti-counterfeit skill such as hoax, cyberbullying, hate speech, pornography and piracy. Secondly, increasing skill to produce positive content. Third, the development of digital transformation skill includes coding, big data analysis, and others (Kominfo, 2018).

3.4 Digital Literacy and the Spread of Hoaxes

At this point, the spread of hoaxes is one of the low reflection of Indonesian digital literacy. Hoax is one of cybercrime whose impact is not only individual for the perpetrator, but social impact. Digital literacy is not merely how people can use the internet, but how they can do analysis, evaluation and message production. Anonymity on social media makes hoax message easy to circulate. Hoax manufacturer can make a hoax and after the message becomes viral, he will deactivate the old account and use a new account. Anomimity is one of the facilities provided by social media. In mediated context, anonymity is state of communicating where the identity of communicator is not readily apparent (Wood and Matthew, 2005). Communicating on social media creates a digital footprint and can be tracked who is the producer of a message, but anonymity can complicate tracking effort. In addition to anonymity, social media also provides facility for pseudonimity, namely the use of fake identity or disguising themselves as other people. The Indonesian Ministry of Communication and Information admitted that it was difficult to prevent the public from creating an anonymous account on social media because, the government must cooperate with social media service provider platform, mostly from abroad. Meanwhile, the social media platform still uses international rule, where anonymity is not prohibited (Meilina, 2018). Without adequate digital literacy capability, social media user in Indonesia is very easily tossed around

for various interest, including political and economic interest. Hoax producer can easily make misleading, provocative and emotional message. User who considers the hoax to be correct information will easily forward the message to friends or followers on social media. The low digital literacy is in line with the result of research on the level of world literacy released in 2016. The research on The World's Most Literate Nations was conducted by John W. Miller, president of Central Connecticut State University in New Britain which stated that Indonesia was ranked at 60th from 61 countries in the literacy level. This study not only discusses the ability to read from a nation, but also discusses "literate behavior and their supporting resources" (literacy behavior and its supporting sources), namely how society behaves and how people's access to sources of literacy plays an important role in this study (CCSU, 2016). One of the informants of this study, Fathul Wahid, who is a digital literacy activist, said that hoax distribution can be inhibited if everyone has information resilience. Information resilience is a person's ability to assess the information obtained and process it further. Processing here can mean storing or circulating both limited and wide. Information security of each individual is important because social media actor is individual. If each individual does not have the resilience of information, it will be easily trapped in the narrative of certain group that we do not know who and what their interest is. Fathul also said, the second thing that an individual must possess is sensitivity. This sensitivity is important because people tend not to think long, do not know what the implication is, so they underestimate that even hoax can be bad. This sensitivity, according to Fathul, is influenced by many things, including political affiliation, so it is not uncommon for this to make people do not have common sense in processing information. "Furthermore there is no specific criterion about the individual as to what is the resilience of information and sensitivity. Even the high level of formal education and employment is also not a guarantee that they are literate enough with hoax so that it is wise to process information". However, Fathul has a recommendation that an open minded attitude and awareness to educate others become one of the solutions that can be done if you want hoax to decrease in intensity. Novi Kurnia in her interview with reseacher, also highlighted the problem of producing this message. In today's digital era, lack of literacy is accompanied by the stutter of individual in seeing who they are, especially on social media. They are no longer just user but also message producer. This is what is less realized when

the implication is very different. In the user, the individual is at the passive level, while the individual producer becomes active and even interactive. This means that the problem at the individual level is the root of the problem of widespread hoax in society. In general there are two issues that arise in relation to digital literacy. That is the problem at the level of awareness of the message maker and the recipient of the message. The literacy approach to the producer of messages is like what the government did, namely regulation and law. Both of them up to now lead to pros and cons because they are considered not in harmony with freedom of opinion. At this level, digital literacy activist tries to make hoax occured is not higher. Difficulty that often occurs is, there are hoax spreaders who work by design but there are also those who become volunteer. They are driven by hatred and very easily provoked. A massive hoax can influence other people who might also influence their political choice. The massive hoax on certain local issue is then responded to by individual who has nothing to do with the locality. Seeing the massive hoax in Indonesia, especially on political issue, must also touch the family and school level. This is because the initial building of the nation's generation came from these two institutions. The reading movement in school is also an important part of digital literacy because digital literacy is always associated with information literacy. So the huge action of information literacy indirectly also suppresses the negative effect of social media activity. Hoax on social media also shows typical symptom, namely the polarization of opinion on the side of "us versus them", the pro-government side versus the opposition. Each side believes that their opinion, belief and political choice are the most correct. At the same time, they have an opinion that the party opposites with them is the wrong party. In this case, they will bring "data" to confirm that their opinion is the most correct. The thing that becomes a big problem is that "data" which is used as a basis for belief, in the end turns out to be a hoax. Speaking of polarization, researcher from "Drone Emprit Media Research", Ismail Fahmi said to the researcher that the government was instrumental in sharpening the polarization. This triggered an atmosphere of injustice felt by some parties. According to him, in the past year the party that contradict to Jokowi (and also the government) feel that law enforcement by the government is only used to take action against those who contradict them. Conversely, if government supporter spreads hoax, law enforcer does not take any action. Fahmi said that social media which is nothing but a medium of communication is only a

tool that has no feeling so that those who appear on social media are merely technical matter. This means that a more humanist approach needs to be done so that dislike of the government does not trigger widespread hoax. "Law enforcement that is fair on the one hand is indeed needed, but this dialogue bridge that can bring the two sides together must also be done. When Jokowi was appointed president, he was a parent for all groups, lovers and haters" Fahmi said that the portion of law enforcement should only be up to 20 percent, the rest is dialogue and friendship. Unfortunately, this has not been seen and felt, so some parties dislike Jokowi and the government do not get the solution. In social media, Jokowi can indeed see what the trend is like, including what conversation is being conveyed by the community. However the solution to that case must still be at the level of the real world. Field solution needs to be developed to be able to elaborate on problem that arises on social media. The impression of injustice in the hoax action was also conveyed by Fathul Wahid. According to him, the impression that law enforcement is only for the government's counter is strongly felt. This impression is very strong. Ideally, whoever he is, as long as disturbing peace, it should be dealt with and processed by law, not just for certain group. If this selective cutting practice continues, any government-formed task force will be of no use. On the other hand, The Ministry as part of the government which was very intensive in making effort to overcome hoax also tended to be authoritarian, for example by making arrest and blocking content. Nevertheless, the soft diplomacy style approach that has been carried out is also worthy of being supported by being part of digital literacy through cyber creation. According to him, the digital literacy movement must be initiated by many parties to make it more collaborative. It can be started from university, school, government and the media. A study of mapping digital literacy activity in 9 cities in Indonesia shows that actor to do the action is more dominated by university. The second finding shows that there are still more media literacy activities in the form of one-way socialization or lecture. Third, the target of digital literacy activity is mostly to target teenager or student. Fourth, partner in most digital literacy activity comes from school (Kurnia, Astuti, 2017). Other civil society effort, for example, was carried out by the turnbackhoax community, which was the result of a discussion of the Anti-Defamation and Hoax Forum (group on Facebook). This community actively recruits antihoax volunteers and reports hoax that can interfere with national unity. The public is given

access to report on hoax that are disturbing, both through email, SMS, and the Whatsapp application, and it will be followed up by this community. The ultimate goal is to eradicate hoax from Indonesia. At this point, the role of government in digital literacy has not shown an important role. The threat of hoax as a cyber crime that can threaten the nation's integration is actually addressed by curative effort, for example by forming a Law Enforcement Sub-Unit under the Criminal Investigation Unit. This Sub-Unit is tasked with overcoming hoax that is circulating and balancing them with correct information. Kominfo blocks sites that violate the rule but the government through the Coordinating Ministry for Politics and Security establishes a Sub-Unit to anticipate a related propaganda. More anticipatory, systematic and long-term effort have not been made by the government. Until this research was conducted, there was no discourse to include Digital Literacy in the primary and secondary education curriculum in school in Indonesia. Inculcating digital literacy in early time through school can be likened to planting strong roots so that student can be responsible for using social media. Meanwhile, eradicating hoax on social media in curative ways is like just cutting down branch of tree. The cut branch will be able to sprout again. The results of the study can be illustrated in the following figure 2 :

4 CONCLUSIONS

This study concludes that the level of public literacy in Indonesia, especially digital literacy is still very low, so the space to become user and producer of hoax is very easy. This is made easier by the presence of social media which provides features to show how the reader responds. For example the features "like, retweet, share, repost and like". In certain case, especially hoax, these features represent the user's emotional expression in information. The ease of the response mechanism will have a worse effect on the community having the ability and low evaluation of information. In the Indonesian context, the public response to hoax information targeting the government can then be easily classified into two main polarizations, namely contra and pro Jokowi or government side. This is further aggravated because the government is considered to have no tackling way and only prioritizes repressive curative handling such as blocking certain account, criminalizing people spreading hoax and others. Repressive effort based on digital literacy have not become an important part in tackling hoax. Even though digital literacy effort is
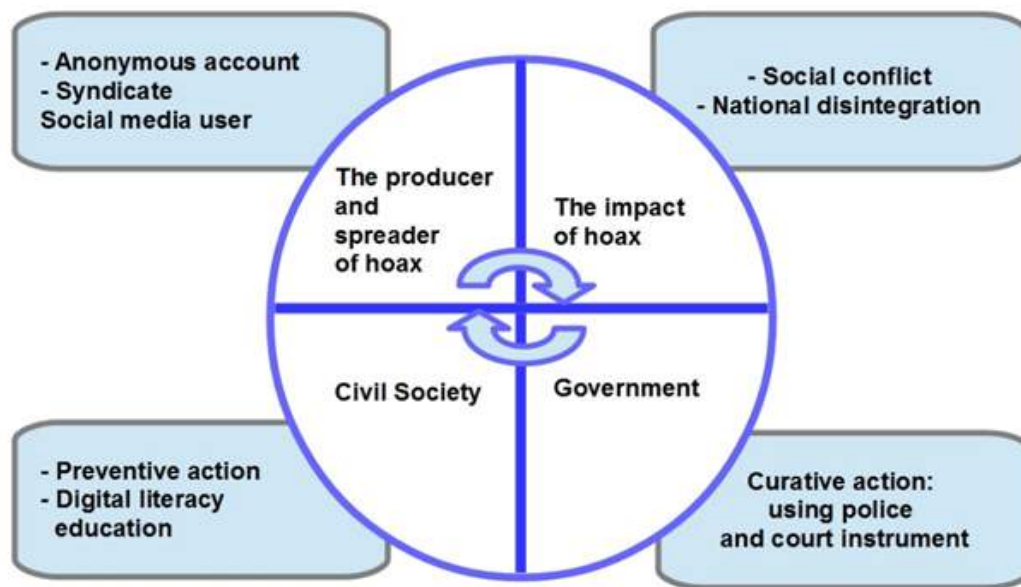
Figure 2: The Research Result

one of the most essential steps to create a generation that has resilience of information and high sensitivity. The Ministry of Communication and Informatics through its various programs has conducted digital literacy, however, law enforcement that is unfair to producer and hoax spreader is still felt by the community and this has exacerbated polarization and a more massive distribution of hoax.

The disunity in cyberspace is also followed by phenomena in the real world. Relation between individual is affected by their activity on social media. Polarization in cyberspace is followed by disunity at the real world level. Especially in term of seeing how Jokowi's position and governance are in the frame of state leadership. This is of course very dangerous because it can affect national integration.

Furthermore, this research can be developed in the future at the policy level, first, so that the government incorporates digital literacy education as a curriculum at the primary and secondary education level; secondly, for the government to make regulation for social media provider at the international level so that there is a common understanding on the prevention of social media as a medium for spreading hoax.

Based on Livingstone Model the digital literacy level moves from the most basic level to the highest level. This reseserch shows that the minimal level of hoax production is in the accessing information sources to the production on content (content creation). For the reason, one of research recommendation is to provide curriculum

and regulation so the awareness of information access leads to good social media behavior. While regulations and law enforcement can be used to regulate access and content production.

REFERENCES

Astrini, A. (2017). Hoax dan banalitas kejahatan. *Transformasi Jurnal*, 2(32):76–77.

Aufderheide, P. (1992). *Media Literacy. A Report of the National Leadership Conference on Media Literacy.* Aspen Institute, Washington DC.

Barr, T. (2000). *Newmedia[dot]Com*. Allen & Unwin, Sidney.

Beers, D. (2006). The public sphere and online, independent journalism. *Canadian Journal of Education/Revue canadienne de l'éducation*, pages 109–130.

Boyd, D. M. and Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of computer-mediated Communication*, 13(1):210–230.

Bulger, M. and Davidson, P. (Accessed 28 mar 2018). *datasociety[dot]net. [Online]*. Available at: datasociety.net/pubs/oh/DataAndSociety_Media_Literacy_2018.pdf.

Castells, M. (2009). *Communication Power*. Oxford: Oxford University Press.

CCSU (2016). *webcapp.ccsu.edu [online]*. Available at: webcapp.ccsu.edu/?news=1767&data [Accessed : 12 jun 2019].

Databooks (2019). *Katadata.co.id [Online]*. Available at: databoks.katadata.co.id/datapublish/2019/02/08/ berapa-pengguna-media-sosial-indonesia [Accessed 26 March 2019].

Dijk, J. A. G. M. V. (2006). *The Network Society : Social Aspects of New Media*. London: Sage.

Flew, T. (2000). *New Media : An Introduction*. Melbourne: Oxford University Press.

Hobbs, R. and Jensen, A. (2009). The past, present, and future of media literacy education. *Journal of media literacy education*, 1(1):1.

Information, E.-W. (n.d). *English-Word Information. [Online]*. Available at: wordinfo.info/unit/3408/s:hoax [Accessed 26 mar 2019].

Kominfo (2013a). *Kominfo [Online]*. Available at: kominfo.go.id/index.php/content/detail/3415/Kominfo +%3A+Pengguna+Internet+di+Indonesia+63+Juta +Orang/0/berita_satker [Accessed 26 mar 2019].

Kominfo (2013b). *Kominfo [Online]*. Available at: kominfo.go.id/content/detail/13943/siaran-pers-no-181 hmkominfo082018-tentang-literasi-digital-siapkan-sdm -unggul-dan-cerdas-di-era-revolusi-industri-40/0/siaran _pers [Accessed 26 mar 2019].

Kurnia, N. and Astuti, S. I. (2017). Peta gerakan literasi digital di indonesia: Studi tentang pelaku, ragam kegiatan, kelompok sasaran dan mitra yang dilakukan oleh japelidi. *INFORMASI*, 47(2):149–166.

Livingstone, S. (2019). What is media literacy. *Intermedia*, pages 18–20.

Martin, A. (2006). *Literacies for the digital age*.

Mastel (2017). *Mastel [Online]*. Available at: mastel.id/hasil-survey-wabah-hoax-nasional-2017/ [Accessed 17 jun 2019].

Potter, J. W. (2005). *Media Literacy (3th Ed)*. London: Sage Publications.

Shekaliu, S., Mustafa, S. E., Adnanˆ, H. M., and Guajardo, J. (2018). The use and effectiveness of facebook in small-scale volunteer organisation for refugee children's education in malaysia. *SEARCH*, 10(1):53–78.

Wood, A. F. and Matthew, S. J. (2005). *Online Communication Linking Technology, Identity and Culture (2nd Ed)*. Routledge, New Jersey.

Yuliani, A. (2017). *Kominfo [Online]*. Available at: kominfo.go.id/content/detail/12008/ada-800000-situs -penyebar-hoax-di-indonesia/0/sorotan_media [Accessed 1 june 2019].

Application of Islamic Education Management based on Nature and Technology

Bahril Hidayat[1], Zulkifli Rusby[2], Ary Antony Putra[1], Alucyana[1]

[1]*Early Childhood Islamic Education Study Program, Universitas Islam Riau, Pekanbaru, Indonesia*
[2]*Islamic Economy Study Program, Universitas Islam Riau, Pekanbaru, Indonesia*
{bahrilhidayat, zulkifli_rusby, aryantonyputr, alucyana}@fis.uir.ac.id

Keywords: Management, Islamic Education, Technology, Local Wisdom.

Abstract: This article provides ideas on the application of technology and nature in Islamic education through the concept of management of educational institutions with library study methods (literature review), which refers to various theoretical views to form new ideas as solutions to educational problems. Development of Islamic Early Childhood Education and Islamic Education services is facing various challenges in order to be able to adapt to the times and needs of the community. To achieve the goals of Islamic education, it is necessary to develop integrated management that uses natural potential and technology as resources managed by people who play a role in the world of education. Forms of management development that can be done include innovating Educational Game Tools, Learning Modules, developing agricultural resources, directed education laboratories, natural schools and entrepreneurship. The direction of management development helps Islamic education achieve targets that are in accordance with Islamic values and local wisdom of Indonesia and Malaysia, both through direct service and educational product transactions, software-based on computers, as well as applications on smartphones as teaching media and modern learning to produce independent students.

1 INTRODUCTION

The discussion of the family of science, especially education, comes from philosophy as the mater scientiarum or parent of science. All exact sciences and social humanities originate from philosophy, although a substantial philosophy in the Islamic perspective requires proportional study and discussion so that the scientific family is in accordance with Islamic teachings. In this case, Islamic Education is one of the humanities social science groups that has a focus on the study, discussion and development that originates from Islam with material objects that are related to the components of the education world, for example the purpose of education, educators, students, educational tools (curriculum, methods, and evaluation of education), and the educational environment. Therefore it can be said that Islamic education within the scope of Philosophy of Islamic Education should give attention and incorporate Islamic values (based on sources of Islamic law) into the components of education.

In this regard, according to Hidayat, B. (2017) in the Philosophy of Islamic Education, he states that the definition of Islamic Education is an attempt by cautious Muslim adults to consciously direct and guide the growth and development of the nature of students through Islamic teachings to maximum growth and development. The word at-tarbiyah is more appropriate to be applied in terms of education because in the term of at-tarbiyah, it includes all activities in the form of growing, developing, repairing, managing, leading, supervising and maintaining students. Thus, the term Islamic Education in Arabic, may use the term at-tarbiyah al-Islamiyah (Hidayat, 2017a; Fakhry, 2010; Fasih, 2016).

According to Zakiyah Darajat (Dakir and Sardimi, 2011; Goffar, 2016; ?), Islamic education is defined as an effort to foster and nurture students to understand the teachings of Islam as a whole. Then, students who undergo formal and non-formal education can live up to the goals that ultimately can practice and make Islam as a view of life.

To achieve comprehensive Islamic Education, the goal of Islamic Education and good management is needed. The Purpose of Islamic Education helps educators and students to be able to direct all potential to achieve these goals. Meanwhile,

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good management helps all elements of Islamic education in empowering existing potential, both the potential of Natural Resources, Local Wisdom, and technology-based education elements (Azhar, 2017; Rusby et al., 2016; Rusby, 2017a).

Islamic education in the world of children is known as a science family or study of Early Childhood Islamic Education. Early Childhood Islamic Education is an effort of disciplines to form prospective educators to know, understand, and apply the values of Islamic education to early childhood, both in formal education and non-formal education. The study, discussion and development of science in Early Childhood Islamic Education provides broad insight into early childhood from a variety of perspectives, ranging from the Philosophy of Islamic Education as the parent of science to the perspective of developing teacher professionalism, educating children in the family, developing children's talents and creativity , neuroscience in children's learning, development of educational tools for early childhood, as well as the basics of introducing prospective educators to nature and technology as learning instruments and developing potential for early childhood as the main object of education in early childhood education. Therefore, a comprehensive study and discussion is needed to develop management ideas in Islamic education, especially early childhood Islamic education by using nature and technology as a basis for contemporary education.

The study and development are expected to provide ideas as a way out for the challenges of Islamic education and early childhood Islamic education in order to successfully adapt to the times and meet the needs of contemporary society. The ideas should be carried out by Indonesia and Malaysia as neighboring countries in ASEAN that have similarities in culture and local wisdom. The similarity of local wisdom between Indonesia and Malaysia, for example, makes it easy to improve management and development of management in the world of Islamic education, especially Early Childhood Islamic education. By the existence of cooperation in various forms of theoretical and praxis studies, it will elevate local wisdom in the two countries as potential and resources that will be known to the world. The hope, these ideas and ideas will improve the quality of Islamic education and early childhood education based on Islam into the international arena.

2 THEORY REVIEW

2.1 The Objectives of Islamic Education

The Purpose of Islamic Education according to Hidayat, B. (Hidayat, 2017a) in the Philosophy of Islamic Education is to form a Muslim person who has a noble character (al-khuluq al-syarif), namely a noble person who is substantially and essential, not temporal and accidental glory and embodies good, perfect and happy person. Islamic education also aims to build the character of strong students facing various trials in life and painstaking, patient, and intelligent in solving life problems faced in everyday life.

In addition, Hidayat, B. (Hidayat, 2017a) continues that the goal of Islamic education is to achieve the overall balance of human personality growth (learners) which is done through mental training, mind (intellectual), human self that is rational with potential feelings and senses. Therefore, Islamic education should include the development of all aspects of the nature of students, spiritual, intellectual, imagination, physical, scientific and language aspects, both individually and collectively, and encourage all these aspects to develop towards goodness and perfection. The ultimate goal of Islamic education lies in the realization of perfect submission to God, both in person, community, and all human beings. In summary, the objectives of Islamic Education can be arranged into the following three main forms.

- The purpose of studying science is solely for science itself as a form of worship to Allah.
- The main purpose of Islamic education is the establishment of the Akhlaq al-karimah.
- The purpose of Islamic education is to deliver students to achieve happiness in the world and the hereafter.

Through these three objectives, it is expected that education programmed in educational institutions can deliver students to the closeness to God. Through Islamic teachings, it is then manifested into the basic foundations of the world of education which has other educational components, such as educators, students, educational tools (curriculum, methods, and evaluation of education), and the educational environment. After that, the goal of Islamic education must be managed cooperatively and collaboratively by fellow Muslim scientists who are in a country, as well as neighboring countries who share similar religions and beliefs, local wisdom, similarities in natural potential, and technological developments.

With the directed management-oriented development to achieve the goals of Islamic education, Muslim scientists are the catalyst for accelerating the development and achievement of moral formation, Muslim personality and Muslim mastery in the world of education on an international scale. Therefore, a full understanding is needed in implementing the development of Islamic education management, especially Early Childhood Islamic education which aims to fit the values and teachings of Islam that are intact (kaffah) so that educational products become superior and quality Muslims.

2.2 Management in Islamic Education

Zulkifli Rusby in a book entitled Manajemen Sumber Daya Manusia or Human Resource Management (Rusby, 2017b) explained that various existing resources must be managed properly. Based on the Quran surah al-Jatsiyah verse 13, Allah SWT confirms the basic Islamic command in managing various potentials and resources is as follows.
"And He has subjected to you everything in the heavens and everything on earth, (as a mercy) than Him. Verily in that there are truly signs (powers of God) for those who think" (Surah Al-Jatsiyah, 4:13).

Zulkifli Rusby added that the explanation for getting good management of science is needed to sustain empowerment and optimize the benefits of resources in our environment. Good management based on management's knowledge of human resources, other potential around humans, and various products of human thought, requires management so that the increase in these resources can be achieved by individuals and organizations. Adawiyah, S.R. (2017)(Adawiyah, 2017) also explains similar thoughts based on the Sura Al-Quran verses 14, which is as follows.
"And He is, Allah has subdued the sea (for you), so that you can eat from it fresh meat (fish), and you take out the sea of jewelry that you use; and you see the ark sailing at it, and that you may seek (profit) from His gift, and that you may be grateful."(Surah Al-Nahl, 16:14).

The above verse invites people to be able to utilize marine products, as well as various natural resources, to be managed and utilized optimally. The purpose of this utilization is to seek grace from Allah Almighty to be a media so we have that gratitude. Therefore, management of humans and natural resources around us shows Muslim indicators that are grateful to Allah Almighty. With good management and implementing Islamic orders managing various potentials and natural resources, it increases the potential of Muslim scientists who contribute to Islamic Education, especially the development of management of Early Childhood Islamic Education.

To carry out management development in Islamic Education and Early Childhood Islamic Education, one of the basic views that can be used in the practical (applied) dimension starts from the principles of the principal functions of management. The main functions of management, in general, include Planning, Organizing (Organizing and management), Staffing (Preparation and Job Placement), Leading (Leadership, supervision, and direction), and Controlling (Supervision). If the five main functions of management are carried out to utilize technology-based Human Resources and Natural Resources, the dynamics of the development of Islamic Education and Early Childhood will achieve the goal of maximum Islamic education.

2.3 Management Development based on Principal Function of Management

Management discussion deals with four components, namely, planning, organizing, actuating (implementation) and controlling (supervision). The four management components above are known as abbreviation POAC, it is explained by Hidayat, B (2005)(Hidayat, 2005) that the development which is in Applied Psychology of Industrial and Organizational Psychology to be the main function of management consisting of Planning, Organizing and Staffing (Work Arrangement and Placement), Leading (Leadership, supervision, and direction), and Controlling (Supervision). With the basic functions of management, Islamic education and Islamic education for Early Childhood can be developed according to contemporary needs and problems.

Planning is related to the process of making decisions to determine the activities of organizations, institutions, and each department (the parts contained therein), including tasks, work procedures, time, and people who are responsible for the work. Organizing is related to the process of determining activities in an effort to achieve goals, classify the activities of each work unit or department and delegation of tasks to a manager to lead, delegate authority, establish coordination of activities and horizontal and vertical communication. Staffing is related to filling in positions, and maintaining workers (employees) to remain in a predetermined position, including the order of positions of tasks that must be done, assessment and selection of prospective employees, and training (training) in the effort to develop HR. Leading (leadership, supervision, and

direction) is about the process of influencing and directing workers or employees to strive and be happy to achieve organizational goals (institutions). The Leading function is also related to the assessment and correction of the activities of members to ensure compliance with the implementation of the work with the plan and correction if an error occurs. This function is related to employee performance appraisal.

In relation to the main management functions above, the Qur'an also mandates to pay attention to the implementation of the principal functions of management. Among the verses of the Qur'an related to the main functions of management are as follows.

"O you who believe, fear Allah, and let every one pay attention to what he has done for tomorrow (hereafter); and fear Allah, surely Allah knows what you do." (QS. Al Hasyr, 59: 18).

"And those who take as allies other than Him – Allah is [yet] Guardian over them; and you, [O Muhammad], are not over them a manager." (QS. As-Syuura, 42: 6).

Imam Al Bukhari (Shahih Bukhari, the Book of Adhan, hadith 859) narrated from Ibn Abbas r.a., he said as follows.

"One night I stayed at my aunt's house, Maimunah. After a few nights passed, the Prophet got up to pray. He performed ablution very lightly (with little water) and then prayed. So, I woke up and performed ablution 'like ablution'. I approached him and stood to his left. He turned me to his right and continued his prayer according to what Allah wanted."

Based on the hadith above, an attempt was made to monitor the Prophet Muhammad towards Ibn Abbas who made a mistake for standing on the left side of the Prophet when becoming a makmum in prayer with Rasulullah saw. Rasulullah saw did not let Ibn Abbas do the mistake, but he corrected and supervised by transferring Ibn Abbas's position to the right side of the Prophet. This is an example of the supervisory function in the management of prayer services taught by the Prophet to his people.

Ali bin Thalib r.a. also once said, "The truth that is not well organized can be defeated by organized falsehood." Sayidina Ali emphasized the need for management of institutions with good management by human resources in educational institutions, as well as in collaboration with other institutions.

Organizing in Islamic education is a continuous process of determining the organizational structure, activities, interactions, coordination, structural design, authority, duties transparently, and clearly (transparency) in Islamic educational institutions, both individual and institutional. An organization

in the management of Islamic education runs smoothly and in accordance with its objectives if the institution is consistent with the main principles of management. If the main function of management is applied consistently and collaborates continuously, Islamic education institutions, especially Islamic education for Early Childhood will achieve the goal of substantial Islamic education, namely the realization of perfect submission to God, both personally, community, and all humans by forming personality, morals, and management that are directed at developing quality management.

3 FOCCUS OF DISCUSSION

In this paper, the focus of the discussion will be on developing management of Islamic education and Early Childhood Islamic Education based on Literature Review. The development of management of Islamic education institutions, especially Early Childhood Islamic Education which is oriented on the components of education, developed based on the main functions of management by utilizing nature and technology as resources and potentials utilized by Islamic education-based components with literature review. Through the development of management of Islamic education institutions, especially Early Childhood Islamic education, based on the flow of ideas, Islamic education institutions will achieve the goal of Islamic education to the fullest, namely for knowledge as a form of worship to Allah, the formation of morality, and delivering students achieve happiness of the world and the hereafter. With the achievement of the goals of Islamic education, the closeness of servants and Allah is increasingly manifested in the dimensions of Islamic education, especially Islamic education for Early Childhood.

Management development based on the principal functions of management in Islamic education institutions and Islamic education Early Childhood pay attention to the function of Planning, that is, every component of education should include sources of Islamic law in the implementation of planning including tasks, work procedures, time, and people responsible for the work. Organizing, meaning the determination of activities in each component of education which trying to achieve goals, classify the activities of each work unit or department and delegation of tasks to a manager to lead, delegate authority, establish coordination of activities and horizontal and vertical communication based on sources of Islamic law. Staffing, it is related to filling in positions and maintaining workers (employees) in

order to remain in a predetermined position, including the sequence of positions to be performed, assessment and selection of prospective employees also based on Islamic legal values. Leading (leadership, supervision, and direction) means the process of influencing and directing workers or employees to strive and be happy to achieve organizational goals (institutions) should also be developed based on Islam. All the principal functions of management are empowering nature and technology as instruments of learning in Early Childhood Islamic education and Islamic Education institutions. In the end, the goal of Islamic education is maximally achieved. To understand the development of management, the following is the flow or scheme of the Development of Islamic Education and Islamic Education for Early Childhood Management.
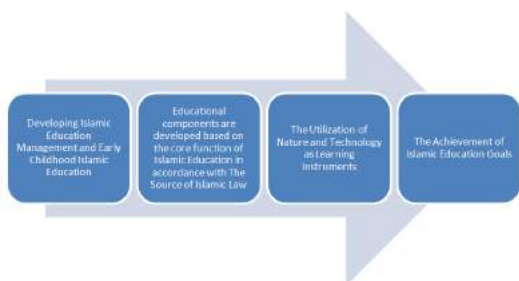
Figure 1: Management Development in Islamic Education and Islamic Education for Early Childhood

Based on the initial ideas above, the explanation of the flow of ideas for the Development of Islamic Education and Islamic Education for Early Childhood Specifically can be seen in the following flow.
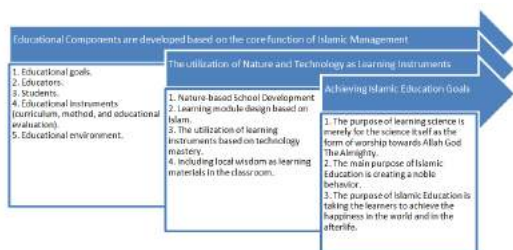
Figure 2: Development of Islamic Education Management and Islamic Early Childhood Education

Through the focus of the discussion above, the idea of developing specific management of Islamic education and Islamic education for early childhood can be directed systematically to achieve the goals of Islamic education. The implementation of these ideas in the form of the development of Nature-Based Schools, Preparation of Islamic-Based Learning Modules, Utilization of Learning Instruments Based

on Technology Mastery, and Incorporating Local Wisdom as Learning Materials into Classrooms will result in the acceleration of achieving Islamic education goals. By using this learning method, the flow of Islamic education institutions will be succeed in creating students who are independent and able to adapt (adapt) to changing times and the needs of society, based on Islamic values.

4 DISCUSSION

In the discussion section, this paper describes the implementation of previous ideas in the form of development of Natural Based Schools, Preparation of Islamic-Based Learning Modules, Utilization of Learning Instruments Based on Technology Mastery, and Incorporating Local Wisdom Materials as Learning Materials into Classrooms. The implementation of these ideas can be applied by Indonesia and Malaysia which have the same culture and local wisdom in forming Islamic education institutions that are directed towards the goal of Islamic education.

The implementation of these ideas should involve the main functions of management, especially educators who meet Islamic management criteria. Educators, such as teachers, and education personnel, such as administrative staff, are the main functions of management that are actively involved in the implementation of the above ideas. In particular, decision makers, especially the government, school and college owners, compilers of curriculum, learning evaluation, and other stakeholders in the main functions of management should be involved in implementing these ideas comprehensively in accordance with their respective roles and main tasks. Therefore, people involved in the main functions of management can be referred to as Islamic Education Institutions Manager.

Implementation of ideas in the form of development of Natural Based Schools, Preparation of Islamic-Based Learning Modules, Utilization of Learning Instruments Based on Technology Mastery, and Incorporating Local Wisdom as Learning Materials into Classrooms are based on the following practical techniques.

4.1 Nature based School

Natural Based Schools in Islamic education institutions, especially Early Childhood Islamic Education need to be developed in the world of education. Children are educated to play and learn in

the open (out door) with the educational environment in the form of beautiful flora and fauna. Children can play and learn in a natural educational environment, develop psychomotor functions by moving actively, getting to know the types of trees, animals, and developing natural health in nature. Children who play and learn in the open, will form their love for the environment and direct them to know and get closer to God Almighty as the creator of the universe through natural education laboratories. Practically, school suggestions based on nature can be applied in the following form.

- Managers of Islamic Educational Institutions Determine Certain Areas that are natural and beautiful

- Managers of Islamic Education Institutions Direct Early Childhood (students) to recognize the flora and fauna in the beautiful region.

- Managers of Islamic Educational Institutions Provide opportunities for students to move (play, learn, and interact) in learning freely.

- Managers of Islamic Educational Institutions Introduce the names of flora and fauna in the beautiful area.

- Management of Islamic Education Institutions directs students to introduce the concept of Allah SWT as the creator of the universe with various variations of His creation.

- Managers of Islamic Education Institutions Applying Learning Concepts that Apply Introduction to agriculture and livestock, starting from the process of maintenance, harvesting, to buying and selling transactions and the concept of payment of infaq, alms, and zakat to students after harvesting agricultural and livestock products to participants student.

- Managers of Islamic Education Institutions involve the active role of parents of students in the Natural Based School program to form the complete attachment of students to their educational environment.

4.2 Preparation of Islamic-based Learning Modules

Preparation of Islamic-Based Learning Modules is an effective learning method. Compilation of Modules and the application of Islamic values into the Islamic Economic family has been applied by Zulkifli Rusby, for example in the form of Marketing Analysis at Pawnshop Shari'a Pekanbaru Riau, Indonesia (2017), Competency Relationship of Islamic Economics

Graduate with the Working World: Experiences from the Islamic University of Riau (2016), The Effect of Career Development and Organizational Culture on Teacher Satisfaction Performance at National School in Pinang Island Garden (2016), and Analysis of the Problems of Baitul Maal Wat Tamwil (BMT) Through Analytical Network Process (ANP) Approach (2016). Zulkifli Rusby's scientific work is a form of implementation of Islamic values from the family of Islamic economics and management.

Meanwhile, the development of the Islamic Education Module which includes Islamic values into the science of Islamic Education and Early Childhood Islamic Education, needs to be developed thoroughly by Islamic Education Institutions, both in Indonesia and Malaysia in laboratories or classrooms in schools. The Islamic-Based Learning Module should contain goals, implementation procedures, learning tools needed, expected learning outcomes for students, and other aspects in a module based on the Koran, Hadith, and Ijma 'Ulama. By compiling Islamic-Based Learning Modules by Managers of Islamic Education Institutions in Indonesia and Malaysia based on Nature and Technology as Resources that are utilized in the learning process, the goal of Islamic education will be achieved for students, especially early childhood who play and study in Islamic education institutions.

4.3 Utilization of Technology Mastery-based Learning Instruments

Utilization of Technology Mastery-Based Learning Instruments in Islamic Education Institutions should be part of the main functions of management by Islamic Educational Institutions Managers. Islamic Education Managers should build technology-based academic services, for example are as follows.

- Academic services on the internet that can be accessed by students and the educational environment

- Applications that can be used on smartphones and computers that help process and evaluate learning are created by Muslim Information Technology experts to help educators, students, and other educational environments

- Learning aids (Educational Learning Tools for Early Childhood) use multi-media and audio-visual learning media.

- Communication channels between Islamic Education Institution Managers and users with contemporary technology networks.

• Management of Islamic Education Institutions provides technological facilities to educators and education personnel to support the smooth use of technology-based learning instruments.

4.4 Local Wisdom Materials as Learning Materials into the Classroom

In a scientific article entitled Learning the Qur'an in Early Childhood, according to the Psychology of Religion and Neuroscience (Hidayat, 2017b) explains that academics, researchers, and early childhood scientists should develop research related to the function of the Koran on early childhood development. In macro terms, various interesting philosophical ideas from the Koran which contain Islamic teachings, science, morality, and human safety in the world and the hereafter can be investigated by scientists. In micro terms, the philosophical idea of memorizing the Quran which can boost the potential of the left brain, reading Arabic letters from right to left can activate the potential of the right brain (creativity, imagination, social sensitivity), the introduction of unique Quranic letters with various variations can activate verbal abilities (for example Broca's Area in the left brain), are interesting hypotheses in the discovery of the functions and roles of the Quran to boost intelligence of early childhood, both intellectual, emotional, spiritual, intuitive, or personality endurance intelligence (Adversity Intelligent).

After the research was conducted, the results of the study were formulated into early childhood classes by incorporating entrenched local wisdom in Indonesia and Malaysia. Local wisdom that contains Islamic historical values, kings, sultans, and state leaders, introduction and preservation of traditional games of the archipelago (for example, the game of the archipelago of Gasing) that have contributed to science, Islam and culture, become learning material in the classroom early childhood. Local wisdom material will shape the motivation of early childhood in the next phase of development so that they emulate the predecessors who apply leadership management values and struggle based on Islam. In addition, local wisdom will realize the meaning of Malay literature in Islamic education institutions because one of the essence of education and educators is the nation's literature.

In the classroom, several Alat Permainan Edukatif (APE) or Educational Game Tools is used as learning props contain the letters of the Koran to stimulate brain function in early childhood. Not only in the form of APE which is in the form of paper, books, or sheets, but also in the form of blocks, puzzles, or other learning media that contain nuances and themes of the Koran and stories of previous leaders will develop the potential of the left brain and right brain early childhood. At home, children play with their parents, after they together read the Koran, parents tell stories in the Koran to children through Story-telling, and rejoice together to improve stickiness, strength, and developing the potential of family spirituality. Thus, the Islamic learning process in early childhood that contains the local wisdom of culture and Islam in Indonesia and Malaysia will foster early childhood as a whole on the Islamic and scientific pathway towards independence in the next phase of development.

5 CONCLUSIONS

The development of contemporary Early Childhood Islamic Education and Islamic Education service management services faces various challenges in order to be able to adapt to the times and needs of society. Islamic Education Institution Managers, namely decision makers, especially governments, school and college owners, compilers of curriculum, evaluation of learning, teachers and education staff, must be able to adapt to changes and needs of contemporary society.

In order to achieve the goal of Islamic education that forms Akhlak al-Karimah and closeness to Allah SWT, it is necessary to develop integrated management that uses natural and technological potential as resources managed by people who play a role in the world of education. Management development was applied based on the main function of management to achieve the goals of Islamic Education Institutions, especially Early Childhood Islamic Education.

Therefore, Islamic Education and Early Childhood in Indonesia and Malaysia should develop and establish various managerial collaborations on the main functions of management to develop the concepts of planning, management, work placement, leadership, and supervision in the world of formal and non-formal education according to their expertise and the main tasks of each element of education. The direction of management development helps Islamic education achieve the achievement of Islamic education goals that are in line with Indonesian and Malaysian local wisdom, both through face-to-face transaction services and educational products, based on software on computers, multi-media and

audio-visual , as well as applications on smartphones (smart phones) as a medium of modern teaching and learning to produce independent students. The ideas above were realized if Islamic Education Institution Managers worked together to implement actively and sustainably through extensive collaboration, particularly cooperation between Indonesia and Malaysia that has similarities in local wisdom to create independent and Islamic students in each phase of the development of students, from the phase of the development of early age to old age.

REFERENCES

Al-Qur'an.

Adawiyah, S. R. (2017). Maritime economy and science based on Al-Qur'an. *Spectra: Journal of Science Education Study*, 3(1):118–131.

Azhar, C. (2017). Management of islamic education development with qur'an perspective. *Tarjih: Journal of Tarjih and Islamic Thought Development*, 14:1–18.

Dakir and Sardimi (2011). *Islamic Education and ESQ (integrated-comparison the effort to achieve perfect human level*. RaSAIL Media Group, Semarang.

Fakhry, J. (2010). Science and technology in Qur'an and its implication in learning. *Ta'dib*, 15(01):121–142.

Fasih, A. R. (2016). The Basic of Islamic Education in the review of Qur'an and Hadist. *Al-Islah: Journal of Educational Study*, 14(1).

Goffar, A. (2016). Management in islam (perspective of qur'an and hadits). *Islamic Academics. Journal of Education and Islam*, 8(1):35–58.

Hidayat, B. (2005). Psikologi terapan psikologi industri dan organisasi (pio).

Hidayat, B. (2017a). Psikologi agama.

Hidayat, B. (2017b). *Qur'an Learning on Early Childhood according to religion psychology and neuroscience*. 2nd Annual International Conference on Islamic Early Childhood Education 2017. Yogyakarta: State Islamic University of Sunan Kalijaga.

Rusby, Z. (2017a). Analysis of factors effected to rahn public service quality at shari'apawnshop pekanbaru. *IJER Serial Publications*, 13:133–151.

Rusby, Z. (2017b). *Human Resources Management*. Jakarta: Rajawali Pers.

Rusby, Z., Purwati, A. A., Hamzah, Z., and Kadir, H. A. (2016). The effect of career development and organizational culture on teacher performance through job satisfaction at national school Kebun Pulau Pinang. *The 8th International Management & Accounting Conference (IMAC 8)*, 505.

Is LGBT Social Media Activity Breaking ITE Law in Indonesia?

Murry Darmoko Moersidin

Law Faculty, University of Surabaya Bhayangkara, Jalan Ahmad Yani 114, Surabaya, Indonesia
murry@ubhara.ac.id

Keywords: LGBT, Social Media Activity, ITE Law

Abstract: LGBT social media activity is a new anxiety in Indonesia. The law on LGBT and its activity does not yet exist, but LGBT people do live in the community. Most people think LGBT is a sin and others consider it a human right. The dissemination of LGBT activity is done through social media. Two problem statements: Does LGBT social media activity violate the ITE Law and what solution can be used to overcome LGBT social media activity? Legal sociology is used as an approach and qualitative as the method. Sources of research : ITE Law, Fatwa MUI, Social Media relating to LGBT and news media. The results : LGBT social media activity is not breaking the articles of ITE Law but can be overcome by the MUI Fatwa number 57 of 2014 as a solution. The discussion was divided into the application of the Fatwa from rehabilitation to the death penalty. Conclusions, LGBT social media activity in cyber space are things that are similar to the real life, can be punished if the MUI fatwa number 57 of 2014 is implemented. Impact for the government to immediately issue a law on LGBT.

1 INTRODUCTION

LGBT and its social media activities are anxieties in Indonesia. Anxiety is divided into two, first, when a behavior is claimed as a sin or a violation or crime cannot be punished because there is no written regulation from the state, LGBT in Indonesia is one that is claimed to be a violation or a crime. Second, when the written regulations exist, violations or crimes are still violated, such as corruption crimes (Darmoko, 2018) either carried out alone or in congregation (Riana, 2019).

LGBT Indonesia's social media activities are crowded in cyberspace. Social media accounts like Facebook, Twitter and Instagram provide freedom for LGBT Indonesia to communicate and "recruit" LGBT members in their activities. Facebook, Twitter and Instagram are social media that provide access to significant LGBT developments. Through these three social media, LGBT people socialize and communicate between old members and new members. I do a search on Facebook, if the word "LGBT" is written in the choices of people, names appear that exist with LGBT endings or prefixes from various countries. And the words 'LGBT' are written in groups' choices so that dozens of LGBT groups emerge. In Twitter and Instagram, the search term "LGBT" is also contained in dozens of entries (Darmoko, 2018). Like an iceberg, LGBT social media activities continue to

show developments that need attention from all parties involved, especially the government and scholars. This is coupled with the regulations issued by Brunei and Taiwan that are in opposition. Brunei executes LGBT people by stoning (Saputra, 2019a) and Taiwan legalize same- sex marriage (Saputra, 2019b). I am convinced by the facts of the information that I have obtained that social media plays an important role in the formation of a statutory regulation.

In Indonesia, the state has established an ITE Law to regulate cyberspace but has not yet determined the status of LGBT and its social media activities. The two problem statements that I look at need to be studied based on the absence of regulations or the vacuum of legislation: first, does the LGBT social media activity violate the ITE Law and secondly, what solution can be used to overcome LGBT social media activity?

The research approach is carried out with a legal sociology approach with the application of directly related theories. The choice of legal sociology is based on two things, first, how strong the dominance and influence that the law has on society or second, vice versa. Sociology has elements: individuals, groups, society and has three key words: dominance, influence and dependence. The legal sociology approach is used in an effort to find answers to the research problem formulation. The Law has three key words: regulating, binding and sanctioning those who violate

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(Darmoko, 2017). The law referred to in this study can be interpreted as a written regulation or as people who make or implement regulations (Darmoko, 2019).

I use the Social Definition Theory in this study. This theory reveals that individual factors are more dominant and compelling in behavior and actions towards Social Institutions, Social Norms, Social Classes. When applied, LGBT dominates Social Institutions, Social Norms and Social Classes as evidenced by the freedom to express their identities on social media and programs they carry out in the community, such as the Transvestite contest (Darmoko, 2017).

2 METHOD AND MATERIALS

I use qualitative methods in this study based on the flexibility of this method: interpretations that can change at any time according to the data obtained. Uncertainty is the advantage of this method, so that every time can change in its conclusions. And of course, the interpretation of the materials that I have obtained today is based on the legal sociology approach as well as the locus and tempos that I limit to research sources, so that it certainly can be different from other researchers whose interpretations differ.

Research locus is LGBT Indonesia with the social media activities they do. Tempos research is since 2014 until this paper was written. The 2014 election was based on the issuance of the MUI Fatwa on LGBT. It should be noted that the fatwa does not bind, regulate and impose sanctions such as the provisions of the Act which were formalized by the state.

I obtained research material or sources from two types of sources, which usually consisted of four sources. I omitted interviews and observations as sources of research on the grounds of limited time and funds that I had. I obtained research material from documents and news media and social media.

The source document consists of two documents: ITE Law and MUI Fatwa Number 57 Year 2014 which are directly related to this research. As for news media and social media sources, I searched through the internet by entering keywords related to LGBT. The document of the ITE Law and the Fatwa of the MUI are the main sources of research because the search for sanctions or violations of LGBT or not is contained in these two documents.

The articles of Law Number 19 Year 2016 concerning ITE which are directly related to criminal sanctions are: (1) Violating morality in article 27 paragraph 1 is punished with article 45 paragraph 1 = maximum imprisonment of six years and a maximum fine of one billion rupiah, (2) Gambling in 27 verses 2 is punished with article 45 paragraph 2 = imprisonment for a maximum of six years and a maximum fine of one billion rupiah, (3) humiliation or defamation in article 27 paragraph 3 punishable by article 45 paragraph 3 = imprisonment of at most four year and a maximum fine of seven hundred fifty million rupiahs, (4) extortion or threats in article 27 paragraph 4 punishable by article 45 paragraph 4 = maximum imprisonment of six years and a maximum fine of one billion rupiah, (5) dissemination of false news and misleading results in consumer loss in article 28 paragraph 1 punished by article 45A paragraph 1 = imprisonment of a maximum of six years and a maximum fine of one billion rupiah, (6) dissemination of information to cause hatred or permu suhan SARA in article 28 paragraph 2 was punished with article 45A paragraph 2 = imprisonment for a maximum of six years and a maximum fine of one billion rupiahs and (7) threats of violence or scare intended personally in article 29 punished with article 45B = the most imprisonment four years and a maximum fine of seven hundred fifty million rupiah (Presiden RI. Undang-Undang Nomor 19 Tahun 2016 tentang ITE, 2016).

MUI Fatwa Number 57 of 2014 concerning Lesbi, Gay, Sodomy and Imbination consists of several parts: First, General Provisions, in this fatwa what is meant by: (1) Homosex is a person's sexual activity carried out against someone who has the same sex, both men and women, (2) Lesbi is the term for sexual activity carried out between women and women, (3) Gay is a term for sexual activity carried out between men and men, (4) Sodomy is a term for sexual activity against syar'i law by intercourse through anus or known as liwath, (5) molestation is a term for sexual activity carried out against someone who does not have a bond between husband and wife such as fingering, squeezing, tinkering, and other activities, both done to other types and same-sex, to adults and children, who are not justified syar'I, (6) Hadd is a type of punishment for criminal acts whose forms and levels have been determined by Nash, (7) Ta'zir is a type of punishment for a crime whose form and level are handed over to Ulil Amri (the party authorized to determine the sentence).

Second, the legal provisions are: (1) Sexual relations are only permitted for someone who has a husband and wife relationship, namely a marriage and male partner who is legally legitimate, (2) Sexual orientation towards same sex is a disorder that must be cured and aberration (3) Homosexuality, both lesbian and gay is illegal, and is a form of crime (jarimah), (4) Homosexuals, both lesbian and gay, including bisex-

ual, are subject to hadd punishment and / or ta'zir by the authorities, (5) Sodomy is haraam and is a cruel act that brings great sins (fahisyah), (6) The sodomy perpetrator is subject to ta'zir punishment which is a maximum sentence of death, (7) Homosexual activities other than by sodomy and the culprit is subject to ta'zir punishment, (8) sexual abuse activities, namely the release of sexual nasfu such as fingering, squeezing, and other activities without a proper marriage bond h, what is done by someone, whether done to another type or same sex, to adults and children is illegitimate, (9) The perpetrators of revocation as referred to in number 8 are subject to ta'zir punishment, (10) In the case of victims of crime (jarimah) homosexuality, sodomy, and molestation are children, the perpetrators are subject to punishment until the death sentence, (11) Legalizing same-sex sexual activity and other deviant sexual orientations is haram.

Third, Recommendations for: (1) DPR-RI and the Government are asked to immediately compile legislation that regulates: (a) not legalizing the existence of homosexual behavior, both gay and other, as well as other communities that have a deviant sexual orientation; (b) severe penalties for sodomy, lesbi, gay, and other deviant sexual activities that can function as zawajir and mawani '(making the perpetrator deterrent and those who have not yet done so are afraid to do so); (c) include deviant sexual activity as a public offense and constitute a crime that defiles human dignity; (d) Preventing the development of deviant sexual activities in the community through socialization and rehabilitation, (2) The government must prevent the widespread deviation of sexual orientation in the community by conducting rehabilitation services for perpetrators and accompanied by strict and strict law enforcement and (3) Government may not acknowledge same-sex marriage and (4) the Government and the community not to allow the existence of homosexual, sodomy, sexual abuse and other deviant sexual orientations to live and grow in the community (Fatwa Majelis Ulama Indonesia. Lesbian, Gay, Sodomi, Dan Pencabulan, 2014).

3   RESULTS

There are two research results. First, legally formal, LGBT People and their social media activities cannot be punished by criminal sanctions through the application of the ITE Law, because not even one article from article 45 to article 45B can be applied to them. The moral article in article 27 has diverse interpretations as well as the community's pro-contra and law on LGBT status. Second, LGBT can be given so-

cial religious sanctions based on the 2014 MUI fatwa number 57. Virtual analogy with real nature with strong evidence can be applied to LGBT cases and social media activities, because it is the same perpetrator.

4   DISCUSSIONS

In this discussion there were two conflicting opinions, one pro and the other contra, especially against the application of penalties for LGBT and its social media activities (Wallace, 2019). Pro LGBT states, during the absence of the Law on LGBT, there is also no criminal sanction for LGBT. They use the principle of legality (no penalty as long as there are no written rules) as a basis for justice and legal transparency in Indonesia. The principle of legality is an initial requirement in determining law and justice in society (Hasyim, 2019). LGBT rights to life are human rights. If you can choose, the views of the pros want that every LGBT has the right to get rehabilitation in overcoming LGBT problems (Fagan, 2019).

For those who are contra, LGBT is a sin and crime that was set in the course of human history and religion which is based on the arguments of God and Prophethood (A.L., 2018). Sin and crime in religious beliefs must be given sanctions, ranging from rehabilitation to the death penalty (Byrnes, 2019), as stated by the MUI Institution. But this fatwa cannot be applied nationally because the definition of fatwa is the answer to the question. This fatwa has no power to regulate, bind and sanction. Fatwa is only a liberator of sins for Indonesian clerics, because the law as a written regulation or law maker / executor (the President and parliament) alone can change the fatwa into Law.

CONCLUSIONS

I conclude two things, first, LGBT people and their social media activities do not violate the ITE Law even though in the pros and cons of LGBT status it becomes a gray matter and this is troubling in terms of humanity, both for LGBT itself and the community. Second, the handling of LGBT and all its activities by the government, as an impact, can be done by making the MUI Fatwa number 57 of 2014 as a Statute or Law by moderating the application of appropriate and gradual penalties.

REFERENCES

A.L. (2018). How homosexuality became a crime in the middle east. *The Economist*, pages 1–7. Retrieved from https://www.economist.com/open-future/2018/06/06/how-homosexuality-became-a-crime-in-the-middle-east.

Byrnes, H. (2019). 13 countries where being gay is legally punishable by death, 1–8.

Darmoko, M. (2017). Modul kuliah sosiologi hukum fh ubhara surabaya.

Darmoko, M. (2018). Lesbian gay bisexual transgender (lgbt) sebagai cosmopolitan paradox life style dan penanganannya melalui pendidikan tinggi. *Khazanah: Jurnal Studi Islam dan Humaniora*, 16(2):177–201.

Darmoko, M. (2019). *MODUL AJAR CEPAT FA-HAM TEORI HUKUM BUAT MAHASISWA DAN MASYARAKAT UMUM*. Surabaya: UBHARA Press.

Fagan, P. (2019). Social media has a positive impact on lgbt people hoping to come out lgbt helpline coordinator paula fagan kicking off our # itsgoodtotalk, 1–12.

Fatwa Majelis Ulama Indonesia. Lesbian, Gay, Sodomi, Dan Pencabulan (2014).

Hasyim, I. (2019). Raperda anti lgbt ditolak , masyarakat cinta depok bicara, 1–4.

Presiden RI. Undang-Undang Nomor 19 Tahun 2016 tentang ITE (2016).

Saputra, E. Y. (2019a). Penerapan uu baru, lgbt di brunei terancam dirajam sampai mati, 1–6.

Saputra, E. Y. (2019b). Taiwan jadi negara asia pertama legalkan pernikahan sesama jenis.

Wallace, F. (2019). The pros and cons of social media, 1–6.

The Implementation of Indonesian Soft Power through Swaggering Strategies in Asian Games 2018

Denik Iswardani Witarti and Anggun Puspitasari

Budi Luhur University, Jakarta, Indonesia

{*denik.iswardani, anggun.puspitasari*}*@budiluhur.ac.id*

Keywords: Nation Branding, Asian Games, Swaggering Strategy

Abstract: Sport has been known as an effective method for carrying out social integration, forming a national identity and improving the global image. Sports in the modern era have been constructed as the capital of a country. Sport can be a method of domestic political imaging, and externally can be used as a means of diplomacy. In the Indonesian context, sports are used as soft power which is implemented into the Swaggering Strategy to form national image (nation branding). Related to the Swaggering Strategy, sports are used as one of the instruments for holding mega-events in an effort to show the capability of the country, in this case, Indonesia uses the implementation of the 2018 Asian Games as an effort to implement the Swaggering Strategy. At the end of this study, it was found that the implementation of the Asian Games was very effective in an effort to shape the country's image. Thus, Indonesia is expected to increase development in other sectors. The use of the 2018 Asian Games global scale sports event can also be used by Indonesia as a media for diplomacy by the government.

1 INTRODUCTION

In the era of globalization, the complexity of relations between countries is characterized by efforts to outperform one country and another. At the end of October 2018, the World Economic Forum (WEF) published a report of the Global Competitiveness Index (GCI) 2018. Hundreds of countries in the world were assessed and examined their competitiveness and quality. Indonesia is included in this study list and in this report, Indonesia experienced a downgrade. Referring to the report, as many as 140 countries were included in the GCI list this year and Indonesia was ranked 45th. This ranking is an increase from the previous year which placed Indonesia ranked 36th. In addition, in Southeast Asia, Indonesia ranked 4th, far behind Singapore that ranked 2nd, Malaysia which was ranked 25th and Thailand which was ranked 38th. (Schwab, 2017).

WEF also analyzes that Indonesia's weak competitiveness is one of them is the simulation of a culture of investment and confidence in the low business sector. Indonesia must have a strategy to create a good investment climate by making various innovative efforts to improve the nation's branding so that the flow of investment and confidence in the business sector can increase (Petrarca and Terzi, 2018). With the increas-

ing of a country's nation branding, automatically the FDI (Foreign Direct Investment) and a healthy business climate within the country can be achieved.

In order to improve the ranking, various strategies are needed by utilizing the power of a country. The power of a country is theoretically divided into two types, hard power, and soft power. Hard power is more compelling and violent, for example by using military force. In contrast to the transactional hard power approach, the soft power approach is more inspirational in that it attracts others with the power of emotional intelligence such as building close relationships or bonds through charisma, persuasive communication, diplomacy, and cultural influences, thereby making other people affected (Nye Jr, 2004). In the use of state-owned soft power, there are several strategies that can be implemented, one of which is the swaggering strategy (Wrong, 2017).

After the Cold War, the soft power approach can be more developed as a way to improve a country's competitiveness, one of its concrete forms is sports culture. Sport has been known as an effective method for carrying out social integration, forming a national identity and improving the global image. Sports in the modern era have been constructed as the capital of a country. Sport can be a method of domestic political imaging, and externally can be used as a means of

diplomacy (Grix and Brannagan, 2016).

Regarding to the swaggering strategy, sports can be used as one of the instruments for holding mega events in order to demonstrate the country's capabilities. In its history, there have been several countries that have managed to hold mega sports events which can ultimately enhance the country's image at a global level, including the Olympics, the FIFA World Cup, the SEA Games, the Asian Games, the Winter Olympics, and others. The success of holding this mega event has become one of the benchmarks of the nation's branding (pretensions), including Indonesia, which has successfully hosted the Asian Games in 2018 (Freeman, 2012).

Through the momentum of holding the 2018 Asian Games sports event, Indonesia seeks to use its soft power to build the Nation Branding at the global level by using a swaggering strategy. Thus, Indonesia is expected to increase development in other sectors. The use of the 2018 Asian Games global scale sports event is used by Indonesia as a media for diplomacy by the government. This is because, there are representations and diplomatic activities by individuals or groups involved in sports events and in conjunction with existing governments (Wagar, 2009).

In practice sports are used to convey messages or shape the image that a country wants to form (Grix and Houlihan, 2014). The holding of mega sports events such as the 2018 Asian Games is increasingly being used as a media for diplomacy in various countries in order to build the image of a country to change perceptions of issues that are developing in the country and encourage rapid development of the country. Therefore, researchers are interested in seeing how Indonesia uses its soft power through the momentum of organizing the 2018 Asian Games in building a positive image of Indonesia through a swagging strategy.

2 SOFT POWER, NATION BRANDING & SWAGGERING STRATEGY

Soft power is one of the concepts promoted by Joseph S. Nye. Soft power is a term that is widely used to interpret or explain a process of relations and realization of power. The meaning of soft power itself is an ability to do everything and control others, to make it do something that they do not necessarily want to do (things and control others, to get to what they otherwise would). Soft power is a superior national resource as the ability of the state that can be used to influence other countries to achieve the desired results

Figure 1: Soft power instruments

or interests. This soft power can be realized in foreign policy instruments and techniques run by a country.

Nye explained that with Soft Power "the best propaganda is not propaganda" (the best propaganda is not propaganda ", and also explained that" credibility is the scarcest resource "(credibility is the rarest source) (Nye, 2012). Nye introduced this term in his book, "Bound to Lead: The Changing Nature of American Power" (Nye, 1990). Nye then developed the concept further through his book, "Soft Power: The Means to Success in World Politics" (Nye Jr, 2004). According to Joseph Nye, soft power is: *the ability to get through a rather than through coercion or payments attraction.* Some forms of soft power include tourism, culture and so on. Thus, in pursuing its national interests the state can never act alone.

This concept requires other actors such as private agents, religious and educational institutions, and transnational companies engaged in the business of trade, communication and information, art, and culture (interdependence). This concept refers to the non-military power of the state such as the economy, culture and things that realists call low politics compared to hard power such as defence and military issues, soft power also has quite crucial problems for the country. The success of soft power depends on the credibility of the country concerned and acceptance from the target country. Attractions and inducements are social reconstructions so that new soft power will have an effect if there is a two-way relationship. The following are the components that can be categorized as the soft power of a country.

The success of a country in competing in the global market is very much influenced by the nation's Branding. Every country seeks to build a Nation Branding to influence relations with other countries. Nation Branding is one of the main components that can be the starting point for bilateral relations between one country and another. In this relationship, there are also actors who play a role in it, namely

state actors and non-state actors. Both of them always try their best to create a good image or image of their country to the international community. Nation Branding covers various aspects, such as politics, economics, culture, business and sports. At present, countries in the world focus on elevating the image of the country through anything that can distinguish itself on the international stage.

According to Anholt, Nation Branding is:

Nation Branding as 'the dominant' channel of communication for national identity and communication has been a central concept in his conceptualization of nation branding.

According to Raymond Miller, nation branding is defined as:

A set of theories and applications that aim to measure, build and regulate the reputation of a country (still related to place branding).

In accordance with its definition, this nation branding functions to build, develop, and maintain a good image (reputation) about a country. The success of a country in competing in the global market is strongly influenced by the country's brand image. In fact, the branding and image of a country coupled with a commensurate transfer between the images to the products produced are as important as the products produced by the country itself.

Nation Branding covers various aspects, such as politics, economics, culture, business and sports. At present, countries in the world focus on elevating the image of the country through anything that can distinguish itself on the international stage. Every country seeks to build a Nation Branding to influence relations with other countries. The use of Nation Branding in an effort to promote various aspects that are motivated by the interests of the state then combines state identity and nationalism in a real way by establishing cooperation with various branding consultants, various collaborative bodies in the field of national identity promotion both private and state, to develop promotional strategies commercial. Thus, efforts to be able to sell commercially owned and state-owned sectors within the country have a brand that will be published both internally and externally. Related to research on sports and the efforts of nation branding carried out through the holding of mega events, there have been several studies that were previously conducted by both researchers and outside academics. Previous research shows that sporting events can be used as instruments of diplomacy in relations between countries that are experiencing problems. Failure to form diplomacy formally can be softened through sporting events. Sports, even succeeded in initiating or opening the path of the recovery process of relations be-

tween two countries that had been involved in a long enough feud (Volcic and Andrejevic, 2011).

According to Martin Muller, events categorized by size and size are divided into giga events, mega events, and major events. The event category is related to the impact of organizing events. The wider the scope of the event is held, the more complex preparations must be made, and the greater the funds spent. The multi-billion-dollar expenditure on mega-events has a direct impact on host countries in cities, regions, populations and the environment. The host must ensure the availability of facilities such as stadiums, conference facilities, roads, railways, metro, hotels or power plants. In fact, the governments of most of the host countries make strategic use of this mega-event to develop infrastructure and encourage urban development (Müller, 2015).

Conceptually swaggering is the only strategy to use national capability that can accommodate soft power into one of their supporting instruments. Swaggering was originally one of the security strategies that has been carried out by a country where the country was trying to show the military security they had to other countries. Swaggering is mostly done in peaceful situations which can be used for military training in weapons demonstrations or making purchases or building prestigious weapons with the aim of being egoistic.

This strategy is usually carried out through the holding of mega events or major events on an international scale that are "show off" to show the capability of the country. Because it was carried out in a peaceful situation, this strategy then developed into a strategy that was not only militaristic. Swaggering is now carried out by using soft state power, one of which is sports culture. As a reference, the dynamics of the development of the Power Concept and its implementation of globalization can be seen in the following scheme (Murray, 2011).

The evolution of the swaggering concept approach from hard power to soft power can be seen in the following Table 1.

It is difficult to measure soft power appropriately, unlike hard power, which has more obvious elements such as population, or area owned. Several indicators offered that can be used to measure soft power which is developed from several aspects, namely politics, economics, social and culture, diplomacy and international relations (Changhe, 2013). For the purposes of this study, a soft power analysis was developed using a swaggering theory which is usually used in the context of military (non-military) power.

Swaggering is a behaviour used to increase national pride, fulfill the ambitions of leaders, and im-

Figure 2: The National Power Scheme

Table 1: The Evolution of Swaggering Strategy Concept

SWAGGERING		
Characteristics	Hard Power	ISoft power
Demonstration (Show off)	Military Capabilities	Culture Uniqueness
Object	Exhibition, Pre-test, Armament Test	Cultural performances, education, tourism or sports exhibitions
Final destination	Egoistic and militaristic achievements	Nation branding
Media	Major and Mega Event	Major and Mega Event
Situation	Peace	Peace

prove the image of a country (Art, 1980). The discussion of swaggering, in this case, is a form of peaceful use of military power. A study explains the possibility of using sports as soft power using swaggering analysis (Freeman, 2012). In the context of military power, swaggering usually appears in the form, for example by displaying a troop title or a national exercise demonstration. This can be replaced by displaying the toughness of athletes competing in the arena of the prestigious world sports competition. Whereas the purchase of sophisticated weapons to show the strength of a country can be replaced with pride in

buying and building modern sports facilities and supporting infrastructure.

The organization of mega sports events such as the World Cup and the Olympics can be a place for a country to demonstrate its capabilities and reputation in the eyes of the international community. The Olympics can be used by the host country to show its identity to the global community. Developing countries can accentuate themselves as "debutante ball" or "coming out party" by becoming organizers. An example is when Japan hosted the Olympics in 1964. The implementation of the Olympics became a symbol of the forgiveness of sins as well as a "total welcome back" of Japan after losing all-out in the 1945 world war. While China used the 2008 Beijing Olympic Games to strengthen its identity in the power hierarchy globally (Fraser and Herbert, 1980).

The host who succeeded in holding a mega sports event will raise his pride in the international arena. The desire and ambition to host the event can show the ability and image of a government (Freeman, 2012). Strengths like this used to be usually pursued through military aspects (hard power), now can be obtained through sports achievements as a form of soft power. But the purpose of self-assertion as in the sense of swaggering can still be obtained.

Although it is difficult to measure its success, some scholars have offered a number of indicators including soft power scope. Nye (Nye, 2005) emphasizes that persuasive attraction is the key to the success of soft power rather than coercion. In a context like this, soft power can be pursued through diplomacy. Su (Changhe, 2013)states that the implementation of public diplomacy by using culture is an effective method of soft power, of course by involving all parties. Government, private individuals or groups can directly or indirectly influence behaviour and public opinion.

In the context of relations between countries, soft power can be used to increase the power of a country. One of them is in the form of increasing friendship with other countries. The aim of a country's diplomacy must be focused on friendship (growing friends) and instilling a culture (cultivating a culture), rather than adding enemies or establishing military alliances (Changhe, 2013). Based on this understanding, the 2018 Asian Games in Jakarta and Palembang are the implementation of soft power diplomacy that Indonesia can use to strengthen friendships with Asian countries.

3 ASIAN GAMES 2018: INDONESIA'S SOFT POWER DIPLOMACY THROUGH SWAGGERING STRATEGY

The biggest event in Asia, the 2018 Asian Games have been held. The event, which took place August 18 to September 2, 2019, competed for 40 sports. The Games have been attended by 15,000 athletes and officials from 45-member countries of the Asian Olympic Council. Indonesia's appointment was motivated by Vietnam's unpreparedness to host. This is the second time Indonesia has hosted the Asian Games IV in Jakarta in 1962. For this reason, the government established the Indonesia Asian Games 2018 Organizing Committee (INASGOC) as the executive committee. INASGOC is responsible as the executive committee that will plan, prepare and organize the 2018 Asian Games. The INASGOC National Committee is responsible directly to the President of the Republic of Indonesia.

The Asian Games, which were first held in 1951 in New Delhi, are mega event sports for Asian countries. The trust given to Indonesia as the host of the 18th Asian Games is, of course, intended that the sporting events run well, smoothly and successfully. Since a year before, Indonesia has prepared and is actively promoting good. President Joko Widodo who inaugurated the Asian Games countdown at the National Monument, Jakarta on August 18, 2017 invited all components of Indonesian society to support the success of this event. All parties involved in the 2018 Asian Games want to achieve success at this sporting party, both in terms of success and achievement. The organization of the Asian Games also has a strategic meaning for Indonesia.

Sports events such as the 2018 Asian Games can simultaneously become an effort for Indonesian swaggering to the international community. Freeman describes the use of sport as a form of non- militaristic swaggering transformation (Freeman, 2012). First, the appearance of athletes who compete in mega events can lift national pride. Second, prestige as the host of mega sports events that will enhance the image of a country in the world. Pride is the goal of a swaggering strategy so that both are appropriate as a form of non- military swaggering. Finally, extensive media coverage of the event being held will also bring a message to the world outside about the existence and capabilities of the host country.

In this study, the analysis of swaggering in the implementation of the 2018 Asian Games was developed by focusing on achieving two things, attractions and prestige. Attractions are shown by the international media interest that covers the event. Whereas Indonesia's prestige and image are seen from the appearance of athletes at the 2018 Games Games, including considering the sports that are aired and medals.

3.1 Media Coverage

The Asian Games are covered by 3,500 international media crews. While in Indonesia the media will not only cover sports activities, but also various other interesting events and objects in Indonesia. If all this time the Ministry of Tourism and the Ministry of Foreign Affairs invites dozens of foreign journalists to the Familiarization Trip (Fam Trip) and Journalist Visit Program (JVP), of course the presence of 3,500 media workers is a very large number to cover Indonesia.

INASGOC set a budget of 800 billion Rupiah for Asian Games broadcasting costs. The funds are included in the cost of the live broadcast of 38 sports, the opening ceremony, and the closing ceremony of the Asian Games which took place in Jakarta and Palembang. INASGOC provides the International Broadcasting Centre (IBC) located in the Jakarta Convention Centre in Jakarta and the Sriwijaya Promotion Centre in Palembang. The IBC 2018 Asian Games covers an area of 7,100 square meters located in the Jakarta Convention Centre (JCC) Hall B, Jakarta, so that it can accommodate the broadcast room requests of a number of countries.

To maintain the quality of broadcasts of the Asian Games, INASGOC is partnering with a Swiss broadcast management company, International Games and Broadcast Services (IGBS) as a management partner for broadcasting the 18th Asian Games. IGBS had previously been an Asian Games broadcasting partner in the previous three editions, the 2006 Asian Games in Doha, Qatar, 2010 in Guangzhou, China and 2014 in Incheon, South Korea. In the final stage of the auction held by INASGOC in Jakarta in June 2017, they defeated NEP, a media company from Australia. The Asian Games broadcasting will be distributed in all Asian countries even to Latin America except Brazil. A total of 427 high-resolution cameras will be prepared to broadcast live all sports except bridge and squash branches.

Meanwhile, the 2018 Asian Games broadcasting rights are held by Dentsu, a Japanese broadcasting company, while in Indonesia broadcasting rights are held by Elang Mahkota Teknologi (EMTEK Group) which has broadcast rights over broadcasts of terrestrial television (SCTV, Indosiar, O Channel), satellite (Nexmedia), digital channel (Vidio.com) and through the BBM application. The Emtek Group also shares

Figure 3: PR Value Analysis of Asian Games News

the broadcasting rights with a number of national televisions except for broadcasts of soccer and badminton matches. In addition to the Emtek Group, the 2018 Asian Games will also be broadcast by other terrestrial television such as TVRI, MetroTV, TV One (specifically Aquatic branches), all pay television service providers, Usee TV, MNC Play, and MAXStream applications provided by Telkomsel. For broadcasting rights on radio broadcasts, it is held by RRI as Emtek Radio Partner.

On the other hand, the number of a foreign official and media teams at the 2018 Asian Games exceeds capacity. INASGOC predicts the number of broadcasts and future foreign media covering 7,000 people. But in reality, the number of media registering exceeds expectations. A total of 11,000 media crews have been registered in the media covering the 2018 Asian Games with 500 media outlets.

Media attention to cover the 2018 Asian Games supports the swaggering strategy. The large number of foreign media covering international interest, especially in Asia, is about the implementation of the 2018 Asian Games held in Jakarta and Palembang. Throughout the 2018 Asian Games, namely from August to September, it managed to attract viewers (readers and viewers) and viewers. Their interest was not only about the matches held, but also everything related to Indonesia, especially regarding the cities of Jakarta and Palembang. Spread news brings positive sentiment and builds a positive image of Indonesia. Based on the PR Value analysis that has been carried out related to the Asian Games news in Indonesia, there are the following results.

Based on the PR Value, it can be seen that negative reporting on the Asian Games is only around 1%. This shows that efforts to establish a positive national image are going very well. Especially with

the very active reporting from foreign media making the spread of national image to a global scale can be easily implemented. In the context of the swaggering strategy, the Asian Games 2018 sports event became effective soft power diplomacy to build Indonesia's nation branding in international relations.

Based on the success of the PR Value, in accordance with the concept of nation branding, it can be said that the host who succeeded in organizing a mega sports event will raise his grip on the international arena. The desire and ambition to host the event can show the ability and image of a successful government. Indonesia's success as the host will strengthen the image of being a country that has the ability to hold mega sports events. This brings benefits to the identity of the Indonesian nation as a country that has developments especially in the economic and political fields which are quite stable so that the Asian Games can be held well.

The implementation of soft power diplomacy during the 2018 Asian Games has involved many stakeholders in all aspects so that it can be said to be a form of successful public diplomacy. Public diplomacy is fully integrated with the process of forming a country's image (Ginesta and de San Eugenio, 2014). This is an advantage of implementing a swaggering strategy that uses soft power because it can be done by non-state actors. Their involvement in the 2018 Asian Games also shows Indonesia's integrated public diplomacy.

3.2 Medal Earning

As the host, Indonesia won 98 medals, consisting of 31 gold, 24 silver and 43 bronze. With this result, Indonesia finished 4th in the highest number of golds medallists at the 18th Asian Games. This incision has become its own history for Indonesia because Indonesia has never before received this much gold. In rank, occupying the fourth position was the second-best achievement after the 1962 Asian Games in which Indonesia which at that time also appeared as the host managed to become the runner-up. Indonesia's success at the 2018 Asian Games cannot be separated from the great contribution of the Pencak Silat sports. This traditional Indonesian martial art has become the golden barn of Indonesia. Of the total 16 gold contested, Indonesia won 14 medals. This is a "clean sweep" because Indonesia does not include its representatives in two numbers.

3.3 Sport Divisions

The Asian Games event as Asia's four-year grand event involves 40 Sports Divisions. For the first time, Pencak Silat sports competed in the Asian Games even though they had competed regularly since the Southeast Asian Games, the SEA Games 1987. Pencak silat is an Indonesian martial art form which was formally recognized as a form of sport in 1948. There are several ways for a sport can enter sports competitions that are in accordance with Olympic rules. The traditional way is through the international sports federation to petition the International Olympic Committee, but the alternative is that the local organization committee encourages the branch to be competed.

Youth and Sports Minister Imam Nahrawi in July 2018 renegotiated with the Asian Olympic Committee so that pencak silat was contested. The official statement is "Indonesia is ready to host the Asian Games as long as various conditions from us can be fulfilled. The main requirement is to present Pencak Silat which is a typical Indonesian sports branch." As the host of the 2018 Asian Games, Indonesia can indeed add to the other three sports.

The competition of Pencak Silat at the 2018 Asian Games is considered to be able to help its recognition as a world heritage. The United Nations Educational, Scientific and Cultural Organization (UNESCO) and the Indonesian government are discussing the submission of Pencak Silat as the world's non-cultural heritage for humanity. Over the past year, dossiers (files and documents) have been carefully prepared by a team of various stakeholders.

3.4 Mapping Perceptions of International Media

News management is communication management on daily issues involving the contents of domestic and international policies. The government in shaping policy in the modern era is always looking for efforts to make the policy a concern so that it can be conveyed to the wider community. But in general, the government only focuses on delivering in the domestic sphere and does not deliver it to the international scope. Whereas the delivery of policies at the international level is very important in the first dimension of public diplomacy (Leonard, 2002).

Therefore, the government's efforts to form policy can be delivered not only in the domestic sphere but also internationally, news management is needed that can facilitate the government to connect with the outside world. News management serves as a channel for the government to disseminate policies made

to the public and not only to the domestic public but also internationally. From here it can be seen that the role of the first dimension of public diplomacy, namely news management, is very important in supporting traditional diplomatic efforts carried out by the government.

According to the facts, the measurement of the soft power effectiveness, are calculated based on Media Coverage, Medal Earning, Sport Divisions, Mapping Perceptions of International Media. From the results of the research, it was found that in some of these categories, the responses of the Asian Games showed a positive trend. Based on the analysis above, there are several benefits of 2018 Asian Games diplomacy and promotion. First, to improve and strengthen people to people relations, because people are the leading actors in diplomatic activities, especially public diplomacy. Second, to increase the promotion of Indonesia abroad, with the amount of foreign media coverage during the Asian Games. Third, it will clearly improve the economy of the community.

4 CONCLUSIONS

Indonesia uses its soft power strategy through the Asian Games 2018 to increase Indonesia's Nation Branding in the eyes of the world. Nation Branding is one of the main components that can be the starting point for bilateral relations between one country and another. In these relations, there are also actors who play a role in it, namely state actors and non-state actors. Both of them always try their best to create a good image or image of their country to the international community. Based on the research above, it can be concluded that the sport held in mega events can be a power in the form of soft power and is used in the efforts of nation branding carried out by countries in the world.

In this study, researchers found that Indonesia is not just holding the 2018 Asian Games as a mere sports tournament. But it is also one of the efforts to use soft power through a swaggering strategy to build a Nation Branding Indonesia as an international tourist destination country as well as to promote Indonesia's potential with the aim of achieving broader national interests. Through the holding of the 2018 Asian Games, Indonesia seeks to form a positive image of Indonesia's potential in the form of tourism, economic openness, state stability, and so on.

REFERENCES

Art, R. J. (1980). To what ends military power? *International Security*, 4(4):3–35.

Changhe, S. (2013). Soft power. In *The Oxford Handbook of Modern Diplomacy*.

Fraser, J. and Herbert, F. (1980). *The Chinese: Portrait of a people*. Summit Books New York.

Freeman, K. (2012). Sport as swaggering: utilizing sport as soft power. *Sport in Society*, 15(9):1260–1274.

Ginesta, X. and de San Eugenio, J. (2014). The use of football as a country branding strategy. case study: Qatar and the catalan sports press. *Communication & Sport*, 2(3):225–241.

Grix, J. and Brannagan, P. M. (2016). Of mechanisms and myths: conceptualising states'"soft power" strategies through sports mega-events. *Diplomacy & statecraft*, 27(2):251–272.

Grix, J. and Houlihan, B. (2014). Sports mega-events as part of a nation's soft power strategy: The cases of germany (2006) and the uk (2012). *The British journal of politics and international relations*, 16(4):572–596.

Leonard, M. (2002). *Diplomacy by Other Mean*. The Foreign Policy Centre.

Müller, M. (2015). What makes an event a mega-event? definitions and sizes. *Leisure Studies*, 34(6):627–642.

Murray, S. (2011). Sports-diplomacy: a hybrid of two halves. In *Artigo apresentado no International Symposium on Cultural Diplomacy. Anais... Berlim*, pages 1–25.

Nye, J. (2005). Soft power and higher education. In *Forum for the Future of Higher Education (Archives)*, pages 11–14.

Nye, J. (2012). Why china is weak on soft power. *The New York Times*, 17.

Nye, J. S. (1990). Soft power. *Foreign policy*, (80):153–171.

Nye Jr, J. S. (2004). *Soft power: The means to success in world politics*. Public affairs.

Petrarca, F. and Terzi, S. (2018). The global competitiveness index: an alternative measure with endogenously derived weights. *Quality & Quantity*, 52(5):2197–2219.

Schwab, K. (2017). The global competitiveness report 2017-2018. World Economic Forum.

Volcic, Z. and Andrejevic, M. (2011). Nation branding in the era of commercial nationalism. *International Journal of Communication*, 5:21.

Wagar, B. M. (2009). Marginal benefit of hosting the summer olympics: Focusing on bric nation brazil (rio 2016). *Global Studies Student Papers*, page 17.

Wrong, D. (2017). *Power: Its forms, bases and uses*. Routledge.

Legal Protection for Victims of Trafficking Crimes from Human Rights Aspect

Heni Susanti and Syafrinaldi

Department of Law, Universitas Islam Riau, Jln Kaharudin Nasution No.113 Marpoyan Pekanbaru – Indonesia
{heni, syafrinaldi}@law.uir.ac.id

Keywords: Legal Protection, Trafficking, Human Rights

Abstract: The world has divided into three tiers of protection of human trafficking victims, based on the report of the American government in 2017. Indonesia falls into the tier 2 categories, namely countries whose governments have not fully met minimum standards in protecting victims of trafficking but still have significant efforts to adjust these standards. The pattern women trafficking begins with the manipulative stage. Prospective victims are not given real information about the type and place where they will be employed; this makes it difficult for victims to know early on about the possible risks that will occur in the future. This paper aims to find out how the legal protection women trafficking is viewed from the aspect of human rights and how the realization of the form of legal protection for human traffic victims. From the discussion that has been described, it can be concluded that efforts to protect victims of human trafficking crimes are a real form of protection of human rights. Legal basis Protection of victims of trafficking in persons is strictly regulated in Article 43 up to Article 55 of Law No. 21 of 2007 concerning of Trafficking in Persons. To protect the victims, every province/district in Indonesia needs to establish an integrated service center for victims and maximize all protection efforts for them.

1 INTRODUCTION

The second largest fast growing criminal industry in the world is the crime of trafficking in persons. The crime of human trafficking is a diverse problem that consists of fraud, coercion, coercion, and exploitation sexual purposes as well as for forced labor purposes (Moser, 2012).

"The UN defines approving acts of trafficking in persons namely recruitment, transportation, transfer, handling or acceptance of people, through the protection or use of violence or other forms of coercion, abduction, or decision, agreement or position of having permission for another person, for exploitation purposes. Exploitation must include, at a minimum, exploitation, forced labor or services, slavery or practices of slavery, slavery or expulsion or similar organs" (Barner et al., 2014).

Every human being born into the world is a creature created by God Almighty who has the dignity. The dignity of a human being has been attached to Human Rights since birth and protected by statutory Provisions. Human trafficking is a serious crime that violates human values and violates human rights. Countries around the world agreed that human traf-

ficking is one type of crime against humanity that must be addressed immediately. In its development, the United Nations has provided a definition of human trafficking, The United Nations defines human trafficking as: "The recruitment, transportation, transfer, harboring or receipt of persons, by means of the threat or use of force or other forms of coercion, of abduction, of fraud, of deception, of the abuse of power or of a position of vulnerability or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purpose of exploitation".

For the most part in reality in the lives of the people, women and children are human beings who are at risk of being victims of trafficking in persons. those who are victims will be trafficked inhumanely, generally not only for the purpose of prostitution or other sexual exploitation, but also including exploitation, such as forced or forced labor, slavery, or slavery-like practices. The perpetrator of this crime recruits, transports, transfers, conceals or receives people for the purpose of trapping, or utilizing the victims with all its forms with the threat of violence, the use of violence, kidnapping, forgery, fraud, abuse of power or position, or giving payments or benefits so that

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they get approval from people who control the victim. Forms of exploitation include forced labor or forced service, slavery, and practices similar to slavery, forced labor or forced service are working conditions that arise through means, plans, or patterns intended for someone to be sure that if he does not do certain work, then he or his dependents will suffer both physically and psychologically [1].

In September 2017, "the number of poor people (population with per capita expenditure per month below the Poverty Line) in Indonesia reached 26.58 million people (10.12 percent), decreasing by 1.19 million compared to March 2017 that reached 27.77 million people (10.64 percent)" [2]. This is one of the factors that causes more people to be attracted by the false promises from trafficking syndicates. Because of the increasing economic demands, victims have no choice in finding legal jobs. They only assume that working abroad will make a higher amount salary without thinking of the risks afterwards. Victims of trafficking are usually more difficult to get maximum legal protection. The government will have difficulty tracing because the process is illegal and the identity is falsified by trafficking syndicates.

When viewed from a variety of factors, in general, the victim is a very disadvantaged part. Victims of trafficking in persons are also often overlooked in criminal justice processes.The formulation of the problem in this paper is: what are the rules governing legal protection for victims of trafficking in terms of human rights and how is the realization of legal protection against victims of human trafficking.

2 DISCUSSION

2.1 Rules of Legal Protection for Victims of Trafficking in Persons

Based on the draft plan of the third International Criminal Code in 1954, Slavery is included in the 13 crimes that have been established and can be sentenced under international law as crimes against the peace and security of all humanity (Hendriana et al., 2017). The International Organization for Migration states that since 2005 it has identified and helped victims of human trafficking in Indonesia as many as 3,339 people, which almost 90% are women and more than 25% of victims are children (Hidayat, 2013).

Slavery is the condition of someone under the ownership of another person. Humanitarian crime in the form of slavery is the act of placing a person in the power of another person which causes the victim to have no choice over the work that was illegally ordered by others to him, so that forced to do work that is not even in accordance with his wishes. Crimes in trafficking of women and children have increased and developed in the form of criminal networks, both organized and unorganized. the crime of trafficking in persons is not just an individual relationship but also develops to other legal subjects namely companies and state administrators who abuse their authority and power.

This rule regulates the scope of witness and victim protection, especially regarding trafficking in persons as the most important aspect of the law enforcement process, the aim being to provide basic protection for victims and witnesses. In addition, Law No. 21 of 2007 also gives great attention to the suffering victims as a result of criminal acts of trafficking in the form of restitution rights that must be given by perpetrators as compensation for victims, and regulating victims' rights to rehabilitation medical and social, repatriation and reintegration must be carried out by the state, especially for those who experience physical, psychological, and social suffering due to the crime of trafficking in persons [3].

In the provisions of Article 1 of Law No. 21 of 2007 referred to: "1. Human Trafficking is the act of recruiting, transporting, storing, sending, transferring, or receiving someone with the threat of violence, the use of violence, kidnapping, confinement, forgery, fraud , abuse of power or vulnerable position, debt bondage or giving payments or benefits, to obtain approval from the person who controls the other person, whether done within the country or between countries, for the purpose of exploitation or causing people to be exploited.

"Article 2 (1) Any person who recruits, transports, accommodates, dispatches, transfers, or receives someone under threat of violence, use of violence, abduction, confinement, forgery, fraud, abuse of power or vulnerable position, debt entrapment or providing fees or benefits although obtaining approval from a person holding control over another person, for the purpose of exploiting that person in the territory of the Republic of Indonesia, is punished with imprisonment for a minimum of 3 (three) years and a maximum of 15 (fifteen) years and a fine of at least Rp120. 000,000.00 (one hundred twenty million rupiahs) and a maximum of Rp.600,000,000.00 (six hundred mil-

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[1]General Provisions in the Explanation of Law No. 21 of 2007 concerning Trafficking in Persons

[2](https://www.bps.go.id/pressrelease/2018/01/02)

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[3]General provisions in the Explanation of Law No. 21 of 2007 concerning the Crime of Trafficking in Persons

lion rupiahs). (2) If the action referred to in paragraph (1) results in the exploitation of the person, then the offender shall be subject to the same criminal offense as referred to in paragraph (1)."

The form of repressive legal protection has referred to the rights of victims of human trafficking as regulated in Law No. 21 of 2007 concerning the Crime of Trafficking in Persons, among others: The confidentiality rights of the identity of victims of trafficking in persons and their families to the second degree (article 44), the right to protection from threats that endanger themselves, their souls / property (Article 47), the right to get restitution (article 48), the right to get health rehabilitation, social rehabilitation, repatriation and social reintegration from the government (article 51)."

In order to protect witnesses and victims, each province and regency / city must have a special service room at the local police office to conduct an examination at the level of investigation for witnesses and / or victims of human trafficking. It's just that in its implementation it still requires special attention and hard effort to realize it in accordance with existing rules. This is the duty and authority of the government to optimize special services for victims.

If there are things that endanger the victim or the family of the victim, in this case in accordance with the provisions of article 47 of Law No.21 of 2007 concerning Trafficking in Persons then the police must provide protection both before, during, and after the case examination.

The provisions of Article 48 of Law No.21 of 2007 concerning Crime regulate the following matters:

1. Every victim of human trafficking or his heirs has the right to obtain restitution

2. Restitution as referred to in paragraph (1) in the form of compensation for:

   (a) Loss of wealth or income

   (b) Suffering

   (c) Fees for medical and / or psychological care actions and / or

   (d) Other losses suffered by victims as a result of trafficking in persons

   (e) The restitution is given and included at the same time in the court decision about the case of the human trafficking

   (f) The granting of restitution as referred to in paragraph (1) is carried out since the decision of the court of first instance is imposed

   (g) Restitution as referred to in paragraph can be entrusted beforehand in the court where the case is decided

   (h) The granting of restitution shall be carried out within 14 (fourteen) days from the date the notification of the decision which has obtained permanent legal force is notified

   (i) In the event, the offender is decided freely by the court of appeal or cassation, the judge orders the decision so that the money for the refund is returned to the person concerned

In the implementation of granting restitution to the victim is not fulfilled beyond the time limit referred to in article 48 paragraph (6), the victim or his heir notifies the matter to the court. Furthermore, if the perpetrators of the crime of trafficking in persons are unable to pay restitution, the perpetrators can be subject to a substitute sentence for a maximum of 1 (one) year.

The provisions of Article 51 of Law No.21 of 2007 concerning the Crime of Trafficking in Persons clearly state that if victims of trafficking in persons have the right to obtain health rehabilitation, social rehabilitation, repatriation and social reintegration from the government if the person experiences physical or psychological suffering due to a criminal act human trafficking. The rights of victims can be filed by victims or families of victims, friends of victims, police, escort volunteers, or social workers after the victims report their cases or other parties report them to the Indonesian National Police. If victims of trafficking are abroad and need legal protection due to criminal acts of trafficking in persons, then the government of the Republic of Indonesia through its representatives abroad must protect the personal and interests of the victims, and try to repatriate victims to Indonesia at the expense of the state.

2.2 Realization of Legal Protection for Victims of Trafficking in Persons

The law is the creation of the community, but at the same time, he also created the community, so that the law in accordance with the development of society. This is in accordance with the opinion that "a good law should be in accordance with the law who live in the community (the living law). So the law must reflect the values in the society (Roy and Chaman, 2017).

Women, men and children in Indonesia who are exploited in several sectors such as, on plantations, including oil palm plantations; fisheries, fish processing and construction, and in mining and manufacturing. while women are generally exploited in the domestic sector and sex trafficking. Victims are often recruited to lure offers of work in restaurants, factories, or domestic workers but are actually used as

commercial sex workers. Debt bondage is very common in victims of trafficking. Women and girls were made commercial sex workers in mining operations in Maluku, Papua and Jambi. When the state stopped and closed prostitution on a large scale around 2014, and another thing that happened was that the protection of women working in prostitution areas was reduced, this resulted in a significant increase in vulnerability to sex trafficking crimes in other regions, including Bali and Papua. Children were victims of sex trafficking in Batam, Riau Islands province, and in West Papua province in previous years. Many reports show an increasing number of students and high school students who use social media to recruit and persuade other students, including those under the age of 18, to commercialize sex. The Riau Islands which borders Singapore and Bali are the destinations for child sex tourism.

Female Trafficking Crime is an act that is contrary to human values, dignity and human rights and violates Human Rights so it needs to be abolished. Women's trafficking practices have also expanded in the form of organized crime networks, both between countries and within the country, which pose a threat to the people of the nation and to the norms of life based on respect for Human Rights.

Human Rights were born before the law existed, meaning that human rights are a basic and sacred right that is naturally inherent in every human being until the end of his life as a gift from God through the state with existing legal rules, also formalizing human rights to in a set of legal rules. From this position, law becomes a sine qua non requirement in upholding human rights. Regarding human rights is one of the sources of justice that awaits the political steps of world leaders to enforce it (Effendi and Effendi, 2007).

Human Rights have a wide scope and cover a variety of lives (Ali, 2010), as follows:

1. Everyone has the right to the protection of his personal, family, honor, dignity and property rights

2. Everyone has the right to recognition before the law as a personal person wherever he is

3. Everyone has the right to feel safe and secure and to protect against the threat of fear of doing or not doing something

4. Everyone must not be disturbed which is a right relating to personal life in his residence

5. Everyone has the right to independence and confidentiality in the communication relationship through electronic means must not be disturbed, except by order of a judge or other legitimate power in accordance with the Law

6. Everyone has the right to be free from torture, punishment, or mistreatment, inhumanity, enforced disappearance and loss of life

7. Everyone must not be arrested, suppressed, discredited, ostracized, exiled or disposed of arbitrarily

8. Everyone has the right to live in a safe, peaceful society and state, which respects, protects and fully implements human rights and basic human obligations as stipulated in the Law

According to Mahfud MD, the Preamble and Body of the 1945 Constitution does not have a strong enthusiasm in providing protection for human rights or more embracing the desire to restrict human rights, to be just a citizen right that must be determined in a law made by the legislature. More explicitly, Mahfud said, in various analyzes it was mentioned that one of the causes of human rights violations was because our constitution did not really elaborate on the protection of human rights in its articles explicitly. In contrast to Dahlan Thaib's opinion, it would be found that there are at least 15 human rights principles if examined in the Preamble, Body, and Explanation, namely as follows:

1. The right to self-determination

2. Citizens' rights

3. The equality rights in the law

4. The right to work

5. The right to a decent life

6. The right to associate

7. The right to express an opinion

8. The right to have religion

9. The right to defend the country

10. The right to get teaching

11. The right to social welfare

12. The right to freedom and independence of the judiciary

13. The right to maintain cultural traditions

14. And the right to defend regional languages

Crimes under the United Nations Convention Complementing the United Nations Transnational Organized Crime Convention, A / 55/383, or the UN Trafficking Protocol, Palermo 2000 determined by the General Assembly on 2 November,2000 is trafficking in Persons Shall mean the recruitment, transportation, transfer, harboring or receipt of persons, by means of force or other forms of coercion, of abduction, of fraud, of deception, of the abuse of power or of a position of vulnerability to obtain consent of a person

having control over another person, for the purpose of exploitation. "Exploitation shall include, at a minimum, the exploitation of the prostitution of sexual exploitation, the practice is similar to slavery, servitude or removal of organs"[4].

The last calculation from the Global Slavery Index conducted by the Walk Free Foundation in 2014 estimated that 35.8 million people consisted of men, women and children who were victims of trafficking in persons around the world. Then a survey conducted by ILO (International Labor Organization) from 2001 to 2005 there were around 12.3 million people become victims of human trafficking, and in 2012 it increased to 20.9 million people [5]. In 2013, the United States Trafficking in Person (TIP) reported that there were around 27 million people, both men, women and children who were victims of human trafficking crimes. US Department of State, 2013 Trafficking in Persons Report [6].

From the table above, it can be explained that the number of victims of human trafficking handled by IOM is very large, namely 6748 victims. This is a proof that the existence of Law No.21 of 2007 concerning the crime of human trafficking has not been maximized, so that there is a need for maximum effort to be carried out by all components in the community, both by law enforcement officials, institutions, and the public.

In the framework of protecting human rights against victims of human trafficking, the government is still working minimally to prevent trafficking in persons. Most prevention efforts are carried out at the district or city and provincial levels; funding and activities are carried out by different task forces in each region. The task force of national anti-trafficking in persons, under the auspices of the Ministry of Women's Empowerment and Child Protection, held several meetings during the reporting period and adopted a National Action Plan for 2015-2019 to eradicate human trafficking. National meetings and action plans focus on improving the rehabilitation and reintegration services for the victims and restoring the coordination between government ministries and other stakeholders. With the support of international donors and NGOs, Women's Empowerment and Child Protection and the local government designed a trafficking awareness campaign

to inform citizens about immigration practices and safe recruitment procedures. In addition, Women's Empowerment and Child Protection has established 25 new anti-trafficking in persons task forces at the regional level, and together with NGOs it provides professional-based training and scholarships for women and school-aged children living in communities that are targeted for recruitment to reduce their vulnerability to human trafficking. Nevertheless, human trafficking Task Force itself is still in lack of operational funds and dependent on the relevant ministry funding contributions. Lack of funding in the task force in the regions and weak internal coordination among task forces at the regional and national levels often obstruct the anti-trafficking efforts. Women's Empowerment and Child Protection and local government received funding support from international donor organizations and NGOs to design and implement campaigns to increase awareness of human trafficking in order to inform citizens about immigration practices and safe recruitment procedures. In November 2015, for the first time, the Ministry of Manpower launched 18 service centers in the villages of origin of migrant workers to increase people's vigilance of human trafficking. These service centers receive funding and human resources assistance from the government to provide anti-trafficking campaign material for prospective migrant workers, economic empowerment programs for at-risk youth, and other care and services for victims [7].

The shortcomings in structural components are obstacles to the protection of victims of human trafficking. The lack of maximum efforts to protect victims of human trafficking can be seen [8] as follows:

1. The lack of commitment from law enforcement officials to resolve cases of human trafficking

2. The lack of government commitment in funding that the budget for victims of human trafficking has not been fully adequate

3. The lack of service personnel with a psychologist background

4. The lack of increase in human resources through service officers, so that not many officers are competent in performing services

5. The lack of post-treatment empowerment budget

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[4]UN Convention Against Transnational Organized Crime Protocol and Protocol to Prevent, Suppress and Punish Trafficking in Person, Especially Women and Children Supplementing the Transnational Organized Crime UN Convention, 2000 ; 383

[5]http://www.ilo.org/

[6]http://www.state.gov/j/tip/rls/tiprpt /index.htm

[7]Annual Report on Trafficking in Persons, US Embassies and Consulates in Indonesia, 2016

[8]IOM Indonesia, Response to the Ratification Plan of ASEAN Convention Against Trafficking in Person Especially Women and Children (ACTIP), Paper was presented at the FGD for Finalizing the Preparation of Academic Scripts, official translation by ACTIP-Bogor 2016

Table 1: Table of victims of Human Trafficking who were assisted by International Organization of Migration (IOM)

Nationality	Frequency				Total
	Woman		Man		
	Children	Adults	Children	Adults	
Indonesian	953	4976	166	653	6748
Burmese	0	0	9	1324	1333
Cambodian	0	2	66	296	304
Thai	0	0	1	77	78
Laotian	0	0	0	13	13
Grand Total	953	4978	182	2363	8476

Source : IOM Indonesia : 2016

Substantial problems are also seen in Law No. 31 of 2014 which is the result of renewal of the previous Law, namely the provisions of Law No. 13 of 2006. There have been changes, however, the government regulation no.44 of 2008 concerning the provision of compensation, restitution and assistance has still not been revoked and renewed. Next is the provisions of Law No. 35 of 2014 concerning amendments to Law No.23 of 2002 about child protection which does not specify about how to protect children who are the victims of human trafficking (Fadila, 2015).

The pattern of trafficking in women begins with the manipulative stage. Prospective victims are not given options about what their jobs are and the risks. Usually they are taken out of town and promised high-paying jobs. Sometimes by brokers, victims and their families have been asked for money or given debt status. In the second stage, victims are taken and forced to live in a very inappropriate shelter. Their identity cards and money are taken so that they cannot escape. Then, the victim is transferred from one broker to another, followed by a payment transaction. At the next stage, the victims are employed as unskilled laborers, commercial sex workers for the entertainment business and military purposes; they were also involved in drug trafficking (narcotics), forced to work as beggars, involved in selling babies, and so on. At this stage they often experience violence, abuse, or rape. Because of identity forgery, it is difficult to track the whereabouts of victims (Irianto, 2006).

The victims of human trafficking usually do not have access to get the rights they are supposed to have. They become victims in several stages starting from the recruitment process to post-trafficking. In fact, many of them preferred to return home without completing legal proceedings until the case was completed. The victims prefer to go back to their hometown because in the judicial process it takes a long time, while they need money to cover their living costs. The government and police, in terms of funding, do not really help them. This is due to an insufficient budget to cover all the needs of victims for a long time. This is what causes them to feel aggrieved many times.

Another problem that arises is when victims are in a position where they have to give testimony that can affect their psychological state. They must recall the atrocities committed by the perpetrators, both physically and psychologically. In this case, the victim needs to get legal and psychological assistance to restore their condition, so that they can lead a normal life.

In order to optimize case disclosure and law enforcement, real legal protection is the right of victims of human trafficking. If a case of trafficking has not been revealed, this means that it will result in difficulties in not being able to identify the victims. This causes them to not be able to get full rights to the protection that should be obtained. Efforts to protect victims are a manifestation of protection of human rights that should be inherent and can be felt by everyone who becomes a victim of trafficking.

The social community also has a role in assisting efforts to prevent and handle victims of human trafficking. They can provide all information that they know to report the existence of a human trafficking to law enforcement or the authorities. In addition, the community can also participate in taking care of the victims.

3 CONCLUSIONS

If seen substantially, the national instrument governing the crime of trafficking in persons is quite good. The rights of victims are regulated in the provisions of Article 46 to Article 55 of Law No.21 of 2007 concerning Crime of Trafficking in Persons. In fact, this is still not maximally implemented due to several factors that influence it, including the level of readiness

and knowledge of law enforcement officials who have not been maximal in providing services to victims of human trafficking. In the framework of protecting human rights against victims of human trafficking, the government is still not excreting adequate effort prevent human trafficking. Most prevention efforts have been carried out at the district/city and provincial levels; funding and activities are carried out by different task forces in each region. Protection of victims of human trafficking still requires special attention from the government and law enforcement officials and the public. This needs to be done in order to optimize performance by task forces already established by the government.

REFERENCES

Ali, Z. (2010). *Law Philosophy*. Sinar Grafika, Jakarta.

Barner, J., Okech, D., and Camp, M. (2014). Socio-economic inequality, human trafficking, and the global slave trade. *Societies*, 4(2):148–160.

Effendi, A. M. and Effendi, A. M. (2007). HAM dalam dimensi/dinamika yuridis, sosial, dan politik: proses penyusunan/aplikasi HA-KHAM (hukum hak asasi manusia) dalam masyarakat / A. Masyhur Effendi, Taufani S. Evandri ; Editor: Nurhadi. *1. HAK ASASI MANUSIA - ASPEK HUKUM,HAM dalam dimensi/dinamika yuridis, sosial, dan politik: proses penyusunan/aplikasi HA-KHAM (hukum hak asasi manusia) dalam masyarakat / A. Masyhur Effendi, Taufani S. Evandri ; Editor: Nurhadi*, 2007(2007):1–99.

Fadila (2015). Legal protection efforts against children as victims of trafficking. *Persons, Legal and Judicial Journals*, 5(2):191–192.

Hendriana, R., Widyaningsih, R., and Sari, D. P. Y. P. (2017). LEGAL PROTECTION TO WOMEN AND CHILDREN AS HUMAN TRAFFICKING VICTIMS IN VICTIMOLOGY PERSPECTIVE (Study in Banyumas Region)Ω. *Jurnal Dinamika Hukum*, 17(3):281.

Hidayat, M. N. (2013). Efforts to eradicate and prevent trafficking in persons through international law and positive indonesian law. *Al Azhar Indonesia Journal Social Institution Series*, 1:163.

Irianto (2006). *Women Trafficking in the Narcotics Circulation Network*. Yayasan Obor Indonesia,, Jakarta.

Moser, K. (2012). Prevention, prosecution, and protection: A look at the united states' trafficking victims protection act. *International Journal of Business and Social Science*, 3(6).

Roy, S. and Chaman, C. (2017). Human rights and trafficking in women and children in india. *Journal of Historical Archaeology & Anthropological SciencesVol 1 Issue*, 5.

Exception to Small Businessman by the Law No. 5 Year 1999 Concerning the Prohibition of Monopoly Practice and Unfair Business Competition Reviewed from the Islamic Economy Perspective

Desi Apriani and Zulherman Idris

Department of Law, Universitas Islam Riau, Pekanbaru, Indonesia
{desiapriani,zulhermanidris}@law.uir.ac.id

Keywords: Law of Indonesian Business Competition, Exception to Small Business, Economic Principles of Islam

Abstract: The Law of Republic Indonesia No. 5 year 1999 concerning the prohibition of monopoly practice and unfair competition excludes the small-scale businessmen of the enactment of such laws as a form of legal protection. There are pros and cons related to the exception to the small businessmen. The pros agree with the weakness of small-scale businessmen power and the deceit won't make a broad impact. And the cons disagree with the reason equality before the law and concerns about the use of policies by irresponsible individuals. Thus, this motivates the writer to perform analysis to discover the exception toward the small-scale businessmen as a form of legal protection that is necessarily needed or not in terms of the principles of Islamic economy. The purpose of this paper is to recommend the ideal legal concept for business competition law of Indonesia in accordance with Islamic law. This research is juriditial normative research, used secondary data. Considering that a regulation must be in accordance with the legal values that is prevailing in the community, including the value of religious law, therefore the small-scale businessmen should not be excluded because it is contrary to Islamic economic principles that require every businessman to operate their business activities fairly.

1 INTRODUCTION

The Law of Republic Indonesia No. 5 year 1999 [1] on the The prohibition of Monopoly Practice and Unfair Business Competition was made as a media to create a conducive business climate, therefore there is a guarantee that there will be equal business opportunities for large scale, medium scale and small scale businessmen based on economic democracy. According to the purpose of the enactment of The Law of Republic Indonesia No. 5 Year 1999 concerning the prohibition of Monopoly Practice and Unfair Business Competition, this matter is related to the reasons for the enactment of The Law of Republic Indonesia No. 5 Year 1999 which can be seen from the consideration of "considering" the Law, namely the existence of equal business opportunities for each business owner in a fair competition situation.

The small business owner is one of several criteria of businessmen in Indonesia beside medium businessmen and large businessmen. According to Article

1 point 2 The Law of Republic Indonesia No. 20 Year 2008 [2] concerning the micro, small and medium enterprises, small business owner is a standalone prolific economic emprise, run by individual or business entity that is not owned, controlled, or become a part of either directly or indirectly from medium or large businesses that fulfill the criteria specified as the small business according to The Law of Republic Indonesia No. 20 Year 2008.

When referring to The Law of Republic Indonesia No. 20 of 2008 concerning the micro, small and medium enterprises, the concept of micro, small and medium enterprises have several meanings, which are: first, the business was established for the purpose of economic activity and non-profit activities; Second, the productive enterprise or generate profits or profits from the venture; third, the efforts of independent or stand-alone not part, branches, or affiliates of other businesses; Fourth, the business owned by an individual or a business entity (Komarudin, 2014).

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[1] The Law of Republic Indonesia No. 5 Year 199 concerning The Ban of Monopoly Practice and Unfair Business Competition

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[2] The Law of Republic Indonesia No. 20 Year 2008 concerning The Micro, Small and Intermediate Enterprise, as the amendment of The Law No. 5 Year 1999 about Small Enterprise

The small business criteria according to article 6 paragraph (2) of The Law of Republic Indonesia No. 20 year 2008 is to have a net worth of more than Rp 50,000,000 (fifty million rupiah) up to at most Rp. 500.000.000 (five hundred million rupiah) not including land and buildings or places of business has annual sales of more than us $300 million (three hundred million rupiah) up to at most 2.5 billion rupiah (two billion five hundred million rupiah). While for businesses that value of assets as well as turnover under the small business criteria, is a kind of micro enterprises.

It can not be denied that the small business owner is one of the pillars of the economy that must get the opportunity, support, protection, and development of existence (Komarudin, 2014). Related to the protection against the small business owner, The Law of Republic Indonesia No. 5 of 1999 on the The prohibition of Monopoly Practice and Unfair Business Competition in Indonesia is one of the regulations that protect small businesses owners by banning all activities of businessmen that led to the economic concentration in the hands of businessmen or groups of businessmen with certain business, and prohibits all unfair competition (fraud). This is because the philosophy or background of the enactment of the law on the Prohibition of Monopoly Practice and Unfair Business Competition is to provide protection against small business owner by giving the guarantee of the existence of the equal business opportunity among every citizens of Indonesia. With the guarantee of the opportunity of equal business opportunity and ban all forms of monopoly practice and unfair business competition, then the threat of a major financier of strength will get rid of the small businessmen can be avoided.

Regarding to the protection against the small business owner, which according to the writer is interesting to be discussed further was the exception of small business owner from entry into force of the act as stated in Article 50-point H on The Law of Republic Indonesia No. 5 Year 1999 concerning the prohibition of Monopoly Practice and unfair business competition. This exception means that The Law of Republic Indonesia No. 5 Year 1999 concerning the prohibition of Monopoly Practice and unfair competition is not applicable to small businesses owner. Further, because of this exception, small business owner is not prohibited from doing any act or activity that is prohibited by law concerning the practice of monopoly and unfair business competition.

Exceptions to the principals of small businesses got a different response (pros and cons) from the observer of business and competition law and research that is conducted in Indonesia. According to A. Ju-

naidi, with the exception of this the Legislative appears to hope there is a chance for small business owner to develop themselves to not losing the business competition or at least get the same opportunities with medium and large businessmen [3]. Meanwhile, according to Mustafa Kamal Rokan, the reason of the grant of privilege in the form of exceptions to these small business owners due to the presumption that small entrepreneurs still need protection in order to develop, as well as for reasons of social the small entrepreneurs that the position is weak, so that votes will not likely make a monopoly (Rokan, 2010).

In line with that according to Ngurah Manik Sidharta and I Ketut Markeling, the reason for the existence of the privilege in the form of granting exceptions to these small businessmen due to the presumption that small entrepreneurs still need protection in order to develop, as well as social reasons that the weak position of small entrepreneurs, so that votes will not likely make a monopoly (Shidarta and Markeling, 2017). Similar with it anyway, and Darren says that in fact exceptions to the perpetrator of a small business is a form of protection provided by the Act No. 5 of 1999 th on the prohibition of Monopoly Practice and unfair competition against perpetrators of small businesses. He said further protection against the perpetrators of a small business that was supposed to be given, since they may not able to compete with medium and large businessmen (Hermansyah, 2008).

On the other hand, based on reports from Research on Business Actors Awareness on the Enforcement of the Competition Law and Awareness on the New Commission in several big cities in Indonesia, in general the respondent does not approve the exception of small business owner from The Law of Republic Indonesia No. 5 Year 1999 concerning the prohibition of Monopoly Practice and unfair competition. The basic foundation of the primary consideration is that this exclusion is contrary to the fundamental equation in the presence of the law (equality before the law). In addition, there is also concern that with this exception gave the small business owner can have the opportunity for doing monopoly and unfair business competition, while not obviously small business owner criteria so that it can result for misuse of status or positions owned by parties that take advantage by taking refuge in that position (Rokan, 2010). In the meantime, Susanti Adi Nugroho argues that the exception relating to the protection of small business principals by The Law of Republic Indonesia No. 5 Year 1999 concerning The prohibition of Monopoly Practice and

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[3]Junaidi, A., KPPU Protecting Small Business Access, Jurnal Berkala Komisi Pengawas Persaingan Usaha. kppu.go.id

unfair competition is only temporary, and the enactment shall be reviewed consistently (Nugroho, 2012).

Indonesia as a country that does not adhere to socialist or a capitalist economic system, but have their own economic system, namely the economic system of Pancasila. The implementation of the economic system of Pancasila as the ideology of Indonesia cannot be detached from religious value. Mubyarto said that the economic activity of Pancasila economy is regulated in the Constitution 1945 need moral based on the deity, humanity, nationalism, and democracy in achieving economic justice (Simanjuntak, 2018).

Based on explanation above, the writer is interested to analyse the exceptions of small business owner by Indonesia's business competition law from the standpoint of the principles of Islamic economy. This is because Islamic law is a law that cannot be ignored in the establishment of national laws considering the majority of society Indonesia is Islam (Abdullah, 2017). In the other hands, As a country with Muslim majority population, the question between Islam and democracy is always on the table with mixed answers (Ikhwan, 2018). Moreover, the idea that the law it is the law to suit the prevailing values in the communities where the law is applied. Religious values should constitute the values into the grip of life of the community, so that the state's law should also accommodate the religious values to be described as the ideal of the law and in accordance with the conditions of the people .

2 RESEARCH METHOD

This paper is part of the research grant program Directorate of higher education Ministry of Research, technology and higher education of the Republic of Indonesia with a Doctoral Dissertation Research Scheme under the title "An analysis to the exception to the small business owner by The Law of Republic Indonesia No. 5 Year 1999 concerning the prohibition of Monopoly Practice and unfair competition". Therefore, this research is juridical normative research by qualitative analytic. Specification of the research is Descriptive Analytic with how to provide data about the human meticulous, circumstances or other symptoms with the aim of celebrating the hypothesis-hypothesis, in order to assist in the strengthening of the theories old or within the framework of drawing up new theories (Soekanto, 2008). The data that the author use is secondary data consisting of primary legal materials and secondary legal materials which include : a) The primary legal materials is the material that binds, consist of norms

and rules (Laws and regulations related to the fundamental issues that the author examined in this research) like Act no.5 1999 on Prohibition of monopolistic practice and unfair business competition. b) The secondary legal materials such as any other relevant literature.

3 DISCUSSION

3.1 Prohibition of the Monopoly Practices and Unfair Business Competition in Indonesia

Indonesia is a legal state with democracy system, the economic system in Indonesia is based on the family principles with the economic democracy principle. Related to that, The Law of Republic Indonesia No. 5 Year 1999 concerning The Ban of Monopoly Practice and Unfair Business Competition, emerges as one of the tools to create a conducive business climate, so that there will be a guarantee to create an equal business opportunity for large, medium and small enterprise owner based on economic democracy. The main purpose of the enactment of the law that ban the monopoly practice and unfair business competition is to maintain the public's interest and to increase the national economy efficiency as one of the efforts to increase the society's welfare which is consumer.

The Law of Republic Indonesia No. 5 Year 1999 concerning The Ban of Monopoly Practice and Unfair Business Competition has been legitimized on March 5th, 1999 and enacted effectively on March 5th, 2000. The Law of Republic Indonesia No. 5 Year 1999 is the source of law of business competition in Indonesia, although the regulation concerning the ban of monopoly practice and unfair business competition can be found on the other regulation that has been enacted before The Law of Republic Indonesia No. 5 Year 1999 was being legitimized. For example, the unfair trading practices can be charged under article 382 bis of Indonesian Penal Code. Likewise, the competitor that suffered a loss that is caused by the unfair business competition can be file a lawsuit under the Article 1365 of Indonesian's Civil Law. It is also expected from the industrial sector to avoid the monopoly practice and unfair business competition, as well as stated on The Law of Republic Indonesia No. 5 Year 1999 concerning the Industrial.

The laws that prohibit the practice of monopoly and competition are unhealthy businesses legal completeness needed in an economy that adhere to market mechanisms. The legislation is necessary to guaran-

tee the freedom to compete in the economy so that it can take place without a hitch, and on the other hand the laws can be signed and guarding so as not happening practices that do not healthy and unnatural (Nugroho, 2012).

With the ban of competition and antitrust practice efforts is not healthy, it can lead to the creation of a market that is not distorted, thereby creating more business opportunity for businessmen. This situation will force businessmen to be more innovative in producing and marketing the products or goods and or services to them. This means that indirectly bans the practice of monopoly and competition of unhealthy businesses will provide benefits to consumers in the form of higher quality products, competitive prices and better service (Usman, 2004).

3.2 The Potential of Small Businesses to Do Things Are Prohibited by Law No. 5 Year 1999

Many who know The Law of Republic Indonesia No. 5 Year 1999 this as the law of "anti-monopoly". Whereas the The law No. 5 Year 1999 is the law on The prohibition of Monopoly Practice and unfair competition. By recognizing The Law of Republic Indonesia No. 5 Year 1999 as the law "antimonopoly" allows the existence of a difference of interpretation of the meaning of the related legislation. Monopoly Practice and unfair business competition are have different meaning, though have a relationship to each other.

According to Article 1 point 1 of The Law No. 5 Year 1999 on the prohibition of Monopoly Practice and unfair business competition, monopoly has the sense as a form of mastery over the production and/or marketing of goods and/or services by a particular offender effort or one group of businessmen. Thus, a monopoly according to The Law of Republic Indonesia No. 5 Year 1999 does not mean the condition that there is only one seller (a single seller), but a form of mastery of a market share of over 50% by one or a group of businessmen (Syafrinaldi, 2018).

Meanwhile, according to the Article 1 point 2 of The Law of Republic Indonesia No. 5 Year 1999, the practice of monopoly has sense, i.e. the concentration of economic power by one or more perpetrators attempt that resulted in the acquisition of production and/or marketing of goods and/or specific services giving rise to unhealthy business competition and can be detrimental to the public interest. The concentration of economic power alone means a real mastery of a market concerned by one or more perpetrators effort so that it can determine the prices of goods

and/or services. Deeds of businessmen which can result in the occurrence of monopolistic practices such as these build oligopoly (article 4), Monopoly (article 17), Monopsoni (article 18), mastery of the market (article 19, 20, 21), abuse of dominant position (article 25), and others.

As for the unfair business competition as mentioned in article 1 point 6 of The Law No. 5 Year 1999, have sense i.e the rivalry between the perpetrator's efforts in running the production and/or marketing of goods and/or services done by dishonest or against the law or hinder competition efforts. Unfair Business competition is often referred to as fraudulent with competition (unfair competition). The works of businessmen that led to these unfair business competitions such as pricing agreements (article 5), Divisions of the agreement (article 9), Cartel (article 11), Conspiracy in determining the winners of tenders (article 22), etc.

Understanding the practice of monopoly, then surely this can only be done by big businessmen, but unfair business competition can be done or caused by activities of each trade both large and small. This is because every human being basically has free will and the possibility of doing wrong, as advanced by Montesquieu "... this is because on the one hand, the particular intelligent beings are of a finite nature, and consequently liable to error; and on the other, their nature requires them to be free agents" (Montesquieu, 1949). With the aim to get the highest possible profits with a capital of every detail, then the potential of each trade good-big or small-cheating in carrying out their business activities are the same.

3.3 The Islamic Principle of Business Competition

Islamic law expressly prohibits the practice of monopoly, cartels, barrier to entry, selling loss, price discrimination and so on. History of economic thought of Islam also portrays the history of scrutiny of the practice of monopoly is one of the very important institutions were presented by the State authorities in order to maintain fairness in the trade market. Islamic history mention, after the formation of the State in Medina, Prophet Muhammad as head of government reforms and modification of the structure of the institution in what was formerly the revolutionary civilization traces of Polytheists. The Prophet immediately review the merchant, whether valid or not honest in doing deals or in running its business activities (Rokan, 2010).

Economic activity as an integral part of muamalah, cannot be removed with moral urgency. Islam

is very reconciling morals with process between muamalah, i.e. with the attitude be honest, reliable, fair, ihsan, do virtue, friendship, and collaborate is taawun (Hamid, 2007).

In AlQuran explained that in humans should be economical to realize the command of Allah SWT in order that his life as a people who need each other and each other's live, working each other mutual and amicable, not turn off each other to win. Further Mustaq Ahmad says Quran gives consideration about distribution of wealth as one of the most important in establishing and creating a healthy economy. Which is a requirement for the implementation of business activity (Salam and Saib, 2004).

Moral for Muslims play a role of great importance and has always been a life stance that guidelines derived from the teachings of the Quran, the Hadith, the Prophet or Ijtihad, i.e. using common sense in developing applied the teachings of Islam in the lives of everyday. The purpose of the on that man can do with his best in the run economic so that human activity that does not deviate from the rule of Islam. The structural social economy has weathered to a healthy and orderly manner, must be in line with the interests of moral, if material needs walk itself and the human relationship is measured by the size of the material just like the capitalist economic structure, it will be broken a good economic system and will change human nature of moraliy the noble nature hernia very low and posed the lusts (Salam and Saib, 2004).

While Islamic economics emphasize justice, welfare and honesty. Hasmerits of the Islamic economic system that should be the way for Muslims to give well-being and becoming a necessity. The economic sharia is Islamic economics in the U.S. use a way for Muslims to complete their economic needs. It is Refers to the meaning of the word sharia which means wide way. As a fair economy and provide for the public welfare, it is feasible to make our way through the U.S. economy sets Islamic principles (Supriyadi, 2014).

In AlQuran explained that in humans should be economical to realize the command of Allah SWT in order that his life as a person who need each other and each other's lives, working each other mutually and amicable. Instead of turning off each other to win on its own. Further Mustaq Ahmad, as quoted Fachri Baits says Al Quran gives consideration about distribution of wealth as one of the most important in establishing and creating a healthy economy, which is a requirement for the implementation of the business activity (Salam and Saib, 2004).

Islam recognizes all human economic activities that are lawful as commerce, trade, business partners of cooperation, joint stock company, the economic activities and operations are halal [4]. But Islam stipulates rules on commercial activities that are intended to ensure that all of it is done by honest, sincere and helpful. The Prophet said: "the prophets is a sincere and honest merchant, so are the people who are loyal and Martyrs" [5].

3.4 Exceptions to the Principals of Small Businesses by the Law No. 5 Year 1999 on the Prohibition of Monopoly Practice and Unfair Business Competition Reviewed the Economic Principles of Islam

In one paragraph that is very important, the Alquran acknowledges the objective character and universality of justice are equated with good deeds (moral virtues-the virtues), which address the community – people of different religions and warns humanity to "performing good deeds": "to every faithful among you (religious people) we provide rules and path (behavior). When God willed, you undoubtedly made her one person (based on the rules and the way it is), but, (he does not do so). God wanted to test you against granting to you. Therefore, what he (i.e., compete with samalain) in doing good. Because Allaah you will all return, and he will tell you (the truth) about what you cannot agree that [6].

In Islamic Economics, business and ethics should not be seen as mutually opposed, for the business which is the symbol of worldly affairs is also considered an integral part of the incidental investment hereafter. This means that if the business orientation and investment efforts hereafter European as worship and is the totality of compliance to the Lord, then the business itself must be in line with the moral norms based on the faith to the afterlife. The businessmen demanded be no contradiction between the intentionally sayings and deeds in his business. They demanded exactly the promise, on time, recognizes the weaknesses and shortcomings, always improve the quality of goods or services on an ongoing basis and should not cheat and lie. The business person prosecuted has the awareness about the ethics of moral, because both are needing that must-have. Businessmen who are careless and do not keep your ethics won't sell them well so that it can threaten the social relations and harming consumers, even himself (Widodo et al.,

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[4] the Holy Quran, Al-Baqara verse 275
[5] Hadith narrated by Tarmidzi
[6] the Holy Quran, Surah Al-Maidah Verse 48

2016).

When referring to business competition according to Islam where Islam sets the rules on commercial activities that are intended to ensure that all of it is done by honest, sincere and fruitful, then the existence of exceptions to the enactment business competition laws in Indonesia in particular exceptions to the small businessmen, according to the author it is not efficient in accordance with the principles of Islamic economists. Islam does not regard honesty in performing the activities sought only from the side of certain trade alone, but every performer's business both large and small must run its business activities honestly.

Unfair business competition prohibited by statute is a competition not honest nor a competition conducted by fraudulent means. So, the slightest fraud committed by the perpetrators of the attempt was a mistake that is contrary to the principles of Islamic economy. When small businesses do the perpetrators of fraudulent activities in running the competition, it will not be serious impact on a modal great trade, but will harm small business principals, fellow micro, what will consumer harm.

Exceptions to these small businessmen result area operation Hawk Act number 5 Year 1999 less than 2% of all businessmen in Indonesia. This is because the number of perpetrators of the small business that does not include no more than 2% (Is, 2016). This illustrates that 98% of businessmen in Indonesia are the small businesses. With this figure, then it can be imagined to be the moral impact of the trade that will be incurred due to an exception by law that ultimately 98% of businessmen in Indonesia were not carrying Islamic principles in the conduct of its business activities. Obviously this far removed from the lofty economic goals of Pancasila.

The implementation of the economic system of Pancasila as the ideology of Indonesia could not be released from Islamic values. Mubyarto said that the economic activity of Pancasila economy is regulated in the Constitution 1945 need moral based on the deity, humanity, nationalism, and democracy in achieving economic justice (Mubyarto, 1987). This means that the principle of honesty in performing business activities must be really accommodating in such a way in a business competition law in the country.

The system of quality of family and economic populist was actually a legal system which does not merely rely on the rule of law, but rather paid attention on the rule of morals and the rule of justice. The legal system is then seamlessly reciprocity in the economic system of Pancasila. With the revolutionary approach expected attainment of Vision 2030 Indone-

sia is based on and guided by a legal system which accommodate the norms of life in the community i.e., customary law and Islamic law (Manan, 2014).

We should not forget that the main purpose of the law is order and justice and the means of renewal in society (Lili, 2007). Al-Arab in the dictionary it states that: "a thing that exists in the mind in a State of honest is justice, any dishonest or not straight or not worthy is regarded as unfair". Ideas about right and wrong implicit in the term adl because the term is often used in a broad sense including the values and religion (Santoso, 2012). According to Islamic system any legal straight and in accordance with the law of God has been just, this is the nature of religious concepts. In the Islamic view on the balance of the world that is governed by the Ordinance of God, justice is a virtue where God provides the law he passes through the Holy Quran. The principles of parity, middle ages, States that bring the beauty of nature and kindness to humans. According to Muslim doctrine, Justice represents both the basic purpose and the ultimate goal of all divine revelation. He expresses in the levels: The Justice of God to his creation and justice of man among his fellow man (Santoso, 2012).

4 CONCLUSIONS

Islam strongly upholds honesty, sincerity and moral perpetrator of effort in conducting its economic activities. Every business activity way hinders the unfair business competition is contrary to the principles of Islam. Not honest in doing business activities such as doing unfair business competition can be performed by each businessman both large and small businessmen. Therefore, it is wise to The Law of Republic Indonesia No. 5 Year 1999 on the prohibition of Monopoly Practice and unfair business competition business in Indonesia does not provide exceptions to small business owner. Protecting small business offender does not mean letting it run the business activities in ways that are contrary to Islamic values, it would be detrimental to society as a consumer.

REFERENCES

Abdullah, A. (2017). ISLAM AS A CULTURAL CAPITAL IN INDONESIA AND THE MALAY WORLD: A Convergence of Islamic Studies, Social Sciences and Humanities. *JOURNAL OF INDONESIAN ISLAM*, 11(2):307.

Hamid, M. A. (2007). *Economic Law Of Islam (Islamic Economy) In Indonesia, Applications and Prospektif*. Ghalia Indonesia, Bogor.

Hermansyah (2008). *Points competition law business in Indonesia*. Kencana Prenada Media Group, Jakarta.

Ikhwan, H. (2018). Fitted sharia in democratizing indonesia. *JOURNAL OF INDONESIAN ISLAM*, 12(1):17–44.

Is, M. S. (2016). *Competition law business in Indonesia as the efforts of Strengthening the institutions of Supervisory Commission of Business Competition (KPPU)*. Setara Press, Malang.

Komarudin, A. (2014). *Political Law Integrative small medium enterprises UMKM (Making State Policy Developed and Empowered Competitiveness)*. Wahana Intermedia, Jakarta.

Lili, R. (2007). *Introduction to Legal Philosophy*. Mandar Maju, Bandung.

Manan, A. (2014). *The role of Law in economic development*. Kencana Prenada Media Group, Jakarta.

Montesquieu (1949). *The Spirit of The laws*. Hafner Publishing Company, Newyork.

Mubyarto (1987). *Pancasila economic ideas and Possibilities*. LP3ES, Jakarta.

Nugroho, S. A. (2012). *Indonesia's Business Competition Law In Theory and Practice as well as The Application of The Law*. Kencana Prenada Media Group, Jakarta.

Rokan, M. K. (2010). *Business Competition Law on Theory and Practice in Indonesia*. Raja Grafindo Persada, Jakarta.

Salam, F. B. and Saib, S. K. (2004). *Economic Frame in The Perspective of Islamic Teachings*. UIR Press, Pekanbaru.

Santoso, A. (2012). *Law, Morality And Justice (A Study Of The Philosophy Of Law)*. Kencana Prenada Media Group, Jakarta.

Shidarta, N. M. and Markeling, I. K. (2017). Juridical Analysis On pre-eminence for perpetrators of small businesses associated with Unhealthy Business Competition.

Simanjuntak, A. (2018). *Business Law (An Integrative Understanding Between Law and Business Practices)*. Rajawali Pers, Depok.

Soekanto, S. (2008). *Introduction To Legal Research*. Universitas Indonesia Press, Jakarta.

Supriyadi, A. (2014). Implementation of islamic economic principles about mortgages. *QIJIS (Qudus International Journal of Islamic Studies)*, 2(2):121–143.

Syafrinaldi (2018). *Indonesia Law theory and its Practice*. Rajawali Pers, Jakarta.

Usman, R. (2004). *Business Competition Law In Indonesia*. Gramedia Pustaka Utama, Jakarta.

Widodo, N., Tatiek, and Zulfa, M. (2016). Islamic development model towards improved performance of sme entrepreneurship. In *strengthening a private Islamic College in the face of globalization, published and diorganisisr by the cooperation agency Islamic College Privately Owned (PTIS-BKS)*.

The Effect of Duolingo on English as Foreign Language University Students' Vocabulary Mastery

Liya Astarilla D. W.

STMIK-AMIK Riau, Pekanbaru, Riau, Indonesia
liya.astarilla@gmail.com

Keywords: Effect, Duolingo, Vocabulary, Mastery.

Abstract: The objective of this research was to investigate the effect of Duolingo on EFL university students' vocabulary mastery. The method used in this study was experimental which included experimental group and control group design with pre-test and post-test. The sample of this study was 60 students at third semester at Islamic State University of Sultan Syarif Kasim Riau in Pekanbaru – Riau, Indonesia. The 30 students were randomy and equally assigned as experimental group and another 30 students as the control group. The instrument of this research was multiple choice test used as pre-test and post-test to asses the students' vocabulary ability in experimental and control group. In analyzing the data, the researcher used t-test. The finding of this research showed that in the significance degree of 0.05 the t-test was higher than t-table value (4.024>2.045). In other words, there was a significant improvement of the students' score after using Duolingo in learning vocabulary. Moreover, the average score of the post-test in the experimental group that used Duolingo was higher than control group that only used conventional method learning vocabulary. In conclusion, Duolingo application was effective to increase the students' vocabulary mastery.

1 INTRODUCTION

English is very important language that used in every aspects of life all over the world. In fact, since Asian Economic Community (MEA) has been applied, university students should concern to prepare themselves to compete in international job market after graduating from their college. It the other words, beside having good education background, the students should also have good English skills. English become a promising skill that they should have for their future endeavour. For example, when they want to apply a job in a big company, they must write an application letter and have interview in English. Then, in the working world, they must communicate and cooperate with many people from difference countries by using English. It means that English is a prominent factor that must have for all university students.

However, if the students want to improve their English skills, they must develop their vocabulary first. In learning English, vocabulary plays an important role because it is one element that connects to the English skills namely speaking, listening, reading and writing. "Without grammar very little can be conveyed" (Thornbury, 2006). Then, vocabulary is integrated into every content area and is addressed as part

of the curriculum which means the use of vocabulary is part of writing, reading, speaking, and listening. This knowledge is the foundation of effective communication (Ababneh, 2013). In other words, students should have adequate number of words, thus they can use them appropriately to communicate well in English.

In Indonesia, vocabulary is not a particular subject but has been taught within English skills namely reading, writing, speaking and listening. It means that, the students gain new words or learning vocabulary while they are learning reading, writing, listening and speaking. There are two types of vocabulary namely active or productive vocabulary and passive or receptive vocabulary. Productive vocabulary is the words that the learners can understand and pronounce correctly that use constructively in speaking and writing. Whereas, receptive vocabulary is the words that learners used in the context of reading and listening material (Webb, 2008). However, students should have productive and receptive vocabulary in order to help them in learning English.

because it has a wide range, and also the variety of vocabulary to be learned, including words, phrases, collocations, idioms, etc. There are also some kinds of vocabulary, one of them consist of part

of speech namely noun, pronoun, verb, adjective, adverb, preposition, conjunction, and determiner (McCarten, 2007). Vocabulary learning is often boring for the students, especially for those who grew up in the digital era where internet has opened up a world of possibilities for improving learning target vocabularies of students (Turgut and İrgin, 2009). However, vocabulary is something that cannot be completely mastered in a short duration of time but expands and deepens over the course of a lifetime (Hayes et al., 1996). In other words, learning vocabulary is a hard work, so attempt is required to understand, produce and manipulate the target words. It also need times to develop and master this knowledge.

Based on the researcher's experience and observation, the students' largest problem in learning English was the lack of vocabulary. There were several reasons that caused the students were lack of vocabulary. First, most of the students seldom enhanced their vocabulary outside the classroom. They only relied on the lessons given by the lecturer in the classroom which was only once a week. They only waited for the lecturer's instruction to improve their vocabulary for example in the form of exercises. Due to the limitation of vocabulary, the students were reluctant to use their English whether in spoken or written form. It triggered them become passive students. Consequently, they were not interested in learning English and it could influence their motivation too. Then, the researcher also saw many students played games on their smartphone after class dismissed whether in the classroom or outside classroom. Thus, the researcher asked several students about the exhilarated of playing games. They said that playing games was fun, challenging, and addicted. They also said that it could overcome their stress feeling after studying all day long.

Based on this phenomenon, the researcher thought that playing games could become one method to engage the students interest to participate actively in learning activities, especially in learning vocabulary. They could enjoy playing games and learning some new words at the same time. This idea also supported by Neyadi (Al Neyadi, 2007) who stated that one way to master vocabulary and to develop vocabulary bank is by applying vocabulary games in learning process. It can help improve vocabulary proficiency and also help with memory enhancement. In other words, games could be useful to engage the students' interest to gain new words of learning vocabulary in a fun way. Further, the application of educational games in classroom or outside classroom can reduce inhibition among shy and weak students to participate in the games as a result learning vocabulary become more interesting, relaxing, motivating, and playful for the students. It has a big role to the students' vocabulary improvement. These pilot studies really triggered the researcher to find an online educational games for her students.

There are several educational games that researcher could choose to help students' in learning vocabulary. However, it was necessary to choose suitable games for the students. The games should be appropriate with students' level and easy to use. There are several factors to consider the appropriate language games that will be applied in teaching and learning activities. First, the games should be integrated into the existing curriculum (Harris, 2009). Second, the games should meet the objectives of the topics being taught (McCarten, 2007). Then, the lecturer's personal beliefs on teaching pedagogy (Van De Bogart, 2009). Furthermore, after the researcher overviewed and tried several educational or language games application on her smartphone for several weeks, she considered to use a language games mobile application called Duolingo. It is a freemium language learning platform for smartphone, android, or computer created by Luis Von Ahn and Severin Hacker in 2011. It is one of the most and praised language teaching application on the market. It has also won several awards as best education start up play and learning application. Duolingo is a very modern-looking gaming application where most of the activities are to complete the lessons based on translation, dictation, and pronounciation. It also provides various topics and sub-topics namely, noun, verb, adjective, preposition, pronoun etc (Astarilla, 2018). Furthermore, it has gamification elements that can motivate and engage learners in every task or activity at anytime and anywhere. Duolingo application meet the needs of today's millenials or the Net generation due to its gaming qualities at the same time also serving as a valuable learning tool (Merz,). Duolingo can be quite of addicting due to its cunning use of gamification; lingots, level, points, and so on. It could make students spend more than 30 minutes per day on the application and increase students' motivation to be persistent on learning activities (Judith Meyer, 2013). In addition, Duolingo is giving opportunity to students to express their ideas through the technology. It can greatly benefit the learning activities by increasing students' engagement and improving their performance (Marmolejo Díaz et al., 2017). Duolingo allows students to make connections between their first language and the target language through the task completion or during playing the games (Kelsey D. White and Frances Siracusa, 2013). It means that Duolingo might be the suitable language games that

researcher used to motivate the students to learn English especially learning vocabulary.

The studies conducted by the previous researchers proved that the use of Duolingo could support students in learning English. The application of Duolingo contributed to increase students' English ability and also boost their motivation in learning English. Although few studies have been done on the use of Duolingo in improving students English skills namely, grammar, pronounciation, speaking, reading and so on, but more information on Duolingo still needed especially on students vocabulary learning. Furthermore, based on the explanation described above, the researcher encouraged to apply Duolingo for her students in a blended learning environment.

This study is a kind of an experimental research. The objective of this research was to investigate the effect of Duolingo application on EFL university students' vocabulary mastery. This study used pre-test and post-test in the experimental and control group to investigate the students' vocabulary mastery before and after treatments during one semester.

2   METHOD

2.1   Research Design

This study is a kind of an experimental research. This research conducted to investigate the effect of Duolingo application on EFL university students' vocabulary mastery. This study used pre-test and post-test in the experimental and control group to investigate the students' vocabulary mastery before and after treatments.

2.2   Participants

This research was conducted at Islamic State University of Sultan Syarif Kasim Riau, on the third semester majoring in Information System of the 2018 academic year. The participants of this study consisted of 60 students, 30 students were randomly and equally assigned to the experimental group and the other students as control group. Their ages range from nineteen to twenty one. They were enrolled in English III course. According to CEFR it was B2 level.

2.3   Data Collection and Analysis

The technique of collecting data in this research used quantitative research. It is used numerical and mathematically methods or statistics in its explanation to get

the result of the research (Muijs, 2010). The length of the semester was 14 weeks or meetings, where every meeting covered 100 minutes once a week. In this study, the researcher only gave treatment during 10 weeks for experimental group.

Blended learning model was used in learning vocabulary of the experimental group by using Duolingo while the conventional method was used in control group. For experimental groups, Duolingo was used outside classroom to support face-to-face meetings in the classroom. All of the participants in experimental group have smartphone or android and they did not know about Duolingo before. The researcher conducted this research based on following design to investigate the effect of Duolingo on EFL university students' vocabulary mastery, as shown on figure 1.

This study used experimental group and control group design with pre-test and post-test. Both of groups got pre-test in the first meeting and post-test in the last meeting. Further, instrument of this research was multiple choice tests which consist of 30 questions to measure students' vocabulary mastery. The test duration was around 60 minutes. The test items were devised based on the syllabus and the students' textbooks. The researcher considered using content validity where the test items in an instrument reflects the content or the syllabus in an instructional program (Boudreau et al., 2001). Further, the researcher discussed the test items with her colleagues or experts. Due to the content validity is using judgemental approach where the research instrument is validated by experts or judges (Hooghe et al., 2010) and there is no formula or statistic in constructing an insrument (Gay et al., 2011). Before administering the pre-test, the researcher analyzed the realibility of the test intrument in order to determine the quality of the test and whether it was valid to be used in this research through Try-out test to the other class that has the same characteristic with the partipants. The result showed that the reliability calculated through Cronbach's Alpha formula was 0.73. It means that the test was categorized into high reliability and acceptable.

At the first meeting, pre-test was conducted to both of groups in order to know students' English vocabulary before treatment. At the second meeting, the researcher introduced Duolingo to the experimental group. She explained and asked all students to download Duolingo application into their smartphone and/or android and registered by using their email. Because when the researcher gave an assignment, the students would receive notification via email that they have assignment, which topic that they should accomplish, and also the deadline or the schedule of the task submission. Then, the researcher guided the students
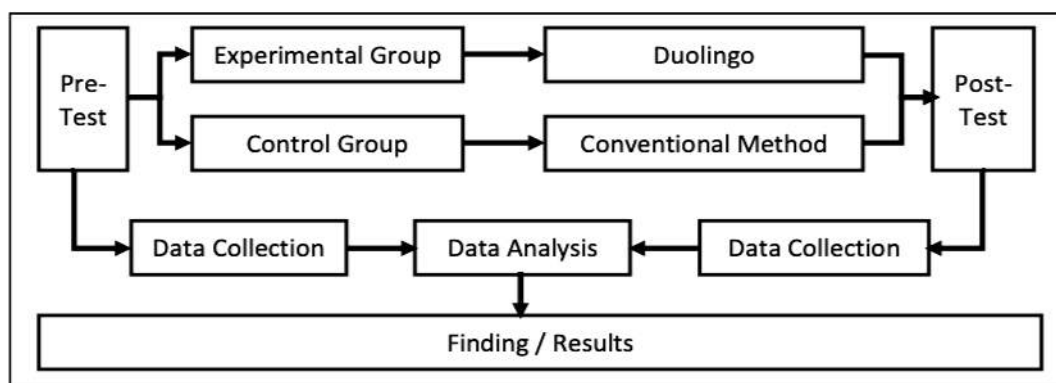
Figure 1: Research Design

how to play and learn vocabulary through Duolingo. At the third meeting, the researcher arranged a website for Duolingo Classroom where all of the participants were registered to the link by entering the classroom password informed by the researcher. Further, the students' acitivities and progress automatically could be monitored and seen by the researcher on Duolingo website. Thus, the researcher also received notification from Duolingo on her email about the students' progress in detail such as it showed the information about the students' assignment submission time. The researcher could know those students who submitted the assignment on time, late, or even did not submit her or his assignment on Duolingo. The researcher used semi structured assignment on Duolingo. Sometimes, she arranged which task that students should accomplish and for other days the students could choose which task that they wanted to accomplish on Duolingo. For the next meetings, the researcher encouraged the students to play and learn vocabulary through Duolingo before the class meeting, after class meeting, during meeting or outside classroom at least 10 minutes in a day. For example, before the class meeting was started, the lecturer gave time to the students to play Duolingo while she was checking the students' attendance list.

Furthermore, the researcher monitored the participants who were actively playing the games by looking at the leader-board every single day. The students also competed and communicated with their friends or users by giving comments. It means that the students could play and learn vocabulary individually or in group through battle and discussion with their friends anywhere and anytime. Whereas, for control group the participants only learning vocabulary by using conventional method without the application of Duolingo in teaching and learning activities. This group only learnt new words in sentences, texts, and passages, and tasks on their textbooks.

After conducting the treatment for 10 weeks, at the end of the semester the post-test for both groups were administered by the researcher in order to know the achievement between the experimental group which using Duolingo and control group which using conventional method. In analizing the data, the researcher used Statistical Package for Social Science (SPSS) 24 version. Descriptive statistics were used to investigate the means and standard deviation of each variable. Then, the researcher compared both of groups' score before and after the treatment conducted. Thus, t-test paired sample test was analyzed to determine differences between the means of both groups. This technique was useful to show statistically whether there were any differences scores between the experimental group and control group or not.

3 FINDING AND DISCUSSION

At the beginning of the research, the researcher used pre-test in order to investigate the equivalence of the vocabulary mastery of the experimental and control groups. Then, the result the of pre-test of both of the groups were examined in order to know whether there was any significant differences between experimental group and control group before the experiment. Thus, t-test paired sample test was conducted. The statistics of the scores are presented in Table 1.

Table 1 describes that the mean score in the pre-test is 55.44 (SD= 9.96) in the experimental group and 56.33 (SD= 8.93) in the control group. It shows that there is no significant difference in the mean score of the pre-test at the 0.05 level (t= -0.32, P>0.05). It emphasizes that participants between experimental and control group do not show any difference in vocabulary mastery. This result reveals that both of groups were homogenous and have the same level of ability

Table 1: Result of t-test Paired Sample Test on Pre-test.

Description	N	Mean	SD	t	df	Sig.(2-tailed) (P Value)
Pre-test Experiment	30	55.447	9.966	-3.079	29	0.707
Pre-test Control	30	56.333	8.939			

before conducting the treatment.

Then, to investigate whether there was any difference on students' vocabulary mastery in the post-test within the groups after treatments a t-test paired sample test was conducted. The result could is shown in the Table 2.

Table 2 reveals that there is a statistically difference between experimental group and control group on the post-test (p<0.05). The mean score of the experimental group is 76.66 (SD=7.87), while the mean score of the control group is 67.55 (SD=9.34). There is improvement on both groups scores from the pre-test to post-test.

Then, by comparing t-test and t-table p<0.05, we can concluded that t-test was higher than t-table value (4.204>2.045). Therefore, it means that the null hypothesis (H0)that stated there was not significant effect of Duolingo on EFL university students' vocabulary was rejected. Thus, alternative hypothesis (Ha) that stated that there was significant effect of Duolingo on EFL university students' vocabulary was accepted.

Table 3 describes that there are improvements of the students' score by the two groups on the post-test compared to the pre-test results. But, the experimental group's vocabulary mastery improved much better after the treatment. The students that applied Duolingo in learning vocabulary gained higher score than the students who did not apply it. The results show that, the mean score of the experimental group is higher than control group on the post-test. The mean score in the pre-test is 55.44 (SD=9.96) become 76.66 (SD=7.87) in the post-test of the experimental group. Then, the mean score in the pre-test is 56.33 become 67.55 (SD=9.34) in the post-test of the control group. It could be concluded that Duolingo could improve the students' vocabulary mastery.

This finding was in line with several researchers' findings. Ana (de Castro et al., 2016) found that Duolingo contributed to increase the vocabulary of her students at IFF language centre. There was a significant improvement on her B2 students' score after using Duolingo in learning vocabulary. This finding also coincided with Ahmed (Bahjet Essa Ahmed, 2016) study who stated that Duolingo could promote acquiring vocabulary for beginners. He found that there was improvement on his students' score on the test. These findings were correct as the findings of

the researcher in this research that using Duolingo could help the students in learning English and improve their vocabulary mastery.

To sum up the improvement of students' scores before and after conducting the research, the researcher created a chart. The result of the scores could be seen in Figure 2.
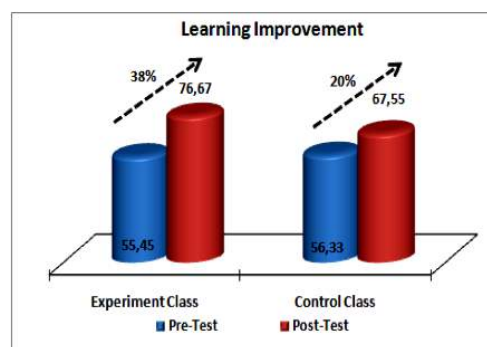
Figure 2: Learning Improvement Chart

Figure 2 describes that there is about 38% improvement on the experimental group or those students' who learned in blended learning vocabulary through the use of Duolingo. Whereas, there is about 20% improvement on the control group or those students who learned vocabulary in conventional method. Therefore, it can be concluded that Duolingo is effective in improving EFL university students' vocabulary mastery. This result was also congruent with Kusumadewi (Kusumadewi, 2018) who found that there was a significant improvement on her students' vocabulary mastery after using Duolingo in teaching and learning activities. The students who used Duolingo got higher score than who did not on the test.

Finally, the researcher assumes that the use of Duolingo in learning vocabulary gave significant effect on EFL university students' vocabulary mastery. From the result, it was clear that there were differences between students' score before and after the treatment. The researcher realized that this technique must have strengths and weaknesses. For Duolingo, the strengths found by the researcher in teaching and learning vocabulary, those are:

a) Duolingo engaged the students' enthusiasm and their motivation in learning vocabulary,

Table 2: Result of t-test Paired Sample Test on Post-test.

Description	N	Mean	SD	t	df	Sig.(2-tailed) (P Value)
Pre-test Experiment	30	76.667	7.877	4.204	29	0.000
Pre-test Control	30	67.550	9.346			

Table 3: Result of Descriptive Statistic.

Description	N	Pre-Test		Post-test	
		Mean	Std. Deviation	Mean	Std. Deviation
Experiment Class	30	55.45	9.966	76.67	7.877
Control Class	30	56.33	8.939	67.55	9.346

b) It supported the students' learning activities anytime and anywhere,

c) It enriched the students' vocabulary in a fun way.

This finding is congruent with Natanael and Byron (Marmolejo Díaz et al., 2017) concluded that Duolingo is a practical and useful application that could be used as a Foreign Language courses to improve students' skills and to create students' motivation. This result also in line with Astarilla (Astarilla, 2018) who found that Duolingo could use to support the students in learning process. The findings revealed that students had an overall positive perception towards the use of Duolingo application in learning English. The findings described that more than 80% of the 135 participants agreed the features in Duolingo was easy to use, convenient and fun. They could access it at anytime and anywhere. Then, they also thought that Duolingo could develop their self-learning skill and encourage them to learn English. As a result, it could increase their motivation to learn and to practice their English skills not only in the classroom but also outside the classroom. In conclusion, Duolingo was effective to improve the students' motivation and their vocabulary mastery.

4 CONCLUSION

This study investigated the effect of Duolingo application on EFL university students' vocabulary mastery. After conducting this research and calculating the data from pre-test and post-test scores of the experimental and control groups, it showed that the result of t-test was 4.024 while the value of t-table was 2.045 in the significance degree of 0.05. It described that t-test was higher than t-table value. It means that the null hypothesis (H0) that stated there was not significant effect of Duolingo on EFL university students' vocabulary was rejected. Thus, alternative hypothesis (Ha) that stated that there was significant effect of Duolingo on EFL university students' vocab-

ulary was accepted. It also could be seen from the mean score of the experimental group was higher than control group on the post-test. The results showed that the mean score in the pre-test is 55.44 (SD= 9.96) become 76.66 (SD= 7.87) in the post-test of the experimental group. Then, the mean score in the pre-test was 56.33 become 67.55 (SD= 9.34) in the post-test of the control group. These results describe that there were improvement on vocabulary mastery by the two groups on the post-test. But, the experimental group's vocabulary mastery improved much better after treatment. Therefore, it could be concluded that Duolingo was effective in improving EFL university students' vocabulary mastery. Based on the finding of the research, the researcher recommends to the teachers and lecturers to apply Duolingo for developing their students' vocabulary because this application can support the students' vocabulary learning and motivate students to learn English anytime and anywhere. The researcher also hopes other researchers to continue conducting future researches related to the use of Duolingo on other English skills.

REFERENCES

Ababneh, S. (2013). Strategies used by jordanian university students' in dealing with new vocabulary in english. *Journal of Education and practice*, 4(4):1–6.

Al Neyadi, O. S. (2007). The effects of using games to reinforce vocabulary learning.

Astarilla, L. (2018). University students' perception towards the use of duolingo application in learning english. *Prosiding CELSciTech*, 3:1–9.

Bahjet Essa Ahmed, H. (2016). Duolingo as a bilingual learning app: a case study. *Arab World English Journal (AWEJ) Volume*, 7.

Boudreau, M.-C., Gefen, D., and Straub, D. W. (2001). Validation in information systems research: A state-of-the-art assessment. *MIS quarterly*, pages 1–16.

de Castro, A. P., da Hora Macedo, S., and Pinto Bastos, H. P. (2016). Duolingo: An experience in english teaching.

Journal of Educational & Instructional Studies in the World, 6(4).

Gay, L. R., Mills, G. E., and Airasian, P. W. (2011). *Educational research: Competencies for analysis and applications*. Pearson Higher Ed.

Harris, C. (2009). Meet the new school board. *School library journal*, 55(5):24–26.

Hayes, D. P., Wolfer, L. T., and Wolfe, M. F. (1996). Schoolbook simplification and its relation to the decline in sat-verbal scores. *American Educational Research Journal*, 33(2):489–508.

Hooghe, L., Bakker, R., Brigevich, A., De Vries, C., Edwards, E., Marks, G., Rovny, J., Steenbergen, M., and Vachudova, M. (2010). Reliability and validity of the 2002 and 2006 chapel hill expert surveys on party positioning. *European Journal of Political Research*, 49(5):687–703.

Judith Meyer (2013). If I want to learn a new language, how do the Pimsleur and Duolingo learning systems compare? How do the two systems compare for young children who want to learn a new language? - Quora.

Kelsey D. White and Frances Siracusa (2013). Translating with Duolingo for Language Learning - The FLTmag — The FLTmag.

Kusumadewi, H. (2018). The effects of using duolingo towards student's vocabulary mastery (an experiment of junior high school students at omega sains institute). *IJET (Indonesian Journal of English Teaching)*, 7(2):172–186.

Marmolejo Díaz, B. G., Méndez Bermúdez, N. M., et al. (2017). Duolingo: An useful complementary mobile tool to improve english as a foreign language learning and teaching.

McCarten, J. (2007). Teaching vocabulary. *Lessons from the Corpus, Lessons for the Classroom. Available at: http://perino. pbworks. com/f/McCarten_booklet. pdf*.

Merz, T. Duolingo : all the buzz. pages 16–17.

Muijs, D. (2010). *Doing quantitative research in education with SPSS*. Sage.

Thornbury, S. (2006). *How to teach vocabulary*. Pearson Education India.

Turgut, Y. and İrgin, P. (2009). Young learners' language learning via computer games. *Procedia-Social and Behavioral Sciences*, 1(1):760–764.

Van De Bogart, W. (2009). Developing a pedagogy for active learning (pal). part 1: Including a brief history of active learning in thailand. *Academic Journal Thammasat University. Bangkok. http://www. earthportals. com/Portal_Messenger/ActiveLearnin g. html [17.11. 2017]*.

Webb, S. (2008). Receptive and productive vocabulary sizes of l2 learners. *Studies in Second language acquisition*, 30(1):79–95.

Morphology of Talang Mamak Tribe Dialect at Indragiri Regency of Riau Province, Indonesia

Seno H. Putra

English Department, Universitas Islam Riau, Pekanbaru, Indonesia
senohimala@edu.uir.ac.id

Keywords: Linguistic, Indragiri Hulu, Communication.

Abstract: This is a study of aspects of dialect used by Talang Mamak tribe, a minority of Indragiri Hulu regency, Riau province. The problems of this study, namely, the processes of morphology that pertain to nominal and verbal constructions and interact with the syntax of TM. The design of this study was based on the methodology of qualitative linguistic research. The approach used in this study is to describe and analyze linguistic corpora, where in conducting this study, the researcher directly went to the field to collect the data through informal communication and interaction with the TM speakers as well as through formal elicitation and recording sessions. The contribution of this study was for linguistic field, and for the basis of the study of TM in the aspects of morphology. Besides, from the analysis and findings of this study obtained the current forms of morphology and a few examples of its sentences of syntax processes of TM. Moreover, the results of this study also indicated both similarities and differences among other dialects in the border of Indragiri Hulu regency, particularly, and Riau province generally, including Borneo and other dialects of Sumatera. for examples, the similarities and differences among other dialects: Sakai, Bonai, Suku Laut, Rengat, Kampar, Taluk Kuantan, in Riau province; while, Berau in Borneo, and Jambi malay language, Nias dialect in Sumatera, and Jakarta dialect, and what the future appears to hold for tm dialect, of course, needs to be followed up.

1   INTRODUCTION

Not many people know about the Talang Mamak, an ethnic group in eastern Sumatra, Indonesia, who still live in the interior of the Indragiri Hulu regency in the Riau Province of Indonesia. However, both culture and language can be investigated and developed, in order to contribute to the world-wide society. Until now, however, many people, including linguists and anthropologists, have not yet investigated the unique characteristics of the Talang Mamak group. Although there have been a few scholars who have investigated these phenomena, the results have not been substantial. We note here only the studies by Sugio Hadi and Dalami Kari and Abdullah Manan and Syahdanur (n.d) (Collins, 1995), especially on the words of Talang Mamak dialect, and Sulaiman a little focused on the Structure of Talang Mamak dialect.

Indeed, there are some areas of the Riau Province where the studies of dialects have been done with much scholarly attention. The results of those studies are available not only to examine basic concepts and to assist in the development of the dialects themselves, but the studies could also contribute towards research, particularly by those who are interested in language studies. Among the studies are, for example, dialects of coastal areas in the Riau Archipelago (Putra,), the dialects of orang Laut in the Riau Archipelago (Suwardi, 1986), the dialects of Kampar (Dahlan, 1983), the Morphology of the Rengat dialect of Indragiri Hulu (Seno, 1998) and Morphological system of Bonai dialect (Ruswan, 1983).

Nonetheless, among Malay dialects little is known about Talang Mamak. However, according to Collins (Collins, 1998), the dialects of minority people must be researched, because the dialects of tribal people, geographically split from mainstream social conditions, often display archaic elements of language, especially in vocabulary and morphology, and these elements may be useful for explaining features and classification of other dialects.

But, until today we still must ask: Why has the Talang Mamak dialect never been investigated? Why has it gotten less attention from regional or foreign scholars? Why have scholars been focused on the study of only some Malay dialects, especially in the parts of the Malay heartland, including in Riau itself, but not on the dialects of Talang Mamak, also a part

of the Malay heartland? In other words, some scholars have been focused on the culture of TM, but only a few on the dialects of TM specifically.

With these questions in mind, the researcher has chosen to investigate the Talang Mamak dialect, especially focusing on the Morphology. There is another dialect, in this region, which has already been thoroughly researched, namely Rengat dialect (Seno, 1998), so this study will focus only on Talang Mamak, henceforth called TM. Geographically, Riau includes many variants of Malay that display differences and similarities from one area to the other, of course, all these dialects are part of the Malay language. Therefore, the focus of this research is on language use in some what informal settings, necessarily a dialect is the appropriate topic. As noted above, the TM dialect will form the basis of this study, or the main problem of this study is about the Morphology of TM dialect will be the main focused of this study.

2 RESEARCH PROBLEMS

The problems of this study can be formulated in two broad questions. First, what are the processes of morphology that pertain to nominal and verbal constructions of TM? Second, how do morphological processes interact with the syntax of TM?. In this study, the researcher does not intend to report on all aspects of TM. Instead, this study is limited to the formulation of the problems (research problem) stated above and so that they can be investigated and analysed in depth. This has implications for what is to be investigated and how this study is to be conducted. Consequently, the main purpose of this study is to discover and describe the Morphology of TM dialect, particularly in the aspects of nominal and verbal constructions of TM, and the morphological processes that interact with the syntax of TM.

3 RESEARCH METHOD

This study uses a descriptive approach to collect, identify and describe the components of the morphology of TM. Since the components or the aspects of Morphology of TM are broad, this study is focused on only three tasks. First, to find out and describe the processes of affixation morphology, particularly in the formation of nouns and verbs. Second, to find out and describe the processes of between the processes of morphology and those of sentence structure in TM. Although the aim of this study is to find and

describe the Morphology of TM, by using a descriptive approach, this study also begins with the hypotheses of the study.

The hypotheses of this study can be explained in three statements. First, there is a relationship between TM and other Malay variants. Second, there is a difference between TM and the other dialects of other area, including the variants spoken by other minority people in Sumatra, such as Kubu, Sakai, Suku Laut, and Bonai. Third, there are similarities between TM and the dialects of the other areas, including the languages or dialects of Kubu, Sakai, Suku Laut, and Bonai. Based on the three hypotheses above, therefore, this study, at least, can contribute to explaining the relationships that exist between TM and other Sumatra dialects, including Kubu, Sakai, Suku Laut, Bonai by delineating the similarities and differences among them.

As stated above with respect to the purpose of this study, this study is aimed at finding out and describing aspects of the Morphology of TM, but the results of this study can also contribute to further research, particularly because the study of TM in the aspects of Morphology that has not been much researched yet by scholars until now. With clear understanding of TM Morphology, Thus, this study can also contribute to those who are interested in conducting research about the Malay language, especially the dialects of minority people like TM, and the results of this study can contribute to linguistic studies.

The design of this study is based on the methodology of qualitative linguistic research. The approach used in this study is to describe and analyse linguistic corpora, because, in carrying out this study, the researcher directly went to the field to collect the data through informal communication and interaction with the Talang Mamak dialect speakers as well as through formal elicitation and recording sessions. These efforts were undertaken became the main work of a linguist who wishes to analyse linguistic data found from the informants in the field. In short, the purpose of studying a dialect is to acquire accurate data through natural communication in the language in use (Bogdan, 1982) (Punch, 2001).

In this study, although the researcher directly went to the field, the researcher also used a Talang Mamak assistant, especially to communicate and interact with the TM dialect speakers. During the field work, the researcher encountered difficulties in acquiring the data from the TM dialect speakers. The TM dialect speakers were very shy not only to talk freely, but also, they were reluctant to face and meet with an outsider, or someone who was not yet known to them. Therefore, in order to get the data for this

linguistic corpus, the researcher was usually accompanied by the village head, Kumantan, a 51 year old man appointed village head by the Indonesian government. Its role in the field was to assist the researcher to obtain the data, by persuading the TM dialect speakers to communicate either with him or with other TM speakers, so the verbal intonation could be noted and tape-recorded.

In addition to the field assistant, the researcher also used two other assistants to obtain the data in the field. The two other assistants were indigenous TM people who have interacted more frequently with other people in Seberida; moreover, they had higher education, for example, one assistant was a junior high school graduate and the other a senior high school graduate. Those assistants, furthermore, still maintained proficiency in and knowledge of their own language and culture. The two assistants helped the researcher gather the linguistic data from the informants in the field and then acted as translators and assistants for the transcriptions of the data. They also assisted in the descriptive analysis of the discourse of the TM dialect.

During the elicitation sessions, the researcher and Kumantan asked the informants to speak freely, for example, about their daily activities, their experiences, or about the TM social and cultural problems. By using such a research design, and become the researcher was accompanied by the village head (Kumantan), the researcher was able to acquire the data smoothly. Because Kumantan is a person honored by the TM people, fieldwork was made possible by his participation. Moreover, local tradition requires that every researcher or an outsider who wants to visit or investigate the TM people must report with Kumantan. It must be admitted that the presence of the important local leader and the researcher himself may have had an important or the data collected. The other informants serve as translators to explain the texts and data obtained in the field. These texts were written that is transcribed, then the informants translated the texts of TM into Indonesian.

3.1 Selecting the TM Informants

The population chosen for this study was the Talang Mamak society in the Seberida district. However, since the population of this minority people is rather large, perhaps 6,983 people (Inhu, 1992), only 15 persons were selected as informants, representatives of the population of the whole Talang Mamak society. 15 persons of TM society as a sample of the whole of TM in Seberida district, these informants were selected based on the criteria, for example, age, sex, level of education, the use of dialect, and reduced contact with outsiders. The characteristics of selected informants are as follows: There were 7 women and 8 men whose ages were between 30 to 50 years. The researcher chose these informants, because they were able to communicate fluently, that is, they were able to use the linguistic elements of their language in daily communicative use.

Although this is a small sample used in this study, the most important thing is how the linguistic data was acquired based on the speech of TM speakers. In this case, as (Labov, 1970) was of the opinion that in linguistic research, the researcher may use only one informant to obtain a linguistic corpus in the field. In addition to this, the were reasons for only taking 15 informants in this study. First, these informants were broadly representative of TM population still settled in the Indragiri Hulu regency. Second, the Seberida district is a part of regency where a relatively large number of TM people live rather than other areas of Indragiri Hulu, such as Rengat Barat district and Keloyang district. Third, the TM people in Seberida, as well as Rengat Barat, and Keloyang districts until now have not been researched by any scholars, particularly with respect to their dialects and culture; so, even this small sample of 15 speakers, it will be possible to shed light on a larger problem. Only two dialect speakers completed elementary school; while the others had no formal education. This seems to reflect the general level of education among two aged thirty years old above.

As shown above, only two dialect speakers completed elementary school; while the others had no formal education. This seems to reflect the general level of education among those aged thirty years and above. Moreover, two TM speakers who had formal education has a little different knowledge from other speakers. In this case, he is also a Shaman (Bomo) in the TM people. Therefore, he was usually asked by the TM people to treat sick people (traditional medicine), particularly in the Talang Jerinjing. Mawan is the uncle of Panjatan who was replaced him to be a Shaman for the TM people. In order to treat sick people, they usually interact with other people out of TM people, so that they are also able to use another dialect, especially Rengat dialect. So, although these speakers of TM are also able to use another dialect, for example, Rengat dialect, they still maintained their own dialect, that is, TM dialect used in daily life.

All these informants were chosen for this research project, because they were indigenous people of TM; in their daily activities, they use their own dialect and culture. They apparently have not been significantly influenced by other dialects and cultures in

the broader society, in this case, for example, the dialects of Rengat, Taluk Kuantan, Indragiri Hilir, Kubu, Pelalawan, and Minang. Geographically, these areas are also close to the area of TM society. To prove that these informants were not influenced by other dialects, firstly, the researcher asked them to communicate with TM dialect; the second one was the researcher asked them to pronounce the things, such as a part of the body and the furnitures in their houses (the researcher pointed something, then still use TM dialect; and the third one was the researcher asked the village head of TM to choose the TM informants who are never out of, or never interact with other community. In other words, all these informants of this study still live in their own village and community. In short, they were really indigenous people of TM who were selected to be the sample of this study.

3.2 Building the TM Corpus

There were two major procedures to develop and expand the TM corpus used for this study. First, data were obtained by asking each speaker of TM to speak freely about his/her experiences and daily activities. Sometimes he/she was also asked to speak about the traditional lifestyles of the TM community. These monoloques were recorded and later transcribed to develop a corpus of discourse reflecting the complexities of the morphology and syntax of TM. The second major procedure was more formal and involved the use of a tested research instrument. Collins developed a lexical questionnaire of 465 items (in Malay and Indonesian) used as a survey instrument in Borneo. This rather long questionnaire, an elaboration of the Swadesh 200-item wordlist, is based on both semantic fields (plants, animals, body parts, both technology) as well as word classes (verbs, adjectives, numerals, pronouns). By eliciting the items of this questionnaire, the researcher gained familiarity with the phonological and morphological systems of TM.

Furthermore, in this study the researcher used two mechanical devices to support the acquiring of the data. First, a small cassette tape recorder was used to record informal communication, for example, at home or in shops, and more formal speech acts, such as ritual ceremonies of the TM society. Such techniques have been used by thousands of scholars (Labov, 1975) and (Stubbs, 1994). Second, a camera was used to take photographs showing the conditions of TM society in the Seberida district. This was intended only as a documentation of the study.

3.3 Field Collection Method

As noted above, the researcher collected the data in the field. Some informants (speakers) were asked to speak freely, and were recorded. On other occassions, however, two or more speakers were asked to talk to each other about their daily activities and experiences. This technique has been used for several decades in the study of Malay dialects. As (Collins, 1987) stated, "two native speakers at the same village are asked to talk about their own daily activities (what they like to talk about), for example, fishing, and so on". As these talks are recorded, the researcher can become involved in communicative interactions.

The initial visit was to select a research site, observe potential informants and contact the chief assistant, Kumantan; Subsegment visits were undertaken to make recordings as well as to elicit the questionnaire discussed. Each of the data collection visits were day-long trips to specific location in the field. As Salimi (Salimi, 1991), the data for this research were gathered mainly in face to face interviews and conversations with speakers (informants). This means that the procedures for investigating the nature of phonological and morphological variants in a given community involved the technique of elicitation data, such as interviews, use of questionnaires. Moreover, the interview method and participant observation procedures have the advantage of enabling the researcher to directly observe the actual quality of relationship that exist within the informants; while questionnaires approach is to construct the information.

"... The interview is one of the main data collection tools in qualitative research. It is a very good way of accessing people's perceptions, meanings, definitions of situations and constructions of reality. It is also one of the most powerful ways we have of understanding others, and interview has a wide variety of forms and a multiplicity of uses, as well as the most common type of interviewing is individual, face to face, or face to face group verbal interchange (Punch, 2001)". In other words, in order to understand other persons constructions of reality, we would do well to ask them in such a way that they can tell us in their terms and in depth which addresses the rich context that is the substance of their meanings.

3.4 Data Analysis Method

In order to analyse the data obtained from the informants in the field, four techniques were used. First, the spoken data of the linguistic corpus were transcribed into semi- phonemic texts. Second, the researcher tried to find out and describe the questions

of the formulation of the problems of the study; for example, (1) the question of the process of morphology formation in the aspects of nouns, verbs, and adjectives of the TM dialect; (2) the researcher attempted to find the relationship between the morphology processes and the sentence structure of TM dialect. Lastly, all the transcribed data described into the texts were re-read and re-examined to ensure the accuracy, validity, and reliability of the linguistic corpus of the Morphology of the TM dialect. Consequently, to re-examine all of the transcribed data, the researcher used one of his assistants to read and translate the material into Indonesian. In the data analysis of TM dialect speakers, in this case, the researcher and the assistants worked together in both collecting data from TM dialect speakers and analysing the data, especially to translate from TM dialect into local Malay or Indonesian. Moreover, if the researcher encountered difficulties about the meaning of TM words or structures, the assistants usually helped to translate these words and structures.

4 RESULTS AND DISCUSSION

The results of this study is focused to the main problems of this research, that is; first, the processes of morphology that pertain to nominal and verbal constructions of TM dialect; Second, the morphological processes involved in inflectional and derivational affixes in TM; and third, the morphological processes interact with the syntax of TM. The examples of TM dialect are presented below.

4.1 Morphological Process

4.1.1 Prefixation Forms

a) Prefixation That Yields Nouns

Prefix {pa-} combines with adjective forms to become 'a person characterized by the base. Some affixes that yiled nominal forms have been identified, although only a few of them appear frequently. The prefix pa-is attached to any base form, functions to form nominal. The meaning of this prefix indicates someone who is characterised by the base. For example, /cadi?/ becomes /pacadi?/ 'a clever person'; /mɔtɛ?/ becomes /pamɔtɛ?/ 'a beautiful person', and the allomorph of {p∂N-} also appeared in the TM dialect determined by the initial sound of the roots, for example, vowel /i/, /e/ and consonants /b/, /m/, and /s/ to form nominal form in the TM dialect. According to the categories of words, only a few word bases

of adjective and verb forms which can form nominal forms in the TM dialect. For example, /inaη/ becomes /p∂inaη/' a nursemaid, /ekaτ/ /becomes /paηekat/ 'a binding,etc.

b) Prefixation That Yields Verbs

The prefix {pa-} can be added to a verbal base to yield a causative verbs, where this prefix derived from verbal, nominal, and adjective base forms indicating transitivity or action of the word forms. For example, the prefix {pa-} verbal form in /tampu/ becomes /patampu/ 'to cause someone to be learner', /inca?/ becomes /painca?/ to cause someone to be a joke',etc.

c) Prefix ba-.

Prefix {ba-} 1.This prefix combines with verbal base forms to form intransitive verbal. The grammatical meaning of the derived can be 'a stative aspects', or may be glossed as characterised by the verb base. For example, /b∂ka/ becomes /b∂b∂ka/'to burn, /gʊgʊ?/ becomes /bgʊgʊ?/ 'to pickle', /j∂w∂l/ becomes /b∂j∂w∂ l/ 'to sell'.,etc. The prefix {b∂-} derived from nominal bases that can change to become 'intransitive verbs' indicating 'an activity' without any objects following the base forms. Example, /ʊbɛτ/ becomes /b∂ʊbɛτ/ to take medicine, /paɣan/ becomes /b∂paɣan/ 'to have a floor',etc.

d) Prefix di-

The prefix {di-}1 is a verb forming with verb base acts as both category changing and category maintaining. In this construction, it functions as a 'passive voice'. /anta?/ becomes /dianta?/' to be collided into /jidai/ becomes /dijidai/ 'to be struct'. The prefix {di-}2 also modifies 'passive voice', the meaning of this construction as an action of the person. Example, /kapɛη/ becomes /dikapɛη/'to be chipped',etc.

e) Prefix k∂-

This prefix combined with verbal bases denote either active intransitive or transitive verbs, which have meaning as an event or unpredictable. Examples,/santa?/ becomes /k∂santa?/ 'to stumble ' and /lɔηkap/ becomes /k∂lɔηkap/ 'to provide'.

f) Prefix ta-

Verbal bases are formed with this prefix denote intransitive or transitive verbal roots, and the meanings of this prefix are accidental, or agentless and unexpected.Examples, /campa?/'to fall ' / tacampa?/ to fall

down /tataga?/ to stand up'. Others take the prefix t∂-/ in TM dialect as /t∂kumpol/ 'to collect'.

g) Prefix maN- +transitive verbs

This prefix functions as transitive verb marker expressing dynamic or progressive action, for example, /gaγɛŋ becomes m∂gaγɛŋ'to fry'. The allomorph of {m-} of the morpheme {maN-} and their morpho-phonemic alternations, such as /mb∂nta? 'to snap' mb∂nta?/ 'to snap at'. The other prefix {maN-}2 also appeared in TM dialect to yield statives verb indicating intransitive verb, i.e., /bumbɔŋ 'be big' /mbumbɔŋ 'to be big'.

h) Prefix s∂-

This prefix can be formed with noun and adjective, i.e., /tiŋgi/ 'high'/ becomes /s∂tiŋgi/'to be very high', another one indicates 'location' etc., /bɔla/ 'next' becomes /ɔla/ 'to be next'.

4.1.2 Suffixation Forms

The morphological process attached at the end of roots or stems of a language (King, 1968; Sturtevant, 1973). In this study only two kind of suffixes found in TM dialect denoting category maintaining or category-changing if they co-occurs with verb base. For example, the suffix {-an} added to the verb base indicates a repeated activity, like /cɔlɔp/ 'to dip' becomes /cɔlɔpan/ 'to cause someone to dip something',while suffix {-i}functions as 'passive transitive' and denotes a complete action done by someone, such as /ulah/ becomes /ulahi/ 'be acted'.

4.1.3 Circumfixed Forms

a) The circumfix {pa-an} interacts with verbal forms to yield abstract or general nouns, i.e., /tampa?/ 'to appear' becomes patampa?/ 'appearance', while {paN-an} interacts with verbal forms indicate a place where the process occurs, i.e., /tili?/ becomes / panili?an/ 'the place where the one can peer, a peephole'.

b) The circumfix {maN-an} denotes a process of doing something repeatedly, and the verbal roots yield transitive verbs. Examples, /taga?/ becomes /managa?an/ 'to make something erect'; while {m∂N-i} functions as active transitive, and grammatically links 'an agent' with the result of the action, i.e., /sudah/to be /m∂πudahi/ 'to finish'.

c) The circumfix {m∂N-i} functions as active transitive, and grammatically links 'an agent', with the

result of the action. Forexample, /sudah/ becomes / m∂πudahi/ 'to finish'.

d) The circumfix {di-an} derived from the variety of roots, like nouns, verbs, and adjective bases. The function of this circumfix denotes the passive voice, and it means that someone acts something from the base. Example, /b∂γ∂t/ to be /dib∂γ∂tan/ 'to be heavy'.While, {di-i} indicating 'passive transitive', where someone acts something derived from the base, such as /ulah/ to be /diulahi/ 'to be acted'. Besides the circumfixes above, the TM also has circumfix {s∂-an}. The meaning of the word forms may be glossed as 'sameness in property, or state. See example, /j∂ŋk∂l/ becomes /s∂j∂ŋk∂lan/ 'span'.

4.2 The Role of Morphology in Transitive Sentences

4.2.1 Active Transitive Sentences

In TM dialect, active transitive sentence is the sentence whose subject functions as 'an agent' or an actor'. In other words, active transitive sentences in TM dialect consist of 'noun phrase as a subject' and 'verb phrase as a predicate'. Moreover, the constructions of TM dialect in active transitive sentences are mostly the same forms as other Malay dialects or Malay language. This means that the structure of these sentences are almost the same forms as the dialects surrounded it, for examples, Rengat dialect, Pelalawan dialect, Taluk Kuantan dialect, etc.

1. ⌈k∂lau batɛn to? m∂πudahi gawai⌉
   if village head for pre+finish wedding party.
   As for the village head, it is he who concludes a wedding party.

2. ⌈nan palɛŋ utam∂ γuma tu kayu⌉
   That most important pre+make house that wood.
   The most important thing about building a house is wood.

4.2.2 Passive Transitive Sentences

In TM dialect, passive sentences can be constructed with two kinds of forms based on their structure: one with using 'dɛ' as prepositional phrase in one direct object, and another one without 'prepositional phrase'. Example, (1) ⌈ aku diawai dɛ? sandal⌉ 'I pre+slip by sandal (I tripped on a sandal), and [iπe dililit buah j∂γγɛŋ] 'he pre+twist fruit j∂γγɛŋ (he is twisted by jereng).

4.3 The Role of Morphology in Intransitive Sentences

A few of verbal bases function as intransitive forms denoting 'an action of the verb in the subject', where the predicate is not followed by an object, except 'an adverb of place'. Here we present prefix {m∂N-} and its allomorphs. For example, [ɣuma summon lagi na? m∂π∂bɔla sitaw] 'house summon again want pre+besides there (Sumon's house is on the side over there)., etc.

4.4 Stative Sentences with Prefixes

Stative verb is one that is not normally used in progressive tense. Most stative verbs refer to 'state', not to actions or events (Swan, 1988). From the investigated data, the several forms of stative intransitive sentences were found in this dialect. The stative sentences, in the TM dialect, express the condition in which somebody or something in circumstances.

4.5 Reflexive Sentences

The reflexive sentence is a combination of –self with one of the personal pronouns or with the impersonal pronoun one. The reflexive pronoun generally refers to an animate being, usually a person. The most common use of the reflexive pronoun is an object that 'reflects back' to the subject. Example, /βατΕν SuɣαN βυlεh m∂ηhukɔmηe / head may pre + sentence he alone ' the head of village himself may sentence him'.

4.6 Reciprocal Sentences with Prefixes

Reciprocal sentence is the sentence which refers to 'given' and 'received' in return an mutual, or it expresses mutual action or relation from one to another (Thomson, 1987). Example,p∂patah bolom kalah m∂ηalah / 'proverbs not pre + defeat ' ' proverbs have not even been defeated or formed short' .etc.

5 CONCLUSION

In the morphological processes of TM dialect include prefixes, suffixes, and circumfixes. The prefixes encompasses prefixation that yields nouns and verbs; while, suffix consists of suffixation forms, such as suffix {-an} and {-i}.In the section of inflectional and derivational constructions, i.e., inflectional constructions in TM dialect involves in prefixes {maN-/m∂N-}, ta-, and the allomorphs of {m∂N-}, such as {m-}, {n-}, and {N-} which function to form active and

passive voices denoting either 'an agent' or an action of person, and unintentional activity derived from the word bases. While, the derivational constructions consist of prefixes {k∂-}, {p∂-/p∂N-}, which also function to form: verbal, nominal, and adjective forms. For example, in the derivational constructions, nominal bases become nominal forms, verbal bases performs, and adjective bases to be nominal forms after the process of derivational affixation. In short, all the examples presented in this section derived from various word bases of TM dialect. Moreover, a few examples of derivational forms with suffix {-an} and circumfix {k∂–an} were also displayed in this section, where this suffix and circumfix followed by word bases to yield nouns and abstractness.

The morphology constructions of TM dialect are displayed in various forms of sentences. The role of morphosyntax with transitive sentences include active transitive sentences and passive transitive sentences; while, the role of morphosyntax with three prefixes, such as the prefixes {mN-/maN} and {b∂-/ba} in the intransitive sentences. Still concerned with this section, three types of sentences also appeared in TM dialect, i.e., stative sentences with prefixes {b∂-}, {ta-}, and maN-, and reflexive sentences with prefix maN- derived from various verbal roots, and the last of this section, reciprocal sentences with prefixes {m∂N-} and its allomorphs, {ba-} and {di-} were also presented, and semantically, they denote reciprocal or repetitive action.

REFERENCES

Bogdan, J. L. (1982). Paradoxical communication as interpersonal influence. *Family process*, 21(4):443–452.

Collins, J. (1998). Malay, world language: A short history. the history of malay monograph series.

Collins, J. T. (1987). *Dialek Melayu Sarawak*. Dewan Bahasa dan Pustaka, Kementerian Pendidikan Malaysia.

Collins, J. T. (1995). *Bibliografi dialek Melayu di pulau Sumatera*. Dewan Bahasa dan Pustaka, Kementerian Pendidikan, Malaysia.

Dahlan, S. (1983). *Hubungan bahasa dan dialek Melayu Kabupaten Kampar Bagian Timur dengan bahasa di daerah bekas Kerajaan Siak*. Pusat Pembinaan dan Pengembangan Bahasa, Departemen Pendidikan dan Kebudayaan.

Inhu, D. S. K. (1992). Statistik.

Labov, W. (1970). The study of language in its social context.

Labov, W. (1975). *The quantitative study of linguistic structure*, volume 1. US Regional Survey.

Punch, S. (2001). Multiple methods and research relations with young people in rural bolivia.

Putra, S. H. Morphology of talang mamak tribe dialect at indragiri regency of riau province, indonesia.

Ruswan (1983). *Morfologi bahasa Bonai*. Tpt.

Salimi, L. O. (1991). *A journal language in society*, 22(2).

Seno, P. (1998). *The Morphology of Rengat dialect*. UIR Press.

Stubbs, M. (1994). Grammar, text, and ideology: computer-assisted methods in the linguistics of representation. *Applied Linguistics*, 15(2):201–223.

Suwardi (1986). *Dialek bahasa orang laut*. Pusat Pembinaan dan Pengembangan Bahasa.

Swan, T. (1988). *Sentence adverbials in English: A synchronic and diachronic investigation*. Novus-Forl.

Thomson, J. (1987). *Understanding teenagers' reading: Reading processes and the teaching of literature*. Methuen Australia North Ryde.

Representation of Malay Symbols: A Semiotic Analysis on Songket Monument and Keris Monument in Pekanbaru

Cutra Aslinda and Dyah Pithaloka

Department of Communication Science, Universitas Islam Riau, Pekanbaru, Indonesia
{cutraaslinda, pithaloka}@comm.uir.ac.id

Keywords: Semiotic, Symbol of Malay, Monuments

Abstract: This research aims to analyze the representation of Malay Symbols of Songket and Keris Monument in Pekanbaru at denotations and connotations context. The semiotic approach that used in this research is referencing to Roland Barthes's mythology. The data was collected through nonparticipant observations and in-depth interview with a Malay Culture expert. Data analysis techniques in this study are the meaning of two stages sign of semiotic Roland Barthes. At the end, this research has two results, first of all is about the Keris Monument. There were four parts of the monument that has been analyzed. The second result is about Songket Monument, the Malay symbol is presented in nine parts. The results showing that not both of the monuments were fully built to represent Malay culture. The Songket monument signifies the values of Malay culture in the form of personality, attitudes, manners, social values, guidance in attitude and self-character, also how to socialize in accordance with Malay cultural values. The Keris monument signifies the Malay honor, however based on interview with Riau cultureists (Al Azhar), there is a mismatch between the meaning of keris position, that should not be downward, since it means surrender.

1 INTRODUCTION

A city is a representation of the community. It means when a city change, the people in the city will also changing (Hamid and Budianto, 2011).Almost every city in the world has their signature food, traditional dress, or iconic building that representing the culture of the city.

One of the most famous city in Indonesia is Bali. When referring to the island of Bali, we find there are monuments in the city that placed at almost every intersection and roundoabout, that happened because monument is related to the beliefs of the Hindu community in Bali.

Other than Bali, city that will be discussed in this research is Pekanbaru. Pekanbaru is the capital of Riau Province in Sumatra, Indonesia. If we travel around Pekanbaru, we will find many languages, accents, monuments. The monuments were built at several spots in the city. There are several monuments, namely pesawat Terbang Monument, Keris Monument, Perjuangan Rakyat Monument, Bambu Runcing Monument, Demokrasi Monument, Songket Monument, Kompang Monument, Pahlawan Kerja Monument, Lancang Kuning Monument, Adipura Monument, Selais Monument, and the newest is Anti Korupsi Monument that built in 2016.

Some important things that must be considered if we talk about monument are monument is a sign, a symbol, it means that monument must be able to signify or symbolize something that a city want to symbolize, wheter it is from the shape, artistic level, where it will be located, how it is related and representing the local culture, what kind of concept and what material will be picked to build the monument. All of that must be think carefully. Also it should be discussed with various related parties, such as culture expert in the country so that the monument can be built perfectly as a symbol of a country or city.

There was a research done by Junaidi form Lancang Kuning University that study about the monument in Pekanbaru, the differences with this research are in the subject and the semiotic analysis used. That research explored the meaning of the signs found in three monuments in Pekanbaru. Those monumensts are Tepak Sirih Monument, Tari Zapin Monument, and Keris Monument (Junaidi, 2014). Peirce's semiotic analysis approach was used to interpret the signs found in that monuments. The results showed that the monuments were made to represent Malay culture. The Tepak Sirih monument signifies the friendliness of the Malays in welcoming guests, the Tari Za-

pin monument signifies the zapin dance as a Malayan dance originating from Riau, and the Keris monument signifying Malay honor. Although these three monuments feature Malay culture, there was a mismatch between the markers used and Malay culture. The three pillars are also not quite right in presenting the concepts of aesthetics and balance. The message conveyed through the monument was not in accordance with the cultural meaning contained in Malay society that causing debate in the community.

According to the previous research, some monuments in Pekanbaru apparently built only as decoration, regardless of the meaning of the monument and the suitability of location where the monuments built. Those were the main problem this research was conducted.

In this research, only two monuments that will be focus on: the Songket Monument and Keris Monument (as seen on figure 1 and 2 below this paragraf). The determination of these two monuments is because those monuments look related each other seen from the perspective of the use of male malay traditional dress that often be equipped with a keris.

Figure 1: Songket Monument.

In this study, we analyze the representation of Malay culture in those two monuments as a symbol of Malay culture in Pekanbaru using the Communication Science approach in Semiotic analysis which examines what is the meaning behind a sign using Roland Barthes's semiotic analysis. In addition to using semiotic analysis the researcher will interview Malay culture expert that understands the meaning of Malay symbols to be more objective.

2 LITERATURE STUDY

2.1 Representation

Representation is an act of representing, being represented, what is representative, or representative. Rep-

Figure 2: Keris Monument.

resentation can also be interpreted as an illustration (Rafiek, 2010).

Representation reconstructs and displays various facts of an object so that the exploration of a meaning can be done to the maximum (Ratna, 2007).

2.2 Symbols

The symbols or symbols in the Webster (1997) dictionary are explained as something that shows, represents or gives an impression of something else; an object is used to represent something abstract; symbol, for example, doves are a symbol of peace.

2.3 Semiotic

Semiotics comes from the word semiotikos, which means sign theory. According to Paul Colbey, the basic words of semiotics come from the word "Seme" (Greek) which means interpretation of signs. Semiotics is the science of signs. The study of signs and all that relates to them, how they function, relationships with other signs, their transmission and acceptance by those who use them.

The sign itself is defined as a basis for social conventions that were built before and can be considered to represent each other. Signs and symbols are tools and materials used in interactions, so that the message can be received effectively, it is necessary to interpret the message, because only humans have the ability to use and interpret symbols, and develop branches of knowledge that discuss how to understand symbols or symbols.

Semiotic is the study of a series of outer objects, events of the whole culture as a sign. The semiotic

analysis used refers to the theory of Roland Barthes. Roland Barthes traces the meaning of a cultural approach, in which Barthes gives meaning to a sign based on the culture behind the emergence of that meaning. Thus the meaning at the level of myth can be revealed in accordance with the semiotic superiority of Roland Barthes who is famous for the mythical element.

2.4 Roland Barthes's Mythology

According to Barthes, semiology wants to learn how human interpret things. Understanding in this case cannot be equated with communicating. Semiology aims to take in any systems of signs whatever their substances and limits like images, gestures, musical sounds, and objects. It describes the interactions that occurs when the sign meets the feelings or emotions of their users and the values of their culture (Fiske, 2012).

3 METHODOLOGY

3.1 Research Approach

This research uses descriptive method with a qualitative approach. Arikunto (Arikunto, 2002) states that qualitative research is a descriptive study because this study attempts to describe data with sentences separated by categories to get conclusions.

3.2 Subjects

The research subject is the method of data sources that are asked for information in accordance to the research problem. The source in research is the subject from which data is obtained (Arikunto and secara Manusiawi, 2002). The subjects in this study were Riau Culturalists: Mr. Al Azhar.

3.3 Data Collection Techniques

In this study, researchers used several data collection techniques, namely: observation, interview and documentation.

3.4 Data Analysis Techniques

In carrying out the analysis, researchers used Roland Barthes's model that has two significant stages in analyzing objects. The first stage is the significance stage of denotation, in this stage the relationship between the signifier and signified in a sign occurs in external reality, namely the most obvious meaning, in another definition, signifier is an image or mental impression of something verbal or visual, such as voice, writing. Whereas in the second stage, it is called the connotation stage. In this stage the interpreter will interpret the signified as the meaning produced by the sign.

The stages of data analysis that will be carried out is to collect all the data, then the researcher classifies the data according to the research questions that have been determined. The classification here is intended to simplify or group data into certain categories according to the formulation of the problem proposed by the researcher, with the aim of making it easier to understand and facilitate researchers in the process of data analysis later. After the data is classified, the analysis of the data using Roland Barthes's semiotic analysis is used to understand the meaning of Malay Symbols in Songket and Keris Monument.

4 RESULT AND DISCUSSION

From the short review above, researcher describe the results into 2 parts. First part about Malay symbols at Songket Monument and the second part is about Malay symbols at Keris Monument.

The Malay symbol at Songket are presented in 9 parts: (1) Siku Keluang design means personality that has the nature of responsibility to be the dream of every malay man. (2) Siku Awan means character, manners and gentleness is a principle of malay civilization, guarding the community with noble character. (3) Pucuk Rebung Kaluk Pakis Bertingkat Design, means the value of knowing ourself is a very important trait, in accordance with the expression of knowing ourself with the command of knowing to sit upright to know the plot properly. (4) The meaning of Pucuk Rebung Bertabur Bunga Cermai is the value of compassion, respect for gentle and clean heart to be a reference in Malay. (5) Siku Tunggal design means that reflects the attitudes or behavior of Malay people who strongly prioritize faithfulness or fusion either among fellow Malay people or immigrants. This is become the reflection of Malay people who always accept anyone who comes with a "clear face and a clean heart". (6) Daun Tunggal Mata Panah Tabir Bintang, it means the values of the philosophy of nobleness and refinement of intimacy and peace. (7) Wajik Sempurna design means gratitude for the blessings and gifts bestowed by Allah. (8) Pucuk Rebung Penuh Bertali that has a meaning of Islamic values that give guidance and guidance to become human beings have noble character so that they live the righ-

teous life. (9) The Umbrella above the songket that means protecting the whole parts of Songket either showing greatness.

The Malay symbols at Keris Monument are presented in 4 parts: (1) The keris position that interpreted as a symbol of courage, greatness. (2) The sheath's carving and luk's number means greatness, power, majesty and authority, charisma. (3) The yellow color of sheath means prosperity, greatness and authority and grandeur and power. (4) Hulu Keris that faced towards the body and or behind the person who wearing it, means the person come with peace. Meanwhile the upstream of the keris that faced out, has the meaning of arrival, anger, killing.

The results above showing that not both of the monuments were fully built to represent Malay culture. The Songket monument signifies the values of Malay culture in the form of personality, attitudes, manners, social values, guidance in attitude and self-character, also how to socialize in accordance with Malay cultural values. The Keris monument signifies the Malay honor, however based on interview with Riau cultureists (Al Azhar), there is a mismatch between the meaning of keris position, that should not be downward, since it means surrender.

5 CONCLUSION

Regarding the research findings in the field, there are some conclusions presented below:

- Malay Symbols are only represented fully at Songket monument

- Keris monument has representing Malay symbol, except for the position of Keris that facing the ground. In Malay culture, Keris means honor, bravery, strong, but downward position has opposite meaning, that is surrender.

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REFERENCES

Arikunto, S. (2002). Prosedur suatu penelitian: pendekatan praktek. *Edisi Revisi Kelima. Jakarta: Rineka Cipta*.

Arikunto, S. and secara Manusiawi, M. P. (2002). Jakarta: Rineka cipta. *Prosedur penelitian*.

Fiske, J. (2012). Pengantar ilmu komunikasi. *Jakarta: Rajawali Pers*.

Hamid, F. and Budianto, H. (2011). Ilmu komunikasi: Sekarang dan tantangan masa depan. *Jakarta: Kencana*.

Junaidi, J. (2014). Analisis semiotik tugu melayu di kota pekanbaru. *Jurnal Pustaka Budaya*, 1(1):65–74.

Rafiek, M. (2010). Teori sastra: Kajian teori dan praktik. *Bandung: Pt. Refika Aditama*.

Ratna, N. K. (2007). *Sastra dan cultural studies: representasi fiksi dan fakta*. Pustaka Pelajar.

Position of Government Regulations for Replacement of Laws in Construction of Democracy Law State

Ellydar Chaidir and Moza Dela Fudika

Faculty of Law, Universitas Islam Riau, Pekanbaru, Indonesia
ellydarchaidir14@gmail.com, mozafudika@yahoo.com

Keywords: Position, Government Regulation of Law, Democracy

Abstract: The phrase "compulsive urgency" has a multi-interpretive understanding and is the authority of the President to interpret the compulsive crises in forming government regulations instead of laws. In essence, in setting government regulations instead of laws, there must be an objective limitation on the compulsive crunch. Although the Decision of the Constitutional Court Number 138 / PUU-VII / 2009 has stated that compulsive crises must fulfill 3 (three) conditions, namely the existence of a situation that is an urgent need to resolve legal issues quickly based on the law, the required law does not yet exist so that there is a legal vacuum or there are laws but it is inadequate and the legal vacuum cannot be overcome by making law in the usual procedure because it will take a long time. However, this has not been able to provide a benchmark for the meaning of the crunch that forced it to be proven by the issuance of Perpu No.2 of 2017 concerning the dissolution of Community Organizations.

1 INTRODUCTION

Constitutionally based on Article 22 paragraph (1) of the 1945 Constitution of the Republic of Indonesia [1] it was stated that "In the event of a compelling matter of urgency, the President has the right to set government regulations instead of the law." The question that arises is what conditions are said as a matter of the force of the force. In terms of the president's power in carrying out his duties as head of government, the president's right to issue a Government Regulation instead of Law (PERPU) is considered subjective because of a unilateral presidential judgment on behalf of the government to determine the state in danger or matters of urgency . PERPPU is a regulation which in terms of its contents should be stipulated in the form of a law but because of the forced state of crisis stipulated in the form of a government regulation (Asshidiqie, 2008).

The assessment can only be objective if PERPU has been discussed to be agreed together with the House of Representatives (DPR) to be mutually agreed to become a law. As referred to in Article 22 paragraph (2) of the 1945 Constitution which reads "The Government Regulation must obtain the approval of the House of Representatives in the trial". Theoretically PERPU, based on the hierarchy of laws and regulations, is at the same level as the Law. So that it can be concluded that PERPU has a very dominant position in the construction of a democratic legal state because PERPU has a very broad impact on the rights held by Indonesian citizens.

The formation of the PERPPU can be considered to make the state tend to appear authoritarian due to the actions of the government that gave birth to the PERPPU with "crunch matters" which have multiple interpretations so that they can injure democratic values in the construction of the Indonesian law. Although the Constitutional Court has interpreted the sentence was the matter of urgency to force in the decision of the Constitutional Court with case number No. 138 / PUU-VII / 2009 which stipulates three categories of compulsive crises, but has not provided a measure of the meaning of the force of force. The crucial issue of the existence of the PERPPU can also be seen from the birth of PERPPU No. 2 of 2017 [2] concerning the dissolution of many community organizations that have received an assessment that the government has carried out an authoritarian action because of its multiple interpretations of the urgency of

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[1] Undang-Undang Dasar Negara Republik Indonesia Tahun 1945

[2] Peraturan Pemerintah Pengganti Undang-Undang Nomor 2 Tahun 2017 Tentang Perubahan Undang-Undang Nomor 17 Tahun 2013 tentang Organisasi Kemasyarakatan.

force in Article 22 paragraph (1) 1945 Constitution of NKRI.

2 DISCUSSION

2.1 Legal Aspects of Government Regulations Law Replacement

Hierarchically all types of legislation have certain functions. But in general, according to Bagir Manan the function of the legislation is divided into 2 (two) main groups (Halim and Putera, 2013), namely:

1. Internal function, namely the function of legislation as a legal sub-system of the rule of law system in general. Internally, legislation runs several functions including:

   a The function of the creation of law (rechtschepping) which gives birth to a generally accepted legal system of law or occurs in several ways, namely through judicial decisions, habits that arise in practice in public or state life, and legislation. In Indonesia, legislation is the main way of creating law.

   b Legal renewal function. Establishment of legislation can be planned, so that legal reform can also be planned. The function of renewal of legislation is, among others, in order to replace the Dutch legislation and national legislation that is no longer in line with new needs and developments.

   c The function of integration of legal system pluralism. The pluralism of the legal system that prevails today is one of the colonial legacies that must be reorganized. The renewal of the national legal system is in order to integrate the various legal systems so that they are arranged in a harmonious order with each other.

   d Legal certainty function. Legal certainty is an important principle in legal action and law and regulation can provide legal certainty that is higher than customary law and customary law or jurisprudence.

2. The external function is the linkage of legislation with the place of effect. External functions can also be called socio-legal functions (Siallagan and Yusdiansyah, 2008), and can be divided into:

   a Function of change. The function of change is law as a means of social engineering where laws and regulations are created or formed to encourage changes in society in the economic, social and cultural fields

   b Stability function. Laws and regulations in the field of criminal, order and security are rules which are primarily aimed at ensuring the stability of society

   c Convenience function. The convenience function can function as a means of regulating various regulations that contain incentives, such as tax breaks.

In essence, based on Article 7 paragraph (1) of Law Number 12 of 2011 concerning the Establishment of Legislation Regulations [3] stating that: "The type and hierarchy of Legislation Regulations consists of:

   a 1945 Constitution of the Republic of Indonesia

   b Decree of the People's Consultative Assembly

   c Substitute Government Laws / Regulations

   d Government regulations

   e Provincial Regulation; and'

   f District Regulation

For the sound of the article, it can be concluded that PERPPU has a position parallel to the Law so that the functions of the legislation referred to above are also related as a function of a PERPPU. In addition, according to Maria Farida Indrati Soeprapto, because this perppu is a government regulation that supersedes the law, the content of the material is the same as the material contained in the law (Indrati et al., 2008). PERPPU is a government regulation that acts as an Act or in other words, PERPPU is a government regulation that is given the same authority as law. The formation of the PERPPU was purely the authority of the president because of its formation without first asking for approval from the House of Representatives (Manan, 1992), although in the end it had to be discussed together to get mutual approval from the president and the House of Representatives (Haryono, 2009).

2.2 Key Terms of Establishment of PERPU

Constitutionally the conditions for establishing PERPU will only be found in Article 22 paragraph (1) of the 1945 Constitution of the Republic of Indonesia [4], that only in the event of a compulsive crisis, the president can issue PERPPU. PERPPU which

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[3] Undang-Undang Nomor 12 Tahun 2011 Tentang Pembentukan Peraturan Perundang-Undangan

[4] Undang-Undang Dasar Negara Republik Indonesia Tahun 1945

was born later was signed by the president. PERPPU has a limited (temporary) period of time.

The main requirement for the formation of PERPPU can also be seen in Article 1 number 4 of Act No. 2 of 2011 which only states that the main requirement for the stipulation of the PERPPU is the issue of compulsive crises, but in the Law the explanation section does not explain the terms and passed to form a PERPPU. So that it can be concluded that the conditions for making PERPPU are merely the subjective judgment of the president or the government stating the state of the country in a state of urgency or in an emergency

2.3 The Crunch of the Forcing in the Issuance of PERPU (Based on the Decision of the Constitutional Court Number 138 / PUU-VII / 2009

During this time there was no clear boundary about "compulsion". As a result there is no single interpretation of the birth of the Perppu. In this context the decision of the Constitutional Court No. 138 / PUU-VII / 2009. Judicially, the Constitutional Court assessed whether actually PERPU was equal to the law so PERPU could be tested at the judicial institution of the Constitutional Court. Based on Article 7 paragraph (1) of Law Number 12 of 2011 it is stated that PERPU itself has an equal position with the law.

Article 22D paragraph (1) of the 1945 Constitution which essentially states that:

1. Granting authority to the president to form government regulations instead of the law

2. The authority can only be used if the situation is in a situation of compulsive crises.

3. PERPU must obtain the approval of the House of Representatives for further hearings which determine whether PERPU becomes a law or is revoked.

In the situation where there is a vacant position the existence of a law caused by various things so that the draft law has not been processed to be followed up as a law based on the applicable provisions, but in such conditions, there is a legal vacuum then arises which is said to be a state urgent (urgent) so that immediately requires a law to overcome this. Then the provisions of Article 22 of the 1945 Constitution provide a special institution by giving authority to the president as head of government to make PERPU a form of overcoming the occurrence of legal vacuum in the country (Mawuntu, 2011). If you follow the mechanism for drafting a law in a rule, the problem of legal vacuum

will not be able to be answered because time in making legislation will take a long time, starting from the planning stage to the final stage, namely enactment in gazette.

Based on the consideration of the Constitutional Court's ruling, it can be concluded that the notion of "matters of urgency that are compelling" according to the interpretation of the Constitutional Court is not only about the danger but also must be interpreted in conditions that must meet 3 (three) conditions, namely:

1. There is a situation that is an urgent need to solve a legal problem in a fast way

2. The law needed to resolve the problem does not yet exist so that there is a legal vacuum

3. The legal vacuum cannot be overcome by making laws with ordinary procedures because it will take a long time

Based on the formulation of Article 22 paragraph (1) of the 1945 Constitution, it is clear that the statement "President has the right" is impressed that the issuance of PERPU is seen as subjective because it is a right and fully under the control of the president. However, the Constitutional Court ruling No. 138 / PUU-VII / 2009 [5] is what should provide an explanation and enlightenment regarding the benchmarks of what is said to be a compelling situation or a precarious situation in a country. And even though the Constitutional Court's decision has been issued, it has not been able to give the true meaning related to the intention of the compulsive crunch. So that after the issuance of the verdict of the constitutional court the presence of a PERPU today still has a shared view of where the meaning of urgency intended by the president as the subject given the authority to issue PERPU. As an example of the issuance of PERPU regarding the dissolution of community organizations which also invited public sentiment and became controversial in the level of public opinion.

2.4 Published Analysis PERPU No.2 of 2017 Concerning Community Organizations

PERPU No. 2 of 2017 concerning Community Organizations has spawned good debate among academics, practitioners and the public who stand on the pro and contra positions which have implications for interesting political dynamics in the Indonesian constitutional system. Through this PERPU, the government

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[5]Putusan Mahkamah Konstitusi Nomor 138/PUU-VII/2009.

actually made PERPU as an instrument to control the existence of social organizations within the Unitary State of the Republic of Indonesia. The issuance of PERPU as if it seems that the policies issued by the government in issuing PERPU tend to be one-sided and subjective. The condition of the compulsive crunch has not yet fully become a proven condition in the midst of society. Through PERPU, the government also revoked the existence of Community Organizations, namely Hizb ut-Tahrir Indonesia, which was considered to be in conflict with Pancasila.

Government policies that issued PERPU have not been fully accepted due to the difficulty of measuring precarious conditions due to the existence of HTI organizations and the absence of concrete indicators and can measure the extent to which community organizations are in line with Pancasila values so that the boundaries become vague and seem to be being a one-sided subjective judgment in assessing the precarious situation. If reviewed further, the existence of HTI at the time before it was dissolved has not been said to be alarming, because there has not been an active movement carried out by HTI which could cause the matters of crisis as intended by the government.

The lack of government aspirations for the dissolution of HTI organizations has also become the public's main spotlight. The government only listens to the voices of one party claiming that the existence of HTI endangers the integrity of the unitary state of the Republic of Indonesia. The opinions of various groups are certainly needed to provide an assessment of the existence of HTI so that there is sufficient indicator that HTI organizations can create a danger for the integrity of the country of Indonesia. Regarding this, Dr. Jeje Zaenudin as deputy general chairman of PP Persatuan Islam writes:

> "The irregularities are also getting stronger when the government bases the dissolution of HTI because it often collides with other mass organizations in the community. In fact, only recently has HTI activities been prevented from being obstructed and disbanded by a particular mass organization that manipulates it. With other mass organizations, such as Muhammadiyah, Persis, Al Irsyad, PUI, etc., HTI remains harmonious, there must be differing views on several aspects of Islamic teachings, especially the concept of khilafah (Riadi et al., 2017)"

Besides that, PERPU No.2 Year 2017 also gives constitutional authority to the government to dissolve the existence of community organizations that are deemed inappropriate. Juridically, matters concerning the dissolution of mass organizations are in the hands of the court as the holder of the judicial authority based on the theory of power sharing initiated by Montesqui. Indirectly, the government automatically has taken over the authority rather than the judicial power which is under the authority of the Supreme Court, which prior to the issuance of PERPU the authority to dissolve the existence of social organizations was in the hands of the court. Based on these problems, the issuance of PERPU No. 2 of 2017 [6] gives the impression of the current dictator of the government, in addition to not measuring the indicators of the state of urgency that forced the issuance of PERPU, the government has deviated its power as the holder of executive power by overthrowing judicial power in the dissolution of community organizations. And in the author's opinion, this problem would tend to make new problems oriented to the division of ethnicity, race, religion, and culture that exist in Indonesia because of the existence of issues related to radicalism at the level of nation and state. So that it can be concluded that with the birth of PERPU No. 2 of 2017 there has been an injury to the value of democracy and the concept of separation of powers.

3 CONCLUSIONS

The phrase 'compulsive urgency' in the background of making Government Regulations Substituting the Law does not yet have a judicial objective measure. The authority in the issuance of PERPU is still oriented to the constitutional subjective rights of the president given by the 1945 Constitution of the Republic of Indonesia. The Constitutional Court Decision Number 138 / PUU-VII / 2009 [7] has not been able to answer the explanations of state benchmarks in matters of compulsion. So that with the birth of polemic against PERPU No. 2, 2017 is still an interesting concern from a political and legal standpoint. With regard to the urgency of the existence of mass organizations that are considered inconsistent with the ideological values of the nation, namely the Pancasila. So that PERPU's position is still considered as a frame for a government that leads to an authoritarian government. It is recommended that the Government and Parliament to emergency situation and to make use Presidential Advisor Board so that issuance of government regulation to subtitute act the meets

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[6]Peraturan Pemerintah Pengganti Undang-Undang Nomor 2 Tahun 2017 Tentang Perubahan Undang-Undang Nomor 17 Tahun 2013 tentang Organisasi Kemasyarakatan.

[7]Putusan Mahkamah Konstitusi Nomor 138/PUU-VII/2009.

the principles of democracy rule of law and public accountability (Almanar et al., 2015).

REFERENCES

Almanar, H. A. J., Rasyid, N., et al. (2015). Kedudukan peraturan pemerintah pengganti undang-undang dalam sistem peraturan perundang-undangan di indonesia. *Jurnal Ilmu Hukum*, 3(2).

Asshidiqie, J. (2008). *Hukum Tata Negara Darurat*. Rajawali Press, Jakarta.

Halim, H. and Putera, K. R. S. (2013). Cara praktis menyusun & merancang peraturan daerah. *Jakarta: Prenada Media Group*.

Haryono, D. (2009). Ilmu perundang-undangan.

Indrati, M. F., Perundang-undangan, I., Jenis, F., and Muatan, M. (2008). Kanisius. *Yogyakarta, l998*.

Manan, B. (1992). *Dasar-dasar perundang-undangan Indonesia*. Ind-Hill-Company.

Mawuntu, J. R. (2011). Eksistensi peraturan pemerintah pengganti undang-undang dalam sistem norma hukum insonesia. *Jurnal Hukum Unsrat*, 19(5):118–127.

Riadi, B., Drajat, D., and Ulhaq, M. Z. (2017). Analisis kebijakan perppu ormas: Kritik terhadap perppu nomor 2 tahun 2017.

Siallagan, H. and Yusdiansyah, E. (2008). Ilmu perundang-undangan di indonesia.

Exploring Digital Ways for Teaching Basic English Grammar of EFL (English for Foreign Language) Context: An Experience of Indonesian Students

Arimuliani Ahmad

Universitas Islam Riau, Pekanbaru, Indonesia
arimulianiahmad@edu.uir.ac.id

Abstract: Nowadays, the integration of technology and education is common and useful option in order to achieve learning outcomes especially for teaching foreign language. The gap of learning experience can be avoided. This article exposes the utilization of Padlet and Kahoot! in teaching Basic English Grammar in EFL (English for foreign language) context. This study was qualitative approach. The result of this research exposes the implementation of Padlet as one useful alternative to teach Basic English Grammar to elaborate others multimedia which can enhance students' understanding of the lesson and ease students to create and submit students' work creatively as an effort to fulfill the challenge of 21 century competence. Besides, all logs and data keep permanently online so lecturer can manage their document well. Furthermore, Kahoot! also becomes one alternative to reduce students' anxiety in learning English Grammar, because it is designed joyful with completed audio-visual feature and having a break as suitable as needed.

1 INTRODUCTION

Teaching Grammar for English as Foreign Language is commonly challenging. Many factors are involved such as students' negative mindset of grammar itself which is quite hard to be mastered because it has different rules with their mother tongue (Ahmad, 2014). Besides, common obstacle of its atmosphere is boredom. The way teacher builds up students' understanding of grammar often make they feel boring because it is not suitable with their willing. Therefore, the lecturer provides grammar task conventionally on certain book or paper. Overall, grammar lesson seems uninterested lesson but actually it is important point due to master English skills. Their grammar competence is influenced their English proficiency included listening, speaking, reading and writing.

Perception that they bring from senior high school continues to higher education. In the beginning, students who just adjust new policies, strategies and rules in university level need more motivation to change their learning habit. Besides, there a lot of different points of view of teacher in high school level than university level. It seems that university lecturer should review and reinforce what they should master in early level which they do not master enough previously.

Therefore, many studies reveal the positive effect of technology integrated in teaching and learning process. First, digital tools such as YouTube and Blog can improve students' vocabulary mastery (Arndt and Woore, 2018). Other studies also prove that Moodle gives benefits for students' proficiency (Wu and Hua, 2008) (Levy, 2009) (Rad, 2018) (Abunabah, 2012) (Nedeva et al., 2010) (Nozawa, 2011). Besides, e-learning also gives good contribution toward students' English proficiency such as Edmodo (Al-Naibi et al., 2018), Padlet (Kleinsmith, 2017), Facebook (Wang et al., 2012), (Ingalls, 2017), and (Kalelioğlu et al., 2017), Blackboard's Discussion Boards, Blogs and Wikis (Alharbi, 2015), Whatsapp (Fattah, 2015).

In order to overcome those problems, university lecturers need to explore digital ways in teaching. There are a lot of digital tools can be adopted in teaching as online or offline. Researcher has developed e-module to teach Basic English Grammar (Ahmad, 2017), the result show there is improvement of students' grammar competence but it is not directly fulfilling the researcher expectation. Teaching and learning process need to be revised. Researcher must consider about joy and cheerfulness. Even though learning grammar is hard but they do not try to avoid it.

One solution to manage teaching and learning pro-

cess is combination of using digital tools as gamification strategy which is Kahoot! and Padlet. Licorish et al (Licorish et al., 2018) reveal students' perception toward Kahoot!. They found that it gets positive perception from students, therefore it involves students' participation and increase students' motivation in learning because Kahoot! provides audio-visual, and timely feedback. Kahoot! engages students-lecturer interaction. Then, it also has a break to ensure students focus on the game which reflected by projector on the screen. Furthermore, Padlet also give benefits on students' proficiency (Kleinsmith, 2017) (De Berg, 2016). Berg (De Berg, 2016) designed his research by combining Padlet with Project-based learning. He focuses on students' language proficiency and their soft skills such as creativity and problem solving. The result also provides students perception. The result shows that the highest level of students' respond is enjoyment.

This research is designed to teach Basic English Grammar course in Teacher Training and Education Faculty of one private university in Indonesia. It utilizes Kahoot! and Padlet by adapted material which is familiar with our students to make they ease to master the lesson.

2 BACKGROUND LITERATURE REVIEW

2.1 Padlet

A padlet [1] is a kind of e-learning which provides a virtual pin board that allows students to collaborate various files, including Word documents, YouTube videos, PowerPoint presentations, etc. It can be utilized to collect students' works or also lesson providing by lecturer by integrating varieties of files or multimedia. It gives opportunity for students to do collaborative work or project that can be done everywhere and every time they need. Besides, it also provides timely feedback which can be addressed to students or lecturer as input of their project.

In teaching Basic English Grammar, researcher implement this tool to enhance students' grammar competence by integrated particular videos and lesson from authentic context from native speakers of English language. After learning that lesson autonomously, the students were expected to do some exercises on that board.

2.2 Kahoot!

Kahoot! [2] is one of digital tools which adopted gamification strategy. This is can be accessed by android application or online searching (web-based). This tool provides audio-visual files, and timely feedback, automatic scoring, and having a break. Fortunately, lecturer can prepare their own content to ensure students' understanding which suitable with their culture. As closer the content/questions with the students' experience as ease for students to understand that.

Kahoot! allows lecturer to create appropriate content with their own syllabus which focus on his/her learning objectives. Lecturer constructs the quiz in which students participate as payers in a game show (Wang, 2015) and adopt informal situation for learning assessment which provide cozy situation by audio and podium point system) that facilitate students' competition to get three podiums as top three of all participants. This is easy applying for lecturer or students in teaching and learning process; therefore, prior training is not needed to use it (Plump and LaRosa, 2017). Indeed, lecturer also can integrate this tool with other media such as presentation slide (Ms. Power Point) in the classroom as additional task to see students' understanding of the lesson. This quiz can be created with additional image or video to provide extra input for the questions and the lecturer can control it which controls the timeline, skipping question, and setting for random questions. the competition atmosphere can be built up because the score will be awarded by considering timeliness and correctness. So, the students need to answer the question correctly and quickly to get higher score. Showing students' score on the screen will build up students' motivation and engagement because they feel winner spirit to lead the board (Barrio et al., 2015), (Wang and Lieberoth, 2016). Therefore, designing the questions, administrating the quiz, and also facilitate discussion about (in) correct questions together in the classroom can be organized by the lecturer in implementation of Kahoot! for face-to face learning. Overall, Kahoot! can increase students' learning experience more dynamic (Licorish et al., 2018).

2.3 Teaching Basic English Grammar Course

Basic English Grammar is the first level of Grammar course that have been taught for English Major of Teacher Training and Education faculty in Univer-

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[1] www.padlet.com

[2] kahoot.com

sitas Islam Riau. End of this class, students are expected to be able to identify, analyze and implement correct rule in English language (Grammar) as spoken and written. This course consists of three credits for one semester. There are sixteen meetings for one semester with twelve topics which are designed by the lecturer and legalized by our Dean.

First topic is about Parts of Speech. The students are expected to master the types and the usages of it in sentence. There are eight parts involve such as noun, verb, adjective, adverb, pronoun, preposition, conjunction and interjection (Lester, 2005). Second topic is about Clause which consists of main clause, subordinate clause, relative clause, and noun clause. Third topic is about sentence. They are expected to comprehend sentence types such as simple sentence, compound sentence, complex sentence and compound-complex sentence. Fourth topic is about Tenses for two meetings. Fifth topic is about Subject-verb Agreement. Sixth topic is about modal auxiliaries. Seventh topic is about Active-Passive Sentence. Eighth topic is about Direct and Indirect Speech. Ninth topic is about Gerund and Infinitive. Eleventh topic is about Conditional Sentence. The last topic is WH-Questions.

Overall, this research addressed to explore the researchers' experience in teaching Basic English Grammar through digital ways. There were two research questions:

RQ1: How was the implementation of digital ways through Padlet and Kahoot! in teaching Basic English Grammar?

RQ2: How are the students' engagement toward the implementation of Padlet and Kahoot! in learning Basic English Grammar.

3 METHODOLOGY

This research adopted qualitative approach. The purpose of this research was to expose the implementation and students' engagement of digital tools; Padlet and Kahoot! in teaching Basic English Grammar (Grammar 1). There were 140 students as participant of this research from first semester students of English Language Education of Universitas Islam Riau. The instrument of this research was digital documentation. All logs and data were kept on Padlet and Kahoot! Platform.

4 PRACTICAL APPLICATIONS

RQ1: How was the implementation of digital ways through Padlet and Kahoot! in teaching Basic English Grammar?

All logs and students' tasks were documented online whether Padlet or Kahoot!. Firstly, the implementation of Padlet addressed to build up students' understanding of lesson with certain topics. To illustrate it, see appendix 1. The lecture adopted Blended Learning in teaching Basic English Grammar. Lecturer took three meetings as online learning (outside the classroom) for Infinitive and Gerund, Tenses, and WH-Question topic. Students were expected to learn by using material that has been pinned on Padlet board then they needed to answer certain questions to see their understanding toward the lesson. There were two ways of answering the exercises; 1) they did the task by posting it on that board, 2) they commended on comment space below the material. For lesson The Use of Gerund and Infinitive lesson, they were asked to watch two videos about it from BBC YouTube Channel. Those videos illustrate the use of Gerund and Infinitive in real condition of native daily communication (British) to understand the use of them in the real context. Besides, they needed to read three sequent posts (1st Reading, 2nd Reading and 3rd Reading) for further explanation of Gerund and Infinitive. Next, they were asked to do the exercises on that pin board (Padlet).

Furthermore, every face-to face learning in the classroom, lecturer implemented Kahoot! as exercises. Lecturer explained the lesson in the classroom by giving written examples on whiteboard as implemented of instructional method. Lecturer explained the lesson by asking students' engagement. Lecturer strove to increase teaching and learning dynamic by attacking student' concentration. It was done by asking selecting students to come forward and giving direct instruction about the topic. They were asked to write example of using grammar (suitable for each topic for every meeting). For example, when they learn and discuss about sentence types, therefore, lecturer asked students to write down one example for each type. After that, lecturer and students in the classroom correct it together. Finally, the end of meeting about 30 minutes, lecturer played a Kahoot! (see appendix 2) to see students' understanding and also discuss about the correct explanation about their mistakes. It can be accessed by https://create.kahoot.it/share/basic-english-grammar-test/9be65ff6-42cb-440d-a2cc-6491be9dfa19.

Overall, teaching and learning process becomes more dynamic by using this Kahoot (gamification).

It motivates students to learn and it can achieve students' concentration a lot. They more focus on the material on the screen. They need to answer the questions correctly and quickly to get better score. They need to compete to be the first podium as winner. Fair competition was created by the lecturer, and then either special gift is delivered for first podium of winner or good additional score is delivered to first and second podium of winner. Besides, they also seem enjoy the process because Kahoot! also provide audio and visual features. They are engaged in quiz by facing the screen and their gadget, they are commonly panic if they are misconnecting on the link. It is reflected by their request to play the quiz by using Kahoot! again for every meeting. Additionally, lecturer also utilized Kahoot! for examination process (see figure 1). To sum up, it can reduce students' anxiety to learn or face quiz of Grammar.

Figure 1: Examination Process by using Kahoot!

Figure 1 illustrated situation of Grammar test by using Kahoot!. The students had to prepare their gadget and its connection to access the Kahoot's link and then they registered to the game id by typing their full name. After all of students registered, lecturer played the game by integrated projector and her pc to show the question. Furthermore, students answered 25 questions by using their own gadget. Every single question had duration to 60 seconds. At the end, they directly known their score.

5 CONCLUSION AND IMPLICATION

Nowadays, technology is not a luxurious thing anymore but it is a common need of every person around the world. For advanced country, it is a common thing but for developed country it is different. It is a kind of precious thing to be maximized especially for teaching and learning process. There are a lot of free applications or software as digital tools that can be implemented to enhance the learning objectives. Commonly, it needs a lot of trial and errors to reveal the advantages of them in learning. The only one classic problem in my country is about internet access. Indeed, the same thing with these two digital tools, there are many researches prove the positive contribution of using technology in order to achieve learning objectives. It is better to further researchers to create digital tools which can be accessed offline.

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REFERENCES

Abunabah, A. (2012). The impact of computer assisted grammar teaching on efl pupils' performance in jordan. *International Journal of Education and Development using ICT*, 8(1):71–90.

Ahmad, A. (2014). Syntactic errors in writing report text. *Journal of English for Academic*, 1(1):177–193.

Ahmad, A. (2017). Developing cooperative learning based e-module to teach basic english grammar of the first semester of english study program students at fkip–uir. *J-SHMIC: Journal of English for Academic*, 4(2):1–11.

Al-Naibi, I. h., Al-Jabri, M., and Al-Kalbani, I. (2018). Promoting students' paragraph writing using edmodo: An action research. *Turkish Online Journal of Educational Technology-TOJET*, 17(1):130–143.

Alharbi, M. (2015). Effects of blackboard's discussion boards, blogs and wikis on effective integration and development of literacy skills in efl students. *English Language Teaching*, 8(6):111–132.

Arndt, H. L. and Woore, R. (2018). Vocabulary learning from watching youtube videos and reading blog posts. *Language Learning & Technology*, 22(3):124–142.

Barrio, C. M., Muñoz-Organero, M., and Soriano, J. S. (2015). Can gamification improve the benefits of student response systems in learning? an experimental study. *IEEE Transactions on Emerging Topics in Computing*, 4(3):429–438.

De Berg, A. (2016). Students as producers and collaborators: exploring the use of padlets and videos in mfl teaching. *Innovative language teaching and learning*

at university: enhancing participation and collaboration, page 59.

Fattah, S. F. E. S. A. (2015). The effectiveness of using whatsapp messenger as one of mobile learning techniques to develop students' writing skills. *Journal of Education and Practice*, 6(32):115–127.

Ingalls, A. L. (2017). Facebook as a learning-management system in developmental writing. *Journal of Developmental Education*, 40(2):26–28.

Kalelioğlu, F. et al. (2017). Using facebook as a learning management system: Experiences of pre-service teachers. *Informatics in Education-An International Journal*, 16(1):83–101.

Kleinsmith, C. L. (2017). The effects of using padlet on the academic performance and engagement of students in a fifth grade basic skills mathematics classroom.

Lester, M. (2005). *Writer's choice: grammar and composition*. Glencoe/McGraw-Hill.

Levy, M. (2009). Technologies in use for second language learning. *The Modern Language Journal*, 93:769–782.

Licorish, S. A., Owen, H. E., Daniel, B., and George, J. L. (2018). Students' perception of kahoot!'s influence on teaching and learning. *Research and Practice in Technology Enhanced Learning*, 13(1):9.

Nedeva, V., Dimova, E., and Dineva, S. (2010). Overcome disadvantages of e-learning for training english as foreign language. *University of Bucharest and University of Medicine and Pharmacy Târgu-Mures*, pages 275–281.

Nozawa, K. (2011). To moodle or not to moodle: Can it be an ideal e-learning environment. *Political Science*, 18(3):289–312.

Plump, C. M. and LaRosa, J. (2017). Using kahoot! in the classroom to create engagement and active learning: A game-based technology solution for elearning novices. *Management Teaching Review*, 2(2):151–158.

Rad, M. R. (2018). The effect of moodle-mediated instruction on the reading comprehension of iranian efl learners. *International Journal of Advanced Multidisciplinary Scientific Research (IJAMSR) ISSN: 2581-4281 Vol*, 1:2.

Wang, A. I. (2015). The wear out effect of a game-based student response system. *Computers & Education*, 82:217–227.

Wang, A. I. and Lieberoth, A. (2016). The effect of points and audio on concentration, engagement, enjoyment, learning, motivation, and classroom dynamics using kahoot. In *European Conference on Games Based Learning*, volume 20. Academic Conferences International Limited.

Wang, Q., Woo, H. L., Quek, C. L., Yang, Y., and Liu, M. (2012). Using the facebook group as a learning management system: An exploratory study. *British Journal of Educational Technology*, 43(3):428–438.

Wu, W.-S. and Hua, C. (2008). The application of moodle on an efl collegiate writing environment. *Journal of education and foreign languages and literature*, 7(1):45–56.

Smart City Branding Strategy of the Samarinda in East Kalimantan

Tuti Widiastuti, Eli Jamilah Mihardja and Prima Mulyasari Agustini

Communication Department, Faculty of Economics and Social Science, Bakrie University, Jl. HR Rasuna Said Kav. C-22,
Jakarta Selatan 12920, Indonesia
{tuti.widiastuti, eli.mihardja, prima.agustini}@bakrie.ac.id

Keywords: Smart City, City Branding, Kota Tepian, Samarinda.

Abstract: Samarinda is the capital city of East Kalimantan, who wishes to become a Smart City. In the process of embodying Samarinda city with Smart City branding, there are six pillars that the government must pay attention to, such as smart governance, smart branding, smart sconomy, smart siving, smart society, and smart environment. Conceptual framework from Goldberg Moser O'Neill offers an approach in creating a cohesive in city branding. Research method is used descriptive qualitative. Data collection techniques in research conducted directly in the field by using several techniques: in-depth interviews, observation, and literature study. The focusing intentions were to aim at introducing the city more deeply, improving the image, attracting tourists and the investors to invest, as well as increasing trades which would later occur in Samarinda City. The city itself is being designed to be a Smart City with water as a city brand with the Waterfront City Development concept. City branding can improve the level of welfare, and coupled with the development of ICT aspects which are crucial in forming Smart City, it is expected to increase the city branding of Samarinda City in order to achieve the Samarinda Smart City.

1 INTRODUCTION

Samarinda City, the Capital of East Kalimantan Province, is the most important regional economic center in East Kalimantan. The city that has the slogan of the Tepian City (an acronym of calm, neat, safe, and comfortable) is targeting the realization of the vision of 'Samarinda City as a metropolitan city that is competitive and environmentally friendly'. This vision exists as an effort to improve people's welfare. In it, there are some focus aspects of sustainable development, such as the core aspects (social, economic, environmental), and supporting aspects ('Good Governance', regional finance), with 'Kota Cerdas' (Smart City) as the foundation for its achievement.

As a form of realization, the Government of Samarinda City increases the contribution of the service sector through the populist economy which is driven by urban society in hopes of reducing unemployment and poverty. However, the development imbalances between regions did not escape the regional economic activities. This is because the development is not always followed by an even increase in population income. Factors that differentiate income include opportunities, education, and various other things.

The development of trade and service areas are two things that are relied on to increase the competitiveness and resources of Samarinda City which is centered on the service sector and trade. The development and construction of service and trade areas are one of the efforts to improve the level of welfare and minimize welfare inequality between regions.

The purpose of City Branding implementation in the preparation of the City Branding Strategy Research Report in Samarinda City according to Handito (Sugiarsono, 2009) is to introduce the city in-depthly, improving the city's image, attract tourists and investors to invest, and increasing trade rate. This report can also provide direction for accelerating the strategy, policies, and development programs of Samarinda City with the approach to planning the six pillars of Smart City, such as smart governance, smart environment, smart living, smart branding, smart society, and smart economy. In the future, it is expected that all the problems in Samarinda City can be solved according to these planning targets.

Smart city movements are growing all over the world and undertaking is expected to solve a plethora of problems arising from urbanization. Indonesia is one of the countries who march toward the development of sustainable smart cities (Mahesa et al., 2019). The strategic issues of city development Samarinda is an embodiment of the city of Samarinda being a

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Smart City. The purpose of the realization of Smart City is to make Samarinda city a livable city especially for future generations through optimization of various things such as smart living, smart society, smart governance governance, smart economy, smart branding, and smart environment.

To reach smart city, the city has to pay attention to sustainable development. If in an effort to reach smart city do not pay attention to sustainable development then the environment will be damaged as a result of the absence of sustainable development which does not pay attention to the environment (Han et al., 2018; Kavaratzis, 2004; Keskin et al., 2016; Nugraha et al., 2017) The ICT infrastructure that will be built by the City Government through the Samarinda City Communication and Information Agency is designed as a center for the integration of all regional information systems. The development of Samarinda Smart City requires a reliable and reliable ICT infrastructure. Currently Samarinda City's Office of Communication and Information Technology has human resources with ICT competencies that meet the standards, so that Samarinda's smart city operations related to electrification or online-based systems will be technically supported by the Samarinda City's Office of Communication and Information Technology, while business processes continue to run in each regional device .

Current technological developments require the readiness of the community to accept and adapt to changes globally so that the people of Samarinda City must be able to take advantage of the progress of the direct implications of technological development. Finally, efforts to realize the character of the Samarinda City community, healthy, smart, and national and international competitiveness become an inseparable mission of regional development amid current technological advancements.

2 CONCEPTUAL FRAMEWORK

According to (Merrilees et al., 2009), City Branding is a method of communicating to build brands of cities, regions, and communities who live based on the market of their entities. Based on these definitions, City Branding can be called the process of forming cities/regions to be known as target markets (investors, tourists, talent, events) with icons, slogans, exhibitions, and positioning in various forms of promotional media. City Branding is also a picture of a person's thoughts, feelings, associations, and expectations when looking at or hearing names, logos, service products, events, or various symbols and designs.

The use of marketing science today is not only by companies of products or services but has expanded to the city as an esteem, as (Kotler, 2003) states cities are increasingly tended to rely on marketing methods in the last three decades, when competition for inward investment, cities are increasingly likely to use marketing methods in the last three decades, when competition to attract incoming investment, tourism revenues and increase population diversity is increasing, (Kavaratzis, 2004).

City Branding is different from City Marketing and promotions. City Marketing is marketing and building regions/cities to change external perceptions in order to encourage tourism, attract population migration, or activate the business relocation. The development of the city as a valuable product causes competition for investment and government funding. This is manifested in the city's efforts to attract tourists, investors, and so on. On the other hand, the promotion has the purpose of spread information, attracting attention, and influencing or persuading to get to know the information provided to the public or society.

City branding has many similarities with corporate branding, so in this paper, the methods used in city branding also adapt from the methods or approaches in corporate branding. Mike Moser, an advertising practitioner with his agency Goldberg Moser O'Neill offers an approach in creating a cohesive brand. (Moser, 2006)in his book entitled United We Brand offers five practical steps in creating a brand, which has a tendency to create corporate brands. Moser's five steps are divided into: 1) Creating core brand values, 2) Creating core brand messages, 3) Determining brand personality, and 4) Determining brand icons, and 5) Determining brand personality.

The message of the core brand is the key message that will be communicated by the city to the entire audience (Moser, 2006). In the context of advertising or marketing, the message is something that is delivered to the target audience, which in the context of city branding, is nothing but a portion of external stakeholders (e.g. tourists, potential investors, potential entrants, etc.).

Shaping the competitiveness of cities, there are several things that must be considered, namely all the potential possessed, especially the potential of human resources, because this potential has a significant influence in globalization. City branding is one of the efforts to shape the competitiveness of cities, and is currently the main focus and quite urgent need. The need for a regional brand will make the region have a strong positioning, especially in the field of tourism globally. City branding requires the active role of local government and related stakeholders to properly

package cities and regions. This is certainly not only infrastructure, but also the readiness of the community and what is offered, or which characterizes the city or region.

City branding is a device for economic development urban areas borrowed from marketing practices by urban planners and planners and all stakeholders. As with products, services and organizations, cities need a strong and different image and reputation to overcome city competition for economic resources at the local, regional, national and global levels. In order for a city to get a representative, harmonious image that truly depicts the social, economic and cultural reality of the city, an approach in building brand identity is needed.

In the context of advertising, an advertising campaign is first and foremost the most important is: what is being conveyed (concerning the contents of the message), then how to convey (concerning the form of the message). The content of the message is the most important thing in advertising, because it is the soul that will drive advertising in influencing the target audience, so that it acts in accordance with the message conveyed.

3 RESEARCH METHOD

Research methos is used descriptive qualitative. (Moleong, 2000) describes descriptive data as a collection of words and images (not numbers). Data presentation in descriptive research is in the form of qualitative, which dominates words, sentences, pictures, interview texts, field notes, videotapes, personal documents, official documents, memos, and other official papers. This concludes that this research is descriptive research. According to (Sugiyono, 2013), data collection is the process of procuring primary data for research needs. Data collection techniques in research conducted directly in the field by using several techniques: in-depth interviews, observation, and literature study.

Interviews were conducted with resource persons from the Head of E-Government Application and Services Division, Samarinda's Office of Communication and Information, the Head of Regional Infrastructure, BAPPEDA Samarinda, the Head of Self-Assessment in the Field of Increasing Revenue in East Kalimantan, the Head of Development Division, Samarinda City Tourism Resources Development, Head of Tourism Destination and Business Development Division, Samarinda City Tourism Office, Samarinda Pranoto Airport Protocol Staff, and Pampang Village residents.

Data analysis is very important in a study because in data analysis organizing data is collected in the field. Analysis of the data used in this research is descriptive method.

4 RESULTS AND DISCUSSION

4.1 Samarinda Smart City's Vision, Mission, and Objectives

In the third period of the Samarinda City Medium-Term Development Plan for 2016-2021, the vision was defined as Samarinda The realization of Samarinda City as a Metropolitan City (SAMARINDA,) that is Competitive and Environmentally Friendly '. Based on this vision, Smart City Samarinda's Vision is "Realizing Samarinda as a City Of Intelligent Education in Kalimantan" which was formed by three main visions, which are Teduh Cerdas dan Rapi Cerdas (environmental aspects, Samarinda City can protect its people so that their life can be fulfilled prosperously) and in line with spatial directives), Aman Cerdas yang Terdepan (economic aspect, Samarinda City can maintain public security for its economic development), and Nyaman Cerdas yang Terdepan (social aspect, Samarinda City can bring tolerance among others that support the peace of mind of the people).

The mission of Samarinda Smart City is to realizing good governance that is free of corruption and supported by high integrity, professional, and innovative apparatus, strengthening the financial management capacity of Kota Samarinda which is accountable in supporting development financing, realizing a livable city space, strengthening the sector services and trade as a leading sector, realizing the characterized people of Samarinda City are healthy, intelligent, competitively nationally and internationally, realizing the climate of life for the people of Samarinda City that is harmonious, cultured and religious. Nine Agenda priorities are optimization of flood control, improvement of public health status, development of education to produce professionals, character, and religious human resources, development and improvement of infrastructure, urban facilities and superior sector supporting utilities that are competitive and known environmentally, poverty alleviation based on people economic empowerment, effective prevention and management of disasters, improvement of religious life, cultural arts, the role and achievements of youth, sports facilities, as well as community and women's empowerment, consolidation of regional fi-

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nance and financing of development in the region, and improving urban governance.

The details of Smart City's goals are the implementation of flood control and the relocation of SKM edges, increasing capacity and distribution of clean water, achieving cleanliness, beauty, and environmentally friendly cities (parks and RTH), creating high quality, transparent, accountable, and free of corruption public services, increasing the income and effectiveness of regional financial management that is also efficient and accountable, increasing the economy through the role of small medium enterprises and cooperatives, tourism and creative economy, agriculture, plantations, livestock and fisheries, and other business services, increasing the economy through private investment and traditional markets, increasing quality education, increased school's facilities and infrastructure, facilitation for poor santri in pesantrens, improved facilities for prevention and disaster management, the realization of the development of arts and culture, the role and achievements of youth, sports correctional, community and women's empowerment, successful family planning, achieving security and order stability in a conducive climate, the realization of Kota Samarinda as a healthy and drug-free city, increased infrastructure, urban facilities and urban utilities.

4.2 Smart Branding of Samarinda Smart City

The meaning of "Tepian Cerdas" on vision Samarinda Realization as the Leading Intelligent Kota Tepian in Kalimantan' is related to the desire to integrate the city identity and the meaning of 'Tepian' with Smart City pillars. Kota Samarinda must and is able to solve all problems with the six Smart City pillars, namely Smart Governance, Smart Branding, Smart Economy, Smart Living, Smart Society, and Smart Environment. This report will focus on the Smart Branding pillar.

The Smart Branding development strategy aims to improve the economy with small medium enterprises cooperatives, the tourism sector and the creative economy, agriculture, plantations, livestock and fisheries, and other service businesses (Pasquinelli, 2015). This objectiveis aligned with the three Priority Agendas of Kota Samarinda, like poverty alleviation based on people's economic empowerment, optimization of flood control, and poverty alleviation based on people's economic empowerment.

The realization strategy is organizing street vendors and other informal sectors in the trade area, improve active cooperative institutions and small medium enterprises, and the role of the Tourism and

Creative Economy, Agriculture, Plantation, Livestock and Fisheries sectors to support the people's economy, organize the Karang Mumus River to support flood control and the Waterfront City concept, and providing easy investment in terms of service and the provision of human resource on the job market.

Smart City cannot be separated from the aspects of ICT (Information Communication Technology). (Martínez et al., 2017)Smart City itself starts from the eagerness that information, city management, and management can be realized properly, which of course can also increase the branding of Samarinda City in the eyes of the world later. This aspect will be implemented with the development of Samarinda Smart City supporting infrastructures, such as Data Center (DC), Network Operation Control (NOC), Backbone between regional devices using Fiber Optic, Samarinda Command and Operation Center, Samarinda Smart City Help Desk, and additional access of public wifi.

In addition, there's also a plan to make applications and software for supporting Samarinda Smart City development. Like The Samarinda Smart City Dashboard (application to obtain information from all applications developed by the City Government), Application Programming Interface (API), connecting application data to be communicated between applications, Data Warehouse as the main repository that becomes the database of Samarinda City's mining and data analytics), eWarga (citizen interaction media application with Lurah, Camat and City Government), eKelurahan (population service support application), and Panic Button (mobile-based emergency info delivery application with user segmented on all RT in the neighborhood of Samarinda City Government).

Beside ICT, the Government of Samarinda City also focuses on the development of Citra Niaga and the potential of ecotourism. As the most important regional economic center in East Kalimantan, Samarinda City will revitalize the traditional market into a modern market, provide easy investment in terms of service and supply of human resources in the labor market, organize street vendors and other informal sectors in the trade area, and increase active cooperative and small medium enterprises institutions and the role of tourism and creative economy, agriculture, livestock and fisheries to support the people's economy.

For ecotourism potential, water will be managed as a city brand from the Waterfront City Development concept. Samarinda City will develop the banks of the Mahakam River along with its main tributaries, the Karang Mumus River, the Karang Asam Kecil River, and the Great Karang Asam River; and its small tribu-

taries to become waterfront tourism as one of the priority (strategic) development areas of Samarinda City in the next twenty years. However, improving the quality of human resources cannot be abandoned, especially in the field of literacy so that Smart City can be realized with the help of its people. Therefore, socialization will be carried out to heads of sub-district areas, heads of the village areas, and the heads of RT, internalization and sharpening of programs and activities that are directly related to Smart City between Regional Devices, internalization through FGDs (Focus Group Discussion) between node of regional devices that have similar tasks and functions , socialization to the Community Information Group (CIG), socialization through traditional media such as Mamanda (Banjar people's drama), mass media publications (newspapers, television, and radio), social media publications (Facebook, Twitter and Instagram), college and school seminars, and installation of billboards and banners.

4.2.1 Facilitating Factors of Samarinda Smart City

The progress of green open space management infrastructure. The process of developing hotels and shopping centers that are increasingly rapid is the success of the involvement of stakeholders and the Regional Work Unit (SKPD). In addition, the Department of Tourism, Creative Economy, Communication and Information Technology has also successfully promoted, introduced, and even made Sarung Samarinda a fashion trend in several events held. HR who work in a place suitable with their fields also greatly determines the overall process of "branding" Kota Samarinda. The stakeholders involved are also supporting elements of managers of the "branding" opinion of Samarinda City because they contribute to optimizing the "branding" process.

4.2.2 Inhibiting Factors of Samarinda Smart City

The budget of the Regional Budget (Regional Revenue and Expenditure) is very low so that it disrupts the "branding" of Samarinda City. Then there is heterogeneous ethnic and ethnic diversity. The number of cultural backgrounds and a variety of thoughts that must be put together is quite difficult for the "branding" process.

In addition, Kota Samarinda has not paid much attention to the development of the suburbs and is lacking attention to equitable development. The government did not really introduce the Desa Tenun either.

Whereas the Samarinda City has succeeded in promoting Sarung Samarinda which is one of the superior products, but the Desa Tenun still has not received the attention it deserves.

4.3 Discussion

Samarinda Smart City has been designed in the 2005-2025 RPJPD and 2016-2021 RPJMD documents. Samarinda Smart City in principle is to sharpen the Action Plan by making coordination effective in program implementation, which is already contained in the existing planning documents.

The development strategy on the Smart Economy pillar aims to realize two main objectives, namely to improve the economy through private investment, as well as traditional markets. Improve the economy by strengthening the role of small and medium businesses, cooperatives, tourism, creative economy, agriculture, plantations, animal husbandry, fisheries, and other service businesses. This goal is aligned with the Samarinda City Priority Agenda for poverty alleviation based on community economic empowerment. The strategies taken to make this happen are:

- Revitalizing traditional markets to become modern markets.

- Providing ease of investment both in terms of service and the supply of human resources in the job market.

- Arranging street vendors and other informal sectors in the trade area.

- Enhancing active cooperative institutions and SMEs, as well as the role of the fields of Tourism and Creative Economy, Agriculture, Plantation, Animal Husbandry and Fisheries to support the people's economy.

Based on Regional Regulation No. 2 of 2014 concerning Samarinda City Spatial Planning for the 2014-2034 timeline, Samarinda City has the objective of spatial planning, namely to realize Samarinda City as a Edge City based on trade, services and industries that are advanced, environmentally friendly and green, and have a competitive advantage to improve people's welfare. The concept of the City of Tepian is meant that the city of Tepian is not only a motto of the City of Samarinda which is an acronym of Teduh, Neat, Safe and Comfortable but also a reflection of the City of Samarinda which is located in the riverside area, which is a part that borders directly with water.

Therefore, the concept of Waterfront City Development is very appropriate to be developed in the

City Samarinda in the context of achieving the objectives of spatial planning namely regional development banks of the Mahakam River along with its main tributaries and tributaries small to be a waterfront tourism as one of the priority strategic areas development of Samarinda City in the next twenty years based on trade, services and industries that are advanced, environmentally friendly and green, as well as has a competitive advantage.

The growth of regional trade products of Plan Long-term Regional Development (RPJPD), as a concrete form of this policy, the Samarinda city government has launched three programs, namely a program to improve domestic trade efficiency, a program to improve the development of performance and financial reporting systems, and to intensify the handling of public complaints.

Improving the quality and access of workers as a concrete form of this policy, the Samarinda city government has launched two programs, namely an investment promotion and cooperation cooperation program and a program to improve labor quality and productivity.

Increasing investment, as a concrete form of this policy Samarinda city government has launched two programs, namely an investment climate improvement program and investment realization, and a program to prepare potential resources, facilities and regional infrastructure.

Provision of space for the development of street vendors and other informal sectors in accordance with zonation stipulated in the RTRW, as a concrete form of this policy Samarinda city government has launched a program, namely the industrial structuring program.

Empowerment of the underprivileged people in business independence as a concrete form of this policy, the Samarinda city government has launched two programs, namely the cooperative institutional quality improvement program and the entrepreneurship development program and the competitive advantage of small and medium businesses.

Provision of sustainable food to support the people's economy, as a concrete form of this policy Samarinda city government has launched five programs, namely an agricultural or plantation production improvement program, a fisheries cultivation development program, a capture fisheries production increase program, a population increase and livestock production program, and a program increased availability and strengthening small medium enterprises.

Poverty when viewed from an economic standpoint arises because of inequality in resource ownership which results in an unequal distribution of in-

come, differences in the quality of human resources and differences in access to capital and the low employment opportunities available. Talking about people's economic problems will never be separated from talk about small and medium businesses. Because of small and medium businesses is taking play a role in economic growth, employment and distribution of development results. Empowerment and development of small and medium businesses is one way to reduce poverty that occurs.

The trick is to provide access to the poor to be able to engage in business and be active in productive business activities and to promote entrepreneurship, especially among poor families or disadvantaged areas. Development of small and medium businesses through improving business and management skills business, access to financial institutions and at the same time increase the certainty and protection of independent businesses to be ready to grow and compete with other economic actors.

Through Community Information Group (CIG), this development priority is intended to create conducive situations and conditions by optimally involving all levels of society to play an active role in social organizations or social institutions that grow in their environment. Every community is encouraged to play a role as the subject of development, especially in the fields of social, economy, and culture. If every community can be a subject in the movement of the development wheel, then in the next stage it is hoped that they will incarnate as agents of change for the better in their respective environments.

So that empowerment of all levels of society can be realized, the Government is obliged to conduct guidance to existing social organizations or social institutions and prepare clear regulations so that community participation goes right in line for the common good and progress.

5 CONCLUSION

As a competitive metropolitan city gives the view that Samarinda City in seeking to harmonize economic aspects and social aspects in sustainable development, and strive for both to run comprehensively. Competitiveness does not only talk about economic growth, focus on economic growth without paying attention to social aspects will only cause inequality and social inequality such as poverty and unemployment, thus ultimately reducing the quality of growth itself. Meanwhile, if the city development is only focused on human development without being balanced with economic development, it will cause the economy to

move slowly, and even tend not to spin because of the lack of private investment as an absorber of human resources.

Samarinda City is the capital city of East Kalimantan that eager to become a Smart City. This is due to the hope that Samarinda City will get city branding that is aligned with its vision, 'The realization of Samarinda City as a Metropolitan City that is Competitive and Environmentally Friendly'. The government also designed various agenda activities and development plans to realize Samarinda City as a Smart City.

In the process of embodying Samarinda City with Smart City branding, there are six Smart City pillars that the government must pay attention to, such as Smart Governance, Smart Branding, Smart Economy, Smart Living, Smart Society, and Smart Environment, which in this report focuses on Smart Branding pillar for city branding. The focusing was carried out with the aim of introducing the city more deeply, improving the image, attracting tourists and the interest of investors to invest, as well as increasing trade which would later occur in Samarinda City.

Based on these objectives, Samarinda City was designed to improve itself to become Smart City with water managed to become a city brand based on the concept of Waterfront City Development. In addition, the work of nine priority agendas that have been previously designed will be able to drive the progress of achieving the Smart City Samarinda vision, 'Realization of Samarinda as the Leading Intelligent Kota Tepian in Kalimantan'. Completion of various problems in the city of Samarinda can improve the level of welfare of the community, and coupled with the development of aspects of ICT which is very crucial in forming a Smart City, is expected to increase the city branding of Kota Samarinda in order to achieve Samarinda Smart City.

A brand is a combination of name, term, sign, symbol, or design, all of them intended to identify goods or services from a seller or group of sellers, so that they can be distinguished from their competitors. The most basic brand function is differentiation. City branding is adapted from corporate branding, then city branding is understood as a network of associations or perceptions in the minds of consumers, so that city branding can be defined as a network of associations in the minds of consumers, based on visual, verbal, as well as behavioral expressions of a place, which is realized through the objectives, communication, values, and general culture of stakeholders, as well as the design of the city as a whole.

Based on Moser's five-step approach, branding activities can be divided into several stages as follows:

1) Determine the core value of the city brand first describe the potential values possessed by the city, by involving internal stakeholders; 2) Determine the city core brand message, by looking at the gap between the perception of the city and the reality of the city, from this it can be determined the market segmentation, target market, positioning, and unique selling position of the city done by involving external stakeholders; 3) Determine the personality of the city, by describing potential personalities for the city, then determine the core personality, this is done by involving internal stakeholders; 4) Determine the city brand icon, which consists of two approaches, a formal aesthetic approach with the output of the icon form, and a semiotic approach that is centered on the content with an outer sign meaning; and 5) Designing a brand road map as a guide for stakeholders to be consistent with the city branding that has been carried out.

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REFERENCES

Han, M., De Jong, M., Cui, Z., Xu, L., Lu, H., and Sun, B. (2018). City branding in china's northeastern region: How do cities reposition themselves when facing industrial decline and ecological modernization? *Sustainability*, 10(1):102.

Kavaratzis, M. (2004). From city marketing to city branding: Towards a theoretical framework for developing city brands. *Place branding*, 1(1):58–73.

Keskin, H., AKGUN, A. E., Zehir, C., and Ayar, H. (2016). Tales of cities: City branding through storytelling. *Journal of Global Strategic Management*, 1(10):31–41.

Kotler, P. (2003). Manajemen pemasaran. edisi kesebelas. *Jakarta: Indeks kelompok Gramedia*.

Mahesa, R., Yudoko, G., and Anggoro, Y. (2019). Dataset on the sustainable smart city development in indonesia. *Data in Brief*, page 104098.

Martínez, M. S., Ugarte, T. B., and Lorenzo, F. C. (2017). The smart city apps as the core of place branding strategy: a comparative analysis of innovation cases. *Zer: Revista de estudios de comunicación= Komunikazio ikasketen aldizkaria*, 22(42):119–135.

Merrilees, B., Miller, D., and Herington, C. (2009). Antecedents of residents' city brand attitudes. *Journal of Business Research*, 62(3):362–367.

Moleong, L. J. (2000). Metodologi penelitian kualitatif, cet. *XI. Bandung: PT Remaja Rosdakarya*.

Moser, M. (2006). *United We Brand: Menciptakan Merek Kohesif yang Dilihat, Didengar, dan Diingat*. ESENSI.

Nugraha, A. R., Yustikasari, Y., and Koswara, A. (2017). Branding kota bandung di era smartcity. *Jurnal Ilmu Komunikasi*, 8(1):1–16.

Pasquinelli, C. (2015). City branding and local smes: A smart specialisation perspective. *Symphonya. Emerging Issues in Management*, (1):64–77.

SAMARINDA, T. T. S. C. Analisis strategis smart city kota samarinda.

Sugiarsono, J. (2009). City branding bukan sekedar membuat logo dan slogan. *Majalah SWA. Jakarta*.

Sugiyono, M. P. K. (2013). Kualitatif, dan kombinasi (mixed methods). *Bandung: Alfabeta*.

Implementation of Legal Protection for Journalists in Safeguarding Local Democracy

Syafriadi, Rani Fadhilla Syafrinaldi

Law Faculty, Universitas Islam Riau, Pekanbaru, Indonesia
syafriadi1966@gmail.com, ranisyafrinaldi@gmail.com

Keywords: Local Democracy, Legal Protection, Journalists.

Abstract: One of the reasons for the decline in Indonesia's ranking in the freedom of the press and expression was due to the many cases of violence against journalists and the criminalization of those who expressed their opinions. Legal protection for journalists is a guarantee given by the government and the public to journalists in carrying out their journalistic duties. The study used an empirical legal approach or non- doctrinal research. This research was conducted in several media from 2011-2018 in Pekanbaru, Riau, Indonesia. The main findings of this study indicate that the phrase of "protection" in the formulation of Law Number 40 of 1999 concerning the press has given rise to multiple interpretations which resulted in journalists experiencing pressure in carrying out their duties. In conclusion, it is highly recommended that the law should be revised.

1 INTRODUCTION

In Indonesia, the portrait of freedom of the press and expression in 2015 was considered blurry. This was marked by the decline in Indonesia's ranking in the eyes of Reporters Sans Frontieres (RSF), an organization that ranks press freedom and expression . In Southeast Asia, freedom of the press and expression of Indonesia is under Thailand, a country that is currently under the junta. Thailand ranks 134th (**?**).

In line with the theory of equality before the law, the protection has placed journalists as people who must be privileged. In relation to the rule of law (rechtsstaat), every citizen must be treated fairly by law enforcement officials and the government.

To strengthen the democracy existence, the press has a very strategic role because its position is considered as the fourth pillar of democracy. As a social control, the press is able to strengthen the democratization and governance so that the government runs on the "right and right path".

Democracy has the basic principle of human dignity and human rights that are respected and protected without discrimination. Democracy also has what are called constitutionally guaranteed civil rights, including the right to independence (Oetama, 2001; **?**; **?**). Freedom of the press is a form of popular sovereignty and an important element in creating a democratic society, nation and state life.

From the study by (Dusterhoft, 2013; **?**; Batubara,

2008) in Canada, it will be argued that the legal protections are in fact sufficient and hardly amendable and that therefore, a more practical, hands-on approach to implementation of those protections must be the focus of future actions. This goal can only be achieved by a comprehensive mission jointly pursued by governments, militaries, journalists, media, NGOs and society.

Article 28 of the 1945 Constitution states that "Freedom of association and assembly shall express thoughts through orally and in writing and so forth shall be determined by law". The term "independence" in the formulation of this article contains two meanings, namely first, freedom of speech and second, freedom of the press. The first independence is freedom of expression in public, while the second is freedom of the press. The formulation of the article was expanded in scope by Article 28F which states, "Every person has the right to communicate and obtain information to develop his personal and social environment, and has the right to seek, obtain, own, store, process, and convey information using all types of channels that are available".

Indonesia Law Number 40 of 1999 concerning Press in principle also regulates the freedom of the press, but to determine whether Indonesia has a free press system (free from bans) is very difficult. This is because there are various laws and regulations which can threaten the freedom of the press itself. Besides being found in the Criminal Code, these threats are

also found in Law Number 11 of 2008 or the Information and Electronic Transactions Act which was later changed to Law Number 19 of 2016. Other threats can be found in Law Number 40 of 2007 concerning Limited Liability Companies and the Law 44 of 2008 concerning Pornography.

In a democratic country press freedom is needed as an instrument to convey true information both to the public and to the parties concerned, as an instrument of free exchange of ideas (free market of ideas), as an instrument of change and progress (agent of change), as an instrument of guard social order (public or social order), as an instrument of control over power, as an instrument that helps deliver the ideals of the nation to realize prosperity and prosperity for all people, and as an instrument of spreading human values, building mutual understanding, openness and tolerance.

In Indonesia, the implementation of democracy during the Reform Era was always claimed by the Pancasila Democracy system which was different from liberal democracy in general which prioritized the majority vote in decision making. Pancasila democracy is a unity that cannot be separated from the precepts of Pancasila whose implementation is imbued with popular precepts led by wisdom of wisdom in deliberation / representation, which is in the belief of the Almighty, with a just and civilized humanity, the unity of Indonesia and social justice for wisdom. all Indonesian people. Thus the freedom of the press regulated in the Press Law is guided by this democratic system, and this results in the press not being able to provide information openly (transparency) to the public.

2 METHOD

This study used an empirical legal research method or was commonly known as non-doctrinal research, which reviews and analyzes primary data from respondents juridically. The nature of research used is analytical descriptive, where the data analysis is not only parsing from the acquisition of research data but also analyzing primary data using theory and legislation in Indonesia.

Several legislations which are cited as references include Article 28 of the 1945 Constitution states, Indonesia Law Number 40 of 1999 concerning Press that related to legal protection for journalists. The period of research was conducted on journalists working between 0-5 years, 5-10 years and 10-15 years in five print media, namely the Riau Pos Morning Daily, Pekanbaru Tribun Daily, Metro Riau Daily, Tabloid

AZAM weekly and other journalists who worked in various media including online media.

3 DISCUSSION

3.1 Press and Democracy

The press in this paper is the aggregate of publications issuing from the press, or the giving publicity to one's sentiments and opinions through the medium of printing; as in the phase "liberty of press" freedom of the press is guaranteed by the first amendment (**?**; Dusterhoft, 2013; Eriyanto, 2001) The term press or press is interpreted as presssus (Latin) which means pressure, pressured, crushed, solid. The press in the Indonesian vocabulary contains the meaning "press" (English) connoted as a printing press or media press. In Law Number 40 of 1999 concerning the Press, the terminology is interpreted as a media that has the function of information media, education, entertainment, social control and can also be an economic institution. In Article 1 of the Press Law it is said that the Press is a social institution and a vehicle for mass communication which carries out journalistic activities including searching, obtaining, possessing, storing, processing, and conveying information in the form of text, sound, pictures, sounds and pictures, and data and graphics and in other forms by using print media, electronic media, and all types of available channels.

Legal protection is a guarantee of protection given by the government and the public to journalists in carrying out their functions, rights, obligations and role as a journalist. This guarantee is given because the work habits of journalists are always in a depressed situation because they are pursued by deadlines, their work is very binding and demands for actuality in the delivery of information.

Democracy is a set of ideas about freedom that gives people space to participate in politics. The press is an inseparable part of democratic life, and is a barometer of the successful implementation of democracy. In the climate of independence, the press has a very strategic role to control the running of government by the executive, legislative and judiciary. The democratization of the press is a form of popular sovereignty based on the principles of democracy, justice and the rule of law and its implementation is guaranteed as a human right of citizens.

In an effort to create a sterile press from power, the press should be positioned as a means of exchanging information to build a mindset of an intelligent and critical society. This is based on several considerations. First, the press is still colored by the voice of

the authorities even though the press has a journalistic code of ethics which is the basis of professionalism in carrying out their duties, but in practice journalists are often confronted with the jargon, "a free and responsible press" which puts journalists in a losing position. Second, the public and the authorities have not fully appreciated the professionalism of journalists. Many of the torture, harassment and intimidation that they experience in investigating information by both officials and the public. Third, the presence of the press which is parallel to the history of the birth of the nation played a major role in the independence movement, but after Indonesia's independence the press had not been placed honorably in advancing the nation and shaping the character of the nation's children.

The high demand for professionalism tends to make the press the potential to violate journalistic performance. Such violations are reflected in the ways in which the press presents news that tends to violate the code of ethics. The violation occurred due to credible resources, weak recruitment patterns of journalists and the lack of understanding of the KEJ and the Press Law as guidelines for the implementation of professional duties. This implies that the face of the press often appears partisan and has not been able to position itself as a pillar of democracy, especially in presenting political news such as coverage of general elections, regional elections where the press is actively involved in the political game.

3.2 Guard Local Democracy

The terminology of location democracy is used in this study because the locus is in Pekanbaru, Riau, Indonesia. Pekanbaru is the capital of Riau Province, and the third city on the island of Sumatra with the best economic growth. The implementation of democracy in this city takes place in the election of Mayor and Deputy Mayor, Governor and Deputy Governor, Election of President and Vice President, and Legislative Election which cycle runs once in five years as determined by statutory regulations. As the fourth pillar of democracy (the four of estate), the press has a strategic role in guarding the running of local democracy.

The author underlines the importance of institutions outside the government taking the right position so that local democratization runs well in accordance with the principles of fair and just elections. The institution is the local media or press. The press is believed to be the guardian of democracy to prevent the wrong implementation of democracy in violation of the rules. This means that the role of the press at the local level can be as significant as their counterparts

at the central level (Indrakrista, 2015; Esser, 1999; Harahap, 2003).

Carry out duties as a journalist full of dynamics and challenges. Besides requiring interviewing and writing skills, a journalist is also required to understand the Law, comply with various other regulations and obey the Journalistic Code of Ethics. This understanding is needed so that the achievement of information in the media does not lead to legal problems or cause harm to others (Indrakrista, 2015; Kusumaningrat, 2009; Oetama, 2001).

In Pekanbaru, there are 1,256 journalists working in print, electronic and online media. Risks in carrying out the profession are believed by journalists, especially in covering political and criminal news. The observation of 100 journalists as respondents who carry out journalistic activities throughout the years 2011-2018 concluded that as many as 80% of respondents claimed that the journalistic profession was very risky, 12% risky and only 8% of respondents said it was normal, while the other 4% claimed to have never experienced any risk while on duty.
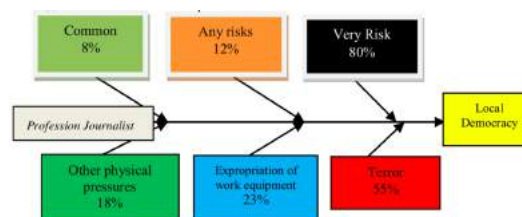
Figure 1: Risk and Experiences of Journalist

In the author's research, among the risks experienced by journalists in carrying out their duties are terror, deprivation of work equipment and other physical pressure (see picture).(Pendidikan, ; Siregar and Haryanto, 2006; Thohir, 2011) Deprivation of work equipment can be in the form of forced taking of photo cameras and video cameras belonging to journalists. Other physical pressure can be in the form of threats received by reporters through cellular channels, sms, whattshap or other physical pressure that is delivered directly to reporters both while they are interviewing and after the information is presented in the media. The higher the social status of the interviewees, the more relevant they are to serving journalists. The theme of the interview also affects the attitudes and perspectives of the resource persons in opening up to journalists. As for the themes that are central and strategic related to their involvement in certain cases such as corruption, resource persons tend to appear emotion and close themselves, they even have a tendency to find ways so that journalists do not feel at home doing interview work. In the account of the

Indonesian Journalistic Alliance Pekanbaru Branch, only a few cases of violence befell journalists who were concerned or finished up in court.

If in Fried S Siebert's libertarian press theory the press is identical to the principles and values of a liberal democratic state, namely the belief in individual excellence, common sense, truth, progress and ultimately people's sovereignty, then press liberalization in Indonesia in the Press Law is strongly influenced by action the government and the community in carrying out the role and function of the media. In the author's study, such a dependency is tantamount to giving a blank check to the media in carrying out press professionalism. Professionalism only makes the press swayed by the atmosphere of mysticism from the government and society. This is very detrimental to the press in guarding local democracy.

Through observation, the writer also observes the neutrality of journalists in carrying out the professionalism of the press as instructed by the Press Law. This can be seen from their involvement in the successful team of winning one of the candidate pairs both in the election of mayor and vice mayor, election of governor and vice governor as well as in the election of president and vice president. In addition, they are also involved in being administrators of certain political parties so that the editorial policy of journalist reporting ends in two blades, namely one side wants to be the guardian of democracy on the other hand carrying out professionalism of the press. The phenomenon of these two blades contributes to the breaking of libertarian theory in Siebert's view.

3.3 Effectiveness of Journalist Protection

The freedom of press becomes the main prerequisite for democracy. As a country that embraces democracy, Indonesia also needs press freedom so that democracy can develop and be well maintained. The Press Law provides legal protection for journalistic workers to carry out their profession freely and independently. Such protection is affirmed by Article 8 of Law No. 40 of 1999 which stated, "In carrying out his profession, journalists receive legal protection". What is meant by "legal protection" by this law is the guarantee of the protection of the Government and or the community to journalists in carrying out their functions, rights, obligations and roles following statutory provisions.

Is it true that reporters get legal protection? The question is easily difficult to answer. Because journalists are no different from doctors, advocates, teachers, politicians, academics, bureaucrats and laborers, all

of whom are children of the nation who are protected constitutionally. The same protection is given to the children of the nation in accordance with the principle of equality before the law. The principle of Equality comes from the recognition of individual freedom, one of which was stated by Thomas Jefferson. Jefferson stated that "that all men are created equal" especially in relation to basic human rights. Article 27 Paragraph (1) of the 1945 Constitution confirms that all citizens must have the same position in the law and the government must uphold the law without exception. Thus the concept of equality before the law has been introduced into the constitution. The problem is how to understand the formulation of the provisions of the law. When using the classic 5W + 1H inverted pyramid writing formula, the question of legal protection for journalists revolves around: "What, Who, Where, When, Why and How". Or "What, Who, Why, When, Where and How". This formula which until now has been difficult to translate because Article 8 of the Press Law itself invites multiple interpretations.

The same problem is experienced by journalists in Pekanbaru. In assessing the position of Article 8 journalists have different views. There are those who think the article is able to provide protection in their duties, while others also state that the law is unable to protect them in the field. Survey of writers in a number of Pekanbaru print media said, 73% of respondents felt protected by the Press Law, 19% of respondents said they were unprotected, and 8% of respondents said they did not know.

There are several reasons why respondents feel they are protected by the Press Law. First, the implementation of functions, rights, obligations and the role of the press in the Press Law is more secure than Law No. 21 of 1982. Second, the emergence of public awareness using the right channel of responsibility and the right of correction in the event of an error in media reporting. The use of the right of reply and the right of correction although it is felt by the community is not optimal can restore the good name and can also reduce anti-press measures. Third, there is a Memorandum of Understanding between the Press Council and the National Police in handling reports related to press reporting so that the police do not necessarily process any public complaints. Fourthly, journalists' awareness of obeying journalistic code of ethics (KEJ) emerged.

Respondents who thought that the Press Law had not been effective in protecting them in the field said that the interpretation of Article 8 that stated, "in carrying out their profession journalists receive legal protection", contains multiple meanings so it is difficult

to be concrete imperative. The explanation in Article 8 only states that what is meant by "legal protection" is a guarantee of the protection of the Government and or the community to journalists in carrying out their functions, rights, obligations and roles. However, the formulation of guarantees from the government and the community is not explained by the law. In the theory of Human Rights the protection of journalists is part of human rights related to journalistic tasks, which include the right to seek, obtain, possess, store, process, and convey information (6M). Protection of human rights is not only a guarantee for the state to protect human rights but also to be reactive in taking legal action if violations occur.

Several actions that could interfere with press freedom. First, through legislation, including the Limited Liability Company Law, the Consumer Protection Act, the Copyright Act and a number of articles in the Criminal Code that can make journalists go to jail. Second, through bureaucracy or apparatus, for example excessive apparatus actions such as limiting journalists' space, depriving journalists of equipment, beatings, torture and various actions and behaviors that are hampering the implementation of journalistic tasks. Third, through the act of "vigilante" by various groups in the community when there are news and writings that are considered harmful. Including ways thugs approach the media office, threatening and terrorizing to the destruction of the media office (Siregar and Haryanto, 2006). Terror, appropriation of work equipment and vigilantism are often experienced by journalists when they are on duty in the field. Sometimes these actions are resolved by journalists themselves, some of whom report to the media in charge.

4 CONCLUSIONS

Media managers face a dilemmatic situation between upholding the professionalism of the press and the conditions in the field that hurt press freedom. Injury arises from the public in various actions and deeds, interest groups (economic and political), and well-established groups who feel disturbed by the press and the politicization of the press by journalists themselves who run the politics of reporting two blades.

ACKNOWLEDGEMENTS

REFERENCES

Batubara, S. L. (2008). Menegakkan kemerdekaan pers. *Dewan Pers: Jakarta.*

Dusterhoft, I. (2013). The protection of journalists in armed conflicts: How can they be better safeguarded. *Merkourios-Utrecht J. Int'l & Eur. L.*, 29:4.

Eriyanto (2001). *Analisis wacana: pengantar analisis teks media*. LKiS Yogyakarta.

Esser, F. (1999). Tabloidization'of news: A comparative analysis of anglo-american and german press journalism. *European journal of communication*, 14(3):291–324.

Harahap, K. (2003). *Pasang surut kemerdekaan pers di Indonesia*. Grafitri Budi Utami.

Indrakrista, N. B. (2015). Pers mengawal demokrasi daerah: Analisis pemberitaan implementasi dana keistimewaan di harian tribun jogja. *Jurnal Ilmu Sosial dan Ilmu Politik*, 18(3):196–209.

Kusumaningrat, H. (2009). Jurnalistik teori dan praktek, cet. 3. *Bandung (ID): PT. Remaja Rosdakarya.*

Oetama, J. (2001). *Pers Indonesia: berkomunikasi dalam masyarakat tidak tulus*. Penerbit Buku Kompas.

Pendidikan, D. Kebudayaan (1989) kamus besar bahasa indonesia. *Jakarta: Balai Pustaka.*

Siregar, R. and Haryanto, I. (2006). *Membangun kebebasan pers yang beretika*. Dewan Pers [atas dukungan] Yayasan Tifa.

Thohir, E. (2011). *Pers Indonesia di mata saya*. Penerbit Republika.

The Influence of Personality Hardiness on Entrepreneurial Intention

Syarifah Farradinna, Rayhanatu Binqalbin Ruzain and Syarifah Fawani Gea Putri

Psycahology Faculty, Universitas Islam Riau, Pekanbaru, Indonesia

{*syarifah.farradinna, raihanatu.binqolbi*}*@psy.uir.ac.id, deen_rc@yahoo.co.uk*

Keywords: Entrepreneurial, Intention, Personality, Hardiness

Abstract: Personality hardiness predicted to have stronger control over life and be able to maintain good business activities. The aim of this study was to identify the characteristics of hardiness and how these characteristics affect entrepreneurial intentions. Participants in this study were simple random sampling technique to obtain 211 students from the Islamic University of Riau who had acted as entrepreneurial. The author adapted the construct of an entrepreneurial intention scale from Ajzen (Ajzen, 1991) theory consists of 14 items, and the personality hardiness scale from (Kobasa, 1982) consists of 17 items and using factor analysis and correlation analysis. The measurement model analysis shows p-value .4081 which means that the resulting model is the goodness of fit. While the value of the Z-value shows 4.916 > 1.96, which means there is a significant relationship between personality hardiness and entrepreneurial intentions while showing a positive correlation .322. This shows that a positive relationship between personality hardiness and entrepreneurial intentions. These results indicate the higher the personality hardiness, the higher the entrepreneurial intention. Based on the analysis, the researcher suggested to the faculty and the university to support various training and skills activities to increase entrepreneurial intention among students, perhaps through self-motivation management training.

1 INTRODUCTION

The implications of unemployment in Indonesia explain that an increase in unemployment is the cause of low income and economic growth of a country (Sugiyanto, 2006). One of the causes of a country included in the category of developed countries is when the number of business actors in the country is 2% of the population (McClelland, 1973). At present. the number of business people in Indonesia only reaches 4.6 million or 1.6 percent of Indonesia's population which ranges from 290 million. Data from the Central Statistics Agency of the city of Pekanbaru. Riau, reported that in 2010 the number of business operators in the city was only 0.1 percent of the total population of the city of Pekanbaru. which was 867 million people. This amount is still in a very low, possibly due to the assumption that business activities involve risks and uncertainties, which a number of potential entrepreneurs do not take priority to become an entrepreneur after graduation (Suryana and Bayu, 2012). Entrepreneurship does not merely believe in circumstances that offer opportunities, but rather the process of "becoming" something that implies great potentials such as stu-

dents in particular (Rasli et al., 2013). Entrepreneurial university students play an important role in decision making as a career goal, not only as a stepping stone but more than a change in trends in determining future jobs, especially those involving innovative, creative and appropriate technology, Although a number of studies have attempted to show the importance of entrepreneurship education among students in order to generate student entrepreneurship intentions (Mahajar, 2012). Entrepreneurial intention is known as the key process of building the tendency for individuals to choose as entrepreneurs as careers (Fayolle and Gailly, 2015). Previous researchers have identified the determinants of the intention to become an entrepreneur are the desire to start and enjoy every process of making decisions in running a business (Suryana and Bayu, 2012). Entrepreneurial intention is related to personality, this is evidenced in the study of (Farradinna et al., 2018) which states that an entrepreneur of Micro, Small and Medium Enterprises (MSMEs) in Pekanbaru City, Riau shows personality factors predicting individuals' ability to manage and run their business. They concluded that individuals with personality hardiness showed more open to opportunities and new ideas, the tendency to increase the

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knowledge and resourceful in trying and finding new experiences and exploring these ideas. In addition, entrepreneurial intentions explain the entrepreneurial process in directing and establishing new businesses and job opportunities (Keat Salvarajah and Meyer, 2011). As it is known that the entrepreneur is the initiator of career choice that shape the competitive personal. adaptable. always learn to understand and develop creative ideas and develop innovative ideas (Al Mamun et al., 2018). Entrepreneurship is defined as an act of risk taking. creative thinking to open a new business or advance an existing business (Hebert and Albert. 1989). In fact, (Kao, 1993) explains entrepreneurship as an effort to create value through the introduction of business opportunities, risk-taking management, and sharpening communication skills to produce good business ventures. Meanwhile, business actors are a way of thinking, exploring, reading opportunities and taking opportunities related to business (Timmons et al., 2004). Entrepreneurs who are able to identify problems between traders and customers respond more quickly to situations in order to gain profits faster than anyone (Deakins and Freel, 2009). Hardiness has been conceptualized into three attitude structures namely; commitment, control. and challenge (Maddi and Kobasa, 1984; Maddi, 2006). Researchers believe that highly committed individuals perceive the importance of trust in engaging with people and their environment, even describing pressure as a natural thing. In addition. it is important for the individual shows the attitude control affects the result though it is difficult to deal with. In the end. hardiness individuals are strong people who face challenges from all pressures. because part of the process of opportunity is learning, developing, and growing. Personality hardiness predicts internal controls that are strong in responding and resilient attitudes with changing global trends (Sabela et al., 2014). In this study, it was also reported that individual throughout personality hardiness was better proven from courage and feel incompetent. so they tended to dare to accept and face changes and obstacles in their business (Farradinna et al., 2018). Why is personality hardiness so important? and how strong can previous studies describe the encouragement of entrepreneurial intentions among students? Hardiness is a language term of personality resilience, which is an internal characteristic of individuals in responding to problems from their environment (Bissonnette, 1998). Personality hardiness itself is a way to form resilience to pressure (Maddi, 2006). This illustrates the individual personality is strong, resilient, stable and optimistic in the face of pressure and can reduce negative feelings (Kobasa, 1982). Individuals whose personality

hardiness show self-control ability, commitment and better able to face the challenges. Positive psychology to explain the attitude of hardiness is a trait that easily transforms stress into a positive state, fosters better performance to be more creative. Thoughtful and fulfillment, maintain or improve the physical and mental health in carrying out tasks such as entrepreneurs (Maddi, 2006). Hardiness personality leads individuals to be able to work effectively, be able to perform difficult tasks. act as leaders, be creative. raise awareness in choosing careers as entrepreneurs, and avoid themselves from indiscipline and behavioral problems. Hence the importance of the entrepreneurial spirit, they need to know that the strength of a nation's economy due to the high intentions of the individual as an entrepreneur. Thus. this study needs to be carried out to identify the characteristics of personality hardiness that influence the level of the intention of entrepreneurs and how much the role of the personality influences students' intention to become entrepreneurs.

Personality hardiness predicts internal controls that are strong in responding and resilient attitudes with changing global trends (Sabela et al., 2014). In this study, it was also reported that individual throughout personality hardiness was better proven from courage and feelings incompetent. so they tended to dare to accept and face changes and obstacles in their business (Farradinna et al., 2018). Why is personality hardiness so important? and how strong can previous studies describe the encouragement of entrepreneurial intentions among students? Hardiness is a language term of personality resilience, which is an internal characteristic of individuals in responding to problems from their environment (Bissonnette, 1998). Personality hardiness itself is a way to form resilience to pressure (Maddi, 2006). This illustrates the individual personality is strong, resilient, stable and optimistic in the face of pressure and can reduce negative feelings (Kobasa, 1982). Individuals whose personality hardiness show self-control ability, commitment and better able to face the challenges. Positive psychology to explain the attitude of hardiness is a trait that easily transforms stress into a positive state, fosters better performance to be more creative. Thoughtful and fulfillment, maintain or improve the physical and mental health in carrying out tasks such as entrepreneurs (Maddi, 2006). Hardiness personality leads individuals to be able to work effectively, be able to perform difficult tasks. act as leaders, be creative. raise awareness in choosing careers as entrepreneurs, and avoid themselves from indiscipline and behavioral problems. Hence the importance of the entrepreneurial spirit, they need to know that the

strength of a nation's economy due to the high intentions of the individual as an entrepreneur. Thus. this study needs to be carried out to identify the characteristics of personality hardiness that influence the level of the intention of entrepreneurs and how much the role of the personality influences students' intention to become entrepreneurs.

2 METHODOLOGY

The construction of the research is based on Planned Behavior Theory from (Ajzen, 1991) to explain the concept of entrepreneurial intentions. namely attitudes. subjective norms, and behavioral control as dependent variables of this study. Entrepreneurial intentions are considered to be the best predictors of planned behavior and behavioral tendencies. The independent variable of this study is hardiness personality factors which consist of commitment, control, and challenge. The implementation process collects data performed after obtaining permission from the university and the faculty, which is given in class. The average age of participants is 18 to 26 years old, participants have the background to create. develop and market their products or services consistently. The survey questionnaire was designed for this study consisted of three parts. Part A consists of questions that require participants to answer their self-report. Part B consists of statements relating to entrepreneurial intentions containing 14 items of statements that support indicators of entrepreneurial intention among students, consisting of attitudes. subjective norms and behavioral control. Entrepreneurial University students are asked to indicate their level of agreement to choose entrepreneurial intentions as their careers with around a scale of 1 to 5, where 1 = Strongly Disagree 2 = Disagree 3 = moderate 4 = Agree 5 = Strongly agree to each statement. Part C consists of statements that require participants to assess the level of personality hardiness tendencies by determining the level of agreement on a scale of 1 to 5 (1 = Strongly Disagree; 2 = Disagree; 3 = moderate; 4 = Agree; 5 = Strongly agree) through marking 'tick' in the column for each of the respective statements. The questionnaire was developed in a test with a sample of 30 respondents to carry out the reduction factors and to provide an indication of the reliability, dimensional size of Part B and Part C of the questionnaire further refined before collection. This study involved a sample of 250 university student entrepreneurs. Sample simple random sampling retrieval methods are used to collect data from student entrepreneurs. Participants came from various

faculties at the Islamic University of Riau, from race and sex, and year of study where they were chosen randomly and simple random sampling for this survey. The total number of questionnaires that were returned was 211 questionnaires. This research was conducted on students on the campus of the Islamic University of Riau, Pekanbaru. Indonesia. Profile of students from various faculties, ages, sexes, and seniority of study proposed in Table 1. The selection of the number of samples taken is simple random sampling based on the estimated number of students from various categories of business unit types. In general, the construct validity test value can be viewed using standard goodness of fit value for assessing the suitability of an acceptable standard of reference is the value of Chi-Square. Chi-Square values can take statistical tests related to significant requirements fulfilled. Standard values p-values $> .05$ followed by RMSEA criterion indicates the value $< .08$. whereas GFI, NFI, and CFI produce value > 0.9 which shows a model of the goodness of fit. The construct validity test needs to be carried out before carrying out a model test analysis for the hypothesis, namely factor analysis or confirmatory factor analysis (CFA) to test the uni-dimensionality of the measuring instrument. The following step is to test the construct validity of data items. The construct validity test of this study uses confirmatory factor analysis with MPLUS software. This step is carried out to obtain good analysis factor outcome criteria (Harrington, 2009). Based on the CFA analysis. it is known that the model is not fit. Therefore researchers need to modify the model. where measurement errors on some items are free to correlate with each other. So that the model fit of a set of entrepreneurial intentions items obtained was tested by MPlus-SEM, CFI= .926; df = 73; p-value = .0028; RMSEA= .050. This explanation can be seen in Figure 1.

The model test based on Figure 2 shows that an analysis of one factor is acceptable, this means that the whole item measures personality hardiness variables. The value of a good z-value coefficient is > 1.96, which states that 14 hardiness personality items are valid. This explanation can be seen in Table 3. Based on the CFA analysis for a set of items the personality hardiness variable shows a model that is not fit. As with the previous variables, researchers need to modify the model by emphasizing measurement errors, which eliminates correlated items. Thus the fit model is obtained from the set of hardiness personality items so that the CFI test is obtained = .881; df = 114; p-value = .0002; RMSEA = .050. This explanation can be seen in Figure 2.

Table 1: Profile of the Participants (N=211)

Demographic	Categories	Frequency	%
Gender	Male	75	35.5
	Female	36	64.5
Age	18 to 20	30	14.2
	21 to 23	166	78.7
	24 to 26	15	7.1
Faculty	Islamic	11	5.2
	Economy	53	25.1
	Communication Studies	17	8.0
	Social and Political Sciences	15	7.1
	Teacher and Science	24	11.4
	Law	24	11.4
	Agriculture	11	5.2
	Psychology	36	17.0
	Engineering	20	9.5
Seniority at UIR	Degree year 1	7	3.3
	Degree year 2	16	7.6
	Degree year 3	36	17.1
	Degree year 4	122	57.8
	Degree year 5	21	9.9
	Degree year 6	6	2.8
	Degree year 7	3	1.4

Table 2: Loading Factor Entrepreneurship Intention

Item	Estimate	SE	
Sikap (Attitude)			
3. Menjadi seorang wirausaha memberikan lebih banyak keuntungan daripada kerugian *Being an entrepreneur gives more advantages than disadvantages*	.487	.057	8.599
4. Saya memiliki keinginan menjadi seorang wirausaha *I have a desire to become an entrepreneur*	.674	.046	14.786
5. Menjadi seorang wirausaha akan memberikan saya kepuasan yang besar *Being an entrepreneur will give me great satisfaction*	.634	.050	12.654
10. Diantara berbagai pilihan, saya lebih memilih menjadi wirausahawan *Among various choices, I prefer to be an entrepreneur*	.739	.039	18.918
12. Sangat menarik bagi saya menjadi wirausahawan *It is interesting for me to be an entrepreneur*	.797	.039	20.369
14. Jika saya memiliki kesempatan dan modal, saya ingin memulai sebuah usaha *If I have the opportunity and capital, I wan to start a business*	.528	.059	9.008
Norma (Norms)			
1. Keluarga saya berpikir agar saya menjadi seorang wirausahawan *My family thinks that I will become an entrepreneur*	.450	.068	6.658
5. Teman-teman saya berpikir agar saya menjadi seorang wirausahawan *My friends think that I will become an entrepreneur*	.801	.049	16.524
9. Orang-orang terdekat saya berpikir agar saya menjadi seorang wirausahawan *The people closest to me think that I become an entrepreneur*	.808	.055	14.763
Kontrol Perilaku (Behavior Control)			
2. Jika saya mau. saya bisa dengan mudah menjadi seorang wirausahawan *If I want to, I can easily become an entrepreneur*	.418	.057	7.273
6. Mudah bagi saya bekerja sebagai wirausahawan *It's easy for me to work as an entrepreneur*	.501	.060	8.401
8. Semua keputusan tergantung pada diri saya apakah saya akan menjadi wirausahawan atau tidak *All decisions depend on me whether I will become an entrepreneur or not*	.355	.067	5.306
11. Ada beberapa kondisi diluar kendali saya yang dapat mempengaruhi saya sebagai wirausahawan *There are several conditions beyond my control which can affect me as an entrepreneur*	.178	.074	2.385
13. Sebagai seorang wirausahawan, saya memiliki kendali atas usaha saya *As an entrepreneur, I have control over my business*	.518	.062	8.354
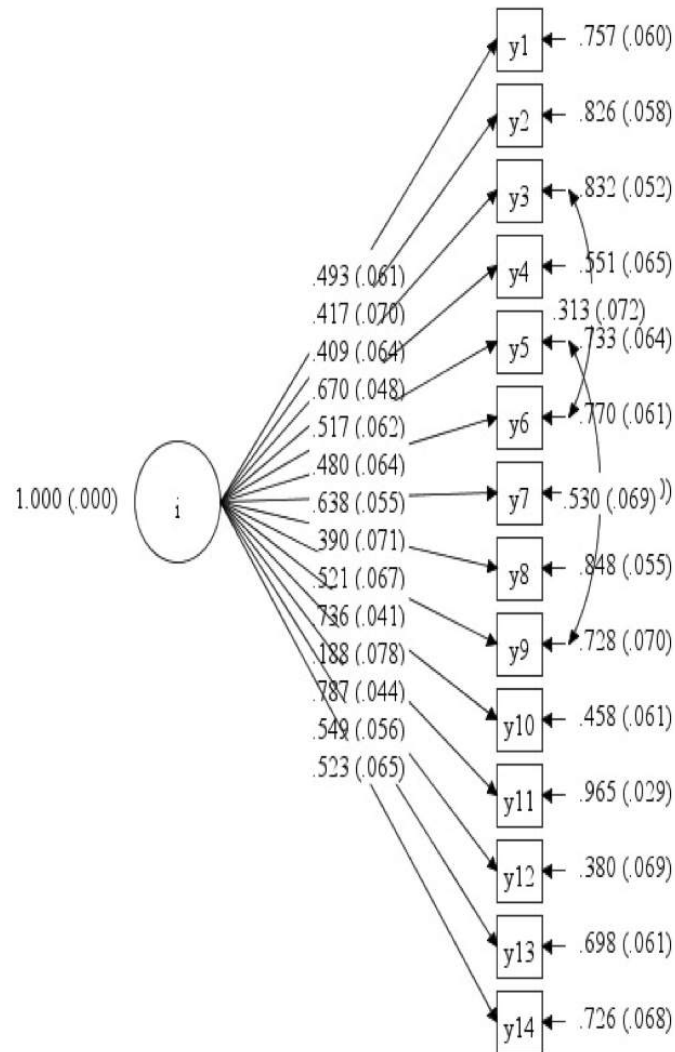
Figure 1: Entrepreneurial intention SEM analysis.

3 RESULT AND DISCUSSION

The results of the analysis of this study to prove the hypothesis there are effects of personality hardiness on entrepreneurial intentions among students. To assess the goodness of fit model, CFA-MPlus software from SEM provides a model suitability test including the Chi-Square model conformity standard. This analysis examines the measurement model by using the Chi-Square test which obtained a p-value = .4081; RMSEA = .0000, meaningful this testing model shows the goodness of fit. Further explanations can be seen in Figure 3.

4 RESULTS AND DISCUSSION

The results of the analysis of this study to prove the hypothesis there are effects of personality hardiness on entrepreneurial intentions among students. To assess the goodness of fit model, CFA-MPlus software from SEM provides a model suitability test including the Chi-Square model conformity standard. This analysis examines the measurement model by using the Chi-Square test which obtained a p-value = .4081; RMSEA = .0000, meaningful this testing model shows the goodness of fit. Further explanations can be seen in Figure 3.

The results shown in Figure 3 show that personality hardiness influences entrepreneurial intentions, the z-value that shows Z = 4.916 > 1.96. This means that
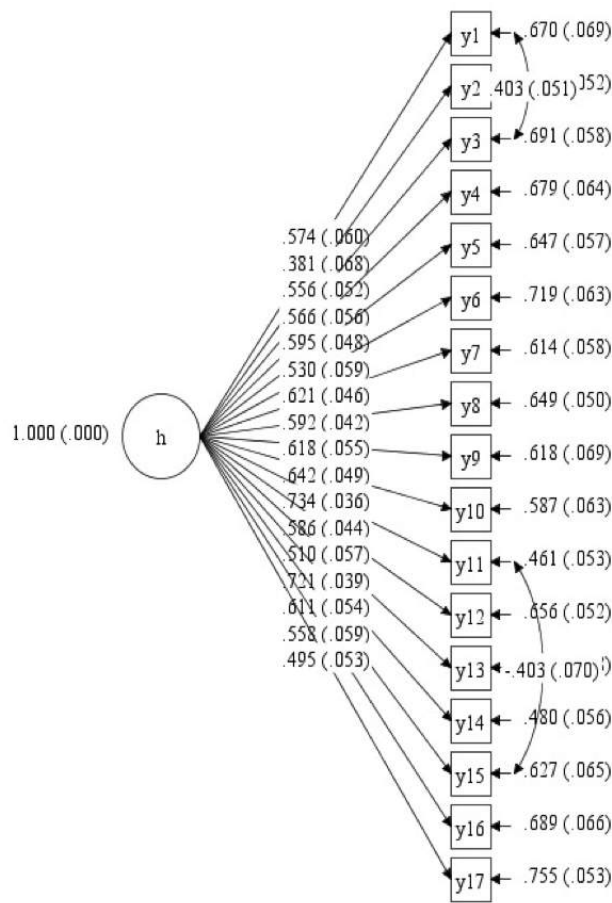
Figure 2: Personality hardiness SEM analysis

Table 3: Loading Factor Personality Hardiness

Item	Estimate	SE	
Sikap (Attitude)			
3. Menjadi seorang wirausaha memberikan lebih banyak keuntungan daripada kerugianBeing an entrepreneur gives more advantages than disadvantages	.487	.057	8.599
Being an entrepreneur gives more advantages than disadvantages			
4. Saya memiliki keinginan menjadi seorang wirausaha	.674	.046	14.786
I have a desire to become an entrepreneur			
5. Menjadi seorang wirausaha akan memberikan saya kepuasan yang besar	.634	.050	12.654
Being an entrepreneur will give me great satisfaction			
10. Diantara berbagai pilihan, saya lebih memilih menjadi wirausahawan	.739	.039	18.918
Among various choices, I prefer to be an entrepreneur			
12. Sangat menarik bagi saya menjadi wirausahawan	.797	.039	20.369
It is interesting for me to be an entrepreneur			
14. Jika saya memiliki kesempatan dan modal, saya ingin memulai sebuah usaha	.528	.059	9.008
If I have the opportunity and capital, I wan to start a business			
Norma (Norms)			
1. Keluarga saya berpikir agar saya menjadi seorang wirausahawan	.450	.068	6.658
My family thinks that I will become an entrepreneur			
5. Teman-teman saya berpikir agar saya menjadi seorang wirausahawan	.801	.049	16.524
My friends think that I will become an entrepreneur			
9. Orang-orang terdekat saya berpikir agar saya menjadi seorang wirausahawan	.808	.055	14.763
The people closest to me think that I become an entrepreneur			
Kontrol Perilaku (Behavior Control)			
2. Jika saya mau. saya bisa dengan mudah menjadi seorang wirausahawan	.418	.057	7.273
If I want to, I can easily become an entrepreneur			
6. Mudah bagi saya bekerja sebagai wirausahawan	.501	.060	8.401
It's easy for me to work as an entrepreneur			
8. Semua keputusan tergantung pada diri saya apakah saya akan menjadi wirausahawan atau tidak	.355	.067	5.306
All decisions depend on me whether I will become an entrepreneur or not			
11. Ada beberapa kondisi diluar kendali saya yang dapat mempengaruhi saya sebagai wirausahawan	.178	.074	2.385
There are several conditions beyond my control which can affect me as an entrepreneur			
13. Sebagai seorang wirausahawan, saya memiliki kendali atas usaha saya	.518	.062	8.354
As an entrepreneur, I have control over my business			

Figure 3: SEM Analysis for personality hardiness on entrepreneurial intentions

there is a relationship between personality hardiness and entrepreneurial intentions. The estimated correlation value shows a positive direction of R = .322. These results indicate that the higher the personality hardiness, the higher the entrepreneurial intention. Meanwhile, the indirect effect of the dimensions of the challenge (R = .354), control (R = .375), and commitment (R = .409) against entrepreneurial intentions are positive and significant. The final analysis of the value of R2 for personality hardiness showed 11 percent variation support for entrepreneurial intentions.

5 CONCLUSION

This study empirically has shown positive effects of personality hardiness to show the intention of entrepreneurship to college students. Previous studies that support (Bruce and Sinclair, 2009) report scholars who have high personality hardiness show better task resolution initiatives, are able to plan even when faced with failures, and have a strong desire for success. As has been demonstrated in previous studies that one determinant of intention to become entrepreneurs starts from within the individual in a positive view of his surroundings (Suryana and Bayu, 2012). Individual factors such as personality are also evidenced in (Farradinna et al., 2018) supporting individual entrepreneurial intentions in managing and running their business. Another study also supports that the more positive the entrepreneurial attitude, the norms that are shown and the stronger self-efficacy in the individual, the higher the intention to become entrepreneurial (Wijaya et al., 2015). Other studies sources explained that the intention of entrepreneurship related to the three essential elements that are decision-making, a positive perception of, and response to opportunity (Krueger Jr et al., 2000). In fact, we examine three dimensions of personality resilience towards entrepreneurial intentions, and the

dimension of commitment is felt to offer a higher value of influence than other dimensions. This proves that a high commitment to work shows individuals who are able to face life's challenges and manage business opportunities better (Maddi, 2002). We prove that contributing personality hardiness predicts entrepreneurial intentions among university students by 11 percent. One previous study stated that the personality hardiness of students as entrepreneurs was able to manage the business they were doing better than those who showed lower personality hardiness (Sabela et al., 2014). The same results with the study of (Fayolle and Gailly, 2015) that identified the determinants of the desire to run a business were the intention to start a business, to innovate and to take the decision to run and develop its business unit. This study has several limitations. The dimensions of personality hardiness in this research model are not explained more fully and deeply, which might be a factor that can influence entrepreneurial intentions. In addition, this study focuses on students at one particular university, so there is a high likelihood of limiting the generalization of findings. Furthermore, this study adopts self-reports that are highly dependent on student experience about entrepreneurship, thus limiting findings. Universities have an important influence on getting involved and trying to make students improve entrepreneurial intentions among students. Faculties and universities collaborate in conducting training and activities to improve hard and soft skills related to entrepreneurship. Future researchers must expand the scope of studies by integrating training experiment methods to increase entrepreneurial intentions that focus on different climates, cultures, and geographical conditions to deepen our understanding of the paradigm of entrepreneurial intentions.

ACKNOWLEDGEMENTS

REFERENCES

Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2):179–211.

Al Mamun, A., Ibrahim, M., Yusoff, M., and Fazal, S. (2018). Entrepreneurial leadership, performance, and sustainability of micro-enterprises in malaysia. *Sustainability*, 10(5):1591.

Bissonnette, M. (1998). Optimism, hardiness, and resiliency: A review of the literature. *Prepared for the child and family partnership project*, 26(7):21–36.

Bruce, R. A. and Sinclair, R. F. (2009). Exploring the psychological hardiness of entrepreneurs (summary). *Frontiers of Entrepreneurship Research*, 29(6):5.

Deakins, D. and Freel, M. S. (2009). *Entrepreneurship and small firms*. McGraw-Hill College.

Farradinna, S., Fadhlia, T. N., et al. (2018). Entrepreneurial personality in predicting self-regulation on small and medium business entrepreneurs in pekanbaru, riau, indonesia. *J. Mgt. Mkt. Review*, 3(1):34–39.

Fayolle, A. and Gailly, B. (2015). The impact of entrepreneurship education on entrepreneurial attitudes and intention: Hysteresis and persistence. *Journal of small business management*, 53(1):75–93.

Kao, J. (1993). *Entrepreneurship Creativity and Organizational: Text, Casess, and Readings*. Mc Graw Hill, New York.

Kobasa, S. C. (1982). Commitment and coping in stress resistance among lawyers. *Journal of Personality and social Psychology*, 42(4):707.

Krueger Jr, N. F., Reilly, M. D., and Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of business venturing*, 15(5-6):411–432.

Maddi, S. R. (2002). The story of hardiness: Twenty years of theorizing, research, and practice. *Consulting psychology journal: practice and research*, 54(3):173.

Maddi, S. R. (2006). Hardiness: The courage to grow from stresses. *The Journal of Positive Psychology*, 1(3):160–168.

Maddi, S. R. and Kobasa, S. C. (1984). *Hardy executive*. Dow Jones-Irwin.

McClelland, D. C. (1973). Testing for competence rather than for" intelligence.". *American psychologist*, 28(1):1.

Rasli, A., Khan, S. U. R., Malekifar, S., and Jabeen, S. (2013). Factors affecting entrepreneurial intention among graduate students of universiti teknologi malaysia. *International Journal of Business and Social Science*, 4(2).

Sabela, O. I., Ariati, J., and Setyawan, I. (2014). Ketangguhan mahasiswa yang berwirausaha: Studi kasus. *Jurnal Psikologi*, 13(2):170–189.

Suryana, Y. and Bayu, K. (2012). *Kewirausahaan: Pendekatan Karakteristik Wirausahawan Sukses Ed. 2*. Kencana.

Timmons, J. A., Spinelli, S., and Zacharakis, A. (2004). *How to raise capital: Techniques and strategies for financing and valuing your small business*. McGraw Hill Professional.

Wijaya, T., Nurhadi, A. M. K., and Kuncoro, A. M. (2015). Intensi berwirausaha mahasiswa: Perspektif pengambilan risiko. *Jurnal Siasat Bisnis Vol*, 19(2):109–123.

Turak Dance as Local Wisdom in the Perspective of the Young Generations in the Digital Age

Ira Miyarni Sustianingsih and Risa Marta Yati

History Education Department, STKIP PGRI Lubuklinggau, Jl Mayor Toha, Lubuklinggau, Indonesia
irastkip@gmail.com, risamarta.2@gmail.com

Abstract: This study aims to analyse the existence of turak dance as one of the traditional dances which has become a local wisdom in Musi Rawas Regency which has very high historical and cultural values in the perspective of the younger generation in the digital era. The research method used is a qualitative research method with a descriptive-analytical approach. Data was collected by combining literature studies, direct observation, distributing questionnaires, interview and triangulation. The results showed that: 1) Turak dance is only known by a small proportion of teenagers in Musi Rawas Regency. The results of a questionnaire observation at three high schools in Musi Rawas Regency, showed that out of 180 people, only 14 people (7.8%) knew or had heard of the name turak dance. 2) The lack of knowledge about turak dance is motivated by the assumption of teenagers in Musi Rawas Regency (age range 14-18 years) that turak dance is an ancient dance, so they are neither interested nor interested in practicing it or preserving it. 3) The lack of a sense of ownership and preservation of the Turak dance among teenagers threatens the regeneration of the turak dance in the future, where if this remains unchecked then it means the extinction of one of the local wisdoms of Musi Rawas Regency which is a pillar of Indonesia's national culture.

1 INTRODUCTION

Human civilization is inseparable from the growth and development of cultural supporters of the civilization. The Indus civilization in India, the Yellow River civilization in China, the Mesopotamian civilization, the Roman civilization and Greek civilizations that have different styles from each other. Civilization will be formed by a combination of cultural systems that include seven elements, namely: language, knowledge systems, social organizations, systems of living and technology, livelihood systems, religious systems and arts. As one element of culture, art has substantial manifestations, meanings and functions in the lives of the people who support the culture. One form of this element of art is dance that reveals beauty through the medium of motion. In the cultural element which is the main content of every culture that develops throughout the world, dance belongs to the element of art, namely performing arts.

The performing arts have three important functions in everyday life that are adapted to the context of events and socio-cultural societies, namely:

1. A referral for the community

2. Transmission of culture

3. Supporting local economic life (Slamet, 2012).

Therefore, the development and preservation of dance is very necessary to do because dance is a reflection of the cultural character and local wisdom of the supporting community which will form a distinctive ethnic identity. This cultural difference is what causes in Indonesia there are a variety of traditional dances that differ from one region to another. This diversity is the richness of Indonesian culture that is highly admired by foreign nations.

One of the traditional dances in Musi Rawas Regency is turak dance. This dance is estimated to have existed since the 18th century when Indonesia was still colonized by the Dutch Colonial Government in the Tanjung Sakti area (now STL Ulu Terawas District). Turak dance was used as a means of community resistance to the Dutch Colonial Government wanting to control the Tanjung Sakti area which was one of the coffee producing centre's in South Sumatra. During the independence war (1945-1949) the people of Tanjung Sakti also used turak dance to paralyze the Netherlands, which at that time was represented by the NICA army (Nederlandsch Indie Civil Administratie) who wanted to control this area (Sustianingsih and Y., 2018; Fitriani, 2018). Although tu-

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rak dance is rich in the historical value of the struggle for independence and the original culture of Musi Rawas, it does not guarantee that this dance is popular among teenagers for today. They are more familiar with Western culture, Japanese or KPOP culture which is synonymous with dances and songs that are performed by beautiful, beautiful singers with clothes that are fashionable and "cool". This phenomenon is the background of the writing of this article which aims to analyze how the existence of turak dance among teenagers in the digital era is greatly facilitated in accessing foreign cultures through technological sophistication.

2 RESEARCH METHODS

The research method used in this study is a qualitative method with a descriptive-analytical approach. Qualitative research methods are research methods used to examine the conditions of scientific objects, in which researchers act as key instruments. Qualitative research seeks to uncover the daily living environment of informants who are the research subjects. Researchers are encouraged to adapt in depth with informants to recognize, observe and follow the informant's life path as is (natural). Therefore, the data obtained by this qualitative method is in-depth data that contains many meanings (Idrus, 2009). Qualitative research methods are often called naturalistic research methods and ethnographic methods (Sugiyono, 2008). Stages in qualitative research include:

- Identification and formulation of problems;
- Develop a framework of thought;
- Formulating a hypothesis;
- Empirically test hypotheses;
- Conduct a discussion;
- Draw conclusions (Suryana, 2010).

Data collection techniques used include through library studies, observations (direct observation and questionnaire), interviews and triangulation (combined). Literature study is intended to find initial data sources from research to be conducted. The library study was conducted in the library of STKIP PGRI Lubuklinggau, Laboratory of History Study Program, Lubuklinggau City Library, Musi Rawas Regency Library and open access journal by online.

Observation is a technique that is then used to obtain data. Some of the advantages of observation techniques, namely:

- This observation technique is based on direct experience;

- Observation techniques also make it possible to see and observe themselves, then record behaviors and events as they occur in real life;
- Observation allows researchers to record all knowledge related to data;
- The researcher will have difficulty getting out of his "personal bias";
- Allows researchers to understand difficult situations during the study;
- Observation techniques become very important when other communication tools are not available (Idrus, 2009).

To strengthen the research hypothesis, during direct observation, researchers distributed 180 questionnaires for three junior high schools (SMP) from first class to third class randomly, namely Xaverius Tugumulyo Middle School (60 questionnaire sheets), SMP N 1 Beliti (60 questionnaire sheets) and SMP N 2 Beliti (60 sheets of questionnaire). This questionnaire sheet is a closed questionnaire consisting of five questions whose answers have been provided by the researcher.

The next research technique used is interviews, where the interview model conducted in this study is structured and focused interviews in accordance with the guidelines that have been prepared. Before conducting structured interviews, researchers must prepare material questions that will be asked. Researchers are also required to be able to develop the ability to gather information from informants (Idrus, 2009). In this study, interviews will be conducted with people who have knowledge of the Turak dance, among others: Hamam Santoso (art activist in Musi Rawas Regency), Liliana (Serumpun studio owner), Husni Tamrin (Cultural figure in STL Ulu Terawas District), Suwandi Syam (Cultural figure in Musi Rawas Regency), Muhammad Asman (Lubuklinggau dance activist).

Meanwhile in triangulation, researchers will usually use different data collection techniques at one time to get data from the same source. Researchers can use participation observation, in-depth interviews and documentation for the same data source simultaneously (Sugiyono, 2008).

The data analysis technique that will be used in this study is an interactive data analysis model proposed by Miles and Huberman's Model consisting of:

- Data Reduction
  Data reduction can be interpreted by summarizing, choosing the main points, focusing on the things that are important, looking for themes and patterns and removing unnecessary. This data reduction can be done by means of abstractions that

aim to make a core summary while maintaining the process and statement so that it does not come out of the research objectives. This data reduction process is carried out on an on going basis so that it can capture the core notes of the research conducted.

- Data Display

  Data display is a collection of information that is arranged which gives the possibility of drawing conclusions. This is done because the data obtained during the qualitative research process is in the form of narrative so that it requires simplification without reducing its contents.

- Conclusion/verification

  Conclusions are the final stages in the process of analysing data that includes researchers' conclusions on data that has been obtained while in the field. The conclusion can be done by comparing the suitability of the statement of the research subject with the meaning contained with the basic concepts of the research. After the conclusion is obtained the researcher then makes a written report (Sugiyono, 2008).

3 TURAK DANCE AS LOCAL WISDOM

The research turak dance is one of the traditional dances developed by the people of Musi Rawas Regency, precisely in the Suku Tengah Lakitan (STL) Ulu Terawas South Sumatra Province. The STL Ulu community is supervised to recognize this dance as a dance that has a characteristic lack of motion. Turak dance a welcoming dance to trick the enemy by relying on weapons called "turak". That's why this dance is called turak dance (Santoso, interview on December 21, 2018 and Lilian, interview on February 2, 2019).

Turak dance has been around since the 18th century when Indonesia was still colonized by the Dutch Colonial Government, in the area of Tanjung Sakti which is now called STL Ulu Terawas District. At that time the Tanjung Sakti area was still led by Moneng Sedayu, The King of the Tanjung Sakti area who was part of the Palembang Darussalam Sultanate. Because this area is produce of coffee, the Dutch Colonial Government then came to control the Tanjung Sakti area. The attempt to conquer the Dutch army will be carried out by the people of Tanjung Sakti. Tanjung Sakti leaders and people then devised a plan to derail the efforts of the Dutch Colonial Government to control the nature and people of Tanjung Sakti.

The leader and community of Tanjung Sakti agreed to welcome the arrival of the Dutch Colonial Government through a dance played by six of the most beautiful women in Tanjung Sakti. These six beautiful dancers are equipped with bamboo weapons named turak. Inside the turak is filled with sand, salt, chilies and kitchen spices which can be removed from the turak by rotating it. Sand, salt, chilies and kitchen spices will hit the eyes of the audience (Dutch soldiers) around the dancers. When the Dutch army was in pain because their eyes were exposed to sand, salt, chilies and spices, the Tanjung Sakti youth would roll out and attack and incapacitate the Dutch army with weapons such as spears and keris weapon. With a strategy to show turak dance as a welcome dance for Dutch soldiers, the people of Tanjung Sakti succeeded in thwarting their intention to control Tanjung Sakti (Sustianingsih and Y., 2018; Fitriani, 2018).

During the Physical Revolution of Indonesia or Indonesian Independence War (1945-1949) the people of Tanjung Sakti also used turak dance to cripple the Dutch who were then represented by the NICA army (Nederlandsch Indie Civil Administratie) who wanted to regain control of the South Sumatra area including Musi Rawas and Tanjung Sakti. Turak dance is not just an ordinary traditional dance. This dance is a dance of the struggle for independence war and becomes a symbol of the struggle of the Musi Rawas community against colonial rule. Unyielding, self-esteem, unyielding, sincere and willing to sacrifice and the spirit of patriotism are fighting values that exist in turak dance (Sustianingsih and Y., 2018).

Even though it was created in the Tanjung Sakti area, turak dance is currently not only known by the people of Tanjung Sakti, but also has developed in various other areas in Musi Rawas Regency. The Tourism and Culture Office of Musi Rawas Regency even made turak dance as one of the riches of the arts and culture of Musi Rawas Regency in the form of traditional dances. In the present, the turak dance function which was initially used as a welcoming dance for guests (usually government officials) who came to Tanjung Sakti has undergone a change now to become an ordinary dance performance.

For each performance of turak dance there is a series of moves that begin and end this traditional dance. The various movements include: back and forth motion, scarf contortion, worship sitting, ngalui, raising turak, lifting rotary turtle, turtle turak, contortion turak, shaking turak, shoulder turak, shaking straight turak, turning turak, worshiping the end, and flying that ends this dance. The turak movement becomes a climax, where when the turtle is rotated, sand, chilies, kitchen spices and salt in the turtle will come out to-

gether following the turtle rotating movements performed by dancers (Fitriani, 2018). In the past when this dance was used as a means of struggle, when the turtle was played and the contents inside it would be about the eyes of the Dutch soldiers and immediately the Tanjung Sakti youth would attack together with the Dutch soldiers who were in pain. In the present, kitchen spices, salt, sand and chilies are replaced with yellow rice which will be scattered around dancers after the turtles are played.

The clothes used by turak dance dancers in every present performance are:

- The upper part: baju kurung, Musi Rawas crown/banyan tree crown/pilis, earrings, sanggul malang and bungo cempako.

- Middle section: Musi Rawas tongue/Musi Rawas lotus/tongue lotus, Musi Rawas necklace, bracelet, rainbow cloth or rainbow shawl, and turak.

- The bottom: songket cloth or sewet songket (Asman, interview on January 18, 2019).

Figure 1: Dancer of Turak Dance Source: Personal documentation

4 LOCAL WISDOM IN THE DIGITAL AREA

In the order of people's lives, local wisdom is a system in social, political, cultural, economic, and environmental life that lives in the midst of local communities. This local wisdom is dynamic, sustainable, and acceptable to the community. Local wisdom is the root of national culture which becomes a national identity. Local wisdom has a very substantial function as:

- conservation and preservation of natural resources;

- developing human resources;

- cultural and scientific development

The substance of local wisdom itself consists of:

- thoughts, attitudes and actions in language, art and literature;

- thoughts, attitudes and actions in various cultural artifacts;

- social ideas, attitudes and actions (Wagiran, 2012).

Local wisdom is also the root of the formation of the values of the supporting cultural character of the community. This character value is closely related to the formation of the personality of each individual, especially the younger generation as the holder of the nation-building relay in the midst of the current era of globalization.

Globalization which collapses the dividing walls between a country to other countries and that it brings them to unity (universality) raises pop culture that dominates today's culture. The era of globalization was also marked by the development of information and communication technology that experienced rapid and drastic changes, especially in the development of mass communication media. The high growth of local media, the development of online media, and the popularity of social media in various communities is a symbol of globalization (Watie, 2015).

Various brands of cheap android-based mobile phones that flood the electronic market also contribute to the increasing accessibility of the internet in the midst of today's society. The ease of ownership of this Android hand phone is also increasingly popularizing global pop culture that threatens continuity, existence and can damage the local cultural order. In addition, global pop culture can eliminate identity, especially the diverse regional identity of ethnic groups in Indonesia. Meanwhile, if the local culture is not preserved, this culture will be claimed by outsiders for economic and global capitalist interests (Piliang, 2005).

Globalization and the digital era have unwittingly brought changes in people's lives, which are seen in the system of cultural values and cultural orientation changes which have led to the death of local wisdom (105). Therefore, local wisdom is very necessary to be developed and preserved because the local culture contains noble values that were the generations' intellectual property. In this era of globalization and digitalization all Indonesian people are required to be wise in filtering out foreign cultures so as not to turn off indigenous culture. This effort will eventually form a resilient cultural resilience, so that the lo-

cal identity of the region does not become lost and remains sustainable until the next negotiation.

5 TURAK DANCE AS LOCAL WISDOM IN THE PERSPECTIVE OF THE YOUNG GENERATION IN DIGITAL ERA

The young generation or adolescence is a phase of human growth that lasts between the ages of 10 and 19 years. This growth stage is the most important period, where this phase is the transition from childhood to adulthood which is characterized by a process of rapid growth. In addition, this period is also very vulnerable to various disorders of both emotions and thoughts that will appear in negative daily behavior (Asif, 2017).

The period of development of information and communication technology in the era of globalization and digitalization has encouraged an increase in foreign cultures entering Indonesia. One of them is the phenomenon of Korean Wave or Korean fever that has hit Indonesian teenagers since 2000. On popular social media such as Facebook, Instagram and YouTube Indonesian teens freely access Korean movie (k-drama), music and songs Hallyu cultures which became a cultural commodity that South Korea developed throughout the world. Besides Korea, Western and Japanese cultures also export much popular cultural content for Indonesian teenagers.

Foreign cultural fever greatly marginalizes the existence of local culture, including in areas that are still thick with various traditions and cultures. Like turak dance which become one of the local wisdoms in Musi Rawas Regency which is increasingly forgotten by the community and its young generation. Turak Dance is very rarely displayed at various events and activities in Musi Rawas. Since 2010 to 2018, there have been only two turak dance performances performed, namely in the Panen Raya at STL Ulu Terawas in 2010 and sedekah rame in Batu Urip Village in 2016. The regeneration of turak dance is currently threatened with no regeneration because of its young people less interested in practicing this dance (Santoso, interviewed on Saturday, August 3, 2018).

The low interest of teenagers in the curiosity of turak dance was also conveyed by Asnan (interview 18 Janiari 2019). He stated that because of the small number of interested people who want to learn turak Dance, this dance is increasingly displayed to the public. Turak dance is listed as one of the Cultural Heritage Tak Benda (WBTB) of the Indonesian Ministry of Education and Culture (heritage). Kemendikbud.go.id). If we associate dance, it is also an educational medium that can educate children to be mature and avoid deviant behavior so that characters will form in accordance with Indonesian cultural values (https://googleweblight.com). This phenomenon will of course be very unfortunate in the development of the local culture of Musi Rawas Regency which is also part of national culture.

The lack of knowledge of teenagers in turak dance in Musi Rawas Regency is also evidenced by the results of questionnaires to three schools in Musi Rawas District, namely Xaverius Tugumulyo Junior High School, Beliti 1 Junior High School, and Beliti 2 Junior High School. The observation sheet contains five questions:

- Have you ever heard of the term turak dance? (yes or no)
- Have you ever watched turak dance? (yes or no)
- Do you have any desire to find out more about this dance? (yes or no)
- Have you ever watched Doraemon or Iron Man movie? (yes or no)
- If you choose between a BTS concert or turak dance performance, which will you choose? (BTS concert or turak dance perfomance)

From 180 questionnaire sheets distributed randomly in the four schools in class VI and VIII, only 14 people (7.78%) knew or had heard of turak dance. Meanwhile for questions about K-Pop singers, Japanese comics and some Western films and songs they all know and have watched them. Turak dance is considered unattractive compared to K-pop, Japanese comics, Western music and films (interview with Rama, May 16, 2019). The lack of recognition of turak dance in schools, the family environment and society is also the main cause of the unknown youth of turak dance.

This data is proof of how turak dance as a wealth of local culture is no longer known by its young generation. Teenagers act as the main pillar in the effort to develop and preserve Indonesian culture. If this condition continues to be left to a variety of local wisdom inherited from our ancestors, it will certainly disappear, replaced by a foreign culture that does not at all characterize local and national identity.

6 CONCLUSION

Turak dance is one of the traditional dances in Musi Rawas Regency whose conditions are currently being abandoned and lacking in regeneration. Turak

dance is estimated to have existed since the 18th century when Indonesia was still colonized by the Dutch Colonial Government. During the Physical Revolution (1945-1949) turak Dance was also used to cripple the Netherlands, which at that time was represented by the NICA army (Nederlandsch Indie Civil Administratie) who wanted to control the area. This historical fact makes Turak Dance a dance of independence struggle that has very high historical value.

But unfortunately at this time turak dance began to be abandoned by the younger generation. This is evidenced by the results of interviews with several informants as well as the results of questionnaire observations distributed to the three schools in Musi Rawas District, showing that only 7.8% (14 of 180 students) class VII and VIII were junior high school students who knew and have known this dance. Various factors are the causes, including:

- This dance is a traditional dance that is considered less attractive to teenagers;

- The digital era which currently makes it easier for teenagers to download various content on the internet, social media and youtube foreign cultures such as Korea, Japan and the West culture which are considered more modern and follow the times compared to regional culture;

- Lack of effort in the school environment or the community to popularize local culture to the younger generation of Musi Rawas Regency.

If this condition is left unchecked, of course it will lead to the extinction of this dance because there is no regeneration among the younger generation.

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REFERENCES

Asif, A. (2017). R dan Farid A. *R. 2017. Hubungan Tingkat Kecanduan Gadget dengan Gangguan Emosi dan Perilaku Remaja Usia*, 11-12.

Fitriani, S. (2018). Analisis Bentuk Gerak Tari Turak di Sanggar Studio Lingga Kota Lubuklinggau. *Sitarakara: Jurnal Pendidikan Seni dan Budaya*.

Idrus, M. (2009). Metode penelitian ilmu sosial.

Piliang, A. (2005). Yasraf. *Cyberspace dan Perubahan Sosial: Eksistensi, Identitas, dan Makana, dalam Balairung, Yogyakarta*.

Slamet, M. D. (2012). *Barongan Blora Menari di atas Politik dan Terpaan Zaman*. Surakarta: Citra Sain LP-KBN.

Sugiyono (2008). *Metode penelitian pendidikan:(pendekatan kuantitatif, kualitatif dan R & D)*. Alfabeta.

Suryana, C. (2010). Data dan jenis data penelitian. *dalam http://csuryana. wordpress. com,(17 Desember 2012)*.

Sustianingsih, I. M. and Y., R. M. (2018). Kajian tentang Perwujudan Nilai Juang pada Tari Turak (Studi Kasus Kecamatan Suku Tengah Lakitan (STL) Ulu Terawas Kabupaten Musi Rawas Sumatera Selatan). *Kaganga: Jurnal Pendidikan Sejarah Dan Riset Sosial-Humaniora*, 1(1):1–11.

Wagiran (2012). (2012). *Pengembangan Karakter Berbasis Kearifan Lokal Hamemayu Hayuning Bawana (Identifikasi Nilai-nilai Karakter Berbasis Budaya). Jurnal Pendidian Karakter. 2 (3)*, 2(3):329–339.

Watie, E. D. S. (2015). Membaca Kearifan Lokal dalam Penggunaan Media Sosial. *Jurnal Transformatika 13*.

Creative Editing in Documentary Film

Sandi Prasetyaningsih

Department Informatics Engineering, Politeknik Negeri Batam, Jln. Ahmad Yani, Batam, Indonesia
sandi@polibatam.ac.id

Keywords: Creative Editing, Documentary, Editor.

Abstract: This study aims to describe the exploration of one of the solutions on technical issues that are encountered by the editor during the editing process. Practice-based research will be my methodology as an approach to assist investigate whether the creative editing can help the editor overcome the problems or not. My research will be running through the production of a documentary film and it will be followed by the method which would form the reflection to approach my case study in terms as editing in documentary. There will be an investigation of the basic editing technique like colour grading to support the creative editing process. This research is important since it gives another insight to the editor when they meet the same problems of documentary editing.

1 INTRODUCTION

In the film production, there are apparent differs treatments on editing between documentary and fiction film. (Reisz and Millar, 1977) argue that the documentary film objective is on an exposition of a theme meanwhile playing with a plot is the main concern of fiction film. This fact brings the editor to encounter immense challenge on employing their skill to create attractive story. Moreover, another main focus is when cutting the footage, documentary film is to more appreciates people and the event that filmmakers try to arrange (Crittenden, 1981). However, during the production, numerous issues might happen since documentary predominantly focused on particular events, characters, and social issues. It makes the filmmakers and the editor have a great constraint to work stick on the script during filming. As the result, the editor has to work creatively to construct an attractive content that can help them to deliver the story and message.

There are noticable time consumes needed in terms of editing documentary and fiction film. Fiction or feature film needs months of years to finish the editing; involve two or more editors or an editor and assistant. For instance, Crimson Tide (1995) spent 148 hours to edit 113 minutes film. On the contrary, documentary editing uses an immense amount of time. In film Olympia (1936), the editor required almost two-year to have the final version of the editing (Phillips, 2009).

According to (Orpen, 2009), there are no parame-

ter as the rules during documentary editing. The editor has several choices to explore their skill to do the editing. An interview section between an editor, namely Ken Sallow, and Jillian Holt, Ken highlited his work experienced; he often worked in unscripted documentaries and allocated hundreds of hours to choose the proper footage. He decided on amount of creative works as he used cut out the extraneous material to do some repititions and jump cut. Alongside the process, he tried to generate smooth cut by maintaining the continuity (Holt, 2015). Besides, according to (Cunningham, 2005), Geof Bartz, another editor, states that he used his experiences to edit the documentary; he pointed out the big challenge for the editor is to find out the dramatic story of the documentary subject since the documentary mostly talks about the real people.

To overcome several technical issues that occure during the production, the editor can employ their creativity to edit the documentary. According to (Byron, 2007), creativity has a relationship with inspiration, institution, ingenuity, imagination, and insight. The ability to create is the process of individual or team to get something that is new and has a probability to execute or proper to be implemented (Nemiro, 2004). In addition, creative activity is about any action, notion or product that alter a remaining domain or modify an existing domain to a novel one (Csikszentmihalyi, 1996).

On its implementation, as an argument from (Cunningham, 2005), editing is fully about the manipula-

tion; however the editor need to be concern on particular elements when working with creativity. It is neccesary to convey the truth of documentary as much as possible based on the real story. Some ethical boundaries should be obeyed by the editor during the process. As an example, the documentary film is made by the actual story that really happen, so that the editor will not do the editing to something that did not happen.

Moreover, in the practical thing, creative editing enforce the editor to have a high sense of choosing the suitable materials for both visuals and audios. They should select the materials from hundreds of files. The proper visuals and audios element have a crucial role to convey the story and message of the documentary. Utilizing suplementary elements, such as music background and transition, also a part of creative editing to convey the emotion of the documentary subject.

Be advised that papers in a technically unsuitable form will be returned for retyping. After returned the manuscript must be appropriately modified.

2 HISTORY OF EDITING

According to V. I Pudovkin, 'editing is the basic creative force, by the power of which the soulless photographs (the separate shots) are engineered into a living, cinematographic form' (Bordwell et al., 2017). (Orpen, 2009) highlights that editing is a process comprises three stages: choosing material with each length; collecting and timing the shots, scenes and sequences; incorporating with soundtrack.

Editing is a practice that include shots and other elements focus on establishing a story which fascinate the viewer through a cinematic form. Editing becomes a media for filmmakers to not only deliver the story, but also present an aesthetic film that bring the audience to feel the story in depth.

Editing's history is inseparable from the cinema growth as a consequence of the practice of editing that did not available before the beginning of filmmaking (Holt, 2015). Moreover, (Fairservice, 2001) also gives similar argument as the Holt; film editing theory cannot be thought about as separate from the historic evolvement of filmmaking since they are associate within the practice.

However, (Dancyger, 2007) states that editing did not exist when the earliest motion of pictures was made. In 1890s which the initial motion pictures commenced to begin, filmmakers stood the camera and filmed the story until the shot reel (a metal or plastic spool to hold film) of the film ran out. It is supported by early cinema methods, which applied the

film without any editing stage. The Kiss (1896) which is one of the well-known films in New York became an indication of film without editing on its shots. The film involved one shot which shows the frame of the screen kiss between two actors (Phillips, 2009).

The idea of editing last to the notion of experimental editing approach. Edwin S. Porter's film, The Life of an American Fireman (1902) and The Great Train Robbery (1903) tried to execute the cross-cutting technique which implies in two actions happening at two places at the same time and combines the one shot to other shots during the editing stage (Phillips, 2009).

Editing strategies are changing in line with the cinema development. The filmmaker attempted to explore the editing technique by applying the latest technology to find out the suitable technique that can be used in their film. (Reisz and Millar, 1977) compared the editing technique used by Porter and Griffith in their film. The main purpose why Porter used a cut between shots was usually because it was physically impossible to execute into a single shot. On the other hand, Griffith used the cut for dramatic reasons to present to the audience details of the scenes which becomes the height of the drama event at the specified moment.

The finding of editing technique in the early discovery of filmmaking arose as the principle of classical editing. Regardless of that time, continuity and dramatic construction were not the main objective of editing. Most of the initial films were taken as one shot.

3 EDITING TECHNIQUE: CONTINUITY IN FICTION AND DOCUMENTARY FILM

Continuity editing is an example of editing techniques that is commonly employed by the editor. (Smith, 2005) underlines that by driving viewer's across cuts, in terms of continuity editing, it can be seen as functional purposes. It means that editing gives several information about the transition and existing visual on film. According to the argument from (Smith, 2012), in terms of applying continuity in editing, natural attention signs can be utilized; these may involve conversational turns, off-screen sound, and pointing gesture to encourage the viewer's concertation through shift across the cuts.

Furthermore, continuity editing is utilized as the more by which the editor maintains the viewers' attention, avoiding them from becoming lost in the

story. Continuity should be presented smoothly to avoid the viewer from feeling unfocused through the transition of the story. Hence, the audience can get the narration every moment on the flow of the story.

(Frierson, 2018) reviews that continuity for the fiction film is approached by implying the mise en scene and cinematography that have a series of shots with discontinuous flow and creating continuous through cutting system. In addition, continuity can be executed on the time, place, action and in several ways, such as eye-line matches, action and reverse shot.

The eye-line matches are represented in the scene Life is Beautiful (1998) when the man on the bicycle looks off-screen to the left; the next shot shows what he is looking at. The continuity editing also can be accomplished by cutting on the action. In particular, a shot shows the end of the subject's movement and the next shot starts with a different angle or distance. In addition, reverse shots are usually used for conversation or dialogue shots to tell the reaction and emotion of each actor (Phillips, 2009).

By contrast, according to (Nichols, 2017), documentary with the continuity techniques tend to unnoticeable and has less priority due to the correlation between time and space; these are not as essential editing component, but because of the actual historical linkages. (Kriwaczek, 1997) points out that producing continuity cuts from a scene to others will prevent the viewer from having a slow comprehension of action in order to identify the novel concern of interest. The most important aspect of editing in documentary is to have the sense of the objective for the documentary itself (Hampe, 1997). This can be achieved by giving visuals that interesting to the audience and support the overall purpose through the evidence revealed by the visual.

(Hampe, 1997) investigates that there are various editing techniques that can be employed as communication way to the audience. Nevertheles, it is necessary to take into consideration some questions "Can you see what is happening in this documentary?" and "Does it make sense?". Hence, the editor can implement the editing technique wisely based on their main goal of the documentary film.

In addition, the editor of fiction film normally has script as guidance. It assists them to control the continuity among scenes, such as action and place. As they follow the script flow and select the right shot to support the story. However, a documentary film without script encounter the editor to maintain the continuity in editing by constructing the continuity itself in story and emotion of the subject. These elements can produce an attractive documentary if the editor use the existing shots in creative ways.

4 METHODOLOGY

(Batty and Kerrigan, 2018) argue that screen production related to creative practice research enquiries can be signified numerous ways; practice-led research, practice-as-research, practice-based research, and research-led practice. (Candy and Ernest, 2018) states that novel media arts as one of the creative pieces emphasizes the creative process and the works that are generated; practice as well as research work together to produce new insight that can be distributed and analyzed. Based on this argument, my research will be practice-based. To support my methodology, I will use reflection as my method to approach my case study. The reflection method will become part of my learning process after analyzing the case study, employing this into my creative work, and lastly reflecting upon my creative practice. As such as, my reflective practice is 'intentional consideration of an experience in light of particular learning objectives' (Hatcher and Bringle, 1997).

I will be working on analysing a documentary case study from the Australian Academy of Cinema and Television Arts Awards (AACTA); Whiteley as the winner of Best Editing in a Documentary in 2017. I will look at the first three minutes of Whiteley and take note of how they approach creative editing throughout the editing process. The case study analysis will inform and enhance my creative practice. According to (Rowley, 2002), case study is widely used due to it offers various method of gaining insight that might not have been accomplished with other approaches; case study is also employed for developing more structured tools that are essential in investigations and experiments. In the end, after exploration in creative editing, I will reflect on which things work well and which do not during the post-production process. The reflection on the case study is part of my learning process in my creative piece. (Ghauri, 2004) says that 'a case study is both the process of learning about the case and the product of our learning'.

5 CASE STUDY

Whiteley is a documentary film about Australia's most iconic artist, Brett Whiteley, with duration of one hour and 35 minutes. This documentary uses a concept of 'in his own words' and visualizes Whiteley's story by using his notebooks, personal letters,

photographs, and other materials that support his concept (IMDb n.d).

Figure 1: The opening visual od Whiteley documentary film

In the first scene, this documentary reveals montage sequences of black and white, and colourful pictures (see figure 1) to introduce Whiteley, telling when and where he was born. According to Frierson, 'montage in the broad sense describes a series of short shots that compress time, space, or narrative information, but it actually has several distinct meanings' (2018, p. 206). Montage sequences can be used as one of the additional elements to assist the visual aesthetic. (Leibowich, 2019) supports the notion that montage can be utilized as a device for creating spatial and temporal correlations within a movie.

Figure 2: Black and white self-portrait of Whiteley

In addition, the process by which the editor chose the beautiful series of images can be appreciated since this component really fascinates me as a viewer. With the arrangement of Whiteley's self-portrait and his amazing art artefact, this brings the viewer to feel more engaged in understanding his life story. The black and white concept showing his portrait differentiates the expressions and activities of Whiteley with his creative piece.

In terms of coloring, the editor employ the feature of color tone; exposure, contras, highlight, and so forth to keep the color continuity and as the distinct of current and past moment.

6 CREATIVE PRACTICE IN DOCUMENTARY FILM

Having the freedom to explore my creative skills during editing of the documentary, I intended to experiment with the color grading since this part of editing becomes the serious technical issues.

My last project in documentary was an unscripted documentary. It forced me to work creatively on the issues occurred during the production process. It happened since I got an attractive and energetic subject, so the subject of documentary told random things, yet we gave some questions sequentially. In addition, another problem came into the camera setting which the camera person set up the camera in automatic mode. Hence, every time the subject moved, it affected the brightness and color differences between the shots. Moreover, the expression and emotion of the subject were out of my direct control.

For three minutes lengths of fine-cut documentary, I worked in two hours recorded video. As the initial process, I selected the proper content of the clips in order to construct the story. The attractive subject brought the beneficial to create an interesting story of his personal life. However, since he told the story in random way, as an editor, it was slightly difficult to cut the shots in right part and made it into smooth continuity when combining with other parts.

Figure 3: Original clip of telling the time he moved to suburb

Figure 4: Original clip of his partner story

Figure 3, 4, and 5 were the original clips of the documentary film. It can be seen that each clip had different brightness and color grade. Figure 3 had overexposure lighting on the right side of the subject. Every time he moved, the brightness changed

Figure 5: Original clip of explaining about his house

and also affected other elements, such as shadow and contrast. Figure 4 was close to normal brightness and color grade, but the color contrast in the left side was a bit dark. Figure 5 got a lot of light in all areas of clips since the video taken outside and the color of the subject's cloth effect the white balance.

To overcome these several problems, I edited the clips by setting up the color grade on some components, such as temperature, tint, highlight, shadow, and so forth. However, the immense challenge of the color grade editing was to keep the color continuity for each shot. Hence, my main concern was to avoid the color jumping which could distract the audience's concentration while watching the documentary.

I tried to maintain the color continuity for figure 3 and figure 4 by putting the same values of the color grading. The color grading in figure 6 was applied to all indoor clips as the default color grade attribute values. I used the basic correction feature as my tool for color grading. I changed nothing for the white balance, but I played with tone's values to generate proper color. I adjusted the exposure attribute to -0,4 in order to reduce the amount of light. Furthermore, the contrast's value was decreased to -32,7. The bright spot value or highlights was changed to -27,4. In addition, to make similar dark part in each shot, I modified the value of shadows become 9,7. Whites attribute was set up to -6,2 and there was no correction value for blacks' attribute.

Figure 7 and figure 8 were the result of applying the color grade as shown in figure 6. The clips still had different brightness and color even they have similar attribute values. It happened because both of the clips had a big gap of overexposure.

Figure 9 was the default attribute values for outdoor clips which it was totally different attribute values compared with the indoor clips. I modified the exposure attribute to -2,8. The contrast's value was altered into lower value than the value for indoor clips; -65,8 was used to bring down the color difference between the light and dark color tone. Highlights and shadows were change to 64 and 20,7 respectively.

As it was stated, the color of the subject's cloth affects the white balance, so the color grade editing
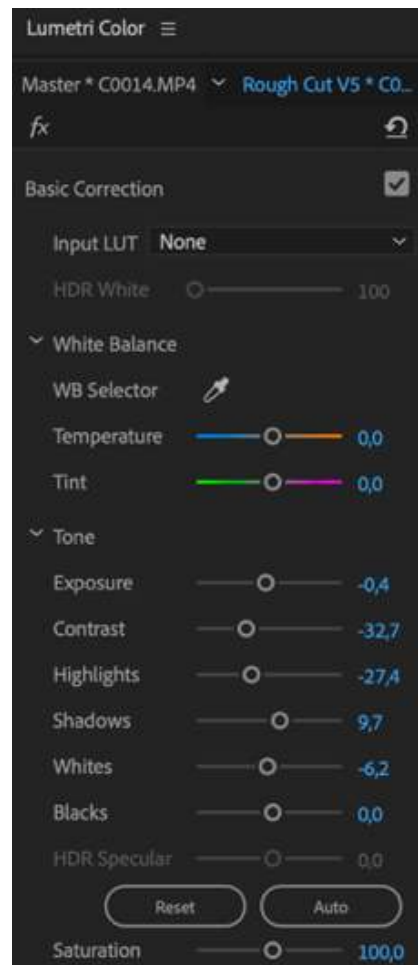
Figure 6: Color grading editing

Figure 7: Edited clip of telling the time he moved to suburb

Figure 8: Edited clip of his partner story

was more focus on highlight to reduce the overexpose
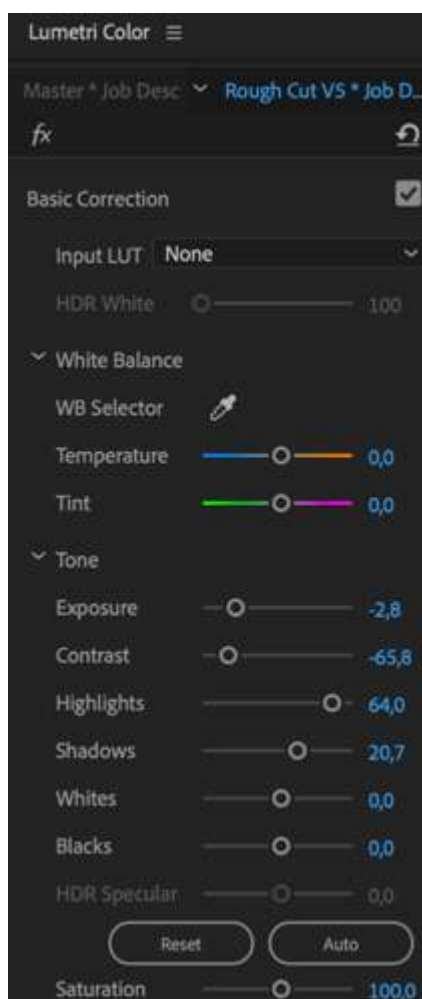
Figure 9: Color grade setting for outdoor clip

Figure 10: Edited clip of explaining about his house

lighting as the result at figure 10 by implementing the color grade set up as figure 9.

7   CONCLUSION

It is challenging to work in documentary film, especially when it enters the editing process. I realized that during the production, we need to have a well-design production plan as the preparation of any un-

predictable issues. Moreover, as the exploration of color grading feature by employing the color tone; exposure, contras, highlight, and so forth, I learn a lot about how to keep the color continuity if I meet over exposures shots.

I know that my exploration on color grading in my previous documentary film is not fully successful. It is because the problems related to overexposure brings me to a difficult time since even though I implement the same color value, it still ruins the color continuity. Hence, there are still color differences, for example different highlight and contrast, between the shots. As the result, in terms of the issues that I face for this production, I try to edit the color continuity in visual as close as possible, so it is a bit reduce the color jumping and avoid the viewer from getting distraction during watching the documentary.

REFERENCES

Batty, C. and Kerrigan, S. (2018). *Screen production research: creative practice as a mode of enquiry, Cham: Springer International Publishing*. Cham.

Bordwell, D. A., Thompson, K., and Smith, J. C. (2017). *Film art: an introduction, New York, NY*. McGraw-Hill Education.

Byron, K. (2007). *Defining Boundaries for Creativity*. Keynote Presentation at the Creativity or Conformity. Building Cultures of Creativity in Higher Education Conference, University of Wales Institute, Cardiff, 2007.

Candy, L. and Ernest (2018). Practice-based research in the creative arts: foundations and futures from the front line. *Leonardo*, 51(1):63–69.

Crittenden, R. (1981). *The Thames and Hudson manual of film editing, London, Thames and Hudson*.

Csikszentmihalyi, M. A. (1996). *Creativity: the psychology of discovery and invention, New York*. Harper Perennial Modern Classics.

Cunningham, M. (2005). *The art of the documentary: ten conversations with leading directors, cinematographers, editors, and producers, Berkeley, CA*. New Riders.

Dancyger, K. (2007). *The technique of film and video editing: history, theory, and practice, Burlington, MA, USA*. Focal Press.

Fairservice, D. (2001). *Film editing: history, theory, and practice: looking at the invisible, Manchester*. Manchester University Press.

Frierson, M. (2018). *Film and video editing theory: how editing creates meaning*. Taylor & Francis.

Ghauri, P. (2004). *Designing and conducting case studies in international business research*.

Hampe, B. (1997). *Making documentary films and reality videos: a practical guide to planning, filming, and*

editing documentaries of real events, New York, Henry Holt and Company.

Hatcher, J. and Bringle, R. (1997). Reflection: bridging the gap between service and learning. *College Teaching*, 45(4):153–158.

Holt, J. (2015). *The 'art of editing': creative practice and pedagogy*. In: HOLT.

Kriwaczek, P. (1997). *Documentary for the small screen, Oxford Boston*. Focal Press.

Leibowich, J. (2019). *Montage, The Chicago School of Media Theory*. viewed 3.

Nemiro, J. E. (2004). *Creativity in virtual teams: key components for success, San Francisco, Calif.* Pfeiffer.

Nichols, B. A. (2017). *Introduction to documentary, Bloomington, Indiana*. Indiana University Press.

Orpen, V. (2009). *Film Editing: the art of the expressive, London*. Wallflower Press.

Phillips, W. H. (2009). *Film: an introduction, Boston: Basingstoke [England]*. Bedford/St. Martins.

Reisz, K. and Millar, G. (1977). *The technique of film editing, New York*. Hastings House.

Rowley, J. (2002). Using case studies in research. *Management Research News*, 25(1):16–27.

Smith, J. (1998). *The Book*. The publishing company, London, 2nd edition.

Smith, T. (2005). *An Attentional Theory of Continuity Editing*. In: PAIN.

Smith, T. (2012). *The attentional theory of cinematic continuity*. Projections: The Journal for Movies and Mind, vi.

The Influence of Word Clap Game on Students' Vocabulary Mastery

Marhamah[1], Rahmi Eka Putri[2], M. Aries Taufiq[2], Yenni Rozimela[1] and Hasanudin[2]

[1]*Department of English Education, Universitas Islam Riau, Pekanbaru, Indonesia*

[2]*Faculty of Languages and Arts, Universitas Negeri Padang, Jl. Prof. Dr. Hamka,Padang, Indonesia*

marhamah@edu.uir.ac.id, {amethyst.himekawaii, ariespertama, yennirozi}@gmail.com

Keywords: Word Clap Game, Vocabulary Mastery, Elementary Students.

Abstract: This research aimed to discover the influence of word clap games on students' vocabulary mastery at elementary school in Pekanbaru. This experimental research was conducted by applying pretest posttest design. The samples of this research were 38 students from one of the elementary schools in Pekanbaru. Those samples were splitted into two groups: an experimental group and a control group. The experimental group was treated by applying word clap game while the control group was treated by applying a conventional strategy in which the teacher explained the materials. The results of this research found that students who were taught by word clap game had better vocabulary mastery than students who were taught by conventional strategy. This indicates that applying word clap games greatly influences the vocabulary mastery of the elementary students. Thus, this research concludes that word clap games has a significant influence on the improvement of students' vocabulary mastery.

1 INTRODUCTION

As one of a language components, vocabulary is essential to be acquired by students in learning the language, especially English. Without sufficient vocabulary, students will get troubles in mastering skills like speaking, reading, listening and writing. It implies that recognizing enough vocabulary will make the students able not only to understand what others are saying but also to create sentences in order to transfer their messages to other people. Thus, vocabulary becomes the first element the students should master in studying English.

Vocabulary is a fundamental element in communication. Learning vocabulary is also important for the language acquisition process. Krashen (1981) asserts that learning English can not be broken up from learning its vocabulary. Moreover, it is even more crucial to master vocabulary than to master the English grammar. As stated by (Thornbury, 2006; Markova et al., 1979), without mastering grammar, people can express very little but without vocabulary people cannot say anything. Therefore, it is crucial for teachers to introduce vocabulary to facilitate the students to understand English utterances and to prepare them to learn English in the next level. Learning vocabulary can help students in mastering other components. That is why vocabulary mastery has a significant role

in achieving the language skills.

(Thornbury, 2006; Setiawan, 2010) asserts that it will be difficult for the students to comprehend and express their English skill if they have insufficient vocabulary. He adds that people can say anything with words. It implies that vocabulary is the primary element the students should now before coming to other elements. Thus, it is the teachers' responsibility to find and apply appropriate strategies to facilitate students during the learning process so that it can improve their vocabulary mastery. Unfortunately, students still have problems dealing with vocabulary. One of the reasons was the different rules between English and Indonesian. These differences cover not only the structure of the languages but also the pronounciation and vocabularies.

Based on the preliminary observation conducted in an elemnetary school, some problems were found related to the students' vocabulary mastery. It was found that most of the students did not have sufficient vocabulary. As a result, it was difficult for them to understand other skills such as listening, speaking, reading and writing. Besides, the students also cannot identified parts of the words, like verbs, adjectives, adverbs, and nouns. From the results of the observation explained above, it was assumed that students needed to be taught by an appropriate strategy that assisted them to learn vocabulary. They need an ef-

fective strategy not only to memorize vocabulary but also to understand it.

Various kinds of teaching strategies are available to help teachers in learning process, especially learning vocabulary. One of of the strategies is by implementing word clap game. It is a game-based learning which integrates a game named clap game into the learning process. Several experts assert that word clap game is a kind of game that can be applied as a strategy for teaching vocabulary. Through this game, the students not only remember the vocabulary but they can also build their confidence. Besides, word clap game can increase students' motivation to learn so that they can enjoy the learning process.

This research focused on the implementation of word clap game in improving students' vocabulary mastery at elementary school. The purpose of this research was to discover the influence of word clap game on students' vocabulary mastery at fourth grade of elementary school in Pekanbaru.

2 RELATED THEORIES

2.1 Vocabulary Mastery

Vocabulary mastery is defined as the ability to utilize words as a medium to communicate with others. Nation in (Schmitt, 2000) says that vocabulary mastery is the competence related to a set of words that create a language which is utilized by a particular person. Moreover, Read (2000) asserts that vocabulary mastery means the ability to use words in conducting communication, and students understand the sets of words. In other words, it is the set of words likely to be used by those students when constructing new sentences.

(Aslanabadi and Rasouli, 2013) argue that vocabulary is very crucial in order to understand any concepts in learning a foreign language because the students can understand the language if they know the meaning of the words in that language. Furthermore, vocabulary links the other skills: speaking, listening, reading and writing. Vocabulary facilitates the students to produce sentences both in spoken and written (Susanti, 2017). However, it will be difficult for the students who have limited vocabularies to demonstrate their ability in English well. As stated by Burton (1982), it is impossible to apply our English correctly without having a sufficient vocabulary. For this reason, students need to master vocabulary before they communicate with other people in English.

Considering the importance of vocabulary in learning English especially for the students, the teacher needs to consider a suitable strategy to be applied in teaching vocabulary in the classroom. This is because students' vocabulary mastery will be increased if the teaching process runs well and effectively, and the students enjoy the learning process. From the explanation above, it can be concluded that the teacher must choose appropriate teachniques which make the students able to understand the material in learning vocabulary and enjoy their study.

There are some techniques that can be implemented by the teacher in teaching vocabulary, for example teaching by giving explanation, through pictures, songs, and even games especially word games. Since the object of this research was elementary students, game-based learning is considered to be the best strategy that can be applied by the teacher in teaching vocabulary. Games bring fun situation in the classroom, and the learning process will be more interesting. In this research, the game applied in the classroom was word clap game.

2.2 Word Clap Game

Learning through games can be an interesting classroom activity and it usually becomes a favorable strategy for students. (Brown, 2002; Nugroho et al., 2012) comments that students enjoys learning through games. They will learn better when they work with their classmates. One of the examples of game that can be applied in the classroom is word clap game. Word clap game combines clap games with words. It is a game that requires collaboration among students. Thornburry (2002) defines word clap game as a game played by groups of students which works by clapping hands collaborated by other students. In this game, the students play in groups and say the words as soon as possible while clapping their hand.

Before applying this game, both the teacher and students need to understand the rules of the game. Thornburry (2002) explains that to begin this game, the students sit in a circle, then, following the teacher's command, make a four beat rhytm by clapping their hands to their thighs three times. Then, they clap both hands while mentioning a word from a topic provided by the teacher. The winner is the one who can mention the most words. In this game, the teacher only needs to monitor and control the game. During the game, the teacher moves from one group to another, listening and providing any assistance when necessary as well as noticing the mistakes committed by the students. At the end of the game, the teacher gives feedback related to the mistakes found during the game.

Word clap game brings several benefits both for the teacher and students. First, this game can be applied at any stage of teaching. It can be performed at the beginning, in the middle or at the end of the learning process. After that, this game is also simple and easy to play since the teacher does not need any preparation for this game. Then, word clap game is also appropriate for any level of students starting from kindergarten to high school students. It can also be applied at any setting whether in formal or informal situation. Just like other games, word clap game can also stimulate students' motivation so that this game can encourage students to remember their vocabularies. However, applying this game in a classroom, especially at elementary school, can be crowded and even causes chaos.

Therefore, a good preparation is absolutely required if the teacher wants to apply this game in the classroom. Every step must be carried out sequentially. The teacher needs to think carefully about the topics and predicts any possible errors that could happen during the game.

In addition, Thornburry (2002) mentions the steps of the game. First, before starting the game, the teacher prepares the topics. In the classroom, the teacher explains the rules of the game. After that, the students make some groups and sit in a circle based on their group. To begin the game, the students follow the teacher's instruction making a four-beat rhythm by clapping their hands on their thighs three times. Then, they clap their hand and mention a word based on the topic given by the teacher. The students who either repeat the words already mentioned or break the rhythm or say nothing are disqualified. The game ends when the there is only one student left as the winner.

3 RESEARCH METHOD

This research was an experimental research using pretest-posttest design. It was conducted at grade 4 in one of the elementary schools in Pekanbaru. 38 students were chosen as the samples of this research. Those samples were splitted into two groups: an experimental group and a control group. The experimental group was treated by applying word clap game while the control group was treated by applying a conventional strategy. The instruments of this research were vocabulary tests which were distributed to the students before the treatment (pre-test) and after the treatment (post- test). After analyzing the statistical requirement, the data were analyzed by using t test formula in order to test the hypotheses.

The hypotheses of this research are:

H_0 : There was no significant influence of applying word clap game on the students' vocabulary mastery.

H_1 : There was a significant influence of applying word clap game on students' vocabulary mastery.

4 FINDINGS AND DISCUSSION

After analyzing the data, the result of the pre-test and post-test from both classes can be seen in the following figure.
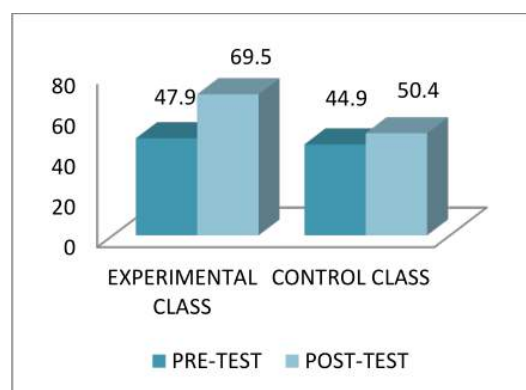
Figure 1: The Results of Students' Vocabulary Mastery in Experiment Class and Control Class.

Figure 1 demonstrates that after conducting the pre-test, the average score of the students in the experimental class was 47.9 while the average score in the control class was 44.9. After having the treatment, the average score of the students in experimental class increased significantly to become 69.5 while the score in the control class was 50.4. Based on this result, it can be seen that there was an improvement in the students' score between pre-test and post-test. However, the improvement in the experiment class was more significant than in the control class. It implies that the students who were treated by word clap game had better vocabulary mastery than students who were treated by conventional strategy. Based on the explanation above, it can be summarized that there was a significant influence of word clap game on students' vocabulary mastery.

4.1 Hypotheses Testing

After analyzing the result score of pre-test and post-test both in experimental class and control class, the researchers compared the result score of post-test in each class by using independent sample test in order to know the significant effect of word clap game

on students' vocabulary mastery. The researchers utilized SPSS Version 2.2 to analyze the data. The output of data analysis can be seen in the tables below.

Table 1: The Statistics Result of Paired Samples

		Mean	N	Std. Dev	Std. Error Mean
Pair 1	pretest experimental class	47.90	20	2.864	.640
	posttest experimental class	69.50	20	3.487	.780
Pair 2	pretest control class	44.90	20	3.076	.688
	postest control class	50.40	20	2.644	.591

Table 2: Paired Samples Test

	Paired Differences					t	df	Sig (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Convidence Interval of the Difference Lower	Upper			
Pair 1 Pretest experimental class - posttest experimental class	-21.600	4.083	.913	-19.689	-19.689	-23.657	19	.000
Pair 2 Pretest control class - postest control class	-5.500	2.819	.630	-6.189	-4.181	-8.725	19	.000

Table 2 demonstrates the output of paired sample t - test. Paired sample t-test was used to know whether there was a significant effect between two group samples which were not correlated. From the calculation above, it can be seen that the value of $t_{calculated}$ was 23.657 while the value of t_{table} was 2.023. It means that $t_{calculated}$ is higher than t_{table}. Furthermore, the table shows that the significance value was 0.000, and it was lower than the value of α Significance 5% (0.05). Thus, alternative hyphothesis was accepted and null hypothesis was rejected. It can be concluded that word clap game gave significant influence on the students' vocabulary mastery.

The main concern of this study was to know the influence of word clap game on students' vocabulary mastery at grade four of elementary school. Based on the explanation mentioned above and the results of data analysis, it can be stated that word clap game is very appropriate in teaching vocabulary. Through this game, the students enjoy the learning process and word clap game increases students' interests in learning vocabulary. In this study, word clap game is more effective that the conventional technique used by the teacher. It motivates the students to learn vocabulary and bring them to the topic. Besides, it also makes the students feel fresher. At last, the application of word clap game creates competition and remind the students about the topic being taught by the teacher.

It is in accordance with the result of the research conducted by Susanti (2017). In her research she found that the elementary students were happy and

motivated when they were taught by using word clap game. Moreover, word clap makes students enjoy the learning process. In addition, this game also trains the students to work collaboratively in groups. The result of this research is also supported by the result of the research from (Agustin, 2016) and (Mariyana, 2016; Furqon, 2013). Both of them agree that word clap game is effective in teaching vocabulary since it is significantly improve students' vocabulary mastery.

5 CONCLUSIONS

Based the findings of this research, it can be concluded that word clap game is effective to improve students' vocabulary mastery especially at elementary schools. The findings of this research reveal better results for students who are taught by word clap game than the convetional strategy. Thus, it is suggested for elemntary school teachers to apply this strategy in teaching vocabulary. However, this research also has a limitation. First, it only analyzed the influence of word clap games on students' vocabulary mastery at elementary school. In the future, it is suggested for the next researchers to add any variables, such as learning motivation and students' perception towards the game, in order to obtain more comprehensive results about this topic.

REFERENCES

Agustin, N. (2016). *Improving Students'vocabulary Mastery Through Word Clap Game (An Experimental Research Of The Seventh Grade Students Of Smp Muhamadiyah 06 Dau)*. PhD thesis, University of Muhammadiyah Malang.

Aslanabadi, H. and Rasouli, G. (2013). The effect of games on improvement of iranian efl vocabulary knowledge in kindergartens. *International Review of Social Sciences and Humanities*, 6(1):186–195.

Brown, H. D. (2002). *Strategies for Success: A Practical Guide to Learning English.* ERIC.

Furqon, F. (2013). Correlation between students'vocabulary mastery and their reading comprehension. *Journal of English and Education*, 1(1):68–80.

Mariyana, D. E. (2016). *The Vocabulary Mastery Of The Fifth Grade Students Of Sd N 1 Tumpangkrasak In Academic Year 2015/2016 Taught By Using Word Clap Game*. PhD thesis, Universitas Muria Kudus.

Markova, A. K., Szekely, B. B., and Vale, M. (1979). *The teaching and mastery of language.* Croom Helm.

Nugroho, Y. S., Nurkamto, J., and Sulistyowati, H. (2012). Improving students'vocabulary mastery using flashcards. *English Education*, 1(1).

Schmitt, N. (2000). *Vocabulary in language teaching*. Ernst Klett Sprachen.

Setiawan, B. (2010). Improving the students' vocabulary mastery through direct instruction. *English Department. Universitas Negeri Surakarta.*

Thornbury, S. (2006). *How to teach vocabulary*. Pearson Education India.

Analysis of Sharia Hotels Feasibility in Pekanbaru

Zulkifli, Boy Syamsul Bahkri, Muhammad Arif and Putri Nuraini

Faculty of Islamic Religion, Universitas Islam Riau, Pekanbaru, Indonesia
{zulkifli_rusby, bsb_fai, muhammadarif, putrinuraini}@fis.uir.ac.id

Keywords: Sharia Hotel, Hilal-1, Tourism.

Abstract: This research study is motivated by a growing number and a trend of sharia hotels in Pekanbaru. The problems in sharia hotels are not just only on the claim and labels, but also the specifications and the criteria must be clear so that they are not merely a business commodity. The problem statement in this research study is "do sharia hotels in Pekanbaru meet the feasibility based on sharia regulations?". The purpose of this research study is to find out the feasibility of sharia hotels in Pekanbaru. The theoretical framework in this research study refers to the Regulation of Minister of Tourism and Creative Economy of the Republic of Indonesia Number 2 Year 2014 on the Implementation Guidelines of Hilal-1 Syaria Hotel Business. The data used in this research study are primary data and secondary data. The population and sample in this research study are all sharia hotels (total sampling) in Pekanbaru, which consists of 8 hotels (1-star to 3-star hotels). While the data collection techniques are observations, interviews, and questionnaires. The results of this research study indicate that there are no sharia hotels that actually apply the sharia-based concept of Hilal-1 category which includes product dimension, service dimension, and management dimension.

1 INTRODUCTION

Currently, business development in Indonesia is going bigger and advanced, including in the sectors of industry, services, and trade. Globalization has caused quite rapid changes in business, which requires organizations or companies to adapt, have resilience, be able to change direction quickly and focus attention on customers.

Hospitality is a business or service business needed by the people in Pekanbaru because in Pekanbaru, the majority is Muslims and Sharia hotels are surely petrified to the people who are working there and those who are traveling in the city. The development of hotels always tends to be shades of sharia and star rated hotels.. The managers must complete the facilities and infrastructures that make many consumers are interested. Sharia hotels must provide Islamic prayer room, food and beverages that are halal.

Hotels that are in accordance with sharia principles are hotels that provide lodging, food and beverage services, and other services for the common people; managed commercially, and meet the requirements stipulated by the government, and do not conflict with sharia principles. All components of the hotel operational and technical requirements criteria, starting from the small things such as kind of information should be available at the concierge. Equipment that must be available in the public toilet, serving food and beverage, and *reception of policy and procedure* at the front office must be ensured to fulfill the sharia provisions.

The emergence of sharia hotels in Pekanbaru is based on market needs sourced from Islamic spiritual offerings. The needs for sharia products is an effect of the increasing level of public awareness, especially Muslim consumers against the laws and provisions of Islam in terms of life.

The phenomenon of the increasing number of hotels labeled sharia in Pekanbaru is an attraction for Muslim tourists who are traveling in Riau Province. The problem that occurs is that there are still many hotels labeled as sharia but have not implemented the sharia concept as a whole in its operational management. According to preliminary observations, the researcher still finds sharia hotels that do not meet the criteria, for example, hotel guests that are still free to enter guest without being identified first.

Based on the phenomena that occur above, the researcher is interested in conducting research study with the title "Analysis of Sharia Hotels Feasibility in Pekanbaru".

2 LITERATURE REVIEW

2.1 The Meaning of Sharia Hotel

Sharia hotel is a hotel that in the provision, procurement and use of products and facilities, and business operations that do not violate the sharia rules. All components of the hotel operational technical criteria start from small things such as what information should be available at the front office, equipment in public toilets, until the presentation of the types of food and beverages available at reception policy and procedure, and house rules must be ensured that all meet the criteria of sharia (Sofyan, 2011; Jurattanasan and Jaroenwisan, 2014).

The criteria for sharia hotel is as follows (Sofyan, 2011):

- Facilities
- Hotel Guest
- Marketing
- Food and Beverages
- Decoration and Ornaments
- Operations

2.2 Legal Basis of Sharia Hotel

- Al-Quran

  Q.S An-Nisa : 29

  Meaning: "O you who have believed, do not consume one another's wealth unjustly but only [in lawful] business by mutual consent. And do not kill yourselves [or one another]. Indeed, Allah is to you ever Merciful.".

  The purpose of the verse is that Allah SWT forbids taking the wealth of others by vanity (improper way), except by trade that applies with mutual consent. Sharia hotel is included in commerce/business in the field of services so that in obtaining profits; they are not allowed to use methods prohibited by Allah SWT.

- Al-Hadits

  Hadith about glorifying guests.

  Artinya: *"Whosoever believes in Allah and the last day, let him glorify his guests when he is blessed. "The friends ask," O Rasulllah Saw. What is a special moment? He said, "the first day and night. The visit is three days, if it's more than three days, then it's a charity."*(HR.Muslim).

- Ijma'

The basic principle that must be considered in relation to realizing sharia in a business is the rule of fiqh which reads: Meaning: "the original law in the field of muamalah is skill (worship) until there is a argument that prohibits it".

From this rule, Islam gives freedom to humans to do muamalah activities in order to fulfill their needs in the form of profits, goods or services, while still paying attention to the limits set by sharia. In this case, what human have to pay attention to is what limits should not be violated in conducting muamalah activities (Departemen Agama, 2005; Henderson, 2010).

2.3 Guidelines for Implementation of Sharia Hotel

Based on the Regulation of the Minister of Tourism and Creative Economy of the Republic of Indonesia Number 2 Year 2014 on guidelines for implementation of sharia hotel businesses, the government divides the group into Hilal-1 of sharia hotel and Hilal-2 of sharia hotel.

Hilal-1 category includes product aspects which consist of 8 elements and 27 sub-elements, service aspects consist of 6 elements and 20 sub-elements, and management aspects consist of 2 elements and 2 sub-elements. Below are the Hilal-1 categories that have been determined by the government:

- Product
  - Public toilets (Public restroom)
  - Guest bedroom
  - Staff Room
  - Worship Room
- Service
  - Front office
  - House Keeping
  - Food and Beverages
- Management
  - Business Management
  - Human Resources

3 METHOD

3.1 Types of Research Study

The type of this research study is descriptive research. Descriptive research is a research study arranged in order to provide a systematic description of scientific

information that comes from the subject or object of research study. (Sanusi, 2011; Sugiarto and Ir, 2003; Saad et al., 2014).

3.2 Research Study Sites

This research study is conducted in several sharia-labeled hotels spread in Pekanbaru as follows:

Table 1: Name and Address of Sharia Hotels in Pekanbaru

NO	Hotel Name	Address
1	Akasia Syariah Hotel	Jl. Jend. Sudirman No. 419 Pekanbaru
2	D'Lira Syariah Hotel	Jl. Pepaya No.73 Pekanbaru
3	Libra Syariah Hotel	Jl. Tuanku Tambusain Pekanbaru
4	Oase Hotel	Jl. Jend. Sudirman No. 255 EF Pekanbaru
5	Rauda Hotel	Jl. Tengku Zainal Abidin No. 2-4 Pekanbaru
6	Stefani Syariah Hotel	Jl. Taskurun No. 100 Pekanbaru
7	Sri Indrayani Hotel	Jl. Dr. Sam Ratulangi No. 45 Pekanbaru
8	Tasia Ratu Hotel	Jl. Hasyim Ashari No. 10. Pekanbaru

Source: Processed Data, 201

3.3 Data Collection Method

In collecting data for this research study, several methods are used as follows:

- Questionnaire

  Questionnaire is a list of questions that must be covered by the interviewer during the interview. The purpose of the questionnaire is to obtain information on how the practice of sharia hotel management in Pekanbaru.

- Observation

  Observation is the selection, alteration, recording, and coding of a series of behaviors and atmosphere relating to observation activities in accordance with empirical objectives (Sutrisno, 2009).

- Interview

  Interview is data collection techniques by asking questions directly by the interviewer to the respondent and the respondents' answers are listed or recorded (Sutrisno, 2009). In practice, the author prepares a list of questions to be submitted directly to hotel managers or hoteliers and sharia hotel staffs.

- Documentation

  Documentation is a data collection technique that is not directly aimed at the subject of the researcher, but through documents (Sutrisno, 2009). Documentation can be in the form of text, images, and monumental works of someone. This documentation is intended to obtain evidence regarding management practices

such as applicable regulations and applied to sharia hotels in Pekanbaru.

3.4 Population and Sample

The population in this research study is all sharia hotels in Pekanbaru, which are 8 hotels (1-star to 3-star hotels). Sample is examples that represent the population and mirror the entire object under study (Sutrisno, 2009; Komar, 2006; Pariwisata, 2014; Sulastiyono, 2011). The population in this research study is <100 people, then all populations in this research study are used as research samples.

3.5 Data Analysis Method

The data analysis method used in this research study is adjusted to the research study, that is a sharia review of sharia hotel management practices assessed using qualitative methods. This analysis aims to determine business practices in hotel management in Pekanbaru sharia hotels.

3.6 Operational Concept

Based on the theory above, the operational concepts can be made as follows:

3.7 Theoretical Framework

Based on the description above, the theoretical framework can be described as follows :
   Source: Processed Data, 2018

4 RESULTS

4.1 Findings

4.1.1 Product Dimension

Product dimension consists of eight indicators (public toilet, guest bedroom, guest bathroom, kitchen, staff room, Islamic prayer room, swimming pool, and spa). The eight indicators are divided into twenty-seven statement items.

The results of the data collected from eight sharia hotels for the Product Dimension shows that none of the hotels achieved an ideal score (27) from a number of indicators and sub-indicators presented. The highest score is achieved by Sri Indrayani Hotel (24) and Rauda Hotel (24). While the lowest score is achieved by Oase Hotel (17). The average score achieved by the hotels is 21.5.

Table 2: Operational Concept

Concept	Dimension	Indicator
Guidelines for Implementation Hilal-1 of Sharia Hotel Business	- Product (Regulation of the Minister of Tourism of the Republic of Indonesia Number 2 on Guidelines for Implementation of Sharia Hotel Business, 2014)	1. Public Toilet (Public Restroom) 2. Guest Bedroom 3. Guest Bathroom 4. Kitchen 5. Staff Room 6. Islamic Prayer Room 7. Swimming pool 8. Spa
	- Service (Regulation of the Minister of Tourism of the Republic of Indonesia Number 2 on Guidelines for Implementation of Sharia Hotel Business, 2014)	1. Front office 2. House Keeping 3. Food and Beverages 4. Sports, recreation, and fitness 5. Spa (if available) 6. Entertainment facilities
	- Management (Regulation of the Minister of Tourism of the Republic of Indonesia Number 2 on Guidelines for Implementation of Sharia Hotel Business, 2014)	1. Business Management 2. Human Resources

Source : Regulation of the Minister of Tourism and Creative Economy of the Republic of Indonesia Number 2 on Guidelines for Implementation of Sharia Hotel Business, 2014.
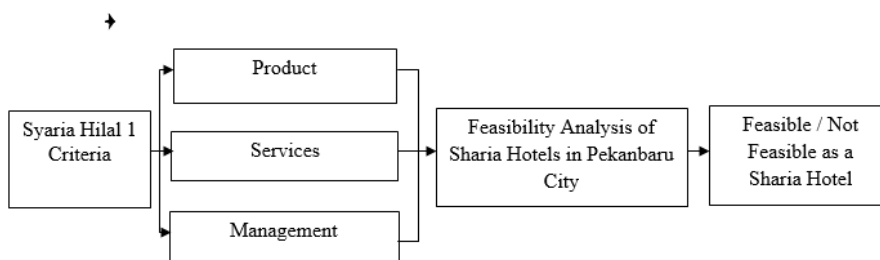
Figure 1: Theoretical Framework

Table 3: Tabulation of Data of Product Dimension

No	Hotel Name	1	2	3	4	5	6	7	8	Score
1.	Sri Indrayani	2	4	3	2	4	9	0	0	24
2.	Rauda	2	4	3	2	4	9	0	0	24
3.	Stefani	2	1	3	1	4	9	0	0	20
4.	Akasia	2	3	3	2	4	9	0	0	23
5.	Tasia Ratu	2	4	3	1	4	9	0	0	23
6.	D'Lira	2	2	3	1	3	9	0	0	20
7.	Oase	1	2	3	2	3	6	0	0	17
8.	New Libra Syariah	2	4	3	2	4	6	0	0	21

Source: Processed Data, 2018

Table 4: Tabulation of Data of Service Dimension

No	Hotel Name	1	2	3	4	5	6	Score
1.	Sri Indrayani	5	3	3	0	0	1	12
2.	Rauda	5	3	3	0	0	2	13
3.	Stefani	4	2	3	0	0	1	10
4.	Akasia	5	3	3	0	0	0	11
5.	Tasia Ratu	5	3	3	0	0	2	13
6.	D'Lira	4	2	3	0	0	1	10
7.	Oase	5	2	3	0	0	1	11
8.	New Libra Syariah	5	3	1	0	0	2	11

Source: Processed Data, 2018

4.1.2 Service Dimension

The Service Dimension consists of six indicators (front office, house keeping, food and beverage, sports recreation and fitness, spa, and entertainment facilities). The six indicators are divided into twenty statement items.

The results of the data collected from eight sharia hotels for the Service Dimension indicate that none of the hotels achieved an ideal score (20) from a number of indicators and sub-indicators presented.

The highest score is achieved by Rauda Hotel (13) and Tasia Ratu Hotel (13). While the lowest score is achieved by Stefani Hotel (10) and D'Lira Hotel (10). The average score achieved by the hotels is 11.4.

4.1.3 Management Dimension

Table 5: Tabulation of Data of Management Dimension

No	Hotel Name	Indicator		Score
		1	2	
1.	Sri Indrayani	1	1	2
2.	Rauda	1	1	2
3.	Stefani	1	1	2
4.	Akasia	1	1	2
5.	Tasia Ratu	1	1	2
6.	D'Lira	1	1	2
7.	Oase	1	1	2
8.	New Libra Syariah	0	1	1

Source: Processed Data, 2018

The last dimension is Management Dimension which consists of two indicators (business management and human resources). The two indicators are divided into two statement items. The result of data collected from eight sharia hotels for the Management Dimension shows that almost all hotels achieved ideal scores (2) from a number of indicators and sub-indicators presented. Only one hotel that is New Libra Syariah Hotel get the lowest scores (1). The average score achieved by the hotels is 1.9.

5 CONCLUSIONS

The beauty of the essence of sharia is to throw away everything that is harmful or destructive to humans and the environment. In line with the purpose of the implementation of sharia, that is maintaining human welfare including protection of the faith, life, mind, descent, and property. Anything that guarantees the protection of these five cases is a concern for humans and is desirable, not limited by those who are Muslim, because actually something dangerous for Muslims, of course also dangerous for non-Muslims. Thus, sharia products and services are open to all human beings, without differentiate race, religion, gender, or others.

Sharia hotel is a hotel that provides services in accordance with sharia principles. Halal definition is not only limited to the provision of halal food & drink, but also to the operation of hotels in general, starting from the provision, procurement, use of products and facilities, and financial transactions. In addition, in receiving guests, the receptionist is required to select guests who come in pairs, whether they are a married couple or have a *mahram* relationship.

All halal products in Indonesia, including hotels, of course require certificates as written evidence indicating whether the hotel has met the business standards of hotels as determined by the government or not.

In 2014, the government has compiled and determined the Guidelines for Implementation of Sharia Hotel Business through Regulation of the Minister of Tourism and Creative Economy Number 2. The guidelines contain the classification of sharia hotels into 2 categories, that is Hilal-1 and Hilal-2 of Sharia Hotels. Hilal-1 category is a classification of sharia hotel businesses that are considered to meet all the criteria for sharia hotels needed to serve the minimum needs of Muslim tourists. Whereas, the Hilal-2 category is a classification of sharia hotel businesses that are considered to meet all the criteria for sharia hotels needed to serve the moderate needs of Muslim tourists.

Some conclusions obtained from this research study are:

- The Product Dimension shows that no hotel has an ideal score (27) from a number of indicators and sub-indicators presented. The highest score is achieved by Sri Indrayani Hotel (24) and Hotel Rauda (24). While the lowest score is achieved by Hotel Oase (17). The average score achieved by the hotels is 21.5.

- The Service Dimension shows that no hotel has an ideal score (20) from a number of indicators and sub-indicators presented. The highest score is achieved by Hotel Rauda (13) and Hotel Tasia Ratu (13). While the lowest score is achieved by Hotel Stefani (10) and Hotel D'Lira (10). The average score achieved by the hotels is 11.4.

- The Management Dimension shows that almost all hotels achieve ideal scores (2) from a number of indicators and sub-indicators presented. Only one hotel that is the New Libra Syaria Hotel get the lowest score (1). The average score achieved by the hotels is 1.9.

The results of this research study indicate that there are no hotels that actually apply the sharia-based concept in Pekanbaru, even to meet the Hilal-1 Category (sharia hotel business classifications that are considered to meet all the criteria for sharia hotels needed to serve the minimum needs of Muslim tourists).

SUGGESTION

In this research study, it is explained that the hoteliers can run their business after obtaining a Hotel Business Certificate issued by the Business Certification Agency, where the assessment of Absolute Criteria fulfillment (the minimum terms and conditions that must be fulfilled and implemented by the hotelier) applicable organized by DSN-MUI.

Regardless of the central government's efforts to make sharia hotel standards, the results of this research study indicate that in Pekanbaru, no hotel has actually implemented a sharia-based concept, even to fulfill the Hilal-1 category (sharia hotel business classifications that are considered to meet all sharia hotel criteria is needed to serve the minimum needs of Muslim tourists). This may due to the high investment costs for sharia hotels considering the qualifications and standards of sharia-based hotels which require hoteliers to add facilities in accordance with applicable regulations.

REFERENCES

Departemen Agama, R. (2005). Al-qur'an dan terjemahannya, bandung: Pt. *Syamil Cipta Media*, 1428.

Henderson, J. C. (2010). Sharia-compliant hotels. *Tourism and Hospitality Research*, 10(3):246–254.

Jurattanasan, A. and Jaroenwisan, K. (2014). The attribution of shariah compliant hotel in muslim countries. *Review of Integrative Business and Economics Research*, 3:39.

Komar, R. (2006). Hotel management–manajemen perhotelan. *Penerbit PT. Grasindo, Jakarta*.

Pariwisata, K. (2014). Lampiran peraturan menteri pariwisata dan ekonomi kreatif republik indonesia nomor 2 tahun 2014 tentang pedoman penyelenggaraan usaha hotel syariah.(pdf). *Tersedia: https://www. bing. com/search*.

Saad, H. E., Ali, B. N., et al. (2014). Sharia-compliant hotels in egypt: Concept and chanllenges. *Advances in Hospitality and Tourism Research (AHTR)*, 2(1):1–15.

Sanusi, A. (2011). Metodologi penelitian bisnis.

Sofyan, R. (2011). *Bisnis syariah, mengapa tidak?: pengalaman penerapan pada bisnis hotel*. Gramedia Pustaka Utama.

Sugiarto, E. and Ir, M. (2003). Hotel front office administration (administrasi kantor depan hotel). *Gramedia Pusaka Utama, Jakarta*.

Sulastiyono, A. (2011). Seri manajemen usaha jasa sarana pariwisata dan akomodasi: Manajemen penyelenggaraan hotel. *Bandung: Penerbit Alfabeta*.

Sutrisno, E. (2009). Manajemen sumber daya manusia edisi pertama. *Jakarta: Kencana Prenada Media Group*.

A Study on Relationship between Teachers' Instructional Practices and School Performance of Rural Public Secondary Schools in Malaysia

Mahidah Ab Wahab and Siti Maziha Mustapha

Infrastructure University Kuala Lumpur, Jalan Ikam-Uniten, 43000 Kajang, Selangor, Malaysia
datinhjh@gmail.com, maziha@iukl.edu.my

Abstract: The research attempts to investigate the levels of instructional practices among teachers of rural public secondary schools, the performance of rural public secondary schools, the relationship between instructional practices of teachers and school performance of rural public secondary schools and the dimensions of teachers' instructional practices that contributed towards school performance. Survey instrument was used to measure teachers' instructional practices. 379 out of 22979 teachers were randomly selected as respondents. SPSS was used and data analysis was carried out using descriptive statistics, Spearman Rho and Multiple Regression. It was found that overall Teachers' Instructional Practices were at high levels. 100% of the rural schools performed below the national average score expected for secondary schools which was 4.89 in 2018. A significant relationship was indicated between teachers' instructional practices and rural secondary school which are public performance. The multiple regression showed that out of the three dimensions, Instructional Strategies was the dimension that contributed the most to the school performance. Recommendations were made to improve teachers' instructional practices.

1   INTRODUCTION

Teachers face many challenges in pursuit of school performance especially in rural public secondary schools. Malaysia struggles to attain an established nation status by the year 2025 and many parts of the country including rural areas are being established to help quicken the development. Developments in rural areas are critical because more than 7% of the rural population in Malaysia is living in deficiency (Ganeswaran, ; Vogler, 2002). Suppression of deficiency is vital as it is seen as a faltering block towards a nation's development. One of the strategies to eliminate deficiency is through education (World Bank, 2013). Although there were much persistence effort, however, it has been realized that equality of outcome in not achieved through equality of access. The obvious inequality of outcome between rural and urban schools proves that this inequality exists in Malaysia (Panatik et al., 2011).

Education can be defined as the development that enables a student to learn or the accumulation of knowledge along with skills, beliefs, values and habits (Mannan, 2018). Education in destined to play a key role in reinforcing the development of a citizen with positive quality which contributes to the progress of country's economic, social and cultural aspect. (Mannan, 2018) and in the search towards national standards and goals and transforming the country as centre for education with quality (Farhana, 2017; Azman et al, 2016). To respond to the country's goal, the Malaysia Education Blueprint is outlined from 2013-2025 to achieve the achievement planned in the system of education. The focus has been shifted to the leadership quality and teaching practices in schools which are the main factors in enhancing schools' performance all over Malaysia either urban or rural schools, primary or secondary schools (Malhoit, 2005; Kim and Sheridan, 2015).

2   PROBLEM STATEMENT

Essential players in improving school effectiveness are teachers as they have specific strength to produce excellent especially when the teaching and process goes on (Malhoit, 2005). Teaching practices which have good quality are able to steer the school towards good performance in addition to good education.

Through a quantitative method, this study aims to highlight the level of teachers' instructional practices and their influences on rural public secondary school

performance. This study hopes to contribute towards the influence of teachers instructional practices which can lead to to good academic achievement of students along with contouring schools into excellent ones for future goverment programs to be implemented successfully.

3 RESEARCH QUESTIONS

The following are the research question:

- Research Question 1: What are the levels of teachers' instructional practices of rural public secondary schools?

- Research Question 2: What are the levels of school performance of rural public secondary schools?

- Research Question 3: Is there a significant relationship between teachers' instructional practices and school performance of rural public secondary schools?

- Research Question 4: Which dimension of teachers' instructional practices influences largely towards the performance of rural public secondary schools?

4 REVIEW OF LITERATURE

An open-system perspective from system theory, was applied by the researcher. This is an input-throughput-output research because students' academic achievement is the outcome of the principals' instructional leadership that can influence and bring an impact to teachers' instructional practices.

The Sijil Pelajaran Malaysia (SPM) Examination Results were used to calculate the scores of school performance. SPM examination results were reported based on the candidate's achievement and performance of subjects. Candidate achievement refers to the degree to which candidates dominate the learning in all subjects tested. The index used to show the achievements of candidates across the country is the National Grade Point Average (NGPA). Smaller National Grade Point Average (NGPA) value indicates better performance. The performance of the subject refers to the degree to which candidates dominate the knowledge, skills and values measured in each subject. Index used to reflect the performance of the subjects is the average point for Grade Point Average for Subjects (GPMP). The smaller

value of GPMP also showed better performance. Achievements of the Candidates for the year 2018 was better than in 2017. The National Grade Point Average (GPN) for 2018 was 4.89 compared to 4.90 for the year 2017 with an increment of 0.01.

Achievements of the candidates based on the location of the candidates' achievements in urban and rural areas was encouraging. There was no change in the achievements of candidates in the urban areas 4.75 in 2018 and 2017. The achievements of the candidates in the rural areas increased by 0.04 i.e. 5.18 in 2018 compared to 5.22 in 2017. The result for the National Grade Point Average (GPN) for the year 2018 is. 4.89.

Table 1: Candidates' achievements based on location for the year 2018, 2017 and 2016

Year	National Average Grade (GPN)	Urban Average Grade	Rural Average Grade	Difference
2018	4.89	4.75	5.18	0.43
2017	4.90	4.75	5.22	0.47
2016	5.05	4.89	5.36	0.47
Difference		0.14	0.14	
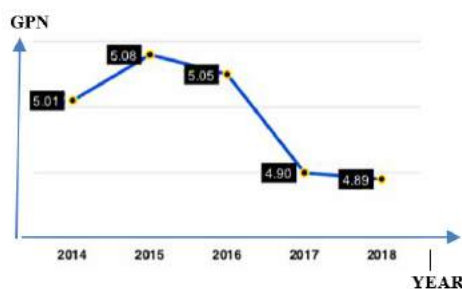
Figure 1: National Average Grade (GPN) 2014-2018
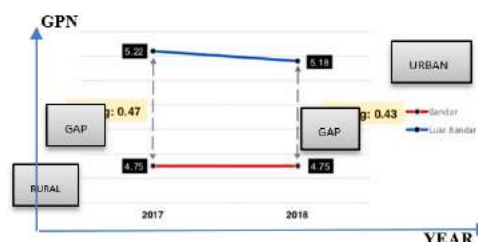
Figure 2: Achievement Gap in the Location of the Candidates

Achievements gap of the candidates based on the location in the urban and rural narrowed by 0.43 in the year 2018 compared to 0.47 in the year 2017. This is due to the increased performance of the candidates in the rural areas while urban remain the same.

There is a gap in the results obtained by rural compared to urban. Urban schools are better and their Grade Point Average result was 4.75 which was above the National Grade Point Average (GPN) of 4.89. Rural schools did not do well as their results 5.88 was way below the National Grade Point Average (GPN) of 4.89. Thus, it derives a need to study the interrelation between teachers' instructional practices and the performance of schools specifically rural public secondary schools in Malaysia.

5 RESEARCH METHOD

5.1 Sample

Stratified random sampling was used. 379 teachers (32.7% male, 67.3% female) attended secondary schools in five states; Perlis, Kelantan, Pahang, Johor and Malacca, in Malaysia were selected as participants. All participants were teachers who work full time an average of 10 years in the service and an average of 1 or 2 years teachers have been working under the present principal.

Table 2: Gender of Teacher Respondents

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	124	32.7	32.7	32.7
	Female	255	67.3	67.3	100.0
	Total	379	100.0	100.0	

Table 3: Number of sample size from each state Source. E-Operasi Statistics State Education Department for the year 2018 Morgan and Krejcie's (1970) table of sampling determination.

States representing Malaysia	Number of The Public Secondary School Teachers	Number of The Public Rural Secondary School Teachers	Number of Samples
Pahang	9280	5671	94
Kelantan	10846	6670	110
Perlis	1211	1021	17
Johor		7097	117
Malacca		2500	41
Total		**22959**	**379**

Samples comprised of teachers from the secondary public school situated in rural areas without any representation of any specific group of age and gender.

5.2 Measures

The survey instrument was evaluated using Likert scale developed by Rensis (1932). The Likert-type scale used in this study range from 1 (Never) to 5 (Very Often). This scale has proven to be a reliable tool for respondents for questions on instructional practices. Cronbach's Alpha for the scales in this study are .904, 0.915 and 0.854 respectively. According to (Pallant, 2011; Sheridan and Kim, 2015), Cronbach's Alpha exceeding 0.6 is acceptable, exceeding 0.7 is good and the most appropriate is exceeding 0.8. As shown in the table below, all the variable in the questionnaire exceed the value of 0.8.

Likert Scale is used in the section where never represented by 1, seldom represented by 2, sometimes represented by 3, frequently represented by 4 and always represented by 5.

Table 4: Likert Scale

Scale	Represents
1	Never
2	Seldom
3	Sometimes
4	Frequently
5	Always

Table 5: Reliability Coefficient for Each Dimension (N=379) for Teacher's Instructional Practices

Variables	Item No.	Deleted Items	Cronbach's Alpha
Instructional Strategies	20	0	0.904
Teaching Techniques	7	0	0.915
Instructional Materials and Tools	13	0	0.854

*Value after item deletion

5.3 Demographic Data

The respondents were required to give details about themselves for extraneous variables. They reported in detail data regarding gender, their age, years of service, years of working with present principal and service category.

5.4 Teachers Instructional Practices Survey

The participants were required to do ranking of their best five teachers' instructional practices factors which are Instructional Strategies, Teaching Techniques and Instructional Materials and Tools that could have influenced their schools performance.

5.5 Statistical Treatment

Descriptive statistics were used. Spearman Rho correlations were derived to analyse the interrelation among variables. Data were analysed using SPSS.

6 RESULTS AND DISCUSSION

The study aimed to answer the following research questions:

- Research Question 1: What are the levels of teachers' instructional practices of rural public secondary schools?

- Research Question 2: What are the levels of school performance of rural public secondary schools?

- Research Question 3: Is there a significant relationship between teachers' instructional practices and school performance of rural public secondary schools?

- Research Question 4: Which dimension of teachers' instructional practices contributes the most towards performance of rural public secondary schools?

6.1 Descriptive Statistics

The Descriptive Statistics Table 6.1 shows that the mean score for the participants' age as on 1st Jan 2018 is 40.87 with a wide dispersion as the SD is 7.911.

Table 6: Descriptive Statistics for teacher Respondents

Descriptive Statistics					
	N	Min	Max	Mean	Std. Deviation
Age on 1st Jan 2018	379	21	59	40.87	7.911
You are in teaching service for	379	1.0	38.0	15.464	7.5572
How long have you been working under the present principal?	379	.0	24.0	2.420	2.5511
Valid N (listwise)	379				

This indicates that there is a wide range of ages among teachers. The mean for the participants' years

in teaching service is 15.464 years. The standard deviation is 7.5572 indicating the dispersion is rather wide too.

6.2 Teachers' Instructional Practices

Research Question 1: What are the levels of teachers' instructional practices of rural public secondary schools?

Based on Table 6.2, overall the Teacher's Instructional Practices are at high level (Mean=3.87). All the dimensions of the Teacher's Instructional Practices are also at high level 3.87. Standard deviation is .45435.

Table 7: Mean Score and Standard Deviation of the Teachers Instructional Practices

Dimensions	Mean	Standard Deviation	Level
Instructional Materials and Tools	3.84	.46321	High
Teaching Techniques	3.88	.49160	High
Instructional Strategies	3.91	.55598	High
Overall Teachers' Instructional Practices	3.87	.45435	High

Note :(Mean 0 to 2.39 as Low; 2.40 to 3.69 as Moderate; more than 3.70 as High)

Research Question 2: What are the levels of school performance of rural public secondary schools? Table 6.3 shows that 100% of the rural schools performed below the national average score expected for secondary schools which was 4.89 in 2018.

Table 8: Academic performance or the Average Grade Score GPN or GPS

States representing Malaysia	Number of Samples Rural Sec schs	GPS SPM 2018 Rural Sec schs	GPN set by MOE
Pahang	94	5.00	
Kelantan	110	5.20	
Perlis	17	5.54	4.89
Johor	117	4.96	
Malacca	41	5.50	
Total	379		4.89

Research question 3: Is there a significant relationship between teachers' instructional practices and school performance of rural public secondary schools? A correlation test that was conducted in order to address research question 3 whether there is a significant interrelation between teachers' instructional practices on the performance of rural public secondary schools. Spearman correlation is

often used to evaluate relationships involving ordinal variables.

Table 9: AcademicCorrelation Test Teachers' Instructional Practices and School Performance of Rural Public Secondary Schools.

Correlations			GPS_rec	TIP_2	PIL_2
Spearman's rho	GPS_rec	Correlation Coefficient	1.000	.238**	.271**
		Sig. (2-tailed)	.	.000	.000
		N	379	379	379
	TIP_2	Correlation Coefficient	.238**	1.000	.667**
		Sig. (2-tailed)	.000	.	.000
		N	379	379	379
**. Correlation is significant at the 0.01 level (2-tailed).					

Table 6.4 shows the correlation test of Teachers' Instructional Practices. The test results indicates a significant positive relationship between Teachers' Instructional Practices and with school performance of rural public secondary schools (H1: Research Question 2).

Hypothesis 1: There is a significant relationship between teachers' instructional practices with school performance of rural public secondary schools.

The Correlations table indicate that the correlation value is .238. A weak linear relationship was indicated when the value of r is positive and approaches 1. The value of r also suggest that the points are grouped together in a line that slopes positively.

6.3   Multiple Regression

Research Question 3: Which dimension of teachers' instructional practices contributes the most towards performance of rural public secondary schools? For assumption 1, from the indication that there is a relationship that is significantly positive between TIP and GPS (r=0.271) indicates that there exists a linear relationship between the dependant variable and the independent variables.

As for assumption 2, is normally distributed as indicated by the histogram and plot below.

As for the assumption of multicollinearity, the VIF values of the variable were used to address this assumption.

Independent Variables	VIF
Instructional Materials and Tools	3.237
Teaching Techniques	3.024
Instructional Strategies	2.188

Based on the table above, there is no multicollinearity that exists since that the value
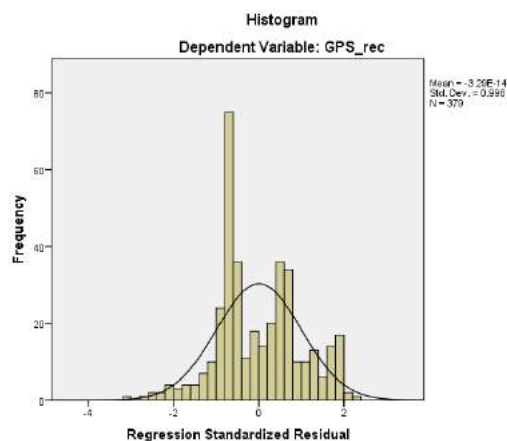
Figure 3: Histogram
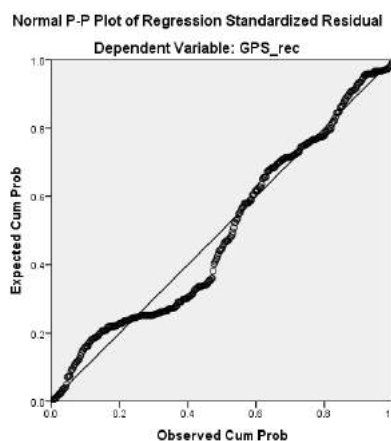
Figure 4: Normal P-P Plot of Regression Standardized Residual

of VIF for both variables are below 5 (Hair et al., 2010).

Table 10: AcademicCorrelation Test Teachers' Instructional Practices and School Performance of Rural Public Secondary Schools.

Coefficientsa		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
Model		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.386	.213		15.872	.000		
	Instructional Strategies	.219	.096	.201	2.290	.023	.309	3.237
	Teaching Techniques	.121	.087	.118	1.387	.166	.331	3.024
	Instructional Material and Tools	.024	.065	.027	.369	.712	.457	2.188
a. Dependent Variable: GPS_rec								

The model summary Table indicates that the R (.324), R square (.105) and Adjusted R Square (.098). This means that 10% of the variance in school performance was jointly explained by Instructional Material and Tools, Teaching Techniques and Instructional Strategies. Cohen (1994), concluded

that, R=0.10 indicates a small effect size, R=0.25 indicates a medium effect size and R=0.40 indicates a large effect size.

Table 11: Correlation Test Teachers' Instructional Practices and School Performance of Rural Public Secondary Schools.

			GPS_rec	TIP_2
Spearman's rho	GPS_rec	Correlation Coefficient	1.000	.219**
		Sig. (2-tailed)	.	.000
		N	379	379
**. Correlation is significant at the 0.01 level (2-tailed).				

Table 12: Collinearity Diagnostics

Collinearity Diagnostics^a							
					Variance Proportions		
Model	Dimension	Eigenvalue	Condition Index	(Constant)	Instructional Strategies	Teaching Techniques	Instructional Material and Tools
1	1	3.981	1.000	.00	.00	.00	.00
2	2	.011	19.459	.89	.01	.02	.20
3	3	.006	25.912	.10	.10	.27	78
4	4	.003	36.760	.01	.89	.71	.02
a. Dependent Variable GPS_rec							

Table 13: Correlation Coefficient and Strength

The correlation coefficient(r)	The strength of correlation
.91 to 1.00 or -.91 to -1.00	Very strong
.71 to .90 or -.71 to -.90	Strong
.51 to .70 or -.51 to -.70	Average / Moderate
.31 to .50 or -.31 to -.50	Weak
.01 to .30 or -.01 to -.30	Very Weak
.00	No Correlation
Source. Chua (2013p. 258)	
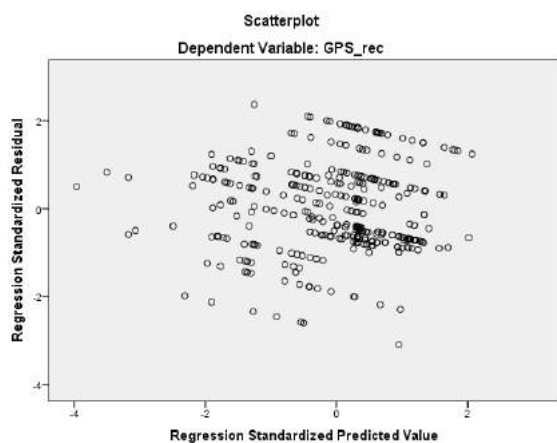
Figure 5: Scatter Plot

Homoscedasticity is the last assumption where the variability indicated in the scores for variable X should be similar at all values of indicated in the scores of variable Y. A scatterplot should indicate a fairly cigar shape along it length. This last assumption stated that the variance of error terms are homoscedasticity which means that they were similar across the values of the independent variables. A plot of standardized residuals versus standardized predicted value will show whether points were equally distributed across all values of the independent variables. Since there was no clear pattern or cone shaped pattern in the distribution, the data was homoscedasticity. Therefore, the last assumption was fulfilled.

After all of the assumptions already fulfilled, multiple regression was used to test the impact of dimension of teachers' instructional practices towards school performance of public secondary schools in rural areas.

Dimensions of teachers' instructional practices towards school performance of public secondary schools in rural areas are shown as per results of the analysis. The dimension of Instructional Strategies is significantly correlated to School Performance of Rural Public Secondary schools. Of these three variables, frequency of Instructional Strategies made the largest unique contribution (beta = .201) while Teaching Techniques made a small contribution (beta = .118) and Instructional Material and Tools made a small contribution (beta = .027) significance of 0.05. This is an indication that there is a significant relationship statistically between Teachers Instructional Practices and School Performance. This means that when teachers' instructional practices goes up positively by 1 standard deviation, School Performance of Rural Public Secondary Schools goes up positively by 0.307 standard deviation. Analysis of the results indicated that independent variable, Teachers' Instructional Practices is significantly correlated to school performance of Rural Public Secondary Schools. Teachers' Instructional Practices made a statistically significant contribution (beta = .307).

(Malhoit, 2005) has given a statement that good strategies allow rural schools to be excellent schools. Towards this, high quality teachers only should be employed in rural schools. In addition, quality teachers are not only encompass academic qualification such as degree also the skill that enable them to teach students with diverse need and style of learning. Teachers from rural school highlighted have "a bachelor degree in the subject(s) taught, full state certification and proof of content knowledge for each subject" (Eppley, 2009). Teachers should also be provided sufficient pay by the school. Teachers will not be motivated to teach well if they inadequately paid even though they possess

the skills. Thirdly, effective leaders should be the head of rural; Principals instructional leadership. Researchers in educational field have made it a statement that this is what rural schools should have. Without it, there will never be a good rural school. Malhoit has stated rural school should be provided facilities with good quality. Given the circumstances, rural school should take in consideration the usage of technology. In Malhoit's view, rural schools should be provided sufficient internet availability and ICT (Information and Communication Technology) facilities. Finally, without doubt, rural schools have to be provide with enough supplies for instructional purposes such as "well-equipped libraries, media centres, and laboratories" and These facilities will be able to assist students to "learn to think critically, and enhance their readiness for higher education opportunities".

Hence, due to this circumstances, teachers equipped with best instructional practices, has their work supported with CSR project because schools are to provide all that is needed for instructional purposes (e.g. books, CDs, videos, internet, software, etc). They are also provided internal courses to develop their professionalism simultaneously improving the quality of their teaching. What more, if teachers are able to ignite the awareness of students in strategies to learn language, they will engage actively in activities that aims towards these strategies. The will eventually improve the performance in English of rural schools (Thiyagarajah, 2003; Raman et al., 2015).

Overall, with the right policy, the quality of Malaysian rural schools can be improved and therefore, the gap exists between these schools and their urban counterparts would be decreased and completely shut. Throughout the years, numerous studies have failed to interrelate teachers' instructional practices and rural public secondary schools and school performance.

Thus, there should be more studies undertaken to investigate the relationship between teachers' instructional practices of rural public secondary schools and school performance. The findings derived from the studies would benefit multiple departments in the ministry and schools that deal with the facilitating education for the students to rope in school performance. In consequence, this will help them to increase teachers' instructional practices of rural public secondary schools and gain better school performance of rural public secondary schools.

7 CONCLUSIONS

Various extensive funding has been put forward by the Government of Malaysia programs in education sectors from independence till date. As indicated, teaching and learning process are related to teacher quality which is developed among the schools. Teachers and Leaders with good skills are needed urgently to in increase the learning and teaching quality. In addition, review of past studies indicate that it needs to be aligned with learning and teaching instructional practices of good quality. In regards to system in Malaysia Education, the researcher found that teachers are equipped with good instructional practices and engage these practices, in enhancing good performance of the school in rural areas. Furthermore, this study also has found that significant relationship exists among teachers' practices of instruction and school performance. Researcher also disclosed the current levels of teachers' instructional practices in rural secondary schools. Teachers are regarded as valuable possessions that establish and increase the future of nation's children. Therefore, quality of teachers directly relates to the education quality of the nation (Hanushek and Rivkin, 2007). This study has proved that teachers instructional practice are able to improve schools' performance Hence, steps should be taken by schools for teachers to come up with planning in instructional practices that encourage teamwork in schools. The findings also indicated that instructional practices have a significant positive influence on the performance of schools However, a stepwise multiple regression indicated that the predicting dimension was Instructional Strategies of teachers' instructional practice. To enhance practices of instruction, teachers need to consider creating a climate in school which encourages positive learning. Overall, teachers' instructional practices and school performance have positive significant relationship with each other. Teachers' instructional practice which can help to achieve results include knowledge and responsibility sharing, new teaching techniques discussion which will bring improvement to student learning.

8 LIMITATION

The stratified random sampling technique (teachers' respondents in five states in Malaysia) requires replication of this study in other states prior to generalizing these results to all teacher population.

REFERENCES

Eppley, K. (2009). Rural schools and the highly qualified teacher provision of no child left behind: A critical policy analysis. *Journal of Research in Rural Education (Online)*, 24(4):1.

Ganeswaran, L. K. Challenges of special education in rural schools: Teachers perspective.

Hair, J. F., Black, W. C., Babin, B. J., and Anderson, R. E. (2010). Multivariate data analysis: Global edition.

Kim, E. M. and Sheridan, S. M. (2015). Foundational aspects of family–school connections: Definitions, conceptual frameworks, and research needs. In *Foundational aspects of family-school partnership research*, pages 1–14. Springer.

Malhoit, G. C. (2005). Providing rural students with a high quality education: The rural perspective on the concept of educational adequacy. *Rural School and Community Trust*.

Mannan, F. (2018). The relationship between women principal instructional leadership practices, teacher organizational commitment and teacher professional community practice in secondary schools in kuala lumpur. *Instructional Leadership To The Fore: Research And Evidence*, 1:13.

Pallant, J. (2011). Spss survival manual 4th edition: A step by step guide to data analysis using spss version 18. *Maidenhead, Berkshire: Open University Press. Retrieved on from http://www. allenandunwin. com/spss*.

Panatik, S. A. B., Badri, S. K. Z., Rajab, A., Rahman, H. A., and Shah, I. M. (2011). The impact of work family conflict on psychological well-being among school teachers in malaysia. *Procedia-Social and Behavioral Sciences*, 29:1500–1507.

Raman, A., Ling, C. C., and Khalid, R. (2015). Relationship between school climate and teachers' commitment in an excellent school of kubang pasu district, kedah, malaysia. *Mediterranean Journal of Social Sciences*, 6(3 S1):163.

Sheridan, S. M. and Kim, E. M. (2015). *Foundational aspects of family-school partnership research*, volume 1. Springer.

Thiyagarajah, P. (2003). Learning english in malaysian rural secondary schools: Difficulties, learning styles & strategies and motivation. In *Unpublished paper presented at the Learning Conference*.

Vogler, K. E. (2002). The impact of high-stakes, state-mandated student performance assessment on teachers' instructional practices. *Education*, 123(1):39–56.

Application of the Proximacause Principle in Loss Insurance According to the Book of Trade Law and Regulation Number 40 of 2014

Selvi Harvia Santri, Syafriadi and Erlina

Department of business law, Universitas Islam Riau, Pekanbaru, Riau, Indonesia
{*selviharviasantri, syafriadi*}*@law.uir.ac.id, erlinashmh@yahoo.com*

Keywords: Insurance, Policy, Proxima cause, Evenement, Compensation.

Abstract: Companies that accept risk transfer from the insured are insurance companies. Losses suffered by the insured due to an event must be stated in the policy. Policies that are approved by the insured and insurance companies must explain the principles of insurance law, one of the important principles in insurance law is Proximacause. Proximacause is used to measure or assess the liability of an insurance company to provide compensation to the insured, caused by events experienced by the insured. If the cause or event that causes the loss is not guaranteed in the policy, compensation costs cannot be paid by the insurer to the insured. Payment of compensation made by the guarantor is limited only to events that are guaranteed in the policy, if excluded in the policy. policy, compensation cannot be paid by the guarantor. This paper aims to find out what are the regulations governing Proximacause and how to apply the Proximacause principle for loss insurance in accordance with Trade Law and regulation No. 40 of 2014. This paper is based on empirical juridical methods. analyze regulations and observations in the field.

1   INTRODUCTION

Risk is a danger that threatens humans that can cause harm (Purba, 1992; Saleh, 1992). Risks can occur due to human activity factors themselves, can also occur due to natural disasters, such as floods due to earthquakes. According to Prof. Subekti, risk is the obligation to bear losses (Simanjuntak, 1999; Pagliari, 2012).

There are several ways that humans can do to overcome risk, namely avoiding risk, preventing risk, transferring risk to insurance companies. Transferring risk to insurance companies is the best way to manage risk. The insurance company is the first party to guarantee the risk of the insured. The insured has hope for economic certainty and stability if at any time something unexpected happens (Suparman, 2003; Liakopoulos, 2019).

The second party called the insured, is an individual, group, institution, legal entity, company or someone who follows insurance. The transfer of risk from the insured to the guarantor can only occur because of an insurance agreement. The insurance agreement is stated in a written deed called a policy. The policy is called an insurance contract between the guarantor and the insured.

The loss earned by the insured is caused by the event or event stated in the policy, if the event or event is not stated in the policy, then the loss cannot be paid to the insured according to the principle of insurance law, namely proximacause or the main cause of risk.

The Proximacause principle that is applied to insurance can be seen when the insured submits an insurance claim (Arquilla, 1993). The insured can claim the loss suffered by the guarantor by first determining the cause of the loss. This means that the Insured can only claim if the loss suffered is caused by a risk guaranteed by the policy. Guaranteed causes must be "direct causes".

2   DISCUSSION

2.1   Regulations Governing the Proximacause of Loss Insurance

According to the provisions, insurance law regulations are regulated in accordance with Commercial Law and Number regulation. 40 of 2014. An insurance agreement was made between the Insurer and the insured. In the Commercial Law Act, the type of insurance regulated is the object loss insurance objects such as fire insurance, motor vehicle insurance, while

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in Law No. 40 of 2014 [1] the type of regulated insurance is insurance for a number of human life object money.

In addition to regulating the type of insurance, the Commercial Law Act also regulates insurance principles, including the Insurable Interest Principle, the Principle of Compensation, the Most Good Good Principle, Contributing Principle, Subrogation Principle, Proximacause Principle. The main direct cause is the active main cause. (stand-alone).

The direct cause is not the first or last cause, but the dominant cause or efficient cause, if there is a direct relationship between cause and effect. The rules governing proximacause are Article 246 of the commercial law code

2.2 Application of the Proximacause Principle to Loss Insurance

The principle of proximal cause in insurance is called the proximate cause. the application of the principle of proximate causes Often causes disputes due to errors in the interpretation of the cause of the loss. In insurance policies always listed what causes are guaranteed. This statement implies that the company will pay compensation for the loss of the insured object if the loss arises due to one of the guaranteed reasons.

Before the insured can claim the loss suffered from the insurer must first be determined what the cause of the loss. This means that the Insured can claim only if the losses suffered are caused by a risk guaranteed by the policy. The guaranteed cause must be a "proximate cause". Causation that brings an effect without intervention is something else that works actively and that comes from a new and independent source.

In the practice of insurance, it is sometimes very difficult to establish an event that is considered as the most dominant or most efficient cause of loss, because frequent events are not single events, but are a series of events that are interrelated so that there is often controversy and debate in determining the main events that cause losses.

For example, the occurrence of hurricanes with fires, which are not related, but there are two types of losses, due to fires and due to hurricanes. For example, other events or event fires that occur when there are riots, each of which is not related as a solution:

1. If two losses cannot be separated, and both are not excluded in the policy, guaranteed.

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[1] The Commercial Law Act Law No 40 of 2014 concerning Business Asuransian

2. If one is excluded and the loss cannot be separated, it is not guaranteed. If it can be separated, only those who are not excluded are guaranteed insurance.

2.3 Principle of Principles in Insurance Law

2.3.1 Principles of Proximacause

Events that cause guaranteed losses in the policy cannot be disturbed. the guaranteed loss is only the loss suffered until the cause has just begun to work. Losses suffered after unsafe risks cannot be claimed.

Solving problems in applying the principle of direct causes in special circumstances, often requires the help of determination by experts or related professionals, such as professional surveyors and other insurance law experts.

Insurance provides guarantees for losses caused by certain risks insured or in other words the existence of an insurance agreement raises the obligation for insurance companies to provide compensation if the insured suffers losses. However, in reality we often have difficulty in determining the cause that causes this loss, because we often encounter causes for more than one loss, which may be a series of events that occur together.

This principle is related to a causal relationship, to determine what causes this loss and what causes it to be guaranteed by an insurance policy. The purpose of the Proximacause principle is that the insurance company will be responsible for the loss suffered by the insured if the loss is indeed the responsibility of the insurance company. If not, then the insurance company can be exempt from the obligation to pay compensation. Accordingly, based on this reason, the loss borne by the guarantor arises, but not all causes are borne by the guarantor. Although the policy with the All Risk clause, that is, the policy, bears all risks, it does not mean that all risks are guaranteed because there are always exceptions.

2.3.2 Insurable Interest

Insured interests give a person the right to insure because of the financial relationship recognized by law between that person and the insured object. Insurable Interest Definition: "Legal rights for insurance of financial relationships recognized by law, between the insured and the subject of insurance" means that a person's right to insure arises from a financial relationship that is recognized by law between that person and the object of insurance.

Furthermore, in the Criminal Procedure Code there are provisions governing insured interests "If a person is responsible for himself, or someone insured by a third party, at the time the insured does not have an interest in the insured object, the guarantor is not required to pay compensation. With so, the insured must be able to prove that he has an insurable interest because if he does not have an interest in the insured object, there will be no compensation.

2.3.3 Principle of Utmost Good Faith

The principle of honesty is to provide information by the insured to the insurance company regarding all information when negotiating the making of an insurance agreement. Liability of the insured must be done from the beginning of the application or during the insurance period. If the insured party intentionally or unintentionally hides information that is relevant to the object insured, then the insurance company can cancel the insurance agreement.

The best and honest intention must also be with the guarantor, that is, when the insurance is done, the insurance company must inform and explain the extent of the guarantee and the rights of the insured because the insured is the guarantor. The definition of utmosgoodfaith in Article 251 (Santri, 2019) of the Indonesian Criminal Code is as follows: Any information that is false or incorrect, or everything that does not tell the things that are known by the guarantor, no matter what his intentions are, that way, so that if the insurer already knows the actual situation, the agreement will not be closed with the same conditions, resulting in the cancellation of the agreement.

2.3.4 Principles of Indemnity

The function of insurance is to divert or share the risks that are likely to be suffered or faced by the insured because there is an uncertain event. Therefore, the amount of compensation received by the insured must be balanced with the loss he suffered, this is the essence of the principle of indemnity From the definition of Article 246 KUHD, the insurance agreement (loss) is a compensation agreement or indemnity agreement. Insurance in this case is a loss insurance that only replaces the losses actually suffered by the insured, the principle of compensation (indemnity) is a mechanism for paying compensation with money, which in a sense includes several things:

1. Financial changes

2. Place the insured's financial position the same as its financial position just before the loss occurs (Riau,).

2.3.5 Subrogation Principle

Article 1365 [2] of the Civil Code states as follows: "Every act violates the law, which requires the person who caused the wrong to issue the loss, compensates for the loss". In the implementation of insurance agreements, the possibility of a loss occurring can be caused by a third party. Literally based on Article 1365 of the Civil Code above, then if the insured has received compensation from the insurer, it is also permissible to claim compensation to the party causing the loss, meaning the insured can receive compensation that exceeds the loss suffered. But the problem is different in the insurance agreement because it must be remembered that the insurance agreement is not like a normal or general agreement, and to avoid this in the insurance agreement the subrograsi principle applies where this principle is an integral part of the principle of indemnity which is essentially that the insured cannot obtain compensation in excess of the losses suffered.

2.3.6 Principle of Contribution

This principle actually supports the principle of subrogation, the principle of this contribution arises when over an object is insured more than from an insurance company, then if a guaranteed loss occurs and one insurance company has paid the full loss then the right to claim compensation to another company is transferred to the company insurance that has paid full compensation. The principle of this contribution is also only valid in the insurance of losses (scadeverzekering) and does not apply to insurance amounts (sommenverzekering) The principle of this contribution applies or arises when fulfilled the following conditions:

1. There are 2 (two) or more indemnity policies

2. The policies guarantee the same subject matter

3. The policies guarantee the same subject matter

4. The policies cover the same interest

5. The policies cover the same object

6. The policies are valid at the same time, that is, when the loss occurs

3 CONCLUSIONS

Regulations governing the loss insurance proximatecause contained in Law No. 40 of 2014 concern-

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[2]The Commercial Law Act Law No 40 of 2014 concerning Business Asuransian

ing Insurance and Commercial Law Law Article 246 which states that the guarantor will only pay compensation to the insured if the loss and damage caused by an event or event is contained in an insurance policy. The rules governing Proximatecause in the regulations have not been explicitly regulated regarding the obligations of the parties. Because it is needed, new regulations specifically regulate Proximatecause. The application of the Proximatecause principle to loss insurance starts with an agreement between the insured and the insurance company and is written in an agreement called a policy. Which guarantees losses in accordance with the agreed events. The application of the Proximatecause principle in insurance experiences constraints, sometimes it is very difficult to establish an event that is considered to be a proximatecause which is the most dominant or most efficient cause of loss, because events often occur that are not a single event, but a series of interrelated events so that there is often controversy and debate in determining the main events that cause harm. So expertise in survey theory is needed to determine the main causes of events that cause harm. If the event that caused the loss is not listed in the policy, the claim is not paid by the guarantor.

REFERENCES

Arquilla, J. (1993). A decision modeling perspective on us-cuba relations. Technical report, RAND CORP SANTA MONICA CA.

Liakopoulos, D. (2019). Jurisprudential approach of the aircraft liability according to international and eu rules. *Acta Universitatis Danubius. Relationes Internationales*, 12(1).

Pagliari, N. (2012). *Why are we running? Political economy of bank runs and an analysis on the 2007-09 banking crisis in the United Kingdom*. PhD thesis, The London School of Economics and Political Science (LSE).

Purba, R. (1992). *Memahami asuransi di Indonesia*. Number 10. Pustaka Binaman Pressindo.

Riau, S. H. S. U. I. Pelaksanaan prinsip subrogasi pada asuransi kendaraan bermotor menurut kitab undang-undang hukum dagang.

Saleh, N. (1992). Are the validity and construction of legal acts affected by cause (sabab)-(a comparative study under islamic and arab laws). *Arab LQ*, 7:116.

Santri, S. (2019). Penerapan prinsip indemnitas pada asuransi kendaraan bermotor. *UIR Law Review*, 3(01):31–37.

Simanjuntak, P. N. H. (1999). *Pokok-Pokok Hukum Perdata Indonesia*. Djambatan.

Suparman, M. (2003). Aspek-aspek hukum asuransi dan surat berharga. *Bandung: PT. ALUMNI*.

A Comparative Study among Asean and Asia Countries Community to the Realization and Application of English, Culture, Science and Technology

Seno H. Putra

Universitas Islam Riau, Pekanbaru, Indonesia
senohimala@edu.uir.ac.id

Keywords: English, Culture, Economy, Education, Science and Technology

Abstract: The Problem of this study was to find out the realization and the application of English, Culture heritage, Human sources, Economy, Science and Technology among ASEAN, Asia Countries Community. The Research Methodology used in this study was Qualiquantitative approach, where the obtained data were explained and analyzed throughout sentences and also added by the percentage. The results of this study explained as follows: The Results of this study showed that Hongkong, Singapore, Malaysia, Philippines, and Brunei were accustomed to using English in formal and non formal settings, on Culture, Japan, Indonesia, Malaysia, Brunei still maintained their own Cultures in Economy in addition to, Japan, Singapore, Hongkong, Malaysia, and Brunei were dominant among other ASEAN , Asia countries, human sources, science, technology, Singapore, Hongkong, South Korea, and Japan were the Top Ranks if it was compared to other Asian Countries. Therefore, other ASEAN countries, such as Thailand, Indonesia, Vietnam, Cambodia, and Philippines were beyond in Economy, Education, science and technology rather than Singapore, Hongkong, Japan, Korea, Malaysia, and Brunei were also expected to be able to quickly run in the future, so that the beyond ASEAN Countries as cited in this study will be the same level not only in ASEAN and Asia Countries, but also in the world.

1 INTRODUCTION

There are some Asian and Asia Countries which have potential issues on the use and application of English, culture, and science and technology. Most of the ASEAN Countries are developing Countries which start to increase all devices on their lives in their own Countries to be developed Countries after these Countries had been colonized by the Colonized by many years. After their own Independence, they realized that they must exist again to build their Nations and Countries all aspects of their lives, such as to increase human sources, to dig the potential natural sources, to maintain and promote their languages own cultures heritage, to increase economy, science and technology, etc.

The Majority of the ASEAN and Asia Countries were colonized by the Colonizations (Putnam et al., 1976). During the colonizatios, their people to be slaves and hard workers to assist the Colonizations and their own natural sources digged and taken to be the Colonizatios, even the whole devices of their lifes to be limited and not allowed to develop their own

potential issues, including to increase human sources of each level of schools. The Nations became stupid, slaves, trauma, etc.

The ASEAN and Asia Countries which were Colonized by the Colonizations are Indonesia, Malaysia, Vietnam, Cambodia, Philippines, Singapore, Hongkong, Maccau, etc., excluding Thailand. From these cases and phenomena the questions raises:

- Do they realize to exist to increase their own human resources?

- Do they realize to increase their own Economy?

- Do they realize to maintain their own Languages and Cultures Heritage?

- Do They realize to create and develop their own Science and Technology?

- How are the comparative devices used and Applied by among Asian and Asia Countries?

Therefore, based on the Cases and the Questions Raises above, I would like to carry out this Study which is also accordace with the the Title above.

1.1 Context of the Problem

The context of the problem of this study is only to find out some devices which have been explained above on the realization and the application each ASEAN and Asia Countries Community to increase all aspects of life (Wilken, 1979).

1.2 Limitation of the Problem

The Limitations of the Problem of this Study are focused on as follows:

- Language and Culture Heritage
- Economy
- Education
- Science and Technology.

1.3 The Problem of This Study

The Problem of this Study is as follows: How are the Realization and the Application of Languages and Cultures Heritage, Human Sources, Economy, Science and Technology among ASEAN and Asia Countries Community?

1.4 The Purpose of the Study

The Purpose of this Study is to find out and set up the ASEAN and Asia Countries Community on the Realization and the Application of Languages and Cultures Heritage, Human Sources, Economy, Science and Technology.

1.5 Key of Terms

- Comparative Study is a study to compare two or more variables which are focused on the main problems of the research, then from these can be distributed to become several indicators in a research (Seno Putra,2007). Therefore, in this study, it is only focused on, or to compare a few of variables and indicators as stated on the limitation and the formulation of the problems of this study.
- Languages and Cultures Heritage language language is media created by the God, the developed by human depends on societies used both spoken and written, formal and non formal, verbal and non verbal which can communicate to have mutual understanding one another close and long distance. While culture heritage is creativity of individual, a group, local, nation, and global which are created by human beings to be used by them and show them to other societies, as well as maintain and developing so that not escaping from values, norms, ethics, habits and customs from their own societies .

- Human Sources is human or person who has competence or quality in skills and sciences after he/she joins each level of education, then from that he/she is able to create, develop, and contribute his/her skills and sciences to local, national, and global societies.

- Economy is the system by which country's money and goods are produced and used . In this study, it means that the systems of state economy produced by industry which can give the welfare of nation and state (Klein, 1967).

- Science and Technology is Knowledge is obtained by observation and testing of the facts, and systematic application of knowledge to practical tasks in industry (Oxford). In this study means that the education, science and technology founded and created by the scholars and scientists which can be sale to the market, as well as developing and getting ranks to compete among Universities through out institutions survey (Yang and Pedersen, 1997).

2 A GLANCE RELATED CONCEPTUAL FRAMEWORK

Under the ASEAN Economic Community (AEA), a single regional common market of ASEAN Countries will be created by 2015. The regional integration's objective is to create a competitive market of over 600 million people ASEAN Countries: Brunei, Combodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam. There will be free flow of good, services, investment, capital and skilled labour following the liberalization. These will include tariff reductions and streaming of certain administrative procedures. Many businesses have begun preparing themselves three years ahead of time to the most challenges and opportunities of the ASEAN Economic Community (AEC).

ASEAN Member 2016 GDP Growth Forecast

For ASEAN member countries 2016 promises a mixed bag with the World bank forecasting Thailand's economy to remain on the intensive care list, constrating by 20 per cent from a 2015 Thailand GDP of 2.5 per cent to just 2.0 percent this year primarily due to domestic consumption constricted by high household debt and subdued export growth. Also, forcast to see a continued contraction is the

Malaysia economy with 2016 Malaysia GDP forecast to contract by 4.26 per cent from 4.7 percent GDP growth last year to 4.5 per cent growth in 2016.

At the opposite end of the economic performance chart for 2016 is Myanmar, Lao PDR, Vietnam, the Philippines, and Indonesia, all of who are forecast to continue experiencing strong growth (Shavit et al., 2007). Moreover, Leading the field for pure 2016 GDP growth is Myanmar which the World bank forecasts will see 2016 Myanmar GDP growth of 7.8 per cent, a 20 per cent increase in the 2015 Myanmar GDP growth of 5.8 per cent followed by Lao PDR where 2016 Lao GDP is forecast to reach 7.0 per cent, an increase of 9.37 per cent over 2015 Lao GDP of 6.4 per cent. Bringing up third place in the growth stakes is Cambodia where 2016 Cambodia GDP is expected to continue at the same 6.9 per cent the country recorded in 2015.

For Vietnam the World Bank said rapid investment, consumption, and export growth should see 2016 Vietnam GDP to increase by 6.6 per cent, a 1.54 per cent increase over 2015 Vietnam GDP growth of 6.5 per cent, while public private partnerships (PPP) and government spending are expected to be the chief drivers of the Philippines GDP growth is forecast to come in at 6.4 per cent, a 10.34 per cent increase over the 2015 Philippines GDP of 5.8 per cent. Tempering its outlook for the region the World Bank warns that economic growth in the region remains at risk from a faster than expected slowdown in China; The possibility of greater financial market vitality and restricted credit; A steep appreciation of the value of the US dollar; and a slower than expected acceleration of high income economies.

3 RESEARCH METHODOLOGY

3.1 Research Design

The Design of this Study is Qualiquantitative Approach, where the data of this Study are obtained from the Informants are analyzed through out detailed explanations based on cited above problems. The kind of this Study is focused on A Comparative Study, in which this Study is only to compare some devices mentioned on point (1.3) among ASEAN and Asia Countries Community. In short word, Comparative Study is a study used by the Researcher to compare one variable and Indicator to other Variables and Indicators in one Research or Study, as well as to compare the required results of the study, then to decide the argumentations,

Conclusions, and Recommendations in the forms of Scientific Academics; while Quantitative approach, where the obtained data were analyzed through out the percentage (%) only (Putra, a).

3.2 Location of the Study

Locations of the Study are Japan, Hongkong, Brunei, Malaysia, Vietnam, Cambodia, Singapore, Thailand, Philippines and Indonesia.

3.3 Population and Informants

Since the Population is too broad, this Study only uses in formants. The reasons to use Informants on Qualitative Approach are (1) Informant can be used one person or more people; (2) the Informants must be indigenous People; (3) Comprehension of Problems of Study to be asked; and (3) Gendre, Age, Background of the Education, Experience, Duration of Stay, etc. (Read Seno Putra,1997-2004). Total Informants of this Study is 45 People who are different Social Status.

3.4 Instruments of the Study

The Instruments of the Study are Talk active with the Infrormants, Introduction to Informants and asking something with them; relaxing and interviewing non formal setting with them, Handphone for recording and taking photos,etc.

3.5 Data Collection Technique and Collection Procedure of the Study

Procedure of this Study is to visit each Country, then find out the Informants at certain Locations, then Talk Active with them, such as in the Markets, Academics, Offices, Trains, Bus, Cafeteria, Air Ports, Mall,Tourism Places, Hotels, Street Markets,and also provided by the Documents,etc.

3.6 Data Analysis Technique

The Data Collection Techniques of this Study are

- After asking and interviewing nonformal setting with the Informants, the obtained data are classified into descriptions.

- The descriptions of the data are also divided into 5 components of the Study as cited (1.3).

- All required data are analyzed to be clear descriptions based on the main Problems.

- Clear Descriptions and Transcripts of data are check and recheck over and over before becoming permanent Scripts.

- The Descriptions and Scripts of Data are coded with numbers based on the questions of the Study of each Country.

4 RESULTS OF THE STUDY

4.1 The Use and the Application of English

ProductMajority of people in Indonesia, Vietnam, Thailand, Cambodia, and Japan are not able to use and Apply English in their daily life and activities. Only 10 to 15 percent of each were able to use English, especially those who worked at Hotel, Tourism Places, Airport, Souvernir Markets, Taxi, Bajai, Bus Station, Trains, Certain Offices. The People of these Countries still Maintained their own Languages both mother tongues and Their National Languages. Moreover, English was also used by them in certain Academics, such as International Seminar, Conference,etc.

4.2 Culture Heritage

Most of the ASEAN and Asia still maintain their own Cultural Heritage, in which they still used and applied their own Culture in daily life activities, such as in family, wedding party, ceremony, any states' activities in their home countries. The rest of each was only 25% that Communities used and applied modern culture, especially in Towns (Dahlgren et al., 1982).

4.3 Economy

The Most Increasing Economy Micro and Macro in ASEAN Countries were Singapore, Malaysia, Vietnam, Cambodia, Indonesia, Thailand. The micro economy, Vietnam, Indonesia, Cambodia, and Thailand were mostly similar activities to have merchants, traditional markerts products, home industries to sell the local buyers and to the foreigners (Tourists). The ways of sale of 5 ASEAN countries were most the same one another, except Singapore.

ASEAN Founded in 1967, where the members are Singapore, Malaysia, Malaysia, Philippines, Thailand, Brunei, Vietnam, Cambodia, Laos, and Myanmar. Economically, these Countries are different stages of development but all sharing immense growth potential. ASEAN is also major global hub of manufacturing and trade, as well as one of the fastest growing consumer markets in the World.

Singapore ranks number two in the world for competitiveness as a result of consistently world in the area of 'basic requirements', which covers the quality of institutions, infrastructure for macroeconomic factors. Singapore also comes second area of 'efficiency enhancers' covers labour market flexibility access to finance and regulation and business sophistication. Malaysia, moreover, is the highest placed developing Asian Economy. It ranks 4th in financial markets become the leading center of global Islamic finance. Thailand continues to advance up the world competitiveness rankings macroeconomics, but market competition remains limited by high barriers to entry, especially those affect to remain in other areas, particularly governance. Indonesia has benefited from infrastructure and connectivity improvements, strengthen for government efficiency.Philippines is one of the most digitally connected developing Asian Nation that can be said of Infrastructure. Vietnam ranks 68th with its labour markets ranking 49th, its best showing among the 12 market size (34th).The macroeconomic environment (75th) is improving and public institution back of better property rights protections.Cambodia is the country faces major property rights and corruption, and in the area of innovation where scientific research (118th) and patent applications (124th) are towards the bottom of the tables (Barendt and Barendt, 1993).

ASEAN, moreover, is the fourth-largest exporting region in the Wo. It Accounts for 7 percent of global exports and as its member states have developed more sophiscated manufacturing capabilities, their exports have diversified. Vietnam specializes in textiles and apparel, while Singapore and Malaysia are leading exporters of electronics. Thailand has joined the ranks of leading vehicle and automotive-parts exporters.Indonesia is the World's largest producer and exporter of palm oil, the largest exporter of coal, and the second largest producer of cocoa and tin.Philippines has established a thriving business process outsourcing Industry, and Malaysia and Singapore are the most important export market.

ASEAN Economic Community integration plan, which aims to allow the freer movement of goods, services, skilled labour, and capital. While tariffs on goods are now close to zero in many sectors among the original six member states (Brunei, Indonesia, Malaysia, The Philippines, Singapore, and Thailand.

4.4 Education and Science Technology

The systems of Education of each ASEAN and Asia Countries are very different one another, since starting from the election of the new students, processes, and until the outcomes, of course are not the same systems, strategies, and others. For examples, most of Universities In Singapore, Hongkong, Japan, and Malaysia are very strict to elect the new students to study at those Universities, and so does in the processes of Teaching and learning, as well as the outcomes to be the scholars (**?**). The systems do not give tolerance for those who are not able to complete their study to become Scholars, because all the students who are studying there must have highest competiveness to maintain themselves to be very good and excellent scholars, and they also must maintain their Universities as alumni to compete other Scholars in the World. The right Veto (Authority) of each Lecturers have very strong which are given by the systems of Universities, except if any big problems both must be over come together whether pass or not. Therefore, the quality Universities had applied drop out for the students are not able to complete their studies based on they year entry and finish study. In short words, no excuses for them to play in the back screen.

Moreover, the systems and the Quata of subject matters and the guidance of Scriptions, Theses, and Disertations of the students must be equal to the Lecturers with suitable ranks, Academics, and their experiences of Teaching and Research (Putra, c). No Research and Scientific Writings of the Lecturers, no given to become guidance or supervisors for students in scientific writings. These are only among criteria explained in here, but still have a lot of requirements which had been applied by those Universities both Lecturers and Students.

In order to see the ranks of Universities in ASEAN and Asia, the following tables are attached below.

4.5 A Total of 47 Schools (Universities) from 7 ASEAN Countries Made it to the Top 300 of the Annual Rangkings

- Brunei

  118. Universiti Brunei Darussalam
- Vietnam

  191-200. Vietnam National University
- Singapore

  1. National University of Singapore

Table 1: ASEAN Universities in Top 10

2014	2013	Institution	Country
1	2	National University of Singapore	Singapore
2	6	Korea Advanced Institute if Science and Technology	South Korea
3	2	University of Hong kong	Hong kong
4	4	Seoul National	South Korea
5	1	The Hong kong University of Science and Technology	Hong kong
6	7	The Chiness University of Hong Kong	Hong Kong
7	10	Nanyang Technological University	Singapore
9	7	Pohang University of Science and Technology	South Korea
10	9	The University of Tokyo	Japan

Source (Southeast Asia:http://www.rappler.com/nation/95860

Table 2: ASEAN Universities in Top 10

2015	2014	Institution	Country
1	1	National University of Singapore	Singapore
4	7	Nanyang Technological University	Singapore
29	32	University Malaya	Malaysia
44	40	Mahidol University	Thailand
49	57	Universiti Sains Malaysia	Malaysia
56	56	Universiti Kebangsaan Malaysia	Malaysia
61	66	Universiti Putra Malaysia	Malaysia
70	63	University of the Philippines	Philippines
79	71	University of Indonesia	Indonesia
99	92	Chiang Mai University	Thailand

Source (http://www.rappler.com/world/southeast-asia/95897

  4. Nanyang Technology University
- Philippines

  70.University of the Philippines

  114.Ateneo de Manila University

  143.University of Santo Tomas
- Indonesia

  79.University of Indonesia

  122.Bandung Institute of Technology (ITB)

  137.Universitas Gajah Mada

  147.Airlangga University

  161-170.Padjadjaran University

  201-250.Bogor Agricultural University

  251-300.Diponegoro University
- Thailand

  44.Mahidol University

  53.Chulalongkorn University

  99.Chiang Mai University

  143.Thammasat University

  171-180.Kasetsart University

  171-180.Khon Kaen University

171-180.King Mongkut's University of Technology Thonburi

191-200.Prince of Songkla University

251-300.Burapha University

251-300.Naresuan University

251-300.Srinakharinwirot University

- Malaysia

29.Universiti Malaya

49.Universiti Sains Malaysia

56.Universiti Kebangsaan Malaysia

61.Universiti Technologi Malaysia

66.Universiti Putra Malaysia

151-160.International Islamic University Malaysia

151-160.Universiti Teknologi Petronas

191-200.Universiti Utara Malaysia

201-250.Universiti Malaysia Serawak

201-250.Universiti Teknologi MARA

201-250.Universiti Malaysia Perlis

201-250.University of Malaysia Sabah

251-300.Limkokwing University of Creative Technology

251-300.UCSI University

251-300.Universiti Malaysia Pahang

251-300.Universiti Malaysia Terengganu

251-300.Universiti Tenaga Nasional

251-300.Universiti Tunku Abdul Rahman.

Source (http:/www.rappler.com/world/southeast-asia/ 95897

From the above tables, we know that among Universities in ASEAN and Asia Countries which are the Top ranks whether 10 Top ranks, 100 Top ranks or 300 Top ranks, where Singapore is still the most top among others,the second top is Malaysia, the third top is Thailand, the fourth top is Philippines, and the fifth top is Indonesia, the sixth top is Brunei, and the seventh top is Vietnam in ASEAN Countries.While in Asia Countries are Hongkong, Korea, and Japan. Singapore University can loose other Universities in Asia, such as Hong kong, Korea, and Japan. In short words, Singapore is the most top Universities both ASEAN and Asia Countries (Putra, b).

5 CONCLUSIONS

Based on the Research Problems and the Results of the Study above, it states that

- The use of English in formal and non formal activities were dominant is Singapore, mostly (90%) of people in here communicated in English;

- Malaysia is only (60%), and the rest is Malay as a mother tongue and National Language, as well as (5%) of the Community in here used India Language.

- Hongkong was also used English as a formal and non formal daily activities, mostly (60%) of the people used it, and the rest is Mandarin, Hongkian, etc.

- Japan was (30%) of the people in here is also used English, especially in formal setting, and the rest was Japanese as a mother tongue and National Language;

- Cambodia was (25%) of the people used it as Formal setting, and the rest is non formal setting;

- Vietnam (25%) for formal setting, and the rest is its mother tongue and National Language;

- Indonesia was (20%) only for formal setting, while others is mother tongue and Indonesian as National Language; and

- Thailand only for (20%) for formal setting, and the rest is their own mother tongue and National Language;

- Brunei, (70%) of the people there can use English both formal and non-formal setting, since English in that Country is also as a second Language, while Malay is used by most people there in daily activities.

While in Culture Maintenance is

- Japan (90%), in which people in here still maintained their own traditional Culture both family and other ceremonies;

- Indonesia was (80%) still maintained their own traditional culture, and the rest is influenced by other cultures;

- Malaysia, where people in here used Malay Culture, only (30%) of the People there used Chiness and India Cultures;

- Singapore, where most of the People use Chiness Culture, (15%) of the People was Malay, and the rest was India ones;

- Hongkong, in which most of the People there used Chiness, and only (3%-5%) was from ouside Cultures;

- Thailand also maintained its own Cultures, and a little bit out of other Cultures;

- Vietnam also maintained its own Culture, and only (3%) was outsiders;

- Cambodia, where most of the People there used their own Cultures, and only a little bit out of others; and

- Brunei, in which most of the People there used Malay Cultures (90%), and the rest was only (3%-5%).

In Economy, the trade and industry, Japan is the third rank in the world after America and China. Therefore, while in ASEAN, of course, Singapore is the rank number one, the third is Malaysia, the fourth is Brunei, the fifth is Thailand, the sixth is Indonesia, the seventh is Philippines, the eight is Cambodia, the ninth is Vietnam.However, Hongkong is number three in Asia after Singapore. Furthermore, related to Education, Science and Technology, for examples; ASEAN and Asia Universities in top ten is as follows: The rank number one is National University of Singapore, the second rank is Korea Aadvanced Institute of Science and Technology of Korea, the third rank is National University of Hongkong, the fourth is Soul National University of South Korea, the fifth is the Hongkong University of Science and Technology of Hongkong, the sixth is the Chiness University of Hongkong, the seventh rank is Nanyang Technological University of Singapore, the Ninth is the University of Science and Technology of South Korea, and the Tenth rank is the University of Tokyo, Japan.

REFERENCES

Barendt, E. M. and Barendt, E. (1993). *Broadcasting law: A comparative study*. Clarendon press Oxford.

Dahlgren, R. M., Clifford, H. T., et al. (1982). *The monocotyledons: a comparative study*. Academic Press.

Klein, H. S. (1967). *Slavery in the Americas: a comparative study of Virginia and Cuba*. Oxford University Press London.

Putnam, R. D. et al. (1976). *The comparative study of political elites*. Prentice-Hall Englewood Cliffs, NJ.

Putra, S. *2014*. Karya Ilmiah Populer dan Karya Ilmiah Akademik. Pekanbaru.

Putra, S. 2015. *Linguistics, Science and Technology. Conferences Abstract.IEDRC.Tokyo, Japan*, 28.

Putra, S. H. *2016*. Contribution Language (Englsih) and Culture to Market Integration in ASEAN. The 13th Insyama International annual symposium on Management. Ho Chi Minh City, Vietnam.

Shavit, Y. et al. (2007). *Stratification in higher education: A comparative study*. Stanford University Press.

Wilken, P. H. (1979). *Entrepreneurship: A comparative and historical study*. Ablex Norwood, NJ.

Yang, Y. and Pedersen, J. O. (1997). A comparative study on feature selection in text categorization. In *Icml*, volume 97, page 35.

Student Readiness Model Facing the Industrial Revolution 4.0

Dedek Andrian and Astri Wahyuni

Department of Mathematics Education, Universitas Islam Riau, Pekanbaru, Indonesia
{*dedekandrian,astriwahyuni*}*@edu.uir.ac.id*

Keywords: Determinants, Student Readiness, Industrial Revolution

Abstract: The purpose of this study is to describe the factors that influence the student readiness in facing the industrial revolution 4.0. This study uses quantitative research methods. The population in this study was the student teacher of education faculty of Universitas Islam Riau. The sampling technique used is cluster random sampling. The data collection technique uses a questionnaire. Data analysis technique uses Product Moment Correlation and Path Analysis with the help of Lisrel 8.80 Software. The results showed that; (1) there is no significant effect the variable of Parent Support (PS) and Learning Environment (LE) on Industrial Revolution, (2) there is significant effect learning facilties (LF) and university policy (UP) on Industrial Revolution (IR), (3) there is significant effect of university policy and parent support (PS) on learning facilities, (4) there is significant effect of learning facilities (LF), parent support (PS) and university policy (UP) on the learning environment (LE).

1 INTRODUCTION

The beginning of the industrial revolution allowed all preparations to be made by every university. This is doing so that every university is able to keep up with the flow of globalization that is difficult to be stopped. The world is entering the era of 4.0 industrial revolution which is followed by technology developments and emphasizes on all digital (digital economy, artificial intelligence, big data, robotic), or the phenomenon of disruptive innovation. Universities need to pay attention to the factors that influence the readiness of students in facing the industrial revolution because the success of students facing the 4.0 industrial revolution depends on what is prepared both from students and universities.

Global competitiveness index data shows that Indonesia's ability to face the 4.0 industrial revolution is still lower compared Thailand which is at level 32, Malaysia ranks 23 and Singapore is at level 3. The factors that cause Indonesia still cannot compete with Malaysia, Thailand, and Singapore are weak in higher education, lack of training or workshops, the knowledge readiness of science and technology, innovation and satisfaction in doing business (Kemenristek Dikti, 2019).

These aspects need to be improved so that Indonesia's ability to face the 4.0 industrial revolution is better and on top of Singapore.

Resources strengthening is very important for universities, resources strengthening includes the development of lecturer abilities, learning facilities, learning environment, campus policy, and parental support. Resources that are the determinants factors of success in facing the industrial revolution need to be strengthened so that the ability of students to face the flow of globalization in the era of 4.0 Industrial Revolution is not doubted because students are supported by strong and good facilities and resources.

Responding to the importance of competition in facing 4.0 industrial revolution, higher education specifically universities need to provide good quality services. In addition, the research needs to be done for knowing whatever the thing must be increased, repaired, and prepared so that research can be used to determine what factors are capable of making students ready to face the 4.0 industrial revolution. Based on this reason, the research titled "The Influence of Parent Support, Learning Facilities, Learning Environment, and Universities Policy, on Student Readiness in Facing the 4.0 Industrial Revolution is very important to be done.

2 LITERATURE REVIEW

Learning facilities are an important factor in getting maximum learning outcomes. Quality of learning facilities is a determining factor in improving student performance (Uline and Tschannen-Moran, 2008). Learning facilities such as online-based learning can improve student satisfaction in learning and influence learning outcomes or student achievement (Eom et al., 2006). Learning facilities create value or learning experiences that can produce better learning outcomes (Parnabas et al., 2014). Learning facilities can improve the quality of learning where students get learning experiences that are different from the previous process (Bliuc et al., 2007). Learning facilities have a significant relationship to student achievement, so it can be concluded that the better learning facilities, the better the learning outcomes (Keramati et al., 2011).

The learning environment is a factor that can influence the success of the learning process. The learning environment has an important role in increasing interest and learning outcomes (Kärnä and Julin, 2015). A conducive environment for learning can improve learning outcomes (Kleij & Fesken, 2015). A different or less conducive environment can be significantly different from the results of a conducive learning environment (Khalifa and Lam, 2002). The learning environment can make learning activities interesting because the learning environment becomes a stimulus for students to achieve success in learning (Rasch and Schnotz, 2009). The learning environment is a determining factor for the success of a teaching and learning process.

The success of students is also influenced by the stake holder's policy. Stakeholders who tend to have the desire to advance education through policies that build student achievement (Price and Roberts, 2008). Governments that have the same policies as leaders in each educational institution can produce good learning outcomes (Ngware, Onsomu, Muthaka, & Manda, 2006). Collaboration between government and educational institutions can realize educational goals in producing great educational output (Bektaş and Tayauova, 2014). Government policies that specifically have their own fields of education can affect the educational institutions below them through programs aimed at improving education (Lumby and Wilson, 2003).

Parent support is very important in student success of learning both at school as well as the university. Parent support is described as the main support because they have an enormous effect in developing the student to achieve success in its life (Creech, 2010). Parental involvement will help students more if they are supported by easily accessible technology (Lewin and Luckin, 2010).

3 RESEARCH METHODOLOGY

The research method used in the study is a quantitative research method with a correlational approach. This research aims to find the relationship or influence of one or several independent variables on the dependent variable. Creswell (2014) states that the correlational research method can in the form of correlation, regression, path analysis, and Structural Equation Modeling (Creswell, 2012; Hair et al., 2013).

3.1 Population and Sample

The population in this study were all Teachers and Education Faculty students, while the sample was some of the Teaching and Education Faculty students who were taken randomly. The sampling technique used in this study is the stratified random sampling technique, the number of research samples was 265 students. In the context of this study, researchers will randomize students in all Teaching and Education Faculty Study Programs based on the level or semester taken by Students, that is 2, 4, 6, 8.

3.2 Research Instrument

The data collection instrument used in this study was a questionnaire. A questionnaire was developed based on studies of variables so that indicators were found. Based on these indicators, items are arranged to obtain data in the field.

3.3 Validity and Reliability of Instrument

The validity of the instrument in this study used content and construct validity while reliability used construct reliability and Cronbach Alpha. Content validity was analyzed using Aiken's Formula while construct validity was analyzed using CFA (Confirmatory Factor Analysis). Construct reliability was analyzed using CFA based on the value of loading factor and error, while Cronbach Alpha reliability used the formula from Cronbach Alpha.

3.4 Analysis Data Technique

Data analysis in this study using product moment correlation and path analysis. Product Moment correlation is used to see the relationship between independent variables to other independent variables and independent variables to the dependent variable with the help of SPSS 16. Path analysis is used to see how far the independent variable affects the dependent variable and see how far the independent variables affect the other independent variables as moderator. Path analysis was carried out with the help of the Lisrel 8.80 program.

4 RESULT

4.1 Product Moment Correlation

Product moment correlation in this research aims to see the correlation between variables of parent support, learning facilities, university policy, learning environment, and readiness of student facing the industry revolution 4.0. the result of product moment correlation can be seen at the correlation matrix in Table.

Table 1: Correlation Matrix

	PS	LF	UP	LE	IR
PS	1	.553**	.515**	.583**	.319**
LF	.553**	1	.717**	.652**	.563**
UP	.515**	.717**	1	.657**	.582**
LE	.583**	.652**	.657**	1	.477**
IR	.319**	.563**	.582**	.477**	1

**= significant with level 95%

Based on Table 1 were acquired the result of analysis of product moment correlation from all variables. From analysis has found that there is a significant correlation between independent variables PS with LF, UP, LE and IR with values consecutively are o.553, 515, 583, 0.319. there is a significant correlation between LF variable with UP, LE, and IR with values consecutively are 0.717, 0.622, and 0.563. There is a significant correlation between UP variable with LE and IR with values consecutively are 0.657 and 0.582. There is a significant between LE variable with IR variable. These results show that all variables have the good correlation and significant with level 95%.

4.2 Path Analysis Result

Path analysis will describe the effect of the independent variable on independent variables and

independent variables (moderation variables) on dependent variables. in this research, parent support (PS) as independent variables. Learning facilities (LF), university policy (UP), learning environment as moderation variables, and student readiness facing the industrial revolution as the dependent variable. Before the result of the analysis is shown. the first step, the researchers must know that the analysis result has got good data which is the measurement model has developed. the data was said well if the Goodness of Fit that acquired from the analysis result has fulfilled criteria. The result of the analysis can be seen in Table 2.

Table 2: Standard and Result of Goodness of Fit.

GOF	Standard	Result	Conclusion
Chi-Square	P >0,05	0,4421	Fit
RMSEA	RMSEA <0.08	0,000	Fit
GFI	GFI ≥ 0.90	0.96	Fit
NFI	NFI ≥ 0.90	0.95	Fit
CFI	CFI ≥ 0.90	0.96	Fit
IFI	IFI >0.80	0.96	Fit
RFI	RFI 0-1	0.91	Fit

From table 2 was got seven criteria of GOF. this result show that the data were collected at the field are fit and fulfilled the criteria the good data. This result indicates that the measurement model has developed from studying the theory in accordance that was proposed by the statistics expert. because of the result has fulfilled the good criteria, so the result of path analysis can be continued or interpreted. The result of path analysis can be seen in Table 3.

Table 3: The Result of Path Analysis.

Variables	Coefficient	T-Value	Criteria
PS→LF	0,25	3,91	Significant
PS→UP	0,52	7.26	Significant
PS→IR	-0,08	-0.01	Not Significant
PS→LE	0.27	3.88	Significant
UP→LF	0,59	9.17	Significant
UP→LE	0,32	3.98	Significant
UP→IR	0,35	3.46	Significant
LF→LE	0,27	3.23	Significant
LF→IR	0,29	2.88	Significant
LE→IR	0,11	1.14	Not Significant

From Table 3 above can be concluded that there is significant effect variable PS on LF, UP, and LE with the contribution of each variable are 25%, 52%, and 27% but there is no significant contribution PS variable on IR variable. There is a significant effect of UP variable on LF, LE, and IR with contribution are 59%, 32%, and 35%. There is a significant effect of LF variable on LE and IR with contribution are 27% and 29%. There is no significant effect of LE

variable on IR variable. The biggest contribution in this research is UP variable on LF variable and the smallest contribution is LE variable on IR variable.

5 DISCUSSION

From the result of analysis has got the effect of independent variables on the dependent variable. the analysis shows there is an effect of Parent support on Learning Facilities. This information explains that parent support gives a good contribution to learning facilities. Dempsey (2001) said that parental involvement in education is very important as a school-improvement effort. Parental involvement in educational setting and activities are the important thing for the schools because the parent can give any contribution to the school for creating the good school that educates the student from various useless things (Hara and Burke, 1998). Parent support has a good effect on learning Environment because the student parent is an element of school that gives recommendation about the learning environment and will care with learning environment (Hara & Burke, 2019). Parent support in form learning facilities will give an opportunity to the student for developing their skill (Hoefer et al., 2001). Family support will have a tremendous role in helping the student adapt to rapid technology development (Ratelle et al., 2005).

There is a significant result of parent support on university policy, learning facilities, and learning environment. this result explains that university policy depends on parent support to make policy for creating good facilities and environment. the college collaboration with the parent of student will make education become more effective (Ratelle et al., 2005). Parent and school need to work together for achieving the maximum outcome. Schools have accountabilities about the academic outcome, and the parent has accountabilities about moral, cultural, and religious (Hill and Taylor, 2004).

From analysis was acquired negative contribution of Parent support on the Student readiness facing the industry revolution 4.0. this thing happens because many of parent doesn't have knowledge about the important facing the industry revolution 4.0 so they don't think how to motivate their children to face the industry revolution 4.0. Anderson & Minke (2010) said that parent involvement in student study can give a positive outcome for the student but it depends on how the parent decides for motivating their children.

Effect of learning facilities on the learning environment and the readiness student facing the industry revolution 4.0 is significant. this result shows that facilities are an important factor in making the conducive environment of learning and good outcome. student performance in the classroom depends on learning facilities and facilities management (Leung and Fung, 2005). Bad facilities of learning can make the learning environment uncomfortable and give a negative impact on student outcome (Earthman, 2002). Learning facilities is very important for increasing the quality of education.

6 CONCLUSIONS

Based on the analysis result can be made the conclusion that there are two factors or variables were affected the student readiness in facing the industry revolution 4.0 that is Learning Facilities with contribution 25% and University Policy (52%) while Learning Environment (27%) and Parent Support can't contribution on the student readiness in facing the industry revolution 4.0. Biggest contribution on the student facing the industry revolution variable is University Policy variable while the smallest contribution on the student readiness in facing the industry revolution 4.0 is Learning Facilities.

REFERENCES

Bektaş, C. and Tayauova, G. (2014). A model suggestion for improving the efficiency of higher education: University–industry cooperation. *Procedia-Social and Behavioral Sciences*, 116:2270–2274.

Bliuc, A.-M., Goodyear, P., and Ellis, R. A. (2007). Research focus and methodological choices in studies into students' experiences of blended learning in higher education. *The Internet and Higher Education*, 10(4):231–244.

Creech, A. (2010). Learning a musical instrument: The case for parental support. *Music Education Research*, 12(1):13–32.

Creswell, J. W. (2012). Educational research: planning. *Conducting, and Evaluating.*

Earthman, G. I. (2002). School facility conditions and student academic achievement.

Eom, S. B., Wen, H. J., and Ashill, N. (2006). The determinants of students' perceived learning outcomes and satisfaction in university online education: An empirical investigation. *Decision Sciences Journal of Innovative Education*, 4(2):215–235.

Hair, J. F., Black, W. C., Babin, B. J., and Anderson, R. E. (2013). *Multivariate data analysis: Pearson new international edition.* Pearson Higher Ed.

Hara, S. R. and Burke, D. J. (1998). Parent involvement: The key to improved student achievement. *School Community Journal*, 8(2):9–19.

Hill, N. E. and Taylor, L. C. (2004). Parental school involvement and children's academic achievement: Pragmatics and issues. *Current directions in psychological science*, 13(4):161–164.

Hoefer, W. R., McKenzie, T. L., Sallis, J. F., Marshall, S. J., and Conway, T. L. (2001). Parental provision of transportation for adolescent physical activity. *American journal of preventive medicine*, 21(1):48–51.

Kärnä, S. and Julin, P. (2015). A framework for measuring student and staff satisfaction with university campus facilities. *Quality Assurance in Education*, 23(1):47–66.

Keramati, A., Afshari-Mofrad, M., and Kamrani, A. (2011). The role of readiness factors in e-learning outcomes: An empirical study. *Computers & Education*, 57(3):1919–1929.

Khalifa, M. and Lam, R. (2002). Web-based learning: Effects on learning process and outcome. *IEEE Transactions on education*, 45(4):350–356.

Leung, M.-y. and Fung, I. (2005). Enhancement of classroom facilities of primary schools and its impact on learning behaviors of students. *Facilities*, 23(13/14):585–594.

Lewin, C. and Luckin, R. (2010). Technology to support parental engagement in elementary education: Lessons learned from the uk. *Computers & education*, 54(3):749–758.

Lumby, J. and Wilson, M. (2003). Developing 14–19 education: meeting needs and improving choice. *J. Education Policy*, 18(5):533–550.

Parnabas, V. A., Mahamood, Y., Parnabas, J., and Abdullah, N. M. (2014). The relationship between relaxation techniques and sport performance. *Universal Journal of Psychology*, 2(3):108–112.

Price, D. V. and Roberts, B. (2008). Improving student success by strengthening developmental education in community colleges: The role of state policy. *The Working Poor Families Project*.

Rasch, T. and Schnotz, W. (2009). Interactive and non-interactive pictures in multimedia learning environments: Effects on learning outcomes and learning efficiency. *Learning and Instruction*, 19(5):411–422.

Ratelle, C. F., Larose, S., Guay, F., and Senécal, C. (2005). Perceptions of parental involvement and support as predictors of college students' persistence in a science curriculum. *Journal of family psychology*, 19(2):286.

Uline, C. and Tschannen-Moran, M. (2008). The walls speak: The interplay of quality facilities, school climate, and student achievement. *Journal of educational administration*, 46(1):55–73.

The Impact of Tourism on Social, Economic and Cultural Conditions in Kecamatan Siak

Nurhayati, Rona Muliana, Febby Asteriani, Dinda Ratu

Departement Urban and Regional Planning, Universitas Islam Riau, Pekanbaru, Indonesia
nurhayatibks05@gmail.com, {febbyasteriani, ronamuliana}@eng.uir.ac.id, dindaratubella@gmail.com

Keywords: Tourism , Social Impacts, Economic Impacts, Cultural Impacts

Abstract: This study aimed to identify the impact of tourism on social, economic and cultural conditions in Kecamatan Siak. The research method was quantitative deductive by using the Likert scale. Population in this research was Kecamatan Siak residents. The number of samples were 382 families with stratified sampling method. The results showed that tourism had positive and negative impacts on development in Kecamatan Siak. (1) The positive impact on the social sector with the highest value was to strongly agree on the increase of the relations and good communication techniques. The negative impact with the highest value was to agree on an increase in social deviations such as commercial sex, drug use and destruction of tourist attractions (2) The positive impact on the economic sector with the highest value was to strongly agree on the increase in of local businesses. The negative impact with the highest value was that there would be an increase in prices of local goods and basic goods. (3) The positive impact on the cultural sector with the highest value was to strongly agree on the increase in tourism human resources. The negative impact with the highest value was agreeing on the occurrence of consumptive lifestyle.

1 INTRODUCTION

Today, tourism is an alternative sector in the development in Riau. This is due to the decline in the prices of oil palm which has caused a reduction in the contribution of the oil mining sector and palm plantations in the development of Riau. Tourism has an important role, along with the shifting of economic structure to the service sector.

Siak district is a district that intensively promotes its region as a tourist destination. This is accordance with the vision of kabupaten Siak in years 2016-2021. The Kabupaten Siak vision is "Creating the developed and prosperous district of Siak in a religious and malay cultured society and creating Kabupaten Siak as a tourism destination in Sumatra"(Heriawan, 2004; Irianto, 2011; Kurniawan, 2015). From this vision, Kabupaten Siak established itself as a tourism destination in Sumatra. Through the tourism sector, it will certainly has an impact on regional development in Kabupaten Siak, such as economic growth, increased employment, increased community income, changes in social life(Akil, 2002; Cohen, ; Foster, 2000).

After 1 year of establishing the vision of Kabupaten Siak, it is interesting to identify the performance of the tourism sector in Kecamatan Siak. Therefore, the objectives in this study were: (1) to identify the impact of tourism on the social conditions of the people in Kecamatan Siak: (2) to identify the impact of tourism on the economic conditions of the people in Kecamatan Siak; (3) identify the impact of tourism on the cultural conditions of the people in Kecamatan Siak(Mill, 2009; Pitana and Gede, 2009; **?**).

2 LITERATURE REVIEW

The various impacts of tourism on the social, economic and cultural sectors have been examined by the following authors.

3 METHOD

The research paradigm pointed in this study was the rationalistic paradigm. Rationalistic paradigm believes that a reliable source of knowledge is the mind, in which empirical functions only to confirm knowledge obtained from the mind ((WTO), 1980; Geriya, 2004; Kodhyat, 1982).

The method of this study was a quantitative de-

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Table 1: Impact of tourism on social, economic and cultural.

No	Objectives of re-search	Authors	Impacts of tourism
1	Impacts on Social Tourism	Positive Impacts (Mill, 2009) (Yoeti, 1982) (Foster, 2000) (WTO, 1980) (Pitana et al, 2005)	-The emergence of new values ??and norms -The existence of new social structures and relationships -There is an interpersonal relationship between community members -Family modernization -Broaden people's insights and perspectives on the outside world
		Negative Impacts (Mill, 2009) (Richardson et al 2004) (Foster, 2000) (Yoeti, 1982) (WTO,1980) (Pitana et al, 2005)	-Increased crime, local consumerism and prostitution -Increased social deviations -Emerging consumptive-oriented mental attitudes giving rise to pathology social like prostitution, using drug and drug trafficking
2	Impacts on tourism economy	Positive Impacts (Mill, 2009) (Cohen, 1984) (Leiper, 1990) (WTO, 1980) (Pitana et al, 2005)	-Open new jobs -Improve the standard of living and income of the community -Assist the existence of local businesses -Improve managerial skills and community skills that spur other economic activities -Encourage someone to be an entrepreneur, for example: -craft traders, surfboard rentals, food suppliers. -Increase community income and government revenue -Providing economic benefits to the community through -Restaurant / tourist market
		Negative Impacts (Mill, 2009) (Manthieson et al, 1982) (Pitana et al, 2005)	-Increase the price of goods local and basic ingredients -Increase in people's income goes up and down -There is regional imbalance and the income gap between several groups in the community -Loss of control of the local community over economic resources
3	Impacts on tourism culture	Positive Impacts (Sihite, 2000) (Smith, 1977) (Butcher, 2003) (Geriya, 1996). (Subadra,2006) (Pitana et al, 2005)	-Preservation of culture local -The development of local culture -The recognition of local culture by tourists -The emergence of cultural creativity and innovation
		Negative Impacts (Sihite, 2000) (Richardson et al,2004) (WTO,1980) (Pitana et al, 2005)	-Additional stresses occur residents due to new arrivals from outside the area -The emergence of commercialization -The development of consumptive lifestyle -Disruption of the environment -Cultural pollution

ductive research method. The quantitative approach was conducted through questionnaires.

The study area in this study was Kecamatan Siak and the population was the residents in Kecamatan Siak (Subadra, 2006; Yoeti, 2006). The number of samples were determined by the Slovin formula with a percentage of inaccuracy of 5%. The sample selection was performed by stratified sampling method. The number of samples were 382 families with the following details.

Table 2: The number of samples in Kecamatan Siak.

No	Kelurahan	Number of Respondents
1	Kampung Dalam	134
2	Kampung Rempak	86
3	Langkai	28
4	Merempan Hulu	23
5	Rawang Air Putih	15
6	Suak Lanjut	33
7	Buantan Besar	28
8	Tumang	35
		382

The method of this study was a quantitative deductive research method. The quantitative approach used was Likert scale. The collected data was categorized with Likert scale, namely Strongly Agree, Agree, Quite Agree, Disagree and Strongly Disagree. Each category from strongly agree to strongly disagree was given score of 5,4,3,2,1.

After being given score, then from the results of the questionnaire, the total score was searched by the formula:

$$Totalscore = T x Pn \qquad (1)$$

Where, T = Total number of respondents who voted Pn = Likert score choice. After getting the total score, then the total score was percentaged with the formula:

$$\%Index = \frac{totalscore}{y} \times 100 \qquad (2)$$

Where, Y = highest likert score multiplied by total respondents. After getting the percentage index, then

Table 3: Impact of tourism in Kecamatan Siak on social.

Indicators	Total Score	Percentage	Category
Positive Impacts			
1. There has been a change in the positive value of society such as an increase in the application of religious values due to tourism activities in the Kecamatan Siak.	1321	69,1%	Agree
2. There has been changing in behavior to a positive norm in better ways, habits, and behavior of the people due to tourism activities in Kecamatan Siak.	1547	81%	Strongly Agree
3. There was a change in employment opportunities from the agricultural sector to the service sector due to tourism activities in Kecamatan Siak.	1321	69%	Agree
4. There has been an increase in relations or communication and good communication techniques for community members due to tourism activities in Kecamatan Siak.	1702	89%	Strongly Agree
5. There has been an increase in solidarity / sense of kinship towards the community due to tourism activities in Kecamatan Siak.	1633	87%	Strongly Agree
6. There has been a modernization of agricultural methods and the sale of community crops due to tourism activities in Kecamatan Siak.	1389	73%	Agree
7. There has been an increase in community insight due to tourism activities in Kecamatan Siak.	1563	82%	Strongly Agree
8. There is tolerance towards other ethnics / ethnic groups due to tourism activities in Kecamatan Siak.	1479	77%	Agree
9. There has been a looseness of parental treatment for children (discipline) due to tourism activities in Kecamatan Siak.	1288	67%	Agree
10. There is an increase in interpersonal relations or mutual help to the community due to tourism activities in Kecamatan Siak.	1598	83%	Strongly Agree
11. There has been an increase in organization / social institutions such as activities, community regularity due to tourism activities in Kecamatan Siak.	1598	83%	Strongly Agree
12. There was an increase in public awareness of the cleanliness and comfort of the environment due to tourism activities in Kecamatan Siak.	1577	82%	Strongly Agree
Negative Impacts			
1. There has been an increase in crime due to tourism activities in Kecamatan Siak.	1078	53%	Quite Agree
2. There has been an increase in social deviations such as juvenile delinquency, destruction of tourist attractions due to tourism activities in Kecamatan Siak.	1302	68%	Agree

they are grouped into intervals, as shown in Table 4.

Table 4: The percentage index category.

Likert Scale	Percentage
Strongly Agree	0-19,9%
Agree	20-39,99%
Quite Agree	40-59,99%
Disagree	60-79,99%
Strongly Disagree	80-100%

4 RESULTS AND DISCUSSION

From the results of the study, tourism had positive and negative impacts on the development in Kecamatan Siak.

4.1 Impacts on Social Tourism

Tourism activities in Kecamatan Siak have a very positive impact or have enormous benefits in the social field for the community. The highest value of benefits was strongly agreeing to increase relations or communication and good communication techniques

Table 5: Impact of tourism in Kecamatan Siak on economy.

Indicators	Total Score	Percentage	Category
Positive Impacts			
1. There has been an increase in employment due to tourism activities in Kecamatan Siak.	1561	82%	Agree
2. There was an increase in income and living standards of the people due to tourism activities in Kecamatan Siak.	1515	79%	Strongly Agree
3. There has been an increase of local businesses due to tourism activities in Kecamatan Siak.	1564	89%	Agree
4. There has been an increase in community's economic activities (community skills products) due to tourism activities in Kecamatan Siak.	1576	82%	Strongly Agree
5. There was an increase in self-employed people as a result of tourism activities in Kecamatan Siak.	1495	78%	Strongly Agree
6. There was an increase in regional income (PAD) due to tourism activities in Kecamatan Siak.	1477	77%	Agree
7. There is an increase in the incomes of hotels and restaurants or tourist markets due to tourism activities in Kecamatan Siak.	1545	81%	Strongly Agree
Negative Impacts			
1. There has been an increase in the cost of building facilities and infrastructure due to tourism activities in Kecamatan Siak.	1230	64%	Agree
2. 2. There is an increase in prices of local goods and basic goods due to tourism activities in Kecamatan Siak.	1285	67%	Agree
3. There is a gap of income due to tourism activities in Kecamatan Siak..	1180	62%	Agree
4. There has been unontrolled economic resources due to tourism activities in Controlled Siak.	1214	63%	Agree

for the community members. Meanwhile, the negative impact of tourism activities on the social sector with the highest value was to agree on an increase in social deviations such as promiscuity (commercial sex), drug use and destruction of tourist attractions due to tourism activities in Kecamatan Siak. Table 3 shows the total score, percentage and social impact categories of tourism in Kecamatan Siak.

4.2 Impacts on Tourism Economy

The tourism activities in Kecamatan Siak have a very positive impact or have many benefits in the economic field for the community. The benefits that have the highest value was strongly agreeing to increase the existence of local businesses due to tourism activities in Kecamatan Siak. The negative impact of tourism activities on the economic sector with the highest value was that there would be an increase in prices of local goods and basic goods due to tourism activities in Kecamatan Siak. The Table 5 shows the total score, percentage and economic impact categories of tourism in Kecamatan Siak.

4.3 Impacts on Tourism Culture

Tourism activities in Kecamatan Siak have a very positive impact or have many benefits in the cultural field for the community. The highest value of benefits was strongly agreeing to increase tourism HR due to tourism activities in Kecamatan Siak as shown in Table 6.

5 CONCLUSION

The negative impact of tourism activities on the cultural field with the highest value was agreeing on the occurrence of consumptive lifestyle due to tourism activities in Kecamatan Siak. The table 6 shows the total score, percentage and cultural impact categories of tourism in Kecamatan Siak. Employment, increase in Tourism Human Resources, increase in encouragement to preserve the environment, increase in encouragement to preserve traditional culture, etc. The negative impacts such as increase in social deviations such as promiscuity (commercial sex), drug use and destruction of tourist attractions, increase in prices of local goods and basic goods, consumptive life patterns.

Table 6: Impact of tourism in Kecamatan Siak on culture.

Indicators	Total Score	Percentage	Category
Positive Impacts			
1. There has been an increase in the maintenance of cultural monuments due to tourism activities in Kecamatan Siak.	1473	77%	Agree
2. There has been an increase in encouragement to preserve traditional culture due to tourism activities in Kecamatan Siak.	1599	84%	Strongly Agree
3. There has been an increase in encouragement to preserve the environment due to tourism activities in Kecamatan Siak.	1633	85%	Strongly Agree
4. Cultural exchanges occur due to tourism activities in Kecamatan Siak.	1424	74%	Agree
5. There has been an increase in cultural creativities and innovations due to tourism activities in Kecamatan Siak.	1587	83%	Strongly Agree
6. There has been an increase in Tourism Human Resources due to tourism activities in Kecamatan Siak.	1683	86%	Strongly Agree
Negative Impacts			
1. There has been a disturbance of the Culture and Religious System due to tourism activities in Kecamatan Siak.	887	46%	Quite Agree
2. There has been commercialization due to tourism activities in Kecamatan Siak.	1044	54%	Quite Agree
3. There has been consumptive life patterns due to tourism activities in Kecamatan Siak.	1285	67%	Agree
4. There has been the disruption of the environment due to tourism activities in Kecamatan Siak.	1128	59%	Quite Agree
5. There has been an occurrence of cultural pollution due to tourism activities in Kecamatan Siak.	989	52%	Quite Agree

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REFERENCES

Akil, S. (2002). *Implementasi Perencanaan Pariwisata Dalam Perspektif Penataan Ruang*. Obor. Jakarta.

Cohen, E. 1984. *The Sociology of Tourism: Approeches, Issues, and Finding*, 10.

Foster, D. (2000). *First Class: An Introduction to Travel and Tourism*. PT.

Geriya, I. W. (2004). *Dampak Kebudayaan Pariwisata*. PT, Peranan dan Dampak Pariwisata Pada Perekomonian Indonesia.

Heriawan, R. (2004). *Peranan dan Dampak Pariwisata Pada Perekomonian Indonesia: Suatu Pendekatan Model I-O dan SAM*. Disertasi Institut Pertanian Bogor. Bogor.

Irianto (2011). *Dampak Pariwisata Terhadap Kehidupan Sosial Ekonomi Masyarakat di Gili Trawangan Kecamatan Penenang*. Kabupaten Lombok Utara.

Kodhyat, H. (1982). *Peran Pariwisata*. Gramedia Pustaka Utama. Jakarta.

Kurniawan, W. (2015). *Dampak Sosial Ekonomi Pembangunan Pariwisata Umbul Sidomukti Kecamatan Bandungan Kabupaten Semarang*.

Mill (2009). *Robert Christie dan Morrison*. Dampak Negatif dan Positif Pariwisata.

Pitana, E. C. and Gede, I. (2009). *dan I Ketut Surya Diarta*. Pengertian Ilmu Pariwisata.

Subadra (2006). *I Nengah dan Nyoman Mastiani Nadra*. Dampak Ekonomi, Sosial-Budaya dan Lingkungan Pengembangan Desa Wisata di Jatiluwih Tabanan.

(WTO), W. T. O. (1980). *Social and Cultural Impact Of Tourist Movement*. Madrid.

Yoeti, O. A. (2006). *Pengantar Ilmu Pariwisata*. Bandung: Angkasa Adiksukarko.

The Future of Democracy in Digital Era: Challenges to Political Life in Cyberspace in Indonesia

Auradian Marta[1] and Leo Agustino[2]

[1]*Department of Government Studies, Universitas Riau, Indonesia*
[2]*Department of Public Administration, Universitas Sultan Ageng Tirtayasa, Indonesia*
auradian_unri@yahoo.com, leoagustino@gmail.com

Keywords: Democracy, Digital Era, Political Life, Cyberspace, Indonesia

Abstract: The development of technology and information has an impact on a country's political and democratic life. Social media becomes an arena in voicing various thoughts and opinions. This paper seeks to explain the challenges of political life in cyberspace in Indonesia. This study uses qualitative research methods with case study design. The data collected comes from books, research journals, reports, and articles in mass media and online media. The findings of this study indicate that the challenges of political life in cyberspace in Indonesia are political culture in Indonesia which is not yet ready to face freedom and information disclosure and technology; non-democratic regime; and Media decadence. The conclusion in this study is the challenge of political life in cyberspace in Indonesia if it cannot be dealt with well, then the future of democracy is the deficit.

1 INTRODUCTION

The wave of reforms in Indonesia in 1998 has brought about a change of democratization with guaranteed rights to express opinions, gather and organize. However, during the 21 years of the journey of reform and democratization in Indonesia, the main political life of freedom of opinion in Indonesia is currently experiencing quite alarming problems. (Intelligence,) report states that Indonesia was the worst-performing country in 2017, falling by 20 places in the global rankings from 48 to 68 positions after its score declined from 6.97 to 6.39. This report from The Economist is in line with the results of research from the Central Statistics Agency (BPS) (2018) which issued the Indonesian Democracy Index (IDI) in 2017 which explained that there was a significant decrease in freedom of opinion in 2017 compared to 2016 which was 6.20 from 72.17 to 65.97. Furthermore, freedom of assembly and association also decreased from 3.63 from 82.79 to 79.16 (Indonesia, 2017).

The development of democracy cannot be separated from the development of technology and information, especially the use of social media very rapidly. Through the development of social media, the public sphere has become very open and sometimes very difficult to limit. This freedom is the effect of the digitalization era which can affect the ongoing democratization in Indonesia.

The study of democracy in Indonesia has been explained and explored by political scientists with various focus studies such as the first, analyzing Islam, and democracy (Barton, 2010; Hamayotsu, 2011; Nasir, 2014). Second, civil society and democracy (Antlov et al., ; Marta, 2017; Mietzner, 2012). Finally, Media, internet, and democracy (Gazali, 2014; Hill and Sen, ; Tapsell, 2015). Based on the classification of studies on democracy, there are still a few who discuss the future of democracy by explaining the challenges of political life in cyberspace in Indonesia. So this study is interesting to discuss and very relevant to the ongoing democratization process in Indonesia.

Therefore, this study aims to explain the challenges of political life in cyberspace in Indonesia. The challenges of political life if not properly dealt with will have an impact on the future of democracy in Indonesia.

2 METHODS

This study uses a qualitative approach with case study research design. According to (Creswell, 2014) case studies are the design of inquiry found in many fields, especially evaluations, in which the researcher devel-

ops an in-depth analysis of a case, often a program, event, activity, process, or one or more individuals. Meanwhile, according to (Yin, 2018), A case study is an empirical method that investigates a contemporary phenomenon (the "case") in depth and within its real-world context, especially when, and may not be evident. In the context of this study, the focus of the study is to analyze the challenges of political life in cyberspace in Indonesia in the era of Joko Widodo and Jusuf Kalla's administration. This is due to the strengthening of the phenomenon of threats to freedom and political rights in that era. This is very contradictory to the rapid development of digitalization.

Data collection in this study comes from documentation and archival records such as books, research journals, reports, data surveys, and articles in mass media and online media. The strength of the data collection technique according to (Yin, 2018) is stable, unobtrusive, specific, and broad. Data collected from various sources are then analyzed using approaches and theories that are relevant to the research and produce research conclusions.

3 RESULT AND DISCUSSION

Today's digitalization of democracy has spread and the Indonesian state is one of those faced with this condition. Digital democracy is also called virtual democracy, E-democracy or cyberdemocracy. Digital democracy as a practice of democracy without limits of time, space and other physical conditions, using information and communication technology (ICT) or computer communication (CMC) instead, as an addition, not a replacement for the traditional "analog" of political practices (Hacker and van Dijk, 2000). Based on these explanations, the use and development of ICT or CMC through cyberspace has an impact on democracy and democratization with the opening of the public sphere for the public to convey their aspirations.

However, it cannot be denied that digitalization also presents a challenge to political life that influences the future of democracy towards the consolidation of democracy. The challenges of political life in cyberspace in Indonesia that can determine the future of democracy in Indonesia include the first, the community's political culture that is not ready for the digitalization of democracy. According to (Almond and Verba,) democracies are only able to persist in they enjoy political culture which is congruent to and supportive of its democratic structures. Furthermore, it was stated that political culture that supports democracy is called civic culture which is understood as attitudes and behavior citizens. Meanwhile, (Klingemann et al., 2006) state that political culture is a multitude of political attitudes and behavior.

Indonesia is a unique country with a diversity of ethnic groups that gave birth to a plurality of people. This will indirectly lead to regional ties or primordialism. The primordialism culture that has existed since long ago has persisted into the digital era. This culture will later become anti-democratic. Political reforms have not brought too much change to the political culture in Indonesia. The political system that has been successfully built has only arrived at a form of pseudo-democracy; on the basis of this level of institutional change that has not been supported by changes in the level of political culture (Culla, 2018).

The form of primordialism and identity politics can be seen clearly during the General Elections, especially the Election of the President and Vice President in 2019. The results of the University of Indonesia's Center for Political Studies (Puskapol) reveal that the use of political buzzers has become one of the triggers of strengthening identity politics in society (Amrullah, 2019). The Puskapol research results are in line with the survey conducted by the Indo Survey and Strategy Institute (ISS) stating that ethnic, religious, racial, and intergroup (SARA) issues, as well as communism, will be increasingly used in the run-up to general elections, both regional and legislative elections and the president (Hamdi, 2019).

Furthermore, the political culture that developed in the midst of a society which contradicts the values of democracy is the development of hoaxes and speeches of hatred. The community still enjoys the euphoria of freedom of opinion which was during the New Order era something "expensive". However, the freedom to express their opinions and aspirations in the digital era today has spread in cyberspace which is very difficult to control. Hoax news and utterances of hatred will damage the threat of social capital to build democracy, namely the values of community unity and solidarity.

The second challenge for this political life in cyberspace is the non-democratic regime. (Brooker, 2013) explains that non-democratic regimes are that they show why and how a modern state might be ruled by other means than representative democracy. The Joko Widodo government used its power by curbing civil liberties and association by dissolving Hizb ut-Tahrir Indonesia (HTI). This is a serious threat to political life in Indonesia. Even (Warburton and Aspinall,) mention that Indonesian democracy has experienced regression. Civil society as a basis for democracy, but its existence is currently threatened because of the interests of the authorities.

Freedom of expression today also experiences restrictions and blocking of social media applications. The blocking of social media carried out by the government was carried out in 2017 by blocking telegram. The climax, after the 2019 Election, the blocking and temporary restrictions were made on the use of social media applications such as WhatsApp, Facebook, Twitter, and Instagram. This condition is reminiscent of the past history of the New Order which used its power to block media with the aim of maintaining its power. The difference, in the digital era today is the blocking and limitation not only of mainstream media but also on social media.

Finally, media decadence, (Keane, 2013) states that democratic potential is threatened by the troubling growth of media decadence. Furthermore, it was explained that media decadence is a reference to the wide gap that is opening up between the rosy ideals of free and fair public contestation and chastening of power. Free and independent media are fundamental elements and have a contribution to democracy and democratization. The freedom of the press as a reform agenda has not been successful and continues to be championed in the digital era today. The current mainstream media has become a tool of authority rather than as a bridge between the ruler and society. In fact, mainstream media has become partisan of the government rather than as an agent to convey the aspirations of citizens. This is of course inversely proportional to the role of media in the democratic era, namely as a watchdog and government monitoring (Coronel, 2003).

The impact of public distrust on this mainstream media, the community tries to find information and channel their thoughts on social media. This freedom in cyberspace is used as a public sphere and is a hope for the community in politics and democracy.

The challenges of political life faced in leading digital democracy in Indonesia, if not managed properly, will have an impact on democratic deficits. Deficit Democracy lacks the most important check on abuse of power: informed citizenry resolutely defending their rights and liberties (Bovard, 2005). This will have a broad impact on the emergence of divisions, political polarization, and weak law enforcement which are entirely contrary to democratic values.

4 CONCLUSION

The development of technology and information through cyberspace has brought changes to all joints of life including in political life and the course of democracy in Indonesia. Indonesia began a new chapter in political life in cyberspace which was full of challenges.

The biggest challenge for political life and democracy in Indonesia is the political culture in Indonesia which is not ready to face freedom and openness to information and technology, non-democratic regimes, and media decadence. These three things are interrelated with one another, thus adding to the complexity of democratization in Indonesia. This challenge must be faced seriously so as not to contribute to the retreat of democracy in Indonesia so that it experiences a deficit democracy.

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REFERENCES

Almond, G. A. and Verba, S. *1963*. The civic culture: Political attitudes in five western democracies.

Amrullah, A. (2019). *Buzzer Politik di Medsos Peruncing Politik Identitas*. Retrieved from https://www.republika.co.id/berita/nasional/politik/ pnr7gx438/buzzer-politik-di-medsos-peruncing-politik-identitas.

Antlov, H., Brinkerhoff, D. W., and Rapp, E. 2010. *Civil society capacity building for democratic reform: Experience and lessons from Indonesia. Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 21(3):417–439.

Barton, G. (2010). Indonesia: Legitimacy. *secular democracy, and Islam. Politics & Policy*, 38(3):471–496.

Bovard, J. (2005). *Attention deficit democracy*. Macmillan.

Brooker, P. (2013). *Non-democratic regimes 3th ed*. Macmillan International Higher Education.

Coronel, S. (2003). *The role of the media in deepening democracy*. NGO Media Outreach: Using the.

Creswell, J. W. (2014). *Research design: qualitative*. Sage Publications.

Culla, A. S. (2018). Demokrasi dan Budaya Politik Indonesia. *Sociae Polites*, 5(23):68–79.

Gazali, E. (2014). Learning by clicking: An experiment with social media democracy in Indonesia. *International Communication Gazette*, pages 425–439.

Hacker, K. L. and van Dijk, J. (2000). *eds.* Digital democracy: Issues of theory and practice.

Hamayotsu, K. (2011). The end of political Islam? A comparative analysis of religious parties in the Muslim

democracy of Indonesia. *Journal of Current Southeast Asian Affairs*, 30(3):133–159.

Hamdi, I. (2019). *Mengapa Politik Identitas Marak di Pemilu? Ini Kata Survei..* Retrieved from https://nasional.tempo.co/read/1069525/mengapa-politik-identitas-marak-di-pemilu-ini-kata-survei/full&view=ok/.

Hill, D. T. and Sen, K. 2000. *The Internet in Indonesia's new democracy. Democratization*, 7(1):119–136.

Indonesia, B. P. S. B. (2017). *2018*. Indeks Demokrasi Indonesia (2017). Jakarta: Badan Pusat Statistik (BPS) Indonesia.

Intelligence, T. E. U. 2018. *Democracy Index.*

Keane, J. (2013). *Democracy and media decadence*. Cambridge University Press.

Klingemann, H. D. F., D., F., S., and Zielonka, J. (2006). Introduction: Support for democracy and autocracy in central and eastern Europe. In *Democracy and political culture in Eastern Europe*, pages 1–22. Routledge, London and New York.

Marta, A. (2017). State and community organization in indonesia. In *International Conference on Democracy, Accountability and Governance (ICODAG 2017).*

Mietzner, M. (2012). Indonesia's democratic stagnation: anti-reformist elites and resilient civil society. *Democratization*, 19(2):209–229.

Nasir, M. A. (2014). The ulama, fatawa and challenges to democracy in contemporary Indonesia. *Islam and Christian-Muslim Relations*, 25(4):489–505.

Tapsell, R. (2015). Platform convergence in Indonesia: Challenges and opportunities for media freedom. *Convergence*, 21(2):182–197.

Warburton, E. and Aspinall, E. *2017*. Indonesian democracy: from stagnation to regression?

Yin, R. K. (2018). *Case study research and applications: design and methods 6 th ed*. Sage Publications.

Developing a Model to Improve Human Resources Performance based on Islamic Perspectives: A Case Study among Lecturers of Islamic University of Riau, Indonesia

Zulfadli Hamzah[1], Astri Ayu Purwati[2], Hamzah[3], Muhammad Arif[4] and Muhammad Luthfi Hamzah[5]

[1]*Departement of Sharia Banking, Universitas Islam Riau, Pekanbaru, Indonesia*

[2]*Departement of Management, School of Business, Pelita Indonesia, Pekanbaru, Indonesia*

[3]*Departement of Islamic Studies, Universitas Islam Riau, Pekanbaru, Indonesia*

[4]*Departement of Islamic Economy, Universitas Islam Riau, Pekanbaru, Indonesia*

[5]*Department of Information System, State Islamic University of Sultan Syarif Kasim, Pekanbaru, Indonesia*

zulfadlihamzah@fis.uir.ac.id, astri.ayu@lecturer.pelitaindonesia.ac.id, hamzah@fis.uir.ac.id, muhammadarif@fis.uir.ac.id, muhammad.luthfi@uin-suska.ac.id

Abstract: Islamic University of Riau is an Islamic Organization that has noble goals listed in Catur Dharma (Education, Research, Community Service and Da'wah Islamiyah). The Culture of Islamic Organization is very essential to support Lecturers' performance in the Islamic University. Thus, every lecturer in Islamic University of Riau should possess Islamic Leadership, Islamic Work Motivation, and Islamic Work Ethics to support the realization of the Culture of Islamic Organization. This study applied a quantitative method in which the data were collected through a questionnaire. The population of this study was all permanent lecturers at the Islamic University of Riau, while the number of samples in this study was 200 people using random sampling technique. The hypothesis testing was utilized by using SEM (Structural Equation Modelling) with the AMOS 4 program. The results of this study found that there was no significant influence of Islamic leadership towards the culture of Islamic organization. However, this study revealed that there was a significant influence of Islamic work ethic on the culture of Islamic organization. Besides, Islamic leadership existed in UIR could affect Lecturers' performance as a whole; Islamic motivation influenced the performance of Lecturers of UIR; Islamic work ethic had a significant influence on the performance of Islamic University of Riau; and the culture Islamic organization had an influence on the performance of Lecturers of UIR. This research suggested the authority of Islamic University of Riau to always enhance the Culture of Islamic Organizations in order to improve the Lecturers' Performance at Islamic University of Riau.

1 INTRODUCTION

Islamic University of Riau is one of the organizations in education field that is based on Islam as the main foundation in every organizational process. One of the goals of Islam is stated in CATUR DHARMA Higher Education which consists of Education and Teaching, Research, Community Service and Islamic Da'wah so that this results in an advantage for UIR where the campus life is surrounded by Islamic environment such as Muslim dress and smoke free, clean and tidy, and comfort work and study. In addition, the curriculum in higher education is not only following the development of science and technology,

but also supported by the values of Islamic da'wah in each subject in order to establish intelligent, empathetic, religious, sincere and trustworthy (CERIA) characters. Therefore, the output produced is alumni who are competent in accordance with each of the disciplines and have Islamic insights.

Leadership factors play an important role in bringing success to an organization. A good leader must be able to create a conducive organizational culture so that the organization's vision can be achieved and the mission can be carried out. This is in accordance with the results of a study conducted by Abbasi et al. (2010) which showed that leadership, as the main model, and people who have direct and indirect in-

fluence over others are the main elements in shaping organizational culture and employee performance. In the Islamic perspective, a leader must administer and be responsible for the mandate given to him based on the Qur'an and Hadist. In addition, an Islamic leader must also be able to create an organizational culture that is based on Islam in order to improve employees' performance.

Work motivation is also a major factor in shaping organizational culture which will also improve employee performance. It is similar to the research conducted by (Satriyani, 2015) in which Islamic work motivation has a positive and significant effect on the Performance of BPRS Saka Dana Mulia Kudus Employees. This means that the higher the motivation given, the higher the Employees' performance is. On the other hand, the lower the motivation given, the lower the employee's performance is. In the perspective of Islam, all activities performed in this world, including work, are not only to fulfill the needs in this world but also to fulfill the needs in the hereafter. Thus, it implies that the Islamic work motivation is not only material but also spiritual.

Work ethic possessed by employees also enables the institution to shape its organizational culture which will ultimately improve the employees' performance. A study conducted by (Kusumawati, 2015) quantitatively obtained the results that there is a positive influence between Islamic work ethic on Islamic work behavior or the performance of lecturers and employees of Sultan Agung Islamic University, Semarang. In the view of Islam, a Muslim is required to have an Islamic work ethic in working; a Muslim is required to always work hard, be productive, creative and innovative to demonstrate better performance.

2 LITERATURE REVIEW

2.1 Leadership in Islam

An Islamic leadership is an ideal leader who has the knowledge sourced from Al-quran and hadith, and also Islamic literature (such as faith, infaq, fasting and so on) as the main principal. According to (Mujiono, 2005), the leadership in Islam is a leader who performs human functions as a caliph on earth that must be based on the Qur'an and hadith. Hence, it can be concluded that the style of Islamic leadership is the way of leading demonstrated by a leader who can maintain his mandate and responsibility to his members and Allah SWT based on the Qur'an and hadith.

The indicators of Islamic leadership style according to (Hakim, 2012) are:

- Shiddiq / Honesty
- Amanah / Trust
- Fathanah / Smart
- Tabligh.

2.2 Motivation

Motivation comes from "motive" or in Latin known as "movere", which means "to mobilize". Martoyo in Erqoni (2008) states that motive or encouragement is an impulse that becomes the reason of someone for doing something or working. A highly motivated person is a person who demonstrates substantial efforts to support the production goals of his working units and the organization in which he works. On the other hand, an unmotivated person only performs minimum efforts in working. Thus, motivation or motivation means giving motives, producing motives, or things that creates encouragement, or circumstances that arises encouragement. It can be said that motivation is a process that begins with physiological or psychological deficiencies that drive the behavior or impulse to achieve goals or incentives (Luthans, 2006).

In Islam, work motivation also fulfills not only a living but also the obligation to worship Allah after other services. The indicators of motivation in Islam, according to (Anisah, 2014), include: Motivation of aqeedah, motivation for worship and motivation of muamalah.

2.3 Islamic Work Ethic

Work ethics can be interpreted as attitudes and views on working, working habits, characteristics or traits regarding the workings of a person, a group of people, or a nation. Meanwhile, the meaning of the Islamic work ethic, according to (Asifudin, 2004), is the character and habits of humans with regard to work, reflected from the system of faith / Islamic aqeedah which is a fundamental attitude towards Allah. (Tasmara, 2002) asserts that the Islamic work ethic is the earnest efforts accomplished by mobilizing all of the assets, thoughts, and remembrance to actualize or reveal the meaning as a servant of God who must subjugate the world and become as a part of the best society (khairul ummah). In other words we can also say that man can only humanize himself by working. It can be concluded that the Islamic work ethic is the attitude, character and work habits that is reflected from the system of faith / Islamic aqeedah to reveal the meaning of himself as a servant of Allah who must subdue the world and place himself as part of the best society (khairul ummah).

Indicators of the Islamic work ethic, according to (Asifudin, 2004), are: Active and likes to work hard, Eager and economical, Diligent and professional, Efficient and creative, Honest, disciplined and responsible, Independent, Rational and has a vision far ahead, Confident but able to cooperate with others, Simple, steadfast and persistent, Physically and mentally healthy.

2.4 Organizational Culture

Islamic organizational culture applied will lead to an Islamic perspective in a certain culture in order to provide a foundation or basis to make forms and methods that need to be held collectively through an organization, making calls or invitation for someone (leader) to follow the teachings and rules inside the organization. According to the (Mesjid, 2018), quoted from Immasjid.com, Islamic organizations are institutions or organizations that preach in Islam to carry out da'wah activities originating from the Qur'an and Sunnah of the Prophet Muhammad SAW with strategies, programs, Islamic-based activities and Islamic developments that have principles, objectives, vision, mission and values. Then, (Denison and Mishra, 1995) formulate the indicators of organizational culture as follows:

- Involvement
- Consistency
- Adaptability
- Mission

2.5 Performance

Performance is related to the process of performing one's duties in accordance with their responsibilities. This performance includes employees' achievement to set working goals, achieving the goals, ways of working, and personal characteristics of employees. John Bernadin (1993) states that there are six characteristics used to measure the extent of individual employee performance:

- Quality Quantity
- Punctuality
- Effectiveness
- Independence
- Working Commitments

3 RESEARCH METHODOLOGY

3.1 Population And Sample

Population is a generalization area consisting of objects or subjects that have certain qualities and characteristics determined by researchers, to be studied and draw the conclusions. So the actual population is not only people but also objects or subjects along with their characteristics. The population in this study was 583 lecturers in the Islamic University of Riau. The sample was selected based on the opinion of (JFJ et al., 1998) who state that if the number of variables is 5, the minimum sample size taken is 200 samples.

3.2 Techniques of Data Analysis

3.2.1 Validity Testing

Validity testing is used to measure the validity of a questionnaire. A questionnaire is valid if it consists of questions that can reveal something that will be measured by the questionnaire. If the loading factor > 0.50 it can be said valid.

3.2.2 Reliability Testing

Reliability testing is intended to measure the level of consistency of research instruments. In this study, the reliability was tested through Confirmatory Factor Analysis, and if the Cronbach's alpha value is greater or equal to 0.60, it means that the instrument is reliable.

3.2.3 Hypothesis Testing

Hypothesis testing is conducted by using SEM (Structural Equation Modeling) with the AMOS 4 program. SEM analysis techniques have several steps that can be described as follows:

- Developing a Model Based on Theory
- Arranging a Path Chart
- Selecting the Model Input and Estimation Matrix
- Assessing the Identification of Structural Models
- Assessing the Criteria for Goodness-Of-Fit
- Model Interpretation and Modification

Data analysis method is used to process the research results in order to obtain a conclusion. By looking at the theoretical framework, the technique of data analysis applied in this research is quantitative analysis using the SEM (Structural Equation Modeling) model or the AMOS program.

Table 1: The Result of Validity and Reliability Testing

Variable	Symbol	Correlation	Cronbach's Alpha	CR	AVE
Islamic leadership	X1.1	0.808	0.825	0.787	0.555
	X1.2	0.811			
	X1.3	0.802			
	X1.4	0.800			
	X1.5	0.822			
	X1.6	0.823			
	X1.7	0.816			
	X1.8	0.818			
	X1.9	0.789			
	X1.10	0.805			
Islamic Motivation	X2.1	0.716	0.713	0.763	0.635
	X2.2	0.694			
	X2.3	0.715			
	X2.4	0.696			
	X2.5	0.693			
	X2.8	0.709			
	X2.9	0.695			
	X2.10	0.712			
Islamic Work Ethics	X3.2	0.772	0.786	0.71	0.551
	X3.3	0.766			
	X3.4	0.765			
	X3.5	0.77			
	X3.6	0.745			
	X3.7	0.744			
	X3.8	0.762			
	X3.9	0.785			
	X3.10	0.776			
Islamic Organizational Culture	Y1.1	0.811	0.804	0.798	0.602
	Y1.2	0.8			
	Y1.3	0.773			
	Y1.4	0.787			
	Y1.5	0.778			
	Y1.6	0.761			
	Y1.7	0.76			
Performance	Y2.1	0.812	0.824	0.798	0.535
	Y2.2	0.812			
	Y2.3	0.819			
	Y2.5	0.829			
	Y2.6	0.807			
	Y2.7	0.813			
	Y2.8	0.813			
	Y2.9	0.817			
	Y2.10	0.814			
	Y2.11	0.803			
	Y2.14	0.806			
	Y2.15	0.802			

4 FINDING AND DISCUSSION

4.1 Validity and Reliability Testing

In order to obtain valid data, firstly the data were analyzed through a test using a program. Through the validity testing with SPSS 19.0 program, it was revealed that if r count $>$ r table = Valid and r count $<$ r table = Invalid. Meanwhile, reliability testing was used to determine whether the indicators used were trusted or reliable as a variable measuring instrument. The pur-

pose of being reliable is to obtain the consistency of the results of the measurements if a re-measurement of the same object is carried out. The reliability of an indicator can be seen from the value of cronbach's alpa (α). If the value of cronbach's alpa (α) is greater than 60 0.60, the indicator is reliable, whereas if the value of cronbach's is negligible (α) smaller than $\leq$ 0.60, the indicator is considered unreliable. The results of the validity test and complete reliability test can be seen in Table 1 as follows:

Validity testing was applied to measure the accuracy of survey instruments to measure the respondents' perceptions. Correlation test was used to measure the validity of the survey instrument. The results of the correlation test of all indicators were more than 0.600 with a p-value of 0.000. The limit of validity testing is 0.600 (JFJ et al., 1998). It can be said that all indicators, for the construct Islamic management principle, Islamic motivation, Islamic work ethic, Islamic organizational culture and performance were valid. Then, confirmatory analysis was applied to measure the convergent validity of the loading factor known as average variance extracted (AVE) of the construct. The results of the AVE of this analysis were all above 0.500 while the limit allowed in testing AVE is 0.500 (Hair et al., 1998), so that all indicators and constructs were worthy to be used in this study.

After that, construct reliability was used to measure the consistency and stability of the indicators in contributing to the construct. The construct reliability results are shown in Table 4. The construct reliability results obtained by all constructs were more than 0.900, even though the limits were set at only 0.70 (JFJ et al., 1998). The same thing was also obtained by using Cronbach's Alpha which value for all constructs is also more than 0.900. The limits allowed in reliability testing are 0.70 (JFJ et al., 1998). Thus, all constructs were reliable. From the results of this test, it can be concluded that the survey instruments used were feasible to be used in this analysis.

4.2 Goodness of Fit Test

The steps that must be done before assessing the feasibility of the structural model is to assess whether the data processed meets the assumptions of structural equation models. Assessing goodness of fit is the main goal of SEM to find out to what extent the hypothesized model is "fit" or matches the data sample (Ghozali, 2011). The results of goodness-of-fit are shown in the table below:

In this study, eight criteria were implemented to analyze the model, consisting of chi-square, Goodness of Fit Index (GFI), Adjusted Goodness of Fit In-

Table 2: Goodness of fit test

Goodness of Fit Test	Cut-Off*	Result	Decision
Chi-Square		170.002	
Probability	≥ 0.05	0	Marginal
GFI	≥ 0.90	0.897	Marginal
AGFI	≥ 0.90	0.837	Marginal
TLI	≥ 0.90	0.933	Fit
CFI	≥ 0.90	0.951	Fit
NFI	≥ 0.90	0.916	Fit
IFI	≥ 0.90	0.952	Fit
RSMEA	0.05-0.08	0.079	Fit

dex (AGFI), Tucker Lewis Index (TLI), Comparative Fit Index (CFI), Normed Fit Index (NFI), Incremental Fit Index (IFI) and Root Mean Square Error of Approximation (RMSEA). There are five of eight criteria, namely TLI, CFI, NFI, IFI and RMSEA, that fulfill the criteria (fit). Meanwhile the other three were marginal. GFI and AGFI did not encounter the criteria limit, but with a value of 0.897 (GFI) and 0.837 (AGFI), they already approached the critical points (0.900) so that they have not reached the "not applicable" criteria or they were still acceptable. On the other hand, the value obtained for chi-square was quite large (170.002) and the probability of 0.000. This is more due to the large number of samples (n = 200) so that the probability cannot be calculated (Hair et al., 1998). Hence, based on the overall criteria used to test the goodness of fit, it can be concluded that the SEM model used in this study was good and feasible to be used for further analysis.

4.3 Path Analysis Hypothesis Testing (Path Analysis) with Analyze of Moment Structure (AMOS)

The results of hypothesis testing showed that only hypothesis 1, which stated that there was a positive influence of Islamic leadership on the culture of Islamic organizations, demonstrated insignificant result. On the other hand, other hypotheses showed significant influence

4.4 The Influence of Islamic Leadership on the Culture of Islamic Organization

The results of this study indicate that there is no significant influence between Islamic leadership on Is-

Table 3: Hypothesis Testing (Path Analysis)

Hypotesis	Exogenous Variable	Endogenous Variable	Standardized Coefficient	Critical Ratio	P- Value	Conclusion
H1	Islamic leadership	Islam Islamic Organizational Culture	0.116	1.192	0.233	Not Significant
H2	Islamic work ethic	Islam Islamic Organizational Culture	0.326	4.098	0	Significant
H3	Islamic Leadership	Performance	0.363	4.486	0	Significant
H4	Islamic Motivation	Performance	0.256	4.355	0	Significant
H5	Islamic work ethic	Performance	0.091	3.052	0.002	Significant
H6	Islamic organizational culture	Performance	0.398	3.554	0	Significant
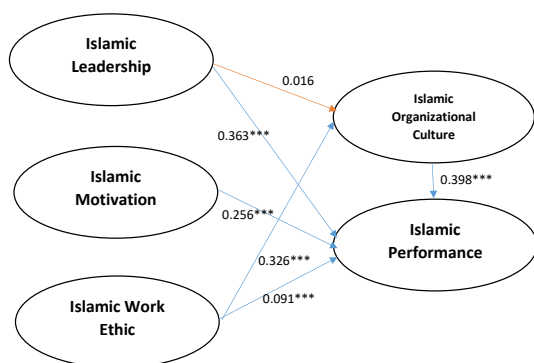
Figure 1: Results of the Hypothesis Model

lamic organizational culture. The results of respondents' test also reveal that the Islamic leadership at Islamic University of Riau generally has been in a very good category. However, the results of this study are not in line with the research conducted by (Hakim, 2012). In that research, Hakim found that there was a significant influence of Islamic leadership on the Culture of Islamic Organization. Leadership is one of the important factors to determine the working relationships between employees and organizations. (Nowack, 2004) concludes that leadership creates a dynamic vision of the organization that can

provide encouragement to have new creations and innovations. Leaders can inspire employees to have a sense of admiration, pride and loyalty so they can be motivated to do more than what is expected.

4.5 The Effect of Islamic Work Ethics on Islamic Organizational Culture

The results of this research showed that there was a significant influence of Islamic work ethic on the culture of Islamic organizations. This result was also supported by the results of the responses from lecturers at Islamic University of Riau in which the work ethic value was very good. Ethical behavior is an important system in working relationships in each organization. The results of the research conducted by (Kusumawati, 2015) showed that organizational culture can help employees with high work ethics to achieve good performance.

4.6 Effects of Islamic Leadership on Working Performance

A leader's characters and behavior reflect a process to influence the activities of organized groups to achieve goals by identifying themselves as agents of change, trusting leaders, staffs and everything involved, all of

which is done by paying attention to Islamic norms according to the Qur'an and Al-Hadith. The results of this study indicated that Islamic leadership in UIR could affect the overall performance of the Lecturers. This result is also in line with the research conducted by (Abusama et al., 2017; Hakim, 2012; Rizki et al., 2017) It implies that the quality of Islamic leadership can be implemented properly, so that it becomes better for employee performance.

4.7 Effects of Islamic Motivation on Working Performance

The results of this study showed that Islamic motivation influenced the working performance with an average response value that was very good. This is in line with the research conducted by (Abusama et al., 2017) which found that as an interesting area for researchers regarding their contribution to companies, work motivation is defined as a driver to improve organizational performance (Dwivedula et al., 2015). When an individual is very motivated to complete tasks and accept challenging jobs, he will take the initiative to complete the work. As a result, his performance in the workplace will contribute to provide the best for the organization.

4.8 Effects of Islamic Work Ethics on Working Performance

The Islamic work ethic is a "dedication to work" as a policy. Islamic Work Ethics is an obligation of people who are able to make enough effort in work. In order to avoid mistakes and overcome the obstacles, cooperation and consultation is highly recommended. After that, social relations at work are strongly encouraged to manage the individuals and social life,. Working is a means to build self-identity, freedom, respect, personal growth, and satisfaction, in which working creativity is seen as a source of noble achievement and happiness. In this study, Islamic work ethic gives a significant influence on the performance of Lecturers in the Islamic University of Riau. This result is in line with research conducted by (Hadisi, 2014; **?**) who found that when employees have a high Islamic work ethic, it will improve the employees' performance.

4.9 Effect of the Culture of Islamic Organization on Working Performance

The results of this research revealed that the culture of Islamic organization had an influence on the performance of UIR Lecturers. This is in line with the findings of the research conducted by (Hakim, 2012). He found that the perspective of Islamic organizational culture that can improve working performance consists of any values, thoughts, and symbols based on Islamic norms that influence a person's behavior, attitudes, beliefs and habits in a certain journey of life. The success of the Prophet Muhammad in developing a conductive working atmosphere was caused by his attitude of feeling sorry for others as stated (Qur'an 3: 159). The success of the Prophet Muhammad in developing a conductive working atmosphere was caused by his attitude of feeling sorry for others as stated (Qur'an 3: 159). Here, Islamic teaching combines the culture and profession.

5 CONCLUSION AND SUGGESTION

5.1 Conclusion

Based on the data description presented in the Research Results and Data Analysis previously, some conclusions can be drawn from the results of the research relating to Developing a Model to Improve Human Resource Performance Based on Islamic Perspective (A Case Study among lecturers of Islamic University of Riau); they are as follows:

- Islamic Leadership does not affect the Culture of Islamic Organizations. This means that Islamic Leadership does not need to be taken seriously in order to improve the Culture of Islamic Organizations because it does not influence at all.

- The Islamic Work Ethic influences the Culture of Islamic Organizations. This means that the Islamic Work Ethic is very essential to be possessed by all lecturers of the Islamic University of Riau to improve the Culture of Islamic Organizations.

- Islamic leadership influences the lecturers' performance in the Islamic University of Riau. This means that Islamic leadership is very much needed to improve the performance of lecturers in Riau Islamic University.

- Islamic motivation has a positive and significant effect on the lecturers' performance at the Islamic University of Riau. This means that the changes occured in the lecturers' performance at the Islamic University of Riau are much influenced by Islamic Motivation. If you want to improve the lecturers' performance at Islamic University of Riau, Islamic Motivation needs to be improved.

- Islamic Work Ethics influences the lecturers' performance at the Islamic University of Riau. This means that the changes occured in the lecturers' performance at the Islamic University of Riau are also much influenced by the Ethics of Islamic Work. If you want to improve the performance of Riau Islamic University Lecturers, you need to improve the Ethics of Islamic Work.

- Islamic Organizational Culture influences the Performance of Lecturers at the Islamic University of Riau. This means that the changes that occur in the performance of the Lecturers of the Islamic University of Riau are also much influenced by the Culture of Islamic Organizations. If you want to improve the lecturers' performance at the Islamic University of Riau, you need to improve the Culture of Islamic Organization.

5.2 Suggestion

To add to the perfection of the research activities, researchers provide some suggestions as follows:

- For Islamic University of Riau, it is suggested to improve the existing Islamic Organizational Culture in order to improve the lecturers' performance at the Islamic University of Riau.

- For other researchers, it is expected that this research can be a reference for conducting more indepth research on the Culture of Islamic Organization and the Lecturers' Performance at Islamic University of Riau from all aspects.

REFERENCES

Abusama, M., Haming, M., and Hamzah, M. N. (2017). Effect of motivation, competence and islamic leadership on job satisfaction and teacher performance in vocational high school. *IOSR Journal of Business and Management (IOSR-JBM)*.

Anisah, S. (2014). *Pengaruh Motivasi Islami dan Pelatihan Kerja Terhadap Kinerja Karyawan di BMT Harapan Umat Kudus*. Skripsi Jurusan Syariah dan Ekonomi Islam di Sekolah Tinggi Agama Islam Negeri Kudus.

Asifudin, A. J. (2004). *Etos Kerja Islami*. Penerbit Universitas Muhammadiyah Surakarta.

Denison, D. and Mishra, A. (1995). *Toward Of Organizational Culture And Effectiveness*. Organization Science.

Ghozali, I. (2011). *Aplikasi Analisis Multivariate Dengan Program SPSS*. Semarang: Badan Penerbit Universitas Diponegoro.

Hadisi, M. (2014). *The Effect of Islamic Work Ethics on the Performance of Muslim Employees of Marketing Sector in Multinational*. International Journal of Organizational Leadership 3:31-40.

Hakim, A. (2012). The implementation of islamic leadership and islamic organizational culture and its influence on islamic working motivation and islamic performance PT bank muamalat indonesia tbk. *Employee in the Central Java. Asia Pacific Management Review*, 17(1).

JFJ, H., Anderson, R., RL, T., and WC, B. (1998). *Multivariate Data Analysis (Fifth edit)*. Prentice Hall Internatiional, inc.

Kusumawati, D. A. (2015). *Peningkatan Perilaku Kinerja Islami Dengan Budaya Organisasi Islami Sebagai Variabel Moderasi*. Presiding di 2nd Conference in Busineess, Accounting and Managgement.

Luthans, F. (2006). *Perilaku organisasi*. Edisi 10.

Mesjid, I. M. (2018). *Pengelolaan Organisasi Islam*. Retrieved at 25.

Mujiono, I. (2005). *Kepemimpinan dan Keorganisasian*. UII Press, Yogyakarta.

Nowack, K. (2004). *Does Leadership Practices affect a Psychologcally a healthy Workplace? Working Paper*. Consulting Tools Inc.

Rizki, F., Armanu, T., Surachman, S., and Rofiaty, R. (2017). Study on the relationship between islamic leadership style, work ethics, job satisfaction, and employee performance. *Russian Journal of Agricultural and Socio-Economic Sciences*, 61(1).

Satriyani, R. A. (2015). *Pengaruh motivasi kerja Islam, disiplin kerja dan lingkungan kerja terhadap kinerja karyawan BPRS Saka Dana Mulia Kudus*. Skripsi Fakultas Ekonomi dan Bisnis Islam di Universitas Islam Negeri Walisongo Semarang.

Tasmara, T. (2002). *Membangun Etos Kerja Islam*.

Creative Comprehension on Literacy: Technology and Visual

Miranti Eka Putri

Faculty of Education, Universitas Islam Riau, Pekanbaru, Indonesia
mirantiekaputri@edu.uir.ac.id

Keywords: Creative Comprehension, Technology Literacy, Visual Literacy

Abstract: This study aims to examine the influence of literacy technology and visual literacy on students' creative understanding in receiving extensive reading material. Mix method (sequential explanatory design) was used in this study. Quantitative data is the result of a one-shot case study in the form of a reading test with treatment mind mapping towards students' creative comprehension. While qualitative data, case studies, use observation instruments. Data processing is done by the Mann Whitney test and observation with the initial description category, process, and end of learning. The Mann Whitney test results concluded that there were mean or mean differences between the experimental group and the control group. Sig. 0.002 ¡0.05, then according to the basis of decision making it was concluded that H_0 was rejected. Rejection of H_0 implies that there are significant differences in student creative understanding in receiving extensive reading material using technology literacy and visual literacy.

1 INTRODUCTION

Literacy is an important part of language learning. Reading and writing skills are preferred aspects of literacy, but literacy is not just two skills. Abilities are related to cognitive, experience, cultural values, and others. Lowe (1998) stated that literacy can be media, networks, computers, traditional alphabet, library, culture, and vision. Beers (2009) concluded that literacy is divided into five basic, libraries, visual, media, and technology. So it can be concluded literacy a combination of various aspects lead to activities of thinking someone.

Critical understanding is an indispensable skill. Ruland (2003) states that process readers measured a universal intellectual standard including clarity, accuracy, precision, accuracy, precision, relevance, relevance, depth. Critical thinking activities can be implemented various by critically examining aspects of the text, context, and integrity of readers. Creative is also very important. According to Taxonomy Barrett divided into literal, reorganization, inferential, evaluation, and appreciation. It explains the highest level of creative thinking. Creative thinking activity requires a critical thinking process. So it can be concluded that creative thinking comes from success in thinking with critical understanding. But critical thinking may not necessarily reach understanding at the creative level (Akın et al., 2015; Yousefi and Mohammadi, 2016;

Kamalova and Koletvinova, 2016).

Currently, the gap occurs a silting thought about something against the younger generation. This happens because of a lack of interest. Facts show academically the majority have a high cumulative index. It is contrary to the results of previous research that the level of student understanding will illustrate his academic achievement. Besides, a reader must have the ability to understand lexical, literal, interpretative, applied, effective, critical, and creative.

A reliable ability academic-non-academic matters so that it can be beneficial for itself, family, and the nation-state. Habit and ability are very important because reading is a bridge to know all knowledge. But there still who not accustomed reading and do not have an ability that should have been at a critical and creative level. Where critical in question is that students can formulate critically, critically understand, apply critically, critically analyze, critically synthesize, and critically evaluate. While creative in question is the student can understand the literal reading and then interpret and give reactions in the form of an assessment of what the author said, followed by developing his thoughts to form ideas, insights, approaches, and new patterns of thought.

This research is very important to be implemented because the young generation must have a reliable reading ability to know all the science in academic and non-academic. Especially change the mindset

of students so motivated to read and generate critical thoughts, and students' creative thoughts. Based on this research is very necessary to analyze aspects of the problem in critical and creative students' understanding. So the young generation though pattern will lead to critical thinking. The study will analyze (a) is there a statistical difference in students' scores for creative comprehension levels between groups? (b) How are the students' creative comprehensions on technology literacy? (c) How are the students' creative comprehensions on visual literacy?

2 LITERATURE REVIEW

2.1 Creative Comprehension

Creative reading is the level of reading comprehension at the highest level. Readers at this level should think critically and should use their imagination. In reading creatively, readers use the results of reading to develop their intellectual and emotional abilities. That ability will be able to enrich the knowledge, experience, and increase the sharpness of the power of reasoning so that the reader can generate new ideas. The process of reading this creative according to (Syafi'ie, 1999) starts from the literal reading and then interpret and give reactions in the form of an assessment of what the author said, followed by developing his own thoughts to form ideas, insights, approaches, and patterns - new thought patterns.

2.2 Technology Literacy

Technology Literacy is the ability to use technology to get information that needed. Variation in using technology literacies are reading the website, using a search engine, use map, access video, researching on the internet, email, chatting, SMS, microblogging use social sites, visiting cyberspace, blogging and using a wiki, use message boards, newsgroups, and VOIP (Skype).

2.3 Visual Literacy

Visual Literacy is a combination of development from various perspectives and abilities. In perspective, visual literacy consists of theoretical, visual language, and presentation. While on the principle of ability, visual literacy is the basis of the development of oral language; student interaction with objects, pictures, body language; the basis of student interaction with diversity of objects, images, body language; and the

involvement of students in learning by creating objects, images and gestures (Biemiller, 2003; Pardo, 2004). In grouping visual literacy is divided into visual thinking, visual learning, and visual communication (Pressley, 2001; Scharer et al., 2005). Furthermore, visual literacy has a component in the form of visual perception, visual language, visual learning, visual thinking, and visual communication (Snow et al., 2002; Williams, 2005).

2.3.1 Visual Mapping

Visual mapping is one of the objects and images that meet visual literacy criteria. There are six types of visual mapping, namely mind mapping, concept mapping, arguments maps (development of places or counter arguments and conclusions surrounding disputes), thinking maps (the process of thinking of students), general thinking system (looking for relationships between variables), system dynamic (developing simulation models).

3 RESEARCH METHOD

This research used a mixed method Concurrent Triangulation Design. One shot case study is used in quantitative data to show the measurement strength and scientific value of research design and qualitative used case design. The participants were 80 students of the second semester in English Language Education, Faculty of Education, Universitas Islam Riau in an extensive reading course T.A 2017/2018. Variable X, technology literacy and visual literacy through observation to find out the teaching and learning process in the class. Variable Y used the reading test to measure students' creative comprehension.

4 FINDINGS

4.1 Quantitative Data

Table 1 shows the results of the Shapiro-Wilk and Lilliefors Tests. The value of p-value (Sig) lilliefors 0.002 in the control group where <0.05 then based on the lilliefors test, the data for each group were not normally distributed. The P value of the Shapiro-Wilk test in the experimental group was $0,000 <0,05$ and in the control group $0,000 <0,05$, both groups were not normally distributed based on the Shapiro-Wilk test, so the non-parametric test (Mann Whitney Test) was used.

Table 1: Normality Test of Shapiro-Wilk and Lilliefors

Test of Normality								
		Kolmogorov-Smirnov			Shapiro-Wilk			
	Groups	Statistic	df	Sig.	Statistic	df	Sig.	
Value	Experiment	.248	40	.000	.538	40	.000	
	Control	.180	40	.002	.730	40	.000	
a. Lilliefors Significance Correction								
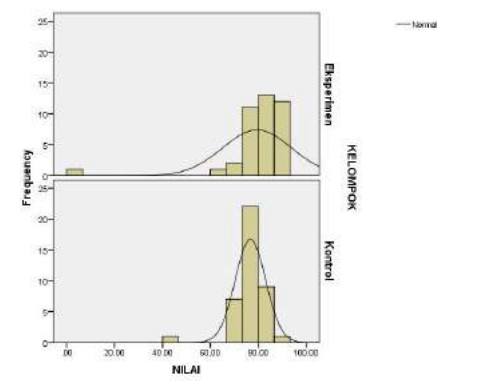
Figure 1: Data Dissemination.

Figure 1 shows that the slope and width are not the same. This shows that the form and distribution of data are not the same. Then look at the second highest peak of the histogram, it turns out it's not the same as the two, which means there are media differences. Then the first assumption of the Mann Whitney test is not fulfilled, i.e. there is no similarity in the form and distribution of data. The next assumption that will be tested is the homogeneity of variance.

Table 2: Mann Whitney Normality Test

Test of Normality								
		Kolmogorov-Smirnov			Shapiro-Wilk			
	Groups	Statistic	df	Sig.	Statistic	df	Sig.	
Value	Experiment	.248	40	.000	.538	40	.000	
	Control	.180	40	.002	.730	40	.000	
a. Lilliefors Significance Correction								

Table 2 is the result of the normality test using Liliefors and Shapiro Wilk. The second Sig (p-value) value is above <0.05, which means that the data is not normally distributed. This is true because if the data are normally distributed, it will use an independent t-test from the Mann Whitney U Test.

Table 3 shows the results of the homogeneity test using Leven's test method. Levene test is more recommended because the test can be used to test the

Table 3: Mann Whitney Homogeneity Test

Test of Homogeneity of Variance					
		Lavene Statistic	df1	df2	Sig.
Value	Based on Mean	2.996	1	78	.087
	Based on Median	2.365	1	78	.128
	Based on Median and with adjusted df	2.365	1	51.374	.130
	Based on trimmed mean	2.410	1	78	.125

homogeneity of variance in data that is not normally distributed. While other tests, namely the Fisher F test are preferred if the data are normally distributed. The Levene's Test test value is shown in the Value-based On Mean, i.e. with Sig (p-value) 0.087, 0.05 which means the variance of the two groups is the same or is called homogeneous. Then the second assumption that is homogeneity has been fulfilled. Then testing the Mann Whitney U Test hypothesis.

Table 4: Mann Whitney Test

Ranks				
	Groups	N	Mean Rank	Sum of Ranks
Value	Experiment	40	48.55	1942.00
	Control	40	32.45	1298.00
		80		

Table 4 shows the Mean Rank or average ranking of each group, that is, in the experimental group the average rating is 48.55 higher than the mean of the control group, which is 32.45.

Table 5: P-Value of the Mann Whitney Test

Test Statistics	
	Value
Mann-Whitney U	478.000
Wilcoxon W	1298.000
Z	-3.099
Asymp. Sig. (2-tailed)	.002
a. Grouping Variable: Groups	

Table 5 shows a U value of 478 and a W value of 1298. If converted to k, the value of Z is -3.099. Sig or P-Value is 0.002 <0.05. If the value of the p-value < critical limit is 0.05 then there are significant differences between the two groups or which means H1 is accepted.

4.2 Qualitative Data

Initial Learning Conditions

The first meeting of the Researcher described the extensive reading course in accordance with the learning contract and RPS that had been prepared by the study program team. In the second meeting, researchers asked students to look for narrative textbooks using literacy technology in the form of Fables, Legend, Fairytales, Myth, Folktale, Romance, Personal Experience, Horror, Science Fiction, Adventures, Historical, Slice of Live, Mysteries. The characteristics of the student's reading book must have more than 300 pages per book. The atmosphere of learning in the classroom is noisy and panic because they have to look for the book and deposit the title of the book along with the total number of pages to be read. Every student is not allowed to have the same list of titles. If students choose more than one textbook, then the student will get more values on the reading log record that has been provided. The intended reading log is a format that students use to record reading activities faithfully the day which includes the day, date, time, title of the book, page, and content. Students must be able to complete the reading with the speed of each page of the book in less than 1 minute. So if a student chooses a book with 500 pages and reads at a speed of 1 minute/page, then they have to finish it in 500 minutes meaning 8.33 hours. If the initial stage of the student can only read comprehensively with 3 minutes per page for 500 pages/book, it will take 1500 minutes with an estimated time of 25 hours to read. This must be overcome to achieve the target and expected results, which is 1 page $\leq$ 1 minute (60 seconds). Students' self-confidence in the reading process will become a problem when practicing. So that researchers must motivate students by proving the practice of speed reading in the classroom together.

Condition of the Learning Process

In the second meeting of the learning process, each student showed the reading material agreed upon at the first meeting. The researcher called one by one the names of the students and checked the material they had been looking for before. The reading material may be more than one book in the form of the e-book (technology literacy). After checking the reading material, the researcher taught the students how to reach the target of reading 1 page $\leq$ 1 minute (60 seconds). The researcher carried out the verification step according to the procedure. In 3x repetitions, students can master 1 page reading $\leq$ 1 minute (60 seconds). To measure their understanding, the researcher asked directly in accordance with the reading text that has been practiced with a limited time to be answered one by one. The situation in the classroom was suddenly quiet when the researcher and students practiced speed reading until asking questions. Until finally the Researchers proved that they could read 1 page $\leq$ 1 minute (60 seconds) by calculating the questions they had answered one by one. After it was proven that they could read 1 page $\leq$ 1 minute (60 seconds), the class suddenly became sad because new students realized that they had reliable competence. The practice of reading speed continues to be applied to 30 seconds per page. The classroom atmosphere was more melting than before. Next, they wrote down the reading schedule in the reading log and prepare themselves to recall orally and non-oral about the reading they have read and answered all the questions asked by the Researcher and other students for the third, fourth and fifth meetings. At the third, fourth and fifth meeting, one by one the students presented the results of their reading comprehension in the form of visual literacy and mind mapping. The researcher called the names of students one by one at random for presentations in front of the class. Before starting the presentation, the class selects the timekeeper to remind the presentation time limit. Each session, the researchers called seven presenters with a mechanism for the presentation time of around 5-7 minutes per student. There were several provisions when presenting, including presenters must pay attention to visual literacy, mind mapping, presentation time, and content.

The Final Condition of Learning

At the end of the learning process, the fifth meeting, the researchers found that the students' presentation of the reading was very satisfying. This was evidenced by the readiness of students to answer questions from researchers and audiences directly and spontaneously (without reading the textbook/summary). In this case, the selection and use of words and sentences when the presentation was still lacking. So that from the results of the observation it could be concluded that the understanding of the students has met creative comprehension. The researcher also found that the successes of these students were based on the motivation of the situation which seemed to force students to read. So that it affects the habits of students to read every day with the speed of reading that was once practiced in class.

5 CONCLUSIONS

The basis of decision making in the Mann Whitney Test in this study is if the value of Asymp. Sig. (2-tailed)<0.05, there is a significant difference. If the value of Asymp Sig. (2-tailed)>0.05, there is no significant difference. With the hypothesis proposed (H0) in the form of no differences in creative understanding of students in receiving extensive reading material T.A 2017/2018 by using literacy technology, visual literacy, and mind mapping. So it can be concluded that based on data from and distribution, the two groups are not the same, then the results of the Mann Whitney test concluded that there were differences in a mean or mean between the two experimental groups and the control group. Furthermore, from Table 4.6 it is known Asymp. Sig. amounting to 0.002, because of the value of Asymp Sig. 0.002<0.05, then according to the basis of decision making in the Mann Whitney Test it can be concluded that H0 is rejected. Rejection of H0 implies that there are significant differences in student creative comprehension in receiving extensive reading material for T.A 2017/2018 using literacy technology, visual literacy, and mind mapping. So, literacy technology and visual literacy are important to build the students" creative comprehension in reading.

REFERENCES

Akın, F., Koray, Ö., and Tavukçu, K. (2015). How effective is critical reading in the understanding of scientific texts? *Procedia-social and behavioral sciences*, 174:2444–2451.

Biemiller, A. (2003). Vocabulary: Needed if more children are to read well. *Reading psychology*, 24(3-4):323–335.

Kamalova, L. A. and Koletvinova, N. D. (2016). The problem of reading and reading culture improvement of students-bachelors of elementary education in modern high institution. *International Journal of Environmental and Science Education*, 11(4):473–484.

Pardo, L. S. (2004). What every teacher needs to know about comprehension. *The reading teacher*, 58(3):272–280.

Pressley, M. (2001). Comprehension instruction: What makes sense now, what might make sense soon. *Reading online*, 5(2):1–14.

Scharer, P. L., Pinnell, G. S., Lyons, C., and Fountas, I. (2005). Becoming an engaged reader. *Educational Leadership*, 63(2).

Snow, C., Sweet, A., Alvermann, D., Kamil, M., and Stricland, D. (2002). Formulating a research agenda about reading for understanding. In *Comprehensive Reading Instruction Across the Grade Levels. A collection of papers from the Reading Research 2001 Conference*, pages 88–110.

Syafi'ie, I. (1999). Pembelajaran membaca di kelas-kelas awal sd, pidato pengukuhan guru besar dalam bidang ilmu pengajaran bahasa dan seni. *Disampaikan pada Sidang Terbuka Senat Universitas Negeri Malang pada*, 7.

Williams, J. N. (2005). Learning without awareness. *Studies in Second Language Acquisition*, 27(2):269–304.

Yousefi, S. and Mohammadi, M. (2016). Critical thinking and reading comprehension among postgraduate students: The case of gender and language proficiency level. *Journal of Language Teaching and Research*, 7(4):802–807.

Character Building Construction of High School Students in Indonesia

Tohirin[1], Risnawati[2], Zubaidah Amir[2], Dicki Hartanto[3], Sohiron[4] and Ramon Muhandaz[3]

[1]*Department of Counseling, UIN Sultan Syarif Kasim, Riau, Indonesia*
[2]*Department of Mathematics Education, UIN Sultan Syarif Kasim, Riau, Indonesia*
[3]*Economic Education Department, UIN Sultan Syarif Kasim, Riau, Indonesia*
[4]*Management of Islamic Education Department, UIN Sultan Syarif Kasim, Riau, Indonesia*
tohirin09@yahoo.co.id, rwati04@gmail.com, {zubaidah.amir, dicki.hartanto, sohiron, ramon.muhan}@uin-suska.ac.id

Keywords: Character Building Construction, High School Students.

Abstract: This study was initiated based on the character problems of students in secondary schools in Indonesia that need the roles of teachers, parents and society. The research method used is descriptive analytic method with the type of case study. The sampling technique used a purposive sampling technique which was carried out in 4 cities and 4 provinces in Indonesia at the junior high school level in the city of Jambi, Medan, Pekanbaru and Bandung. The results of the study concluded that the implementation of character building by teachers conducted on students in junior high schools showed quite good results, while in senior secondary schools in Indonesia included in the fairly good category. The supporting and inhibiting factors in fostering student character are the role of parents and family, peer environment in the classroom and the environment at home, and can be inseparable from the teacher's teaching style. School stakeholders such as school headmasters, subject teachers, parents, school environment and the government need to be involved in fostering student character.

1 INTRODUCTION

The school acts as a formal educational institution that is responsible for preparing useful and productive community members. For this reason, schools are not only limited to educational programs that emphasize the academic aspect, but rather, equip them by fostering students' personalities to become individuals who are able to understand, realize and direct in the life of the community (Jauhari and Maryani, 2018).

As an educational institution, all subjects are provided by school to support learning processes. All students will get the all subject lessons based on the competences required to achieve vision and mission of the school. Certain learning subjects like Mathematics, Social, Economics, Sciences, Religion and Languages are commonly provided in each school in Indonesia.

Mathematics Learning is school material that is included in the general education curriculum (science) in education in Indonesia. General education is considered totally unrelated to "religious subjects" (Zubaidah Amir, 2019). In other words the mathematics learned at school is considered a subject that is not related to the moral values of the national cul-

ture known as moral or Islamic values. Even though good moral or moral formation also develops according to the environment around students, in this case the school environment is included in general education (mathematics).

The process of integrating Islamic values education in mathematics learning can be seen from the curriculum, media, learning resources, methods, and materials. The creation of conditions and conditions conducive to the integration of Islamic values into mathematical learning is supported by school regulations, education and education personnel, and infrastructure (Zubaidah Amir, 2019).

Moral values of Islam in school are not only the responsibility of Islamic religious education subject teachers. However, it is an obligation for all educators and education staff in the school. This means that teachers in the field of mathematics education must also play an active role in addressing the moral education of students at school. Nurul (2008) emphasized that teachers in the field of study can associate the problem of their field of study with morals. In other words, whatever field of study is involved, moral cultivation must be a goal in the learning process.

The problems of deterioration in values, morals

have become one of the problems of Indonesia's most important life in the 21st century. Many juvenile delinquency, which mimics westernism and outside Islamic values occur in society. For example, in recent times, there have often been problems with fights between students to casualties because only a matter of ridicule, sexual harassment by male students to female students that is more heart-staking is that bad behavior has been carried out by students who still in the stage of basic education.

If the causes are examined, of course there are many factors responsible in the above, including the basic factors forming from within the family, education and the school environment, the community environment, the education system in this case the curriculum, regulations and laws that apply, the role of the ulama council community leaders and there may be many other factors. Nata argues that the problem of failure in the world of education in Indonesia is due to the world of education so far that only foster intellectual intelligence, insight and skills alone, without being balanced with emotional intelligence (Nata and Abuddin, 2012).

The task of a teacher, not just transferring knowledge, but more than that is to educate, build the character of students to become dignified human beings. In this case, including mathematics teachers have the same responsibility in fostering the character / morals of students. Direct guidance in schools for students who have problems is done through a counseling process. In this case, Counseling guidance teachers have real functions and responsibilities in fostering students who have problems. These problems can be in the form of learning difficulties, and psychiatric counseling of students. One of the learning difficulties in question is in mathematics learning.

The solution offered by the government in overcoming the above problem is the creation of a character education curriculum in Indonesia. Character education in the religious language is moral education or religious value education. There are quite a lot of cultural values and national character that can be integrated in learning or education in schools. These values are: 1) religious, 2) honest, 3) tolerance, 4) discipline, 5) hard work, 6) creative, 7) independent, 8) democratic, 9) curiosity, 10) national spirit, 11) love for the country, 12) respect for achievement, 13) friendly / communicative, 14) love for peace, 15) love to read, 16) care for the environment, 17) care for the social, and 18) responsibility.

All these character values are conditional on the concept of moral values in Islam. This is also supported by the Government through the formulation of the RI National Education System Law No. 20 of 2003 article 339, which implies that the purpose of Indonesian education directs its citizens to religious life (Supari, Yossi, 2005). Mathematics subjects equip students with the ability to think logically, analytically, systematically, critically, and creatively, and the ability to cooperate. This competency is needed so that students can have the ability to obtain, manage, and use information to survive in conditions that are always changing, uncertain, and competitive.

The apprehensive character degradation lately arises in the world of education, such as cases of national examination fraud, in which the Federation of Indonesian Teachers' Unions noted structural fraud in the SMA and SMK National Exams in seven regions, namely in North Sumatra, Central Java-Brebes, Muna-Southeast Sulawesi Island, Bekasi-West Java, Pandeglang-Banten and DKI Jakarta. According to Retno Listyani as FSGI Secretary General, this data was collected from high school, vocational and MA level teachers. The fraud that occurred was already a planned structural fraud and involved students, teachers, schools and examiners (Rachmah, 2013).

(Marsigit, 2011)Marsigit (2011) suggested that the implementation of character education in mathematics learning has implications for the teacher's function as a facilitator as well as possible so students can learn mathematics optimally. Mathematics is planned not to be taught by the teacher but to be learned by students. Students are placed as the center of mathematics learning. The teacher is tasked with creating the atmosphere, providing facilities and others and the role of the teacher is more managerial than the teacher.

Counseling has the function of improvement, namely the function of guidance and counseling which will result in the fragmentation or overcoming of various problems experienced by students. This is also the same as character building which also has an improvement function, namely fixing the character of students who ultimately embody good character and potentially as dignified students (Widyaningsih, 2013).

To carry out the functions and achieve the goals of education above, the government, schools and communities certainly have a very important and strategic role. This important role is expected to run synergistically and support each other so that the achievement of the national education goals above can be realized optimally by the Indonesian people. This effort is certainly inseparable from the cultural culture and character of the Indonesian people themselves. In this case, it included cooperation between mathematics subject teachers and counseling tutors at the school.

The above suggests that the implementation of character education in mathematics learning and direct guidance by counseling teachers (BK) is expected to be the main axis in creating human resources with knowledge and science and technology insight. Thus students are expected to apply character-oriented learning, directing students to morals, morals and better behavior, can foster student interest and awareness that produce integrated intelligence (complete intelligence) between Intellectual intelligence (IQ), Emotional intelligence (EQ) , spiritual intelligence (SQ), and centered on religious intelligence (RQ). So the problem that must be discussed further is how are the efforts made by the mathematics teacher and the BK teacher in instilling character / morality with students? then how is the collaboration formed between the two teachers in achieving the above goals?

Refer to the problems, phenomena, and reality of character / moral education in the mathematics learning above, and direct guidance by the BK teacher, the researcher is very motivated to conduct a study of how the strategy, process, situation and conditions and forms of cooperation exist in real student moral development. Therefore the researcher summarizes this study with the title *"Building the High School Students' Character in Indonesia between Mathematics and Counseling Teachers."*

2 METHODS

2.1 Research Approaches and Methods

The approach used in this study is qualitative research. There is a match with the characteristics of the problem which is the reason the researchers chose this approach. Through this research, researchers want to describe and analyze strategies, processes, situations and conditions and the factors and difficulties faced in character / moral formation in mathematics learning in junior and middle school by a Mathematics teacher and Counseling Guidance teacher.

2.2 Location and Research Subjects

The research locations are junior and senior high schools in the cities of Pekanbaru, Jambi, Medan and Bandung (located in 4 provinces). The reason for choosing the location of this study is because these cities include the major cities in Indonesia. The subjects in this study were Mathematics teachers and Counseling Guidance (BK) teachers. Determination

of the subject in this qualitative research and uses purposive sampling technique (Sugiyono, 2007).

2.3 Population and Sample

The sampling technique was done by using purposive sampling which was carried out in 4 provinces (one city in each province) in Indonesia, then the school that was used as the subject of research at the junior high school level in Jambi, Bandung, Medan and Pekanbaru.

The junior high school in Jambi were SMPN 1 Jambi, SMPN 5 Jambi, while at the level of the senior high school, SMAN 1 Jambi and SMAN 5 Jambi were selected.

The school used as the subject of research at the junior high school level in Bandung were SMPN 2 Bandung and SMPN 15 Bandung, while at the high school level, they were SMAN 5 and SMAN 21 Bandung.

The schools that were selected as research subjects at the junior high school level in Pekanbaru were SMPN 23 Pekanbaru, SMPN 40 Pekanbaru, while at the high school level, SMAN 1 Pekanbaru and SMAN 12 Pekanbaru were selected.

The schools at the junior high school level in Medan were SMPN 2 and SMP Bina Bersaudara, Medan, while at the senior high school level, SMAN 2 Medan and SMAN 5 Medan and SMA Bina Bersaudara Medan were selected as sample.

2.4 Research Instruments

As a human instrument, researchers immediately become observers and readers of learning situations that were taking place. The researcher as an observer was not just seeing various events in a learning situation, but rather giving an interpretation of the situation. Whereas the researcher as the reader of the situation means that the researcher analyzes various events that occurred in the situation, then concludes so that the meaning can be explored. In this study, questionnaires were used for teachers and students.

2.5 Collection and Analysis of Data

In this study, researchers used several techniques to carry out data collection namely interviews, questionnaires, documentation and literature. Sugiyono (2014) explains that this survey technique or questionnaire is a technique of collecting data by giving a set of questions or tertiary statements to the respondent to answer. This survey or questionnaire is given to

mathematics teachers and counseling tutors and students. This survey or questionnaire is arranged in the form of questions that must be answered in the form of options (options) that ask to be chosen by the respondent in accordance with the reality that is in him.

The documentation collected can be in the form of writing, images, transcripts, books, newspapers, magazines, inscriptions, minutes of meetings, agendas, and so on. Literature studies are carried out to collect scientific data from various literatures in order to complement theoretical studies relating strategies, processes, situations and conditions and the factors and difficulties faced in character / moral formation in mathematics learning in junior and senior high schools by teachers. Mathematics and Counseling Guidance (BK) teachers. The collected data will then be investigated by the researcher so that complete data processing is achieved.

Then, the data was analized descriptively after the data was collected and recapitulated. The descriptive analysis is chosen because it can systematically describe the facts and characteristics of objects and subjects that are precisely examined.

To validate the results of the study, the data triangulation technique is used through the research instruments used, namely interview, questionnaire to teachers and students and documentation.

3 FINDINGS AND DISCUSSION

3.1 Research Findings

From the results of questionnaire data analysis related to student character building by Mathematics Teachers and Counseling Guidance in junior and senior high schools in four cities in Indonesia, the results are variously summarized in the following table.

Table 1: Implementation of Student Character Guidance by Mathematics and Counseling Teachers in Junior and Senior High Schools in Indonesia

No.	School Level	Math Teachers	Counseling Teachers	Remarks
1	Junior High Schools (Jambi, Pekanbaru, Bandung, Medan)	63,47%	66,42%	Good Enough
2	Senior High Schools (Jambi, Pekanbaru, Bandung, Medan)	61,83%	61,50%	Good Enough

From Table 1 above, it can be seen that the Character Formation Implementation by Teachers conducted on students at First Level High School shows quite good results with a percentage of 63.47Mathematics Subject and BK Teacher, while in the High School in Indonesia is in the Pretty Good category with the percentage of Mathematics Teachers and Counselors being 61.83% and 61.50%.

The data above also concludes that the implementation of character building carried out by teachers in junior high schools is better than what is done by high school teachers. This can be seen from the percentage generated from the results of the questionnaire based on the perspective of students in the school. When viewed from the implementation carried out by the teacher, the junior secondary school counselor looks better in character building efforts than the Mathematics teacher, while in senior high school the opposite occurs, even with a small difference.

3.2 Discussions

3.2.1 Character Building Strategies Carried Out by the Teacher

In general, both in excellent schools and in the usual category of schools in high school and junior high school, the teacher applies character building through the process of implementing learning through the process of giving individual or group assignments, through advice and exemplary discipline both in terms of time, dress, and giving feedback assignments to students.

The important findings of this study are 1) In Medan specifically at SMAN 2 (one of the favorite schools), mathematics teachers as mentoring / Spiritual coaches at school, 2) Private schools in the city of Medan. Based on direct observation at the school, it appears that students have not applied strict discipline in dress, so that students who use flip flops are still found.

Both in high school and in junior high school, the school has a BK teacher who has the competence of Counseling Guidance graduates, but has not been balanced in terms of numbers, so the teacher has no hours in class. Character planting is given in the form of service units, both individually, classically, and in groups, and is more focused in the form of responsive patterns, case studies from students who come counseling with individual awareness, and from their homeroom teacher orders.

no students who come to the BK teacher based on the directions from the Mathematics Mapel teacher or, from being called by the BK teacher for orders /

requests from Mathematics subject teachers. In general, students come to the BK teacher in mathematical problems with self-awareness, and out of fear of the math teacher and homeroom teacher, 2) Especially for favorite schools, usually BK teachers also undergo a home visiting program, in the settlement of cases, 3) Found in less favorite junior high schools in Bandung, becoming a piloting project for parenting education under the guidance of the Education Service of West Java Province Region.

Furthermore, it was also concluded the findings that in schools in certain cities (Pekanbaru, Jambi) several BK teachers are not from the competence of BK graduates and even in private schools: BK teachers were not BK graduate competencies.

3.2.2 Establishing Student Character Values

Embedded characters such as: courage to ask, answer, forward class for presentation, responsibility in doing assignments, honesty in tests or tests, cooperation in group work, not selfish / respect for others when discussion. Negative characters that tend to emerge from students are lazy to do assignments, but this can still be overcome by mathematics teachers without involving the homeroom and counseling.

The findings of this study conclude several important things such as 1) In favourite and non-favourite middle schools in Bandung, students are very polite by first greeting and greeting the school guests who come. Want to take guests to the bathroom, 2) High schools in Medan, there were students who ran away from school with the opportunity that there were cars coming out of school, 3) Students and teachers do not respect guests, seem indifferent, do not care, 4) The case of students' negative character faced by mathematics teachers is still within reasonable limits. But specifically students who have problems that involve BK teachers are usually problems of attendance that are insufficient and apply to all subjects, this tendency to have problems in the family (broken home), 5) Particularly in private schools in Medan City schools, there are cases of students who have school problems because of seeking money / work, and dropping out of school due to running away from home due to pregnancy. But not a few show a high fighting ability in learning even from middle to lower families. This finding is supported by the research of (Pala, 2011) Aynur Pala (2011) in India that the development of socialization skills and integration of character education are an important part of a child's academic success. Character education efforts may be effective when implemented rigorously and with a scientific foundation. Schools should focus on teaching character within the regular curriculum.

3.2.3 Supporting and Inhibiting Factors in Character Building

Supporting and inhibiting factors in fostering student character are the role of parents and family, peer environment in the classroom and the environment at home, and can be inseparable from the teacher's teaching style. Findings, especially for type B high school in Bandung, there were still students who came to counseling to BK with the problem of "being encouraged" by the teacher.

The conclusions related to the supporting and inhibiting factors obtained by the teachers are: The conclusions related to the supporting and inhibiting factors obtained by the teachers are:

- Mathematics subject teachers in big cities, especially in the city of Bandung, have an awareness that "every student has different interests and abilities", so that no student is stupid, and not all students must get high grades, the important thing is there is willingness.

- Teachers as role models, role models in applying character values.

- Some important findings include the consistency between the application of rules, reward and punishment must be enforced, this becomes a supporting factor as well as an obstacle to cultivate the character values of students and all schools are not balanced in quantity students with BK teachers. Besides the cooperation between the BK teacher and the math teacher, the homeroom teacher needs to be improved, because in general students come to the BK teacher with their own awareness individually or because they are called with a case that is quite severe like not attending school with a large number of absences.

Especially the existence of inhibiting factors in character building in schools findings:

- The number of BK teachers is slightly compared to the number of students in the school

- Limitations of the BK teacher cause the BK teacher not to get special hours, because the available hours are used to fulfill other compulsory hours given. This results in BK services getting less optimal.

- The number of public school enrollments that exceed the capacity of the school so that the school is divided into 2 shifts, even if one shift, the number of students per local reaches 48 people per class.

- Increasing acceptance of students in public schools has made the number of students accepted

in private schools increasingly fewer and very threatening the closure of private schools.

- The increasing number of students in public schools is also encouraged to increase the acquisition of school BOS funds given based on the number of students received.

The existence of these inhibiting factors is found in the following cases:

- From one of the public schools in Jambi City, student admission exceeds the capacity of the school with a maximum of 36 classes, while the current condition is 48 classes, so it must be divided into 2 (two) learning shifts, namely morning and afternoon.

- The impact of the increase in the number of students has led to character building services, especially those carried out by Guidance and Counseling teachers not optimal. Plus the number of students is not comparable to the number of BK teachers who are in the school

This is supported by the study of (Haryanto and Akhirin, 2018) Haryanto and Akhirin (2018) that character education of students at Madrassa is implemented by integrated actions in teaching and learning activities through the material of Islamic education on salaf books such as books of *Jalalain, Bulugul Maram (al-Qur'an and al-Hadits lesson), Ta'lim Muta'alim (Al-Aqidah and Akhlaq)*,
concept of Nahdlatul 'Ulama *(mujjah Ahlusunnah waljamaah)*. Actuating activities are done through customising prayer, sholawat, praying together, social donation by students' school organization, commemoration of Islamic Days, *dhuha* prayer, and also by maximizing role of guidance and counseling.

3.2.4 Linking Material with Character Values

Linking material with special character values to mathematics teachers, most teachers stated that it was difficult to find a direct relationship. So that character building was given in the learning process indirectly, through giving advice, and exemplary. However, especially for Mathematics teachers at the less favorite junior high school in Bandung, they had participated in an Islamic values integration training conducted independently at ITB, but it was difficult to implement, because the teaching materials did not yet exist specifically

Especially for Mathematics teachers in Medan's private junior high school, planting characters through material can be done on some material, such as material opportunities by conveying that gambling

and lottery are very detrimental in terms of opportunity calculation, social arithmetic material seeking profit and loss by instilling honesty.

The young teachers will involve in elementary and secondary schools, in which the concept of moral and character is easy to introduce to children. Through being equipped with enough knowledge of character education, teachers would tend to be more engaging in character education development. In other words, education policy should take the lead to actualize moral education in the school system. Taken together, parents, teachers, and administrators as stakeholders, should join this camp to encourage students to manifest those good values in their lives (Agboola and Tsai, 2012)

4 CONCLUSIONS

4.1 Conclusion

In general both in excellent schools and in the normal category in high school and in junior high schools in Indonesia, teachers apply character building through the process of implementing learning and services. The embedded characters such as: courage to ask, answer, class presentation, responsibility in doing assignments, honest during examination, team work, not selfish / respect for others when discussion are important characters for students. The supporting and inhibiting factors in fostering student character are the role of parents and family, peer environment in the classroom and the environment at home, and can not be separated from the teacher's teaching style. Then, character building is necessarily given in the learning process indirectly, through giving advice and exemplary.

4.2 Recommendation

From the research results described in the above conclusions, the following recommendations are as below:

1. Stakeholders in schools such as school leaders, subject teachers, parents, school environment need to be involved in fostering student character

2. Fostering the character of students should also be a serious concern of the government through the addition of Counseling Guidance teachers in schools both in junior and senior high schools.

3. Restrictions on the intervention of school authority in accepting students in excessive amounts that are usually carried out by the regional government

4. Further research that can be done is related to the role of local government in character building in schools and integration efforts in character building in schools through the involvement of parents, peers and the environment in student character building

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REFERENCES

Agboola, A. and Tsai, K. C. (2012). Bring character education into classroom. *European Journal Of Educational Research*, 1(2):163–170.

Haryanto and Akhirin (2018). Building students' character through integrated teaching learning activities at madrassa. In *PROCEEDINGS INTERNATIONAL CONFERENCE BKSPTIS 2018*.

Jauhari and Maryani, R. (2018). Program bimbingan karir dalam meningkatkan rencana keputusan karir siswa. *JIGC*, 2(1):45–62.

Marsigit (2011). Pengembangan nilai-nilai matematika dan pendidikan matematika sebagai pilar pembangunan karakter bangsa. In *Prosiding Seminar Nasional Universitas Negeri Semarang*.

Nata and Abuddin (2012). *Manajemen Pendidikan: Mengatasi Kelemahan Pendidikan Islam di Indonesia*. Kencana.

Pala, A. (2011). The need for character education. *International Journal Of Social Sciences And Humanity Studies*, 3(2):1309–8063.

Rachmah, H. (2013). Nilai-nilai dalam pendidikan karakter bangsa yang berdasarkan pancasila dan uud 1945. *E-Journal WIDYA Non-Eksakta*, 1(1).

Sugiyono, M. P. P. (2007). Pendekatan kuantitatif. *Kualitatif, dan R&D, Bandung: Alfabeta*.

Supari, Yossi (2005). *Undang-Undang Republik Indonesia Nomor 20 Tshun 2003 tentang SistemPendidikan Nasional,*. Yogyakarta: Media Abadi., first edition.

Widyaningsih, M. R. (2013). Implementasi bimbingan konseling dalam pembentukan karakter siswa di sekolah menengah kejuruan muhammadiyah salatiga. *(Skripsi STAIN Salatiga, Tidak diterbitkan)*.

Zubaidah Amir, M. (2019). Integrasi nilai pendidikan islam dalam pembelajaran (peer review).

Zuriah and Nurul (2008). *Pendidikan moral & budi pekerti dalam perspektif perubahan: menggagas platform pendidikan budi pekerti secara kontekstual dan futuristik*. Jakarta: Bumi Aksara.

An Analysis of Students' Error in Solving Critical Thinking Problems in Integral Calculus Course based on Newman Error Analysis Theory Viewed from Gender Differences and Habits of Mind

Rezi Ariawan, Zetriuslita

Mathematics Education Study Program, Universitas Islam Riau, Pekanbaru, Indonesia
{*reziariawan, zetriuslita*}*@edu.uir.ac.id*

Keywords: Mathematical Critical Thinking Problem, Newman Error Analysis, Gender differences, Habits of mind

Abstract: This study aims to describe the types of students' error in solving mathematical critical thinking problems in Integral Calculus course based on Newman Error Analysis theory and viewed from gender differences and habits of mind. The method of the research is a descriptive quantitative research. The research subjects were 47 students from the third semester who have taken Integral Calculus course. The instrument of data collection was a test using the indicators of mathematical critical thinking skills and a questionnaire on the habit of mind. The data collection techniques are test and non-test techniques. The data was analysed by using quantitative descriptive technique. The result of this study indicated that: (1) The most dominant type of error is encoding (92.44%) and the least is decoding (6.08%); (2) The most dominant type of error by male and female students is encoding (96.43%) and (86.24%) and the least is decoding (24.28%) and (6.76%) ; (3) The most dominant type of error in terms of habits of mind with very good, good, and fair criteria is encoding (88.28%), (94.43%), and (77.7%) and the least one is decoding (10.56%), (19.76%), and (54.28%).

1 INTRODUCTION

Calculus is a course that exists in almost every university that offers mathematics and science majors. In addition, calculus must be taken and completed by students in exact sciences, especially Mathematics. In Mathematics Education Study Program, calculus is a compulsory course divided into three subjects, such as Differential Calculus, Integral Calculus and Multivariable Calculus. Calculus 1 (Differential Calculus) is provided in the first semester, Calculus 2 (Integral Calculus) in the second semester and Advanced Calculus (Multivariable Calculus) in the third semester.

Given the importance of Calculus 2 course, students are expected to have a good mastery and understanding of the course. For this purpose, lecturers can conduct an investigation to find out how the students' ability can be improved.

One of the ways to investigate is to find out their error in solving Calculus 2 problems. This is in line with SofriRizka Amalia's statement (2017) students' mistakes in problem solving need to be analyzed to determine their error and why these errors occur. Furthermore, students' mistakes need further analysis, in order to get a clear and detailed picture of students' weakness in solving story problems (Nurussafa'at et al., 2016).

Based on the experts' opinions above,the final result of this investigation can provide an overview of the types of error, so that lecturers can take more appropriate steps to solve because the focus of improvement is narrower and more apparent. The students' problem solving answers will reveal the error, especially in the form of essay questions that are included in High Order Thinking Skill (HOTS) category. One of the HOT skills is critical thinking. Subsequently, the researchers would like to create mathematical critical thinking problems in the form of essay to examine students' ability in Calculus 2 course.

Errors are deviations from the right things which are systematic, consistent, and incidental in certain areas. Consistent and systematic errors are caused by students' competence, while the incidental ones are not a result of their low mastery of the subject (Abidin, 2012).

Learning error can be caused by: (a) low intellectual ability; (b) emotional disorder (c) lack of learning motivation; (d) students' immaturity in learning; (e) too young; (f) supporting social background that does not support; (tid) (g) poor

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study habits; (h) low memorization; (i) disruption of the sensory devices for the development of puberty (Rahimah, 2012).

Furthermore, there are several errors in learning mathematics, namely; (a) lack of understanding of symbols; (b) concerning place value; (c) use of the wrong process; (d) error in calculations; (e) writing error. Students' error in solving Mathematical problems can be analyzed with several methods. One of the methods is Newman Error Analysis theory (NEA). Newman Error Analysis was first introduced by Allan Leslie White as a simple diagnostic procedure to observe students' behaviour in solving story problems. In line with that, researchers also plan to use the procedure of the Newman theory in diagnosing the students' error in solving the problems of critical thinking skill in Calculus 2 course.

Furthermore, the error in mathematical problem solving can be influenced by several factors, one of which is the presence of gender differences. Gender differences in creativity were areas of controversy (Indrawati and Tasni, 2016) .Abra and Valentine French in Nenny Indrawati and Nurfaidah Tasni (2016) stated that some experts suggest that men are more creative than women, but other experts reveal that women are more creative than men. Moreover, Nenny Indrawati and Nurfaidah Tasni (2016) stated that some researchers believe that the influence of gender in mathematics is due to biological differences in the child's brain that are known through observation.

Another factor that can affect students' error in Integral Calculus problem solving is called habits of mind. Habit of mind is a characteristic of intelligent people when faced with problems whose solutions cannot be identified easily (Costa and Kallick, 2008). Habit of mind is a group of skills, attitudes, and values that allow people to bring up performance or behavioral intelligence based on the stimulus to guide students to face or resolve existing issues (Marita, 2014). Based on these explanations, it can be concluded that habit of mind is a very important aspect to be explored, especially on students' problem solving error in Integral Calculus course. Therefore, the researcher was interested in analyzing students' error based on Newman's theory viewed from gender differences and habits of mind.

2 RESEARCH METHODS

The research used in this study is descriptive. According to Nana Syaodih Sukmadinata (2010). descriptive research is the most basic research,

intended to describe the existing phenomena, both natural and man-made. Meanwhile, Descriptive research is a research that intends to describe situations or events (Suryabrata, 2014). If the study wants to describe the size, number or frequency, then the research is more appropriately named as quantitative descriptive research (Sukmadinata, 2010).

Based on several opinions above and referring to the research objective, this type of research is quantitative descriptive research. It generates the number, size or frequency of students who commit errors in solving mathematical critical thinking problems in Integral Calculus course by using Newman Error Analysis theory based on gender differences and habits of mind.

To obtain the data about the subject's ability to express opinions and ideas, the researchers needed an auxiliary instrument in the form of a test of mathematical critical thinking problems, which was referred as the first auxiliary instrument. Meanwhile, to get the information about the students' habit of mind, the researcher used a questionnaire sheet as the second auxiliary instrument. The data collection techniques were test and non-test techniques. The test technique used the first instrument and non-test technique used the second one.

The data analysis technique is a systematic process of searching and compiling data obtained from the result of written test. The data analysis process in this study was carried out with the following steps: (1) Analyzing written data by examining the answer error given by students to the test of mathematical critical thinking skill based on Newman Error Analysis theory ; (2) Analyzing students' error based on Newman Error Analysis theory in terms of gender differences; (3) Checking the answers to the students' Habits of Mind questionnaire to collect the scores; (4) Classifying students into three Habits of Mind categories (self-regulation , critical thinking, and creative thinking) based on the results of each student's questionnaire, as seen in Table 1 below.

Table 1: Classification of Students' Habits of Mind

NO	Score	CRITERIA
1	0 – 20	Habits of Mind Very Bad
2	21 – 40	Habits of Mind Bad
3	41 – 60	Habits of Mind Fair
4	61 – 80	Habits of Mind Good
5	81 – 100	Habits of Mind Very Good

Source: Adapted from (Riduwan and Sunarto, 2013)

The procedure of this research was carried out with the following steps, such as:

- Prepare the instruments, such as test instruments with table of specification and alternative answers, and habits of mind questionnaire sheets,
- Provide questions that have been prepared for students to complete.
- Analyze students' error in solving critical thinking problems in Integral Calculus course based on Newman Error Analysis theory .
- Divide students in terms of gender differences.
- Analyze students' error in solving critical thinking problems in Integral Calculus course based on Newman Error Analysis theory viewed from gender differences.
- Distribute habits of mind questionnaire sheets to students.
- Calculate the scores of habits of mind questionnaires that have been distributed.
- Classify students based on habits of mind criteria.
- Analyze students' error in solving critical thinking problems in Integral Calculus course based on Newman Error Analysis theory viewed from habits of mind.

3 RESULTS AND DISCUSSIONS

3.1 Result

The subjects in this study were 2nd semester students of Mathematics Education Study Program who were taking Calculus 2. The researchers only taught one class, class A, with a total of 47 students. Therefore, the subjects were 47 students from the second semester in the academic year of 2017/2018.

3.1.1 Students' Error based on the Newman Error Analysis Theory in Terms of the Test Items.

The questions were prepared using the indicators of mathematical critical thinking skills and referred to the teaching material in Integral Calculus course. Table 2 shows the distribution of teaching materials and indicators used in the development of the research instruments.

The test was carried out in two stages. Test I was conducted after the teaching material in test 1 was completed, while Test II was held after finishing the teaching material in Test II. The types of error that students committed in Test 1 and Test II can be seen in Table 3.

3.1.2 Student's Error based on the Newman Error Analysis Theory Viewed from Gender Differences

The following table 4 is presents the data regarding the percentage of students in terms of gender differences.

Table 4: Percentage of Students based on Gender Differences

Gender	Total	Percentage (%)
Male	6	12.80%
Female	41	87.20%
Total	47	100%

Table 4 indicates that the number of male and female subjects has a very significant difference, which is equal to 74.4%. However, according to the researcher, it can still be used as a source of data to be used as a reference in looking at the types of error made by the subjects of the study. The following table 5 shows the data related to the types of error viewed from gender differences. '

In addition to Test I, the researchers also conducted a second test. The following table 6 presents the data regarding the percentage of subjects in terms of gender differences in Test II.

3.1.3 Students' Error based on the Newman Error Analysis Theory Viewed from Habits of Mind

To obtain the data about the students' habits of mind, researchers distributed questionnaire sheets. The following table 7 presents the data related to the students' habits of mind.

Table 7: Number and Percentage of Students in terms of Habits of Mind

Habits of Mind Criteria	Number of Students	Percentage (%)
Very Good	18	37.5
Good	26	54.2
Fair	4	8.3
Bad	0	0
Very Bad	0	0
Total	48	100

Source: Processed Data

Table 8 reveals the students' habits of mind viewed from gender differences (male and female).

Table 2: Details of Teaching Materials and Indicators of Mathematical Critical Thinking Ability Used in the Development of Test Items in Integral Calculus Course

Teaching Materials	Indicators of Mathematical Critical Thinking Ability	Test Items
IndefiniteIntegral	The ability to identify and justify concepts, namely to provide reasons for mastering concepts.	No. 1 (Test 1)
Integration Technique by partial integral	The ability to identify and justify concepts, namely to provide reasons for mastering concepts.	No. 2 (Test 1)
Integration technique by trigonometry substitution	The ability to analyze algorithm, namely to evaluate or examine an algorithm.	No. 3 (Test 1)
Integration technique by trigonometry function	The ability to generalize, namely to complete the data or supporting information.	No. 4 (Test 1)
Integration technique by trigonometry substitution	The ability to generalize, namely to complete the data or supporting information.	No. 1 (Test II)
Integration technique by rational function	The ability to identify and justify concepts, namely to provide reasons for mastering concepts.	No. 2 (Test II)
Application of Definite Integral (Areas between Curves and Volumes of Solids)	The ability to analyze algorithm, namely to evaluate or examine an algorithm.	No. 3 (Test II)

Table 3: Percentage of Students' Error Based on Test Items (Newman Error Analysis Theory)

Newman Error Analysis (NEA) Stages	Percentage of Students' Error Based on Test Items (%)						
	Test I				Test II		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Decoding	9 22.50%	3 6.80%	11 2.40%	5 10.90%	0 0%	0 0%	0 0%
Comprehension	19 47.50%	4 9.10%	16 34.80%	22 47.80%	0 0%	4 8.30%	0 0%
Transformation	28 70%	11 25%	23 50%	30 65.20%	4 8.90%	27 56.30%	26 66.70%
Process Skill	39 97.50%	37 84.10%	36 78.30%	38 82.60%	11 24.40%	37 80.40%	37 94.90%
Encoding	39 97.50%	41 93.20%	42 91.30%	42 91.30%	17 73.80%	48 100%	39 100%

Source: Processed Data

Description :

1. In Test 1 Question No. 1, the amount of data analyzed was 40 out of 48 students
2. In Test I Question No. 2, the amount of data analyzed was 44 out of 48 students.
3. In Test I Question No. 3, the amount of data analyzed was 46 out of 48 students.
4. In Test I Question No. 4, the amount of data analyzed was 46 out of 48 students.
5. In Test II Question No. 1, the amount of data analyzed was 45 out of 48 students.
6. In Test II Question No. 2, the amount of data analyzed was 48 out of 48 students.
7. In Test II Question No. 3, the amount of data analyzed was 39 out of 48 students.

Table 8: Number and Percentage of Students' Habits of Mind Based on Gender Differences

Habits of Mind Criteria	Number and Percentage of Student's Habits of Mind based on Gender Differences	
	Male	Female
Very Good	2 (33.3%)	16 (38.1%)
Good	2 (33.3%)	24 (57.1%)
Fair	2 (33.3%)	2 (4.8%)
Bad	0 (0%)	0 (0%)
Very Bad	0 (0%)	0 (0%)
Total	6 (12.5%)	42 (87.5%)

Source: Processed Data

The following table shows the distribution of types of students' error according to Newman's error analysis theory based on habits of mind, see Table 9.

3.2 Discussion

Based on the results of this study, the most dominant type of error according to Newman Error Analysis theory is encoding and the least one is decoding. In this study, encoding error occurs when students cannot write correct answers in the form of numbers, symbols or words even though they have gone through the "treatment" stage . Therefore, it can be stated that most students cannot express the correct answers to the questions, neither viewed from gender differences nor habits of mind. From the analysis of the answers, it was found that most of them were unable to identify an appropriate solution to the problem. Only a small number of students solved the problems correctly. Furthermore, the least dominant

Table 5: Students' Error According to the Newman Error Analysis Theory Viewed from Gender Differences in Test 1.

Newman Error Analysis (NEA) Stages	Percentage of Students' Error Viewed from Gender Differences (%)							
	Test I							
	Q1		Q2		Q3		Q4	
	M	F	M	F	M	F	M	F
Decoding	3 60%	6 20%	1 20%	2 5.10%	5 50%	6 15%	2 40%	3 7.20%
Comprehension	4 80%	15 40%	2 40%	2 5.10%	6 100%	10 25%	4 80%	18 43.90%
Transformation	5 100	23 70%	2 40%	9 23.10%	6 100%	17 42.50%	5 100%	25 61%
Process Skill	5 100	34 97.10%	5 100%	32 82.10%	6 100%	30 75%	5 100%	33 80.50%
Encoding	5 100	34 97.10%	5 100	36 92.30%	6 100%	36 90%	5 100%	37 90.20%

Source: Processed Data

Description:
1. In Test 1 Question No. 1, the amount of data analyzed was 40 (5 men and 35 women) out of 48 students.
2. In Test 1 Question No. 2, the amount of data analyzed was 44 (5 men and 39 women) out of 48 students.
3. In Test I Question No. 3, the amount of data analyzed was 46 (6 men and 40 women) out of 48 students.
4. In Test I Question No. 4, the amount of data analyzed was 46 (5 men and 41 women) out of 48 students.

Table 6: Students' Error According to the Newman Error Analysis Theory Viewed from Gender Differences in Test II.

Newman Error Analysis (NEA) Stages	**Percentage of Students' Error Viewed from Gender Differences (%)**					
	Test II					
	Q1		**Q2**		**Q3**	
	M	**F**	**M**	**F**	**M**	**F**
Decoding	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%
Comprehension	0 0%	0 0%	0 0%	4 -9.50%	0 0%	0 0%
Transformation	2 50%	2 -4.90%	5 83.3%)	22 -52.40%	2 -50%	24 -68.60%
Process Skill	2 50%	9 -22%	6 -100%	31 -73.80%	4 -100%	34 -97.10%
Encoding	3 -75%	14 (34.1%)	6 -100%	42 -100%	4 -100%	35 -100%

Source: Processed Data

Description:
1. In Test II Question No. 1, the amount of data analyzed was 45 (4 men and 41 women) out of 48 students.
2. In Test II Question No. 2, the amount of data analyzed was 48 (6 men and 42 women) out of 48 students.
3. In Test II Question No. 3, the amount of data analyzed was 39 (4 men and 35 women) out of 48 students.

type of error is decoding. It occurs because students cannot recognize the terms in the problem, recognize symbols nor comprehend the questions. This type of error is the least dominant one which means that most students are able to recognize symbols or to understand the questions well, yet they can't finish it correctly.

Based on the explanation above, it can be concluded that from all the questions presented, male and female students did all types of error according to Newman Error Analysis theory, but the percentage of male subjects is higher than that of female students.

Gender differences do not separate the students from making types of error.

According to Subanti (2014), women in general are better at remembering, while men are better at logical thinking. Generally, men and women are the same, but male students have better abstraction than female students, allowing male students to be better than female students in the field of mathematics in terms of abstract understanding. Furthermore, Abra and Valentine-French in Neni Indrawati and Nurfaidah Tasni (2016) stated that men are more creative than women, but many researchers expressed

Table 9: Types of Students' Error According to the Newman Error Analysis Theory Based on Habits of Mind in Test I

Newman Error Analysis (NEA) Stage	Percentage of Students' Error in Each Test based on Habits of Mind(%)											
	Test I											
	Q1			Q2			Q3			Q4		
	VG	G	F	VG	G	F	VG	G	F	VG	G	F
Decoding	2 13.30%	4 17.40%	2 100%	2 13.30%	1 4.20%	0 0%	1 5.60%	8 34.5	2 40	2 9.5	6 26.1	2 100
Comprehension	6 40%	9 39.10%	2 100%	2 13.30%	1 4.20%	1 20%	5 27.80%	9 39.1	2 40	3 14.3	5 21.7	2 100
Transformation	11 73.30%	14 60.90%	2 100%	4 26.70%	5 20.80%	1 20%	5 27.80%	13 56.5	2 40	5 23.8	7 30.4	2 100
Process Skill	14 93.30%	23 100%	2 100%	11 73.30%	21 87.50%	3 60%	15 83.3	15 62.5	3 60	5 23.8	15 65.2	2 100
Encoding	14 93.30%	23 100%	2 100%	12 80%	24 100%	3 60%	18 100%	20 87	3 60	15 71.4	20 87	2 100

Source: Processed Data
Description:
1. In Test 1 Question No. 1, the number of data analyzed were 40 (15 HOM VG, 23 HOM G people, 2 HOM F people) out of 48 students.
2. In Test I Question No. 2, the number of data analyzed were 44 (15 HOM VG people, 24 HOM G people, 5 HOM F people) out of 48 students.
3. In Test I Question No. 3, the number of data analyzed were 46 (18 HOM VG people, 23 HOM G people, 5 HOM F people) out of 48 students.
4. In Test I Question No. 4, the number of data analyzed was 46 (21 HOM VG, 23 HOM G, 2 HOM F) out of 48 students.

Table 10: Types of Students' Error Based on Habits of Mind in Test II

Newman Error Analysis (NEA) Stages	Percentage of Students' Error in Each Test based on Habits of Mind(%)								
	Test II								
	Q1			Q2			Q3		
	VG	G	F	VG	G	F	VG	G	F
Decoding	2 13.30%	4 17.40%	2 100%	2 13.30%	1 4.20%	0 0%	1 5.60%	8 34.5	2 40
Comprehension	6 40%	9 39.10%	2 100%	2 13.30%	1 4.20%	1 20%	5 27.80%	9 39.1	2 40
Transformation	11 73.30%	13 54.20%	2 100%	4 26.70%	5 20.80%	1 20%	5 27.80%	13 56.5	2 40
Process Skill	14 93.30%	23 100%	2 100%	11 73.30%	21 87.50%	3 60%	15 83.3	15 62.5	3 60
Encoding	14 93.30%	23 100%	2 100%	12 80%	24 100%	3 60%	18 100%	20 87	3 60

Source: Processed Data
Description:
1. In Test 1 Question No. 1, the number of data analyzed were 40 (15 HOM VG people, 23 HOM G people, 2 HOM F people) out of 48 students.
2. In Test I Question No. 2, the number of data analyzed were 44 (15 HOM VG people, 24 HOM G people, 5 HOM F people) out of 48 students.
3. In Test I Question No. 3, the number of data analyzed were 46 (18 HOM VG people, 23 HOM G people, 5 HOM F people) out of 48 students.

that women are more creative than men. Some researchers believe that the gender influence in mathematics is related to biological differences in their brains. Through observation, women in general are superior in language and writing, while men are superior in mathematics because of their better spatial ability. Both of these opinions contradict the findings of this study. According to the analysis of researchers, the level of ability of both male and female students might be influential. Based on the final test results of Integral Calculus course, all male students had lower scores than female students. Therefore, the results from two previous studies contradict what the researchers found.

Furthermore, the habits of mind of the students do not affect the level or type of error. Students as the research subjects have very good, good and fair criteria with five types of error. Therefore, it can be stated that the habits of mind cannot distinguish the types of error made by the students as well.

4 CONCLUSIONS AND SUGGESTIONS

Based on the research, it can be concluded that: (1) The most dominant type of error based on Newman Error Analysis theory is encoding (92.44%) and the least dominant type of error is decoding (6.08%); (2) Viewed from gender differences, the most dominant type of error by male students is encoding (96.43%) and the least type of error is decoding (24.28%). On the other hand, the dominant type of error by female students is encoding (86.24%) and the least dominant one is decoding (6.76%); (3) In terms of habits of mind, the type of error by students with Very Good criteria is encoding (88.28%) and the least dominant type of error is decoding (10.56%). Then, the type of error by students with Good criteria is encoding (94.43%) and the type of error is decoding (19.76%). Lastly, the type of error by students with Fair criteria is encoding (77.7%) and the least dominant type of error is decoding (54.28%).

Furthermore, the researchers propose the

following suggestions such as: (1) Further studies should be conducted on the causes of the types of error, both based on gender differences and habits of mind; (2) An in-depth study can be conducted through non-test interviews, either unstructured or structured interviews.

REFERENCES

Abidin, Z. (2012). Analisis kesalahan mahasiswa prodi pendidikan matematika fakultas tarbiyah iain ar-raniry dalam mata kuliah trigonometri dan kalkulus 1. *JURNAL ILMIAH DIDAKTIKA: Media Ilmiah Pendidikan dan Pengajaran*, 13(1).

Costa, A. L. and Kallick, B. (2008). *Learning and Leading with Habits of Mind 16 Esential Characteristic for /Success*. Virginia: Association for Supervision and Curriculum Development.

Indrawati, N. and Tasni, N. (2016). Analisis kemampuan pemecahan masalah berdasarkan tingkat kompleksitas masalah dan perbedaan gender. *Saintifik*, 2(1):16–25.

Marita, R. A. S. (2014). *Identification of Practical Student Habits of Mind in Discussions and Their Effects on Mastery of the Organ System Concept*. Tesis pada Sekolah Pascasarjana UPI Bandung: tidak diterbitkan.

Nurussafa'at, F. A., Sujadi, I., and Riyadi, R. (2016). Analisis kesalahan siswa dalam menyelesaikan soal cerita pada materi volume prisma dengan fong's shcematic model for error analysis ditinjau dari gaya kognitif siswa. *Jurnal Pembelajaran Matematika*, 4(2).

Rahimah, D. (2012). *Identification of student error in solving the main questions of integral calculus in integral calculus courses*, volume X. ISSN : 1412-3612.

Riduwan and Sunarto (2013). *Pengantar Statistika untuk Penelitian Pendidikan, Sosial, Ekonomi, Komunikasi, dan Bisnis*. Alfabeta, Bandung.

Sukmadinata, N. S. (2010). *MetodePenelitian Pendidikan*. UPI Press, Bandung.

Suryabrata, S. (2014). *MetodologiPenelitian*. PT, Jakarta.

Exploring Methods for Developing Potential Students in Islamic Schools in the Context of Riau Malay Culture

Syahraini Tambak[1] and Desi Sukenti[2]

[1]*Faculty of Islamic Studies, Unviersitas Islam Riau, Pekanbaru, Indonesia*
[2]*Faculty of Education, Universitas Islam Riau, Pekanbaru, Indonesia*
syahraini_tambak@fis.uir.ac.id, desisukenti@edu.uir.ac.id

Keywords: Aql Potential, Qalbu, Methods, and Madrasah.

Abstract: There has been a lot of research on the development of potential learners, but the methods for developing potentials explored from Islam are still ignored. This study explores the methods for development of the potential of *aql* and *qalbu* (heart) learners practices in different Islamic School in Riau Province, an area where already for decades an Malay culture. Using a case study approach, this research at three Islamic School in Riau Province, Indonesia, the principal, selecting teachers, and students as informants. It is found that this Islamic school has a curriculum to develop the potential of *aql* and *qalbu* learners in the learning process with the lesson of Islamic moral character education, *tahfiz al-Qur'an*, al-Qur'an, the activity of praying in congregation, and the activities of Friday worship. Methods for developing the aql potential of children's learning is done by discussion method; storytelling and questioning in observational based learning and integrating material with *tauhidullah*. Potential of qalbu learners developed in tahfiz lesson with drill method, al-Qur'an with the method of *talqin*, worship congregation worship with modeling the way method, Friday worship, performed with the activities of *muhadharah*, the art of reading al-Qur'an, Islamic art, and reading the Qur'an together. Islamic Schools in Riau Province, Indonesia can make the results of this study as the initial framework in developing the potential of Islamic learners in the learning process to support the vision of Riau Province is the center of Malay culture in Southeast Asia.

1 INTRODUCTION

The potential development of learners in learning becomes the key to success for teachers in building future generations of the nation. The success of learners in the future supported by the potential possessed can develop with the maximum. Humans are pedagogic creatures who are endowed with God of all kinds of potential self that is useful to achieve perfection both physical and spiritual. According to Amal (2013), in order to achieve perfection, humans are required to associate with others and the ever-changing universe, so as to adapt to the environment and maintain its life. Attempts to find one are called "learning.

Before humans were created, Allah SWT has given news of His plan of creating human beings as the *khalifah* on earth so as to build and manage the world according to His will. God informs the angel that He will create a human being who will be assigned the task of *khalifah*. This is reinforced in Al-Qur'an letter Al-An" am verse 165, as follows:

"And He hath made you the rulers of the earth, and He exalts of you above some (some) degrees, to test you of what He has given you. Verily thy Lord is very tortured, and verily He is Oft-Forgiving, the Most Merciful". (QS. Al-An'am: 165) (Indonesia, 2014).

Man is endowed with Allah SWT a quality of virtue that distinguishes his qualities with other beings. With that virtue, man deserves respect from other beings. As the main creature and God's best creation, and with the provision of possessed abilities, human beings are assigned as *khalifat Allah fi al-ard* , that is to be the representative of God on earth. In order to be able to complete his duties on earth as a human *khalifah* given the privilege and potential that has been illustrated in the story of his journey to his place of duty. It is this privilege which in Islamic terms is called *fitrah*. According to Shihab (2013), aql of man is the incident from the beginning or innate from birth. But human nature itself is not limited to its religious nature, although the belief in the Almighty is *qalbu* in the soul and *aql* of man and cannot be

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replaced with others.

In the verse of al-Baqarah; 30, angels have concerns and allegations against the caliphs that Allah will create is a creature that will do the damage on earth and shed blood because of disputes. This is supposedly based on their experience before the creation of man, where there are beings that apply so. Or it could also be based on the assumption that who will be assigned to the *khalifah* is not an angel, and then surely the creature is different from those who always glorify and sanctify Allah SWT (Shihab, 2014).

To overcome humanitarian problems, it is necessary to understand the basic philosophy of man himself. That besides as human servant created Allah SWT also as khalifah who have provided physical nature and spiritual (Tambak, 2013). *Qalbu* as revealed by Shihab as a dynamic human potential base, the *qalbu* needs to be developed so that man can attain a position as a noble creature of God who can perform his mandate as a khalifah. Able to create prosperity, peace and prosperity for all of these on earth. Not the opposite of being a destroyer and destruction of the cosmos of life (Shihab, 2014). Therefore humans need to strive to develop their basic potential. Efforts to develop human potential can be implemented through the educational process; therefore human must do an educational process.

Education is a process toward the perfection of the physical and spiritual functions of man. In the framework of Islamic education then the perfection of the physical and spiritual functions must be based on Islamic values of the values derived from the Qur'an and Hadith in relation to Islamic education. According to As'ad (2015), education contributes in developing 'Islamic character' learners without neglecting academic needs in the face of global challenges. Islamic education is a process that leads human beings on a good life and upgrading human beings in accordance with the basic capabilities of nature and the ability (Hasbi,). With the process of education, people will gain knowledge that can make its potential to grow. So it can be said that the development of human potential cannot be separated from the process of knowledge. The human potential as *khalifah* and the creature possessing such knowledge are contained in the teachings of Islam.

In the teachings of Islam there is exposure about the potential of what is owned by humans. This potency is a gift from God Almighty to the human race and is not owned and conferred on other beings. This is very important that where the Islamic education is invested in humans to be able to develop these potentials. In essence Islamic

education is expected to inculcate skills to learners so that later able to navigate life by sticking to the values of religious teachings. Islamic education must be able to see the full human, not limited to cognitive potential only, but also on affective and psychomotor affectivity, and still see the human in terms of psychological and antrapological that human beings are cultured morals. In addition, Islamic education necessitates a balancing of human nature (*fitrah*), both individual human, social and servant of Allah SWT who acts as *khalifah fi al-ardh*.

Humans are the creatures that hold the most potential. Today, according to Naufal Ahmad Rijalul Amal, the education given to the students is more dominant to make them more likely to be individual rather than socializing with the surrounding environment. Educational products are often measured only from external changes of physical and material progress that can increase the satisfaction of human needs. Educational products change produces intelligent and skilled human beings to do their work, but lacks caring and feelings towards fellow human beings. This is due to the lack of humanist values that children get from the learning process (Amal, 2013).

This illustrates that in fact to support the success of human beings become *khalifah* on earth, Allah SWT has given potential. The potential of Islam is initially still hidden in the students themselves and demanded to be raised and developed. The appearance and development of human potential must be done through the education process. Meanwhile, found a number of schools those label themselves Islam, allegedly still less than the maximum in issuing and developing the potential of Islamic learners based on Islamic teachings. While in the Qur'an found a number of human potential that must be raised and developed, so that humans are able to become *khalifah Allah* on earth. According to Adz-Dzaky (2014) human being as khalifah is endowed by Allah SWT Divine potentials together with the presence of "nur" and "spirit" which is *fitrah* in man, namely the potential of *nur Ilahiah*, the potential of the *ruh Ilahiah*, the potential of the *nafs Ilahiah*, the potential of *qalb Ilahiah*, the potential of *aql Ilahiah*, and the potential of the *sense Ilahiah*.

Islamic schools, is expected to be a pioneer in developing the Islamic potential contained in the Qur'an to learners. This research is very crucial because the human potentials must be raised and developed as it relates to the competence to become the *khalifah of Allah* on earth. Therefore, it should be seen whether the schools that stated themselves Islam at this time, has developed the potential of

Islamic learners in learning. There are several Islamic schools scattered in Riau Province, such as Islamic boarding school *(pesantren), madrasah*, and integrated Islamic school. This research focuses on three Islamic school: Madrasah Aliyah Negeri Pekanbaru, Madrasah Aliyah Negeri Rengat, and Madrasah Aliyah Negeri Kepulauan Meranti. The Islamic potential of learners studied is also limited to two things, namely the potential *aql* and *qalbu*. So the problem is formulated on two things: *First*, how the curriculum is owned to develop the potential aql and qalbu learners in learning? *Second*, what is the method to develop the potential of *aql* and *qalbu* learners in learning in Islamic school in Riau Province?

(Ismail,), revealed that the potential aql and qalbu (heart) can be developed and be grouped into four, namely fatalis-passive, neutral-passive, positive-active and dual-active. Assessing the potential of aql, it can be seen the theory put forward by (Jalaluddin,), the potential of *aql* gives people the ability to understand the symbols of things that abstract, analyze, compare or make conclusions and finally choose or separate between the right and wrong. *Aql* according to (Purwanto,) has the power to know (*al'ilm*). Knowing that power arises as a result of the power of thought, such as tafakkur (thinking), an-nazari (attention), al-i'tibar (interpret), and others. In addition, the *aql* dimension also has the power to understand, such as *tadabbur* (thorough understanding), *ta'ammul* (contemplating), *istisar* (seeing with the inner eye), and *tazakur* (remembering).

While the potential theory of qalbu is based on Burhanuddin (2017) opinion has three powers namely; first, cognition that creates creativity; like thinking '*aql* (), understand *fiqih* (), knowing *ilmu* (), pay attention *dabr* (), remember *dzikir* (), and forget *ghulf* (); second, emotional functions that give rise to race power; example quiet *thuma'ninah* (), affection *ulfah* (), courteous and loving *ra'fah wa rahmah* ( ), submit and shake *wajilat* (), binding *ghil* (), turned away *zaigh* (), hot *ghaliz* ( ), arrogant *hammiyah* ( ), upset *isyma'azza* (); third, connectivity functions that give rise to power like attempted *kasb* ().

Potential learners have been investigated by various education experts. (Yahya,) researches on Islamic education in the development of human potential. This study reveals the role of Islamic education in developing the various potentials possessed by humans from philosophical-cultural fiction. Potentials developed are material (physical) and immaterial (*spiritual*), and equipped with *fitrah, nafs, qalb, ruh, and aql*. Habit (2013) research

on human potential with a philosophical-library approach, in which the potential development of learning media is required. Research (Aziz,) on the nature of humanity and the potential of his spirituality in Islamic education, with the approach of library research. The spiritual potential is examined through the philosophy of ontology in Islamic education.

2 METHODOLOGY

This study used the case study approach (Miles and Huberman,) and focused on exploring the development of potential learners in learning in Madrasah Aliyah Negeri Pekanbaru, Madrasah Aliyah Negeri Rengat, and Madrasah Aliyah Negeri Kepulauan Meranti, in Riau Provinces, Indonesia.

A qualitative data collection method is used to gather data during my fieldwork (Meriam, 2002). Researcher conducted interviews with each of the principals and several teachers of each school. In this Islamic Junior High School, Researcher involved the foundation"s chairman to be interviewed and conducted focus group discussions (FGD) with five to six students in each school. The interviews and FGDs–each lasting an hour or so–were employed to understand the participants" perspectives on the practices of development of potential *aql* and *qalbu* (heart) learners in learning, the contexts of these Islamic High Schools, and other relevant issues important to gain a deep understanding of the phenomenon under investigation. Examples of the questions we used include: What do you understand about the *aql* and *qalbu* potential? How to explore the *aql* and *qalbu* potential student in the teaching and learning process? Researcher collected several documents that supported and complemented the information we collected through our interviews and FGDs. Observed the Islamic Schools rituals, ceremonies, day-to-day interactions, and events that can be inferred as typical of these Islamic school culture.

The data analysis went through several stages: data cleaning, transcribing, coding and categorizing, and interpreting (Emzir, 2014). Every evening after data collection, researcher discussed the information we had found, identified what was relevant and what not for the purposes of the study. After cleaning the data, local assistants made verbatim transcriptions and translated them into Indonesian. Coded the transcripts, categorized them into themes, and compared them across the cases. The most commonly emerging themes from the cases included "exploring *aql* and *qalbu* potential in teaching and

learning", "methods of developing the potential of *aql* and *qalbu* learners in learning". Under each of these themes, some sub-themes were identified; some of them differed from one case to another. By taking these steps, Managed to generate theoretical prepositions from the data about exploring methods of developing the potential of *aql* and *qalbu* learners in learning in Islamic Schools, Riau Province, Indonesia.

3 RESULT AND DISCUSSION

3.1 Development Curriculum of *Aql* and *Qalbu* Potential Learners

The existence of Islamic learning gets serious attention from management these madrasah"s to give birth to Islamic quality learners. This can be seen from the seriousness of principals and teachers in preparing the atmosphere and learning environment conducive to the development of creativity and the values of the learner's religiosity. Teachers are also prepared so that potential learners can develop with maximum.

Based on the observations of the author in this Islamic schools, found some things related to the concept of potential development *aql* and *qalbu* learners. First, related to the development of potential *aql* of students, this Islamic schools provides subjects *aqidah akhlaq*, and Islamic education lessons. Both of these subjects are realized to develop the religious potential of learners, namely *tauhidullah*. As it is understood that *aql* is God's creation. Man created Allah has a religious instinct that is monotheistic religion. If any human being is not monotheistic, then it is not natural. If they are not monotheists it is only a matter of the environment in which learners are born and raised.

According to the Headmaster of these madrasah"s, these two subjects are intentionally manifested to develop the potential of the unbearable and learners to be able to know Allah SWT, have true faith in Allah SWT, and able to apply the concept of tauhid in the life of learners. He emphasized that the learning materials that exist in the two subjects, elaborated with the concepts derived from the Qur'an that aims to learners can become people who have a true *aqidah*, do good in the community, and can deliver themselves at the success of the purpose of life in the world and the hereafter. The results of this study in accordance with research Noer; Tambak & Rahman (2017) wich states that learers who have in

God will be able to develop themselves in public life.

The Lesson of *aqidah akhlak* and Islamic Education is considered by this madrasah"s as something that can develop the potential of aql of learners. Because in it there are concepts of how to believe to Allah SWT to develop the power of knowing (*al'ilm*), *tafakkur* (thinking), *an-nazari* (pay attention), *al-i'tibar* (interpret), *tadabbur* (understand carefully), *ta'ammul* (contemplate), *istisar* (seeing with the mind's eye), and *tazakur* (remembering). This result is in accordance with (Mursalim,) research which confirms that learning creeds can develop the creativity of learners so that the potential of their *aql* can develop. (Hamzah et al.,) research result confirmed that a person who has good moral insight will have the soul of spiritual education to develop the mindset and attitude the teological aspects, anthropo-sociological aspects, and cosmological aspect.

Through the materials it is expected that the potential *aql* of learners can appear well and teachers can apply it easily in the learning process. These two subjects are intentionally manifested to develop the potential of the unbearable and learners to be able to know Allah SWT, have true faith in Allah SWT, and able to apply the concept of tauhid in the lives of learners. Learning materials that exist in these two subjects, elaborated with concepts sourced from al-Qur'an that aims to learners can become human beings who have a true faith, do well in the community, and can deliver itself to the success of goals living in the world and the hereafter.

The subject of morals is a discipline that studies beliefs about the basics of Islamic teachings as a guide to the happiness of life in the world and the hereafter. Education *Aqidah* Morals can thus be described a conscious and planned effort in preparing learners to know, appreciate and believe in Allah SWT. And realizing in the noble behavior of everyday life through guidance, teaching, practice, and the use of experience. In the life of a plural society in the field of religion, this education is also directed to the affirmation of *aqidah* on the one hand and increased tolerance and mutual respect with followers of other religions in order to realize the unity and unity of the nation. *Akidah Akhlak* is part of a cluster of Islamic Religious Education subjects that provide education, uphold the creed of Islam, understand the teachings of Islamic religion, and practice the content of its content as a guide to life in everyday life. This is done by emphasizing the faith and cultivation of morals, and avoiding morally disgraceful. Learning *Aqidah Akhlak* aims to print a plenary human (*insan al-kamil*); the human being who is not only concerned

with the life of the world but also the afterlife is believed to be the ultimate goal in all life.

Secondly, with regard to the potential of *qalbu*, Madrasah Aliyah Negeri Pekanbaru has the basic concept of developing the potential of *aql* and *qalbu* of learners, that is by providing the subjects tahfiz al-Qur'an and al-Qur'an. In Madrsah Aliyah Negeri Rengat by providing the subjects worship prayer congregation, and in the Madrasah Aliyah Negeri Kepulauan Meranti by activities Friday Worship. These four materials are designed so that potential *qalbu* learners can appear to prepare them to be humans who have a quiet life and able to lead life on the right path according to the guidance of Allah SWT.

Head Master of Madrasah Aliyah Negeri Pekanbaru stated that the preparation of curriculum that is able to develop the potential of *qalbu* is very important to be owned by this Islamic school for guidance in learning and development of learners. Therefore, the potential of *qalbu* is the potential of learners related to awareness or feelings. The heart is instrumental in bringing the physical good. If his heart is not good (bad), then tend to do damage or crime. But if his heart is good, then well his physical motion. If the heart is not preserved, then it will *dhalal* (dark) can even drop its dignity and dignity more than animals. Therefore the heart requires ta'dib or education that emphasizes the process of learning morals learners. This is in accordance with the research of (Solikhin, 2016) that to develop the potential of *qalbu* learners required an Islamic curriculum that contains lessons of al-Qur'an and prayer worship.

The development of the *qalbu* potential designed by these madrasah"s is based on the concept that exists in the Qur'an that is the development of the potential of *fuad, shadr*, and *hawaa*. The management of these madrasah"s focuses on the potential development of *qalbu* in learning through the management of *fu'ad, shadr*, and *hawaa* elements. Each potential has its own function of regulating the circulation between the human self as a person and his environment, while emitting his inner qualities. When the light of the heart dims, the darkness of the inner channel, so that the channel loses the heat of love, and changes with evil, hypocrisy and decisions taken over by *Syaitan*. This releted to (Hasyim,) research that education is a vital tool in creating an atmosphere that is conducive to the development of human culture ethos. In other words, education is the most effective means to perform the transfer of knowledge about what is good and what is bad, so that human can become civilized beings.

The results of this study have illustrated a good formulation for the development of Islamic-minded learners because this school has the basic concept of Qur'an education about the potential of *aql* and *qalbu* learners. Nevertheless, Madrasah Aliyah Negeri in Riau is the main purpose of parents to entrust and send their children to school. This community trust is evidenced by the selection that they do to screen prospective learners in accordance with established standards. Selection is done with three forms of tahsin test and tahfiz al-Qur'an, ability creativity, and personality. All this is done to find quality input from the community.

3.2 Development Methods of Aql and Qalbu Potential Learners

The two human potentials-*aql* and *qalbu*-as the basic concept of Qur'an education owned by Madrasah Aliyah Negeri Pekanbaru, Madrasah Aliyah Negeri Rengat, and Madrasah Aliyah Negeri Kepulauan Meranti, make it as a destination for parents to enter their children's school. Although the actual results of the interviews are not specific terms they are used and familiar in designing the curriculum. However, based on the classification of researchers, this Islamic school has the basic concept of Qur'an education on the two mentioned potentials.

To apply the basic principles of Qur'an education about the two potentials, this Islamic schools prepares a good environment, professional teachers, and good service to learners. This school has the means to support it, the school mosque, the wide field for sports, a representative two-story school building, and a conducive study room full of students' creativity, clean school canteens, and learning laboratories. Based on the results of interviews and observations of the author in this Islamic school, found a variety of potential development methods *aql* and *qalbu* learners in learning.

First, with regard to the potential of *aql*, Madrasah Aliyah Negeri Pekanbaru provides subjects of *aqidah akhlaq* and Islamic education lessons. Both of these subjects are realized to develop the potential *aql* of learners with *tauhidullah*. To develop the potential *aql* of these learners, this Islamis schools applies the model of *al-tarbiyah* education in the learning process. The *al-tarbiyah* model is emphasized in the process of developing the knowledge of learners as well as developing the potential of *aql*. In the learning process, teachers try to develop the potential *aql* of learners with the following methods:

The first strategy, observing the phenomenon of society and nature in Madrasah Aliyah Negeri

Pekanbaru. Teachers invite learners to recognize the phenomena that occur in society and the universe, to increase understanding and faith learners through a simple process of observation. Observation method is one of the learning strategies that use contextual approach and original media in order to teach students who prioritize the meaning of the learning process. With the method of observation students will feel challenged to explore the curiosity about the phenomenon and the secrets of nature so that the power that is contained in the potential aql is the power of knowing (*al'ilm*), *tafakkur* (thinking), *an-nazari* (pay attention), *al-i'tibar* (interpreting), *tadabbur* (understanding thoroughly), *ta'ammul* (contemplating), *istisar* (seeing with the mind's eye), and *tazakur* (remembering). The method of observation puts forward direct observation to the object to be studied. So students get facts in the form of objective data which is then analyzed according to the level of student development. This is in accordance with research conducted by (Ahmad et al., 2017) stated that the development of potential *aql* will be able to develop the creativity of learners by doing observation approach in learning.

According to some learners, the method of observation is very useful for the fulfillment of their curiosity. So that the learning process has a high significance. With the method of observation students find the fact that there is a relationship between objects that are analyzed with learning materials that brought the teacher. It is rare in conventional learning patterns. In the conventional learning pattern teachers often deliver material that sometimes students are able to do it but do not know that what it does is useful for him in realizing his competence. Methods of observation help the cognitive development of students who are aroused cognitive adaptation. The process of cognitive adaptation in the form of accommodation and assimilation. Another benefit is in order to instill a sense of love for the environment and nature. Observation methods are deliberately designed by the teacher so that learners find and improve tauhidullah learners, so that their potential aql can develop well.

The second strategy, using the tendency of discussion methods, storytelling and questioning in learning, although other methods are actually used such as lectures, drills, demonstrations, but the volume is very small in Madrasah Aliyah Negeri Rengat. This Islamic school considers that these three methods are aptly used to generate and develop the power of knowing (*al-'ilm*), *tafakkur* (thinking), *an-nazari* (paying attention), *al-i'tibar* (interpreting), *tadabbur* (understanding thoroughly),

ta'ammul (contemplate), *istisar* (seeing with the mind's eye), and *tazakur* (remembering).

Discussion methods in learning Islamic religious education is a way of mastery of learning materials through exchange of opinion among learners according to knowledge and experience based on democratic and humanist atmosphere in solving a problem under the guidance of teachers to obtain joint decisions according to predefined learning indicators (Tambak, 2014). Discussion method is very useful in broadening the insights of learners. Students' insights can evolve through discussion methods used by teachers of Islamic education in the process of learning Islamic education in the classroom. Broad insight is very urgent for the process of intellectual development and mindset of learners in following the learning of Islamic religious education. This broad insight can make the thinking and self learners to continue to learn because it will add knowledge and view a problem not only from one aspect only, but from various aspects and aspects. This then will bring learners into Islamic learners who think inclusive in the meaning of thinking broad and not quickly blame others.

Question and answer methods are used to develop the potential of *aql* in order to attract and focus the attention of learners, even when the learners are grabbed, the sleepy back sleepy and lost sleep. Less controlled classroom atmosphere can be controlled by using question and answer method because Islamic education teacher can directly inquire and interact with learners. Learners are also with this condition would necessarily be adjusting due to the number of questions by teachers.

This method is directed in stimulating learners to train and develop thinking power including memory power. The thinking power of learners needs to be developed to provide a good mindset and have a good frame of mind. Stimulate learners to train and develop thinking power including memory. When this method is applied then the effect at the beginning of its application may be learners will feel a little uncomfortable because of the likelihood of learners accustomed not to concentrate in learning. With this question and answer method teachers provide stimulus to learners to train and develop thinking power and memory. Not only developing the mindset can also train the courage of learners in delivering answers, especially learners often get questions from teachers feel awkward will be more lost so that learners will be more free in expressing the answer.

The storytelling method is also used to develop the potential of learners. The method of storytelling is the way of presenting the learning materials

orally by telling the historical events of human life in the past that involves obedience to exemplified or munkar to be abandoned originating from al-Qur'an and al-Hadith using educational props to improve understanding and coaching personality of participants educate (Tambak, 2014).

The third strategy is to link the study material with the power of God to increase the belief of *tauhidullah* used in Madrasah Aliyah Negeri Kepulauan Meranti. This integration into the educational concept that this Islamic school builds to encourage students to have knowledge is broadly based on the *tauhid ilahiah* (divine tawheed). This *tauhid ilahiah* education paradigm is the pre-eminent one for the development of the civilization of society which is *rahmatan lil'alamin*. All educational concepts, ranging from vision, mission, goals, curriculum, teachers, to the evaluation of education are based on tauhid itself. Science produced in the form of science and technology and communication based on monotheism and back to tauhid itself.

Secondly, in relation to the potential of *qalbu*, Madrasah Aliyah Negeri Rengat has the basic concept of Qur'an education namely the subjects of *tahfiz* al-Qur'an and the Qur'an. Madrasah Aliyah Negeri Rengat: the worship of the congregational prayers, and Madrasah Aliyah Negeri Kepulauan Meranti is the activities of Fridays of creative worship. Based on the results of interviews with the Head Principal of Madrasah, to develop the potential power contained *qalbu* learners namely cognition, emotional power and power connectivity applied various important activities in the learning process is:

In connection with tahfiz al-Qur'an, the teacher asks the learners to memorize the two-juz al-Qur'an, which is the obligatory thirty juz, and one more juz is released for the learners. Each learner is taught how the strategy of memorizing the Qur'an well and quickly by teachers who are professional because the teacher is tahfiz al-Qur'an ten juz. The strategies used by teachers in Madrasah Aliyah Negeri Pekanbaru in applying this lesson, so that the potential of students qalbu develop, done with four things, namely; (1) by way of memorization; (2) memorize from home; (3) listening to friends; and (4) to drill the correct method of memorization. The four ways are used by teachers so that learners love the Qur'an at once so that they can recognize the power of Allah SWT. With this method is expected to develop emotional power and connectivity power that generate power. This is in accordance with the results of research conducted by Duriana and Anin (2015) states that developing the potential of *qalbu* by bringing the learner to the Qur'an will be able to make people aware and shape,

giving birth tawadhu attitude. Either in related with fellow human beings in general or interact with the Qur'an.

In connection with the Qur'an lesson, the teacher teaches that students are able to read al-Qur'an fluently and in accordance with the correct tarweed''s rule. To develop the potential of *qalbu* learners, teachers in Madrasah Aliyah Negeri Pekanbaru, apply the habit at the beginning of each morning learning for 15 minutes all students reading the Qur'an accompanied by the teacher. In addition to reading the Qur'an at each completed prayer, which is *dhuha* prayer, *zuhur* and *ashar*, and also as a separate subject on reading the Qur'an. In teaching the Qur'an with the method of *talqin*. The teacher here realizes that so great the virtue teaches the Quran, through this method of talqin, before the teacher begins to read the letter, he must remind the child to focus his attention on what will be read. With the teachings of the Qur'an, Islamic schools are able to develop the emotional power of learners. Studying the Qur'an makes learners have an intellectual tradition and an inner strength. In research (Ismail, 2017) states that the Qur'an studied will give birth to Islamic intellectual traditions and modernist reforms. This is in accordance with the research (Faizin, 2013) asserted that a teacher must be able to manage the smallest potential of qalbu that exist in the learners to be something of a glorious value and provide great benefits by studying the Qur'an.

In connection with worship praying congregation, in Madrasah Aliyah Negeri Rengat, applied every day by performing prayers in congregation, the prayer dhuha, zuhur, and ashar prayer. This congregational prayer activity is applied so that all learners have peace of mind and think that the real life is to seek Allah SWT pleasure and eternal life. Shalat congregation conducted this Islamic school to develop the cognitive power of learners can develop so that emerging creativity and emotional power. The results of this study in accordance with the findings (Nasihin,) stating that with good congregational prayer can be a command to develop sincere attitude and emotions of learners in everyday life.

The implementation of this congregational prayer gets strict supervision from the teachers so that learners do well and khusyu 'to produce a quiet soul. Congregational prayer conducted Islamic schools as the main media to develop student personality so as to have self-awareness. In research (Astuti, 2015) confirmed that the spirit of prayer in congregation can awaken self awareness and the essence of the learner's life. Prayers performed by learners produce spirituality values and become solutions to all life

issues.

The strategy of applying this concept in learning is carried out with; (1) modeling the way technique; and (2) action learning. The way of modeling technique is a learning technique that is implemented by the teacher giving scenarios of a sub-discussion to be demonstrated by students in front of the class, resulting in dexterity with skill or skill and professionalism. This technique is focused on the ability of a student to develop the potential that is in him. Because students are required to play the role in accordance with the material being taught. Teachers provide opportunities for students to perform certain activities or roles as existing in community life (social). Should the learner be given the opportunity to take the initiative and be given guidance or other to be more successful? Thus it is possible potency *qalbu* learners can develop through the implementation of prayer in congregation.

Action learning approach is an approach of learning to do with an emphasis on the effort to provide opportunities for students to perform moral acts, either individually or collectively in a group. The main goals of value education based on this approach are; first, it gives students the opportunity to engage in moral deeds, both individually and collectively, on their own merits. Secondly, it encourages students to see themselves as individual beings and social beings in peer relationships that have no complete freedom but as citizens of a society that must take part in a democratic process.

In connection with Fridays of creative worship, based on the results of interviews with the one teacher of Madrasah Aliyah Negeri Kepulauan Meranti and my observations in the field on Friday, Madrasah Aliyah Negeri Kepulauan Meranti is developing a process of supporting activities for the realization of the potential development of the heart with the creativity of worship of the learners. With this activity, can develop the cognition of learners, so that emerge the creativity that is thinking, understanding, and trying to the fullest. The activities of worship this Friday are having conversations in Arabic and English, saving, and sharing activities related to Islamic issues.

Developing the potential of qalbu learners, teachers do *muhadharah* activity that is a speech practice. Muhadharah is done every Friday morning in the school field where learners are appointed taking turns. This *muhadharah* activity aims to educate students to be skilled and able to speak in front of the audience to convey the teachings of Islam. In *muhadharah*, learners are taught to speak with good mastery, techniques, materials, and language styles so

as to attract listeners. This is in accordance with the research put forward (Setiawan,) that the activities of *muhadharah* can develop the potential of learners in the field of emotion and cognition so that the generation of managers of the Prophet.

Muhadharah is one of the leading programs in Madrasah Aliyah Negeri Kepulauan Meranti which is held once a week, using three languages namely Indonesian, Arabic and English. This *muhadharah* activity is held with the aim that the learners have the provision and courage to speak in front of the people and have extensive knowledge when it comes time for them to devote themselves in the midst of society as well as a role to prevent the cruel and evil deeds. This activity according to the principal will encourage the development of creative power; such as thinking 'aql, understanding (fiqh), knowing science, noticing (dabr), remembering (dhikr), and forgetting (ghulf). It will also develop the power of conjugation that creates the power of initiative such as seeking (kasb).

The art of reading al-Qur'an is also carried out to develop the potential of *qalbu* learners. The students were divided into a few people who performed that day, while others waited for the next Friday's turn. Learners one by one to put the verses of the Qur'an to completion. At the end of this activity, the teacher gives direction that what they are doing is in order to get closer to Allah SWT. This activity raises the power of cognition, emotional power and power connectivity. According to research (Ulfah,), the art of reading the Qur'an by using the media can develop the potential *qalbu* learners develop with maximum.

In addition, this Madrasah are also implemented Islamic art activities to develop the soul of art in the students themselves. This Islamic art activity is very important to be taught by the school to develop the potential of self-learners, especially those related to the potential of *qalbu*. The art of Islam is developed on the art of the senses of the listener (the art of sound) of vision (art of writing/painting) or of being born with motion intermediaries (dance and drama). This is in line with research conducted by (Kurnianto,) stating that Islamic art should be developed by Islamic schools so that potential *qalbu* learners can appear with the maximum. One developed is the art of *salawatan* that can stimulate the emotional ability of learners.

Another thing that Islamic school does to develop the potential of *qalbu* learners is also to read the Qur'an together in the early morning of learning. Reading the Qur'an is directed to all learners closer to Allah SWT. This activity is conducted so that learners have a holy soul, sincerity, and high motivation in following the learning. Reading al-Qur'an carried out

by the students is expected to bring calm to him. And their hearts are rested in the remembrance of Allah. Remember, it is only with the remembrance of Allah that the heart is rested.

4 CONCLUSIONS

This study concludes that; *first*, to develop the potential *aql* of learners, this Islamic school provides curriculum subjects *akidah morals*, and Islamic education lessons. In addition to developing the potential of *qalbu* learners, Islamic school has a basic curriculum of Qur''an education, namely the subject''s tahfiz al-Qur'an, al-Qur'an, worship prayer congregation, and activities of Friday worship. *Second*, developing the potential of *aql* of the students is discussing, telling and questioning in the observation-based learning and integrating the material with *tauhidullah* in the subjects of Islamic morals and religious education. Potential *qalbu* learners developed in *tahfiz* lesson with drill method, al-Qur'an with the method of *talqin*, worship congregation worship with modeling the way method, Friday worship, performed with the activities of *muhadharah*, the art of reading al-Qur'an, Islamic art, and reading the Qur'an together.

The results of this study are expected to be a reference for Islamic religious education courses in Islamic Religious Higher Education in Indonesia in order to develop curriculum and formulate a system development potential *aql* and *qalbu* for students as prospective teachers. Islamic schools can make the results of this research as the initial framework in developing the potential of Islamic learners in the learning process.

REFERENCES

Ahmad, M. T., Nasution, S., and Ramlan (2017). *Hubungan Potensi Aql dengan Kreativitas Belajar Siswa Bidang Studi Pendidikan Agama Islam di SMK Kanada Sakura Indonesia (KANSAI) Pekanbaru. Al-Thariqah: Jurnal Pendidikan Agama Islam*, 2.

Amal, N. A. R. (2013). *Konsep Humanisasi dalam Pendidikan Islam: Telaah Deskriptif terhadap Potensi Diri Manusia. Jurnal Pemikiran Islam Afkaruna*, 7.

Astuti (2015). *Bimbingan Shalat sebagai Media Perubahan Perilaku. Konseling Religi: Jurnal Bimbingan dan Konseling Islam*, 6.

Aziz, A. *Hakikat Manusia dan Potensi Ruhaninya dalam Pendidikan Islam: Sebuah Kajian Ontologi. Ta*.

Faizin, M. (2013). Peran Manajemen Qalbu bagi Pendidik. *Jurnal Pendidikan Agama Islam*, 1.

Hamzah, N. M., Ismail;, M., and Basiron, B. (2015). *Model Pendidikan Kerohanian terhadap Anak-ank dalam Kalangan Wanita Cemerlang Sektor Awam. Global Journal Al-Thaqafah*, 5.

Hasbi, M. *Manusia dan Potensi Pendidikannya: Perspektif Filsafat Pendidikan Islam. Ta*.

Hasyim, F. Islamic education with multicultural insight an attempt of learning unity in diversity. *Global Journal Al-Thaqafah*, 6.

Indonesia, D. A. R. (2014). *Mushaf Al-Qur'an dan Terjemahannya*.

Ismail, N. B. (2017). The quranic exegesis, reformism, and women in twentieth century indonesia. *Studia Islamika*, 24.

Ismail, S. (2013). *Tinjauan Filosofis Pengembangan Aql Manusia dalam Pendidikan Islam. Jurnal at-Ta*.

Jalaluddin. *(2013)*. Teologi Pendidikan.

Kurnianto, R. (2014). *Model Pendidikan Islam berbasis Seni Salawatan. Muaddib: Jurnal Kependidikan dan Keislaman*, 2.

Meriam, S. B. (2002). *Qualitatif Research in Practice: Examples for Discussion and Analysis*. San Fransisco, Jossey-Bass.

Miles, M. B. and Huberman, A. M. *(1994)*. Qualitative Data Analysis: An Expanded Sourcebook.

Mursalim. (2016). *Peningkatan Pembelajaran Akidah Akhlak Melalui Pendekatan Pembelajaran Berbasis Masalah. Indonesian Journal of Education Research*, 1.

Nasihin, S. (2013). *Manajemen Shalat Menuju Hakikat Penciptaan Manusia. Palapa: Jurnal Studi Keislaman dan Ilmu Pendidikan*, 1.

Purwanto, Y. *(2014)*. Epistemologi Psikologi Islami: Dialektika Pendahuluan Psikologi Barat dan Psikologi Islami.

Setiawan, E. (2015). *Strategi Muhadharah sebagai Metode Pelatihan Dakwah bagi Kader Da*.

Shihab, M. Q. (2014). Tafsir Al-Misbah, Kesan dan Pesan dalam Keserasian Al Qur'an Volume15.

Solikhin, S. (2016). Pembinaan Hati (Qalbu) sebagai Inti Kurikulum Pendidikan Islam. *Jurnal Pikir: Jurnal Studi Pendidikan dan Hukum Islam*, 2.

Ulfah, S. M. (2013). *Metode Pengajaran Seni Kaligrafi, Seni Kaligrafi Salah Satu Media Pembelajaran Agama Islam. Kontekstualita: Jurnal Penelitian Sosial Keagamaan*, 4.

Yahya, M. S. (2017). *Pendidikan Islam dalam Pengembangan Potensi Manusia. Jurnal Insania*, 12.

Investment Climate in the Indonesian Mining Business

Surizki Febrianto and Raja Febriana Andarina Zaharnika

Department of Law, Universitas Islam Riau, Pekanbaru, Indonesia
{surizkifebrianto, r.febrinazaharnika}@law.uir.ac.id

Keywords: Investment, Mining, Mineral, Coal, Regulation

Abstract: Minerals and coal contained in the Indonesian mining jurisdiction are non- renewable natural wealth as the gift of God Almighty which has an important role in fulfilling the livelihoods of many people, therefore management must be controlled by the State to provide real added value to the national economy in an effort achieve prosperity and prosperity in a just manner. Mining is part or all of the stages of activities in the context of research, management and commercialization of minerals or coal which includes general investigation, exploration, feasibility studies, construction, mining, processing and refining, transportation and sales, and post-mining activities. Mining Business is an activity in the framework of the exploitation of minerals or coal which includes the stages of general investigation, exploration, feasibility studies, construction, mining, processing and refining, transportation and sales, and post-mining activities. The main issue: How is the Investment Climate Mining Investment in Indonesia Since the issuance of Government Regulation (PP) No. 24 of 2012 concerning the implementation of Mineral and Coal mining business activities, as well as Minister of Energy and Mineral Resources Regulation No. 7 of 2012 which was subsequently refined by 2 ESDM Ministerial Decree No. 11 of 2012 concerning Increasing Mineral Value Added through Smelter Management and Purification activities. The paper describes In order to control ore exports and encourage downstream industries, the government has issued Government Regulation (PP) No. 24 of 2012 concerning the implementation of Mineral and Coal mining business activities. Furthermore, several related regulations were issued such as Minister of Energy and Mineral Resources Regulation No. 7 of 2012 which was subsequently refined by 2 ESDM Minister Regulation No. 11 of 2012 concerning Increasing Mineral Value Added through Mineral Purification and Management (smelter) activities, where the main material contained in said mining companies can export mineral ores abroad before January 2014 if it has obtained a recommendation from the Minister of Energy and Mineral Resources. Other related regulations that have been issued in order to support the implementation of the Minerba Law, are the Minister of Trade Regulation No. 29 of 2012 concerning the provisions on mining product exports and Minister of Finance Regulation No. 75 of 2012 concerning Determination of Goods subject to Export Levy and Export Duty Tariff, the Center for Foreign Trade Policy will conduct evaluations relating to the prohibition of exports in the form of ore (raw material or ores).

1 INTRODUCTION

1.1 Background

Minerals and coal contained in the Indonesian mining jurisdiction constitute non-renewable natural wealth as a gift from God Almighty which has an important role in fulfilling the livelihoods of many people, therefore management must be controlled by the State to provide real added value. Therefore, the management of mines and minerals must add value to the national economy. To achieve this, the management of mineral mining must be based on benefits, justice and balance and alignments with the interests of the nation and state (Saleng, 2004; Sutedi, 2011; Himawan, 2003).

Mineral and coal mining activities which are mining business activities outside geothermal, oil and gas and ground water have an important role in providing tangible added value to national economic growth and sustainable regional development. In line with this, the government continues to make efforts to encourage business people to continue to improve themselves and make breakthroughs so that they can boost the added value of Indonesian mines and minerals to a position that can prosper the people and determine the trade in world mines and minerals. The government's good intention in encouraging business people to increase the added value of the said mines and minerals, as stated in Law No. 4 of 2009 concerning Mineral and Coal Mining (Minerba), in which the Act has reg-

ulated the obligation to process and refine mines and minerals which are implemented no later than 5 (five) years after the said Act was promulgated on January 12, 2009 so that the processing and refining applies mining and minerals fell in January 2014. As a result of the promulgation of Law No. 4 of 2009, nationally there has been a massive increase in mineral ore exports in the last 3 year (Manuputy et al., ; Sefriani, 2011; Salim, 2006). In order to control ore exports and encourage downstream industries, the government has issued Government Regulation (PP) No. 23 of 2010 which has been amended by PP No. 24 of 2012 concerning the implementation of Mineral and Coal mining business activities. Furthermore, several related regulations were issued such as Minister of Energy and Mineral Resources Regulation No. 7 of 2012 which was subsequently refined by 2 ESDM Minister Regulation No. 11 of 2012 concerning Increasing Mineral Value Added through Mineral Purification and Management (smelter) activities, where the main material contained in said mining companies can export mineral ores abroad before 2004 if it has obtained a 2 recommendation from the Minister of Energy and Mineral Resources. Other related regulations that have been issued in order to support the implementation of the Minerba Law, are the Minister of Trade Regulation No. 29 of 2012 concerning the provisions on mining product exports and Minister of Finance Regulation No. 75 of 2012 concerning Determination of Goods subject to Export Levy and Customs Tariff(Starke, 2014; Istanto, 2010; Utomo, 2005). In connection with these various problems, and based on the Request Letter for Cooperation in mining and mineral studies from the Directorate of Industrial and Mining Exports (DG Daglu) Number: 1022 / DAGLU.3.4 / ND / 8/2013 dated August 13, 2013, the Center for Foreign Trade Policy will evaluating the impact of the policy in question, especially relating to the prohibition of exports in the form of ore (raw material or ores) on mining and mineral commodities that will take effect in January 2014. This is in accordance with the explanation of Charles Himawan who said "These regulations are sometimes so numerous that they cause obscurity of applicable laws. To utilize multinational capital to the maximum, it requires legal clarity. Furthermore, it was stated, if the authoritative law means the law that is obeyed by people, both the person who made the law and the person against whom the law was intended, it will be seen here the connection between humans and law "(Lanini et al., ; OCallaghan, 2010; PERMANA and DREBENSTEDT, 2013).

1.2 Identification of Problems

Identification of problems in a study is very important because it is a guideline and makes it easier for the author to discuss the problems to be studied, so that the goals to be achieved are clearly in accordance with what is expected.

Based on the background description of the problem above, the authors formulate the problem as follows:

- How is Investment Climate Mining Investment in Indonesia Since the issuance of Government Regulation (PP) No 24 of 2012 concerning the implementation of Mineral and Coal mining business activities?

- How is the Minister of Energy and Mineral Resources Regulation No. 7 of 2012 which was subsequently refined by 2 ESDM Ministerial Decree No. 11 of 2012 concerning Increasing Mineral Value Added through Smelter?

1.3 Research Purpose

In this paper, the writer has specific objectives to be achieved, including knowing in depth about the business world, especially about investment in the mining sector. In this case the writer's critical thinking lies in the regulations and government policies that have an impact on investment efforts. Therefore, the writer needs to study the government regulations, especially regarding the prohibition of the export of mineral ores (raw materials ores) abroad, so that it has an impact on the upstream mining industry in Indonesia.

2 RESEARCH METHODS

In conducting this research, the author uses the legal normative legal research method, namely the author tries to provide a description of the research methods as follows:

2.1 Research Approach

Approach to the problem is the process of solving or solving problems through predetermined stages so as to achieve the research objectives. To discuss the problems contained in this study the author uses a normative juridical approach.

2.2 Research Specifications

The specification of this research is descriptive research. Descriptive research is intended to provide

as much preliminary data as possible about humans, circumstances or other symptoms. The point is primarily to reinforce the hypotheses, in order to be able to help strengthen old theories or within the framework of composing new theories.

3 RESULTS AND DISCUSSION

3.1 Results and Discussion "Investment Climate Mining Investment in Indonesia Since the issuance of Government Regulation (PP) No. 24 of 2012 concerning the implementation of Mineral and Coal mining business activities"

3.1.1 Regulations and Policies on the Existence of Mines and Minerals in Indonesia

Article 33 of the 1945 Constitution mandates that the earth, water and natural resources contained therein be controlled by the state and utilized as much as possible for the prosperity of the people. The mandate of the 1945 Constitution is the foundation of mining and energy development to utilize the potential wealth of mineral and energy resources that are optimally owned in supporting sustainable national development. The mines, minerals and coal contained in the Indonesian legal jurisdiction are non-renewable natural wealth as the gift of God Almighty which has an important role in fulfilling the lives of many people. Therefore, the management must be controlled by the State to provide real added value to the national economy in an effort to achieve prosperity and equitable welfare of the people. Mining is an activity of extracting precious and economically valuable deposits of deposits from the skin of the earth, both mechanically and manually on the surface of the earth, beneath the surface of the earth's water. The Government of the Republic of Indonesia through Government Regulation No. 27 of 1980 divides the excavated material into 3 groups, namely:

1. Strategic excavation material called group A excavation consists of: petroleum, liquid bitumen, frozen wax, natural gas, solid bitumen, asphalt, anthracite, young coal, uranium radium, thorium other radioactive minerals, nickel, cobalt, tin.

2. Vital excavation is also referred to as class B excavation consisting of iron, molybden, chromium, tungsten, vanidium, titan, bauxite, copper, lead,

zinc, gold, platinum, silver, mercury, arsenic, antimony, bismuth, ytrium , rhutenium, cerium, and other rare metals, beryllium, corundum, zircon, power crystals, cryolite, fluorspar, barite, iodine, bromine, clhor, sulfur.

3. Non-strategic and non-vital excavation materials, also referred to as group C excavations. These consist of: nitral, nitrite, phosphate, rock salt (halite), asbestos, talc, mica, graphite, magnesite, yarocyte, leucite, alum (alum), ocher, gemstones, semi-gemstone, quartz sand, kaolin, feldspar, gypsum, bentonite, diatomaceous earth, absorbent soil (fuller earth), pumice, trass, obsidian, marble, slate, limestone, dolomite, calcite , granite, andesite, basalt, trachite, clay, sand, as long as they do not contain group A or group B mineral elements on a scale that is significant in terms of mining economics.

The classification of the above excavation is inseparable from the 1967 Basic Mining Law which confirms that the classification of minerals is based on different roles for the nation and state. Group A is a mineral that is very important for the country's economy because it brings in relatively large foreign exchange. Group B is a mineral that concerns the livelihood of many people, while group C is a mineral that is needed for industrial or building materials.

Meanwhile, based on the criteria of mineral mining commodities that can be increased, the added value can be classified into 3 (three) groups, namely metal minerals, nonmetallic minerals and rocks. The description of each type of mineral mining commodity is as follows:

1. The group of metal minerals is a type of metal mineral mining commodity which includes ore: copper, gold, silver, tin, lead and zinc, chromium, molybdenum, platinum group metals, bauxite, ore, iron sand, nickel, cobalt, manganese and antimony.

2. Nonmetallic mineral groups consist of various types of non-metallic mineral mining commodities which include: calcite (limestone / limestone), feldspar, kaolin, bentonite, zeolite, silica, zircon and diamond.

3. The rock group is a type of rock mining commodity, among others: Toseki, Marble, Onik, Perlite, Slate (slate), Granite, Granodiorite, Gabro, Peridotite, Basalt, Opal, Chalcedony, Chert (rijang), Jasper, Chrysoprase , Garnet, Jade, Agat and Topas.

In welcoming the ban on the export of raw materials for mining and minerals in January 2014, there were 15 (fifteen) companies that stated readiness for

processing and refining facilities that would be operational in 2014. Of the 15 companies, there were 6 companies that have prepared themselves with the progress of mining and mineral processing and refining facilities have reached 100% to operate in 2014. Of the 6 (six) mining companies, including PT. Delta Prima Steel and PT. Meratur Jaya Iron Steel with its production in the form of Sponge Iron, PT. Indo Ferro with the production of Pig Iron, PT. Batutua Tembaga Raya with the results of processing in the form of Cupper Chatode, PT. Indotama Ferro Allays and PT. Century Metalindo with the processing of Silica Manganese. Meanwhile, for the other 9 companies the progress of processing and refining readiness facilities to operate in 2014 is still below 75%

In the last three years after Law No. 4 In 2009, nationally there were several types of ore and mineral ore whose realization has increased massively, including nickel ore exports increasing by 800%, iron ore increasing by 700%, and bauxite ore increasing by 500%. In order to control mineral ore exports and encourage downstream industries, the government issued a number of related regulations, including ESDM Ministerial Regulation No. 7 of 2012 as amended by PerMen No. 11 of 2012, Regulation of the Minister of Trade No. 29 of 2012 concerning Provisions on the Export of Mining Products and Regulation of the Minister of Finance No. 75 of 2012 concerning Determination of Export Prices for Calculation of Export Levy. The government requires export duties for 14 mining minerals including copper, gold, silver, tin, lead, chromium, molybdenum, platinum, bauxite, iron ore, iron sand, nickel, manganese, and antimony with an export duty range to be collected ranging from 20% to 50% depending on the type of mineral.

ESDM Ministerial Regulation No. 7 of 2012 was issued in order to secure the implementation of the mandate of Law No. 4 of 2009 concerning Mineral and Coal Mining, specifically related to the obligation to process and refine minerals in the country no later than January 12, 2014. Then Candy 07 of 2012 this was amended based on RI Minister of Energy and Mineral Resources Regulation No. 11 of 2012 dated May 16, 2012 which states that mining companies can export mineral ore or ore in this case nickel abroad before 2014 if they have obtained a recommendation from the Minister of Energy and Mineral Resources c.q Director General. These recommendations will be provided with the following conditions:

1. Status of Production Operation IUP and IPR clear and clean in the sense that each mining company is required to have an approved Production Operation IUP.

2. Mining companies must pay off financial obligations to the state.

3. Mining companies must submit work plans and or cooperation in the management and / or refining of minerals in the country.

4. Mining companies must sign an integrity pact.

3.1.2 Development of the Indonesian Mining Industry

There are two things that enable Indonesia to develop into an advanced industrial country. First; Indonesia is a country that has the most complete mineral wealth in the world, although it is not the world's main actor in all raw materials, but Indonesia has almost the most important mineral sources. Second, Indonesia has relatively large and diverse types of energy sources, ranging from petroleum, gas, coal and other renewable energy sources. However, until now Indonesia has not been able to develop its industry properly, because the mineral mining products exploited in the bowels of Indonesia are still exported in the form of raw materials with very low added value. On the one hand, indeed in terms of raw material and commodity trade, Indonesia holds a key position. But most mining companies have tied mining product sales contracts with developed countries, so that Indonesia cannot control the price of its mining commodities.

3.1.3 Policies Regarding Mining and Minerals

Starting from the issuance of Law Number 4 Year 2009 on 12 January 2013 concerning Mineral and Coal Mining, where the basic material contained in this Law regulates the removal of mineral and coal mining products and prohibits the export of raw materials until 2014. Therefore, This law mandates the construction of smelters so that domestic mining production can be processed before being exported. The purpose of the Minerba Law is intended, so that Indonesia can feel the added value of mining and mineral products so that it can boost gross domestic product and absorb labor. Based on the mandate of Law No. 4 of 2009 referred to, it will become effective in January 2014 for metal mineral mining commodities, nonmetallic minerals and rocks in the form of raw materials (raw material / ores).

In the context of implementing various articles in the Minerba Act, the government then issued Government Regulation (PP) No.23 of 2010 dated February 1, 2010 concerning the Implementation of Mineral and Coal Mining Business Activities, which in this regulation implies that holders of Mining Business Permits (IUPs) are operating production and Special

Mining Business Permit (IUPK) Production operations must prioritize the needs of minerals and / or coal for domestic interests. Therefore, in supporting the development of domestic industries, it is necessary to restructure the issuance of mining business licenses for non-metal minerals and rocks. Furthermore, in order to provide greater opportunities for Indonesian participants to participate more in mineral and coal mining activities as well as to provide legal certainty for holders of Coal Mining Concession Work Contracts and Work Agreements intending to extend in the form of Mining Business Permits, PP is then issued No. 24 of 2012 dated 21 February 2012 concerning Amendment to Government Regulation Number 23 of 2010 concerning Implementation of Mineral and Coal Mining Business Activities.

Besides that, in order to increase the effectiveness of controlling mineral ore exports and encourage downstream industries, the government has issued various regulations such as Minister of Permanent Regulation ESDM No. 7 of 2012 which was later amended by ESDM Regulation No. 11 of 2012 concerning Increasing Mineral Value Added through Mineral Processing and Purification Activities. Increasing Added Value and processing obligations with minimum processing limits, this is done with Mineral Processing and Purification Activities which include processing and refining metal minerals, processing non-metal minerals and rock processing, as well as processing and refining certain metal minerals, processing non-metallic minerals certain, and certain rock processing must meet the minimum processing limits.

Meanwhile, in order to increase the effectiveness of the export regulation of several types of mining products, the government through the Ministry of Trade has also issued Permendag No. 29 / M-AG / PER / 5/2012 as amended by Permendag No. 52 / M-AG / PER / 8/2012 concerning Provisions on the Export of Mining Products, where this regulation regulates matters relating to procedures and permits for the implementation of export activities of various types of mining products by considering the necessity to meet minimum processing limits. In addition to this, based on the consideration / proposal of the Minister of Energy and Mineral Resources as submitted through Letter Number 3038/30 / MEM.B / 2012 concerning the Policy for Control of Mineral Ore Sales (Raw Material or Ore) abroad and in order to increase added value and availability of mineral resources in the country, it is necessary to regulate the imposition of Export Levy on exported goods in the form of mineral raw materials. In this regard, on May 16, 2012 the government through the Ministry

of Finance has issued Permenkeu No. 75 / PMK.011 / 2012 which was subsequently refined by Minister of Finance Regulation No. 128 / PMK.011 / 2013 concerning changes to the regulation of the finance minister number 75 / pmk.011 / 2012 concerning the stipulation of export goods subject to export duties and export duty tariffs, wherein the main material In these changes related to the sale of various types of mineral raw materials to foreign countries subject to export export tariffs of 20%, except for Marble and Travertine products in the form of beams¿ 4 cm thick and Granite beam products with thickness¿ 4 cm is subject to an export duty of 10%. The objectives of the policy to impose export duty on mining commodities are to ensure the fulfillment of domestic needs, protect the preservation of natural resources, anticipate a drastic increase in prices from certain export commodities on the international market and or maintain the stability of certain commodity prices within country. From the description above, it can be concluded that increasing industrial excavation products requires a high precision processing process which can ultimately increase the multipurpose of the excavated material so that the marketing becomes wider. Accuracy of work is needed in all stages of activities so that a lot of useful minerals are obtained and a little bit of impurities is obtained so that the results obtained are more maximal in accordance with the results of consumer orders. With the existence of the Minerba Act, all types of ore / mineral goods and minerals must be processed and purified in advance to obtain added value and then be exported. In Article 102 of the Mining Law, Holders of IUP and IUPK are required to increase the added value of mineral and / or coal resources in the implementation of mining, processing and refining, as well as the utilization of minerals and coal. This new obligation is planned to take effect in 2014. Seeing the prohibition policy, it will only be enacted in 2014, some businesses have increased production and exports on a large scale. This is done, because in general the business actors argue that to establish a processing and refining plant in the field of mining and minerals, a high cost is needed, so that the opportunity during this transition period seems to be used by businesses to produce and export on a large scale because it feels the cost production is still relatively cheap. As is well known, the majority of raw mineral and mineral materials markets are mostly for exports, but there are also those that are marketed domestically and even to fulfill the need for further raw materials as domestic industries also carry out imports even though the original raw material comes from domestic as well.

3.2 Results and Discussion "Impact of the Issuance of Minister of Energy and Mineral Resources Regulation No. 7 of 2012 which was subsequently refined by 2 ESDM Ministerial Decree No. 11 of 2012 concerning Increasing Mineral Value Added through Smelter Management and Purification activities"

3.2.1 Impact of Mining and Mineral Export Prohibition Policy

In Indonesia, the metal mineral mining industry is controlled by foreign investors and state-owned companies, as well as private companies. These companies are established based on Indonesian laws and regulations in the form of an Indonesian legal entity. In mining contract work documents, foreign mining companies are also required to release ownership shares. State ownership rights as a concept to date have not yet had a clear and explicit understanding and meaning that can be accepted by all parties in relation to the management and utilization of national natural resources so as to invite many interpretations that have implications for their implementation.5 Law No. 4 of 2009 concerning Mineral and Coal Mining is a time bomb for Indonesia. This law regulates the removal of mineral and coal mining products and prohibits the export of raw materials in 2014. This law mandates the construction of smelters so that domestic mining production can be processed before being exported. The objective of the Mining Law is very noble: so that Indonesia can feel the added value of mining products, boost gross domestic product, and absorb labor.

In contrast to the initial expectations, post-determination of this law mining exploitation actually jumped sharply. Mine owners compete to mine as much as possible before being banned. As a result, production of a number of mining commodities surged. For example, bauxite production in 2009 was 783,000 mt, in 2011 it was 17,634,000 mt, or jumped 2,150 percent. The same thing happened to nickel ore commodities, where production in 2009 was only 5,802,000 wmt, but in 2011 it was 15,973,000, or a 175 percent increase.

The implementation of the ban on the export of raw materials was in sight, but Indonesia still did not have an adequate smelter to offset mine production. It is recorded that there are at least three commodi-

ties that will deficit the smelter in 2014, namely copper, bauxite and nickel. National bauxite production in 2011 reached 17.6 million tons.7 At present, Indonesia does not yet have a bauxite smelter. The plan to build a number of bauxite smelters, up to 2014, can only accommodate 7.1 million tons. The gap between mine production and smelter capacity is 10.5 million tons, assuming all smelter developments are smooth.

Nickel commodities experience the same thing. Indonesia's nickel mining produced 15.9 million tons of nickel in 2011. Existing nickel smelters in Indonesia have a capacity of 9.03 million tons. Until 2014, it is estimated that there will be an additional number of new smelters, with a total capacity of 4.15 million tons. The gap between mine production and smelter in 2014 reached 2.72 million tons.

For copper commodities, national copper production in 2011 reached 20.2 million tons, while existing copper smelters could only accommodate 1 million tons.8 The planned construction of a number of copper smelters until 2014 only adds smelter capacity to 1.2 million tons. At least there will be 18 million tons of copper that cannot be processed.

4 CONCLUSION

Implications of the lack of a first smelter, government revenues from the mining sector can be in the form of tax revenues (PPh), non-tax revenues (mining royalties), and deadrent (land rent). This revenue has the potential to drop if Minerba mine production decreases. Second, the reduction in mine production will have implications for reducing labor. With the ban on the export of raw materials, workers must be prepared to lose their jobs. Reduction of labor will also occur in companies supporting mining activities, such as shipping and heavy equipment. Third, if raw material exports decline due to export restrictions, the trade balance will be more deficit. This will have an impact on the weakening of the rupiah exchange rate which boosts import costs. The high cost of imports will affect a number of products that still rely on imported components. The Minerba Act has been stipulated since 2009, but until now the removal program has been in place. The government has not succeeded in creating a business climate that has made investors interested in building a smelter industry in Indonesia.

REFERENCES

Himawan, C. (2003). *Law As Commander*. Cet 1, Kompas Publisher, Jakarta.

Istanto, S. (2010). *International Law*. Atma Jaya University, Yogyakarta.

Lanini, A., Sumardi, J., Saleng, A., and Magassing, A. M. Synchronization of trims principles in the legislation of mining sector in indonesia.

Manuputy et al. *2008, International Law*. Depok: Rech-ta.

OCallaghan, T. (2010). Patience is a virtue: Problems of regulatory governance in the indonesian mining sector. *Resources Policy*, 35(3):218–225.

PERMANA, H. and DREBENSTEDT, C. (2013). Mining accident analysis in indonesia (prima system). *Revista Minelor/Mining Revue*, 19(1).

Saleng, A. (2004). *Mining Law*. UII Press, Jakarta.

Salim, H. (2006). Mining law in indonesia. *Jakarta, PT Raja Grafindo Persada*.

Sefriani (2011). *An Introduction to International Law*. PT RajaGrafindo Persada, Jakarta.

Starke (2014). *J*. G Introduction to International Law (dated Bambang Iriana Djajaatmadja, Introduction to International Law), Jakarta.

Sutedi, A. (2011). *Legal Mining*. Sinar Grafika, Jakarta.

Utomo, S. P. (2005). *Principles in Cooperation Agreements*. BPMIGAS, Jakarta.

The Implementation of Rapid Application Development Method in Designing E-Learning based on Learning Management System Moodle at Universitas Islam Riau, Indonesia

Hamzah[1], Muhammad Luthfi Hamzah[2], Zulfadli Hamzah[3] and Astri Ayu Purwati[4]

[1]*Departement of Islamic Studies, Universitas Islam Riau, Pekanbaru, Indonesia*
[2]*Department of Information System, Universitas Islam Negeri Sultan Syarif Kasim, Pekanbaru, Indonesia*
[3]*Departement of Sharia Banking, Universitas Islam Riau, Pekanbaru, Indonesia*
[4]*Departement of Management, School of Business, Pelita Indonesia, Pekanbaru, Riau, Indonesia*
hamzah@fis.uir.ac.id, muhammad.luthfi@uin-suska.ac.id, zulfadlihamzah@fis.uir.ac.id,
astri.ayu@lecturer.pelitaindonesia.ac.id

Abstract: This study presents to develop E-learning system using Learning Management System Moodle by applying Rapid Application Development method. E-Learning is helpful for interaction, learning, and communication between lecturers and students in Universities. Students can easily learn about their courses by using this system. For years, Administration Office of Information and Technology has developed a system about administration such as the staff attendance, costs, and other systems. Therefore, at Universitas Islam Riau, E-Learning manages all activities in learning processes such as assignment, syllabus and all materials about courses. The purpose of this research was to enable lecturers and students access all teaching materials at one place for 24 hours a day and 7 days a week to make it efficient in learning process.

1 INTRODUCTION

As the technology and science increase, especially in the field of information technology which presents tremendous impacts in the world of education today, not only in formal education, but also in informal and non-formal education, people can enjoy the facilities of information technology from simple to modern ones. The technology of computer and internet, both software and hardware, provides many offers and choices for education to support students' learning process. The advantages offered lie not only in the factor of speed to obtain information, but also the multimedia facilities that can make learning more interesting through interactive visuals, such as a research conducted by (Abdellatief et al., 2011) who built e-learning web-based multimedia platforms.

E-Learning is essentially learning, or learning through the use of computer or internet technology. Education must direct students to live in new situations that arise in themselves and their environment. With such conditions, the students need the ability to learn how to learn. This capacity can be achieved with four pillars of education which are described as the

basic of education. 4 pillars of education (UNESCO) refer to learning to know, learning to do, learning to be, learning to live together. By considering the four pillars of education, students can develop the competencies that are beneficial for life in the future. Those competencies include religious, economic, social, self-development competencies (Delors, 2013).

The format of education that might be available is E-Learning, which means learning through the use of computer technology and internet, distance learning, in which teachers and students are not in one place at the same time and do not physically and directly meet in person (Abdellatief et al., 2011). E-Learning is a learning approach through a computer connected to the Internet, in which participants try to get learning materials that comply with their individual needs, and an Internet application that can connect the educators and students in online learning spaces. E-Learning aims to overcome the limitations between lecturers and students, especially in space and time (Wan and Niu, 2018).

Currently, E-Learning has been widely accepted by the world community, as it is evidenced by the widespread implementation of e-Learning in educa-

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tional institutions such as schools, (Hubalovsky et al., 2019), training institutes, universities and industries (Cisco Systems, IBM, HP, Oracle, and others) (Cidral et al., 2018). E-Learning is a type of learning system allowing the provision of teaching materials to students by using the Internet, Intranet or other computer network media and mobile devices (m-learning) (Amasha and AbdElrazek, 2016). E-Learning offers a new hope as an alternative solution for most of the problems in education in Indonesia. Its functions can be tailored to the needs, both as a complementary (supplementary) or substitute for classroom learning activities as long as it is used.

Producing interesting and attractive e-learning requires three conditions that must be fulfilled in designing e-learning, namely simple, personal, and fast. A simple system will make it easier for students to use existing technology and menus. The introduction of e-learning system will be reduced by the ease of the panel provided, so that the students' learning time can be efficient for the learning process, not for learning to use e-learning system. Personal requirements mean that the teacher can interact well as if he communicates with students in front of the class. With a more personal approach and interaction, the teacher can observe the students' learning progress and the teacher can help the students with all their problems. As a result, students feel at home for a long time in front of the computer screen. Furthermore, this service is supported by speed, rapid response to complaints and the needs of other students. Thus, learning can be done as quickly as possible by the instructor or manager.

Moodle is a name for an application program that can transform a learning media into a web form. This application allows students to enter the "digital classrooms" to access learning materials. By using Moodle, we can create learning materials, quizzes, electronic journals and others. Moodle stands for Modular Object Oriented Dynamic Learning Environment.

Moodle is a Course Management System (CMS) application that is free downloaded, used or modified by anyone with a GNU (General Public License) license. The Moodle application was first developed by Martin Dougiamas in August 2002 with Moodle Version 1.0. Currently, Moodle can be used by anyone on Open Source. (Oproiu, 2015) examined the use of the E-Moodle Learning Platform as a learning resource, as a means of evaluating teaching and learning in addition to the traditional teaching, learning methods and assessment at OLITEHNICA University of Bucharest. Moreover, Rosenberg (2001) emphasizes that e-learning refers to the use of internet technology to send a series of solutions that can improve knowledge and skills.

Haughey (Rusman, 2007) states his opinion on e-learning development. He asserts that there are three possibilities in the development of an internet-based learning system; they are the web course, web centric course, and a web enhanced course.

Web course means using the internet for educational purposes, in which students or lecturers are completely separate and there is no need for face-to-face meetings. All teaching materials, discussions, consultations, assignments, exercises, examinations, and other learning activities are fully conveyed through the internet. In other words, this model uses a remote system.

Meanwhile, web centric course refers to implementing the internet which combines distance learning and face to face (conventional) learning. Some materials are delivered via the internet and some are given through face to face. Its function is complementary. In this model the lecturer can give instructions to students to study lecture materials through the web they have made. Students are also given direction to find other sources from relevant sites. In face-to-face meetings, students and lecturers have more discussion about the findings of the material that has been learned through the internet.

Then, web enhanced course is defined as the use of the internet to support the improvement of the learning quality carried out in the classroom. The function of internet is to provide enrichment and communication between students and lecturers, fellow students, group members, or students with other speakers. Therefore, the lecturer in this case is required to master the technique of searching for information on the internet, to guide students to seek and find sites that are relevant to lecture materials, to present interesting and motivating materials through the web, to serve the guidance and communication through the internet, and other skills needed. The concept of E-learning is to bring the influence of the process of transforming conventional education into digital form. Presently, this concept has been widely accepted by the world community, as evidenced by the widespread implementation of e-Learning in educational institutions (Kovacova and Vackova, 2015). For years, all of the learning processes occurred at Universitas Islam Riau still apply Conventional method. In other words, the learning process between lecturers and students can only be done by meeting with the condition that there is an interaction between lecturers and students in the class.

In addition, the process of transferring knowledge is almost entirely conducted in the classroom; this causes the transfer of knowledge will be interrupted if the meeting does not occur. This situation clearly hin-

ders the learning process at Universitas Islam Riau.

2 METHODOLOGY

System Development Life Cycle is a method in the development of popular information systems and can be implemented when an information system is first developed. The System Development Life Cycle was further expanded with the existence of several models and frameworks in the development of information systems. One model that can be used in developing information systems is Rapid Application Development (RAD) (Maheshwari and Jain, 2012). RAD method is the development of an information system in a relatively short time. The development of a normal information system requires a minimum of 180 days. However, a system can be completed in just 60-90 days with RAD method (Aswati et al., 2017).

Rapid Application Development is a term originally used to describe the process of software development introduced by James Martin in 1991. Martin's methodology involves the repeated development and prototypes making. Recently, the terms and acronyms have been used in a broader general sense that includes various techniques aimed at accelerating the development of application, such as the use of web application frameworks and other types of software frameworks. RAD approach might require compromise in function and performance in return for enabling faster development and facilitating application maintenance (Kendall and Kendall, 2013). Rapid Application Development, like other methodologies relying on an iterative approach, has been criticized for rapidly creating a succession of prototypes that individually make little real progress ((Daud et al., 2010).

3 RESULT AND DISCUSSION

3.1 Page Setup

There were 2 phases at this stage. Before turning to action, it is important to know that if we do not understand what the client wants, we will never build the right system. Thus, we determined the needs or conditions to fulfill the product. Just like the requirements, we tried to solve the problem in order to avoid possible conflicts from stakeholders. The processes were:

- Discover Process
  In this phase, we tried to understand the process

Table 1: Software Tools

No	Name of Software	Description
1.	Windows 7	Operation System
2.	Microsoft Project	Schedule Management
3.	Microsoft Word	To apply in documentation
4.	Adobe Photoshop	To edit the picture
5.	Adobe Dreamweaver	Design Template for the website with architecture and system design includes coding and testing.
6.	MYSQL	Database
7.	PHP	Programming language
8.	XAMPP	Template to write and run coding to make sure the system functionalities works well and creating and structuring the database for the system for storing data.
9.	Moodle 1.9.11	Framework E-learning

on this website by interviewing clients or people appointed by knowledgeable clients and asking the employees of the Universitas Islam Riau to utilize the relevant processes, step by step.

- Discover System Requirements
  In this phase, the team collected information after the interview in order to start the system and tried to find the right conditions. This session merged the decision makers from staff organizations, potential users and members of the development team. A facilitator moderated the session. The facilitator was responsible to get what the decision makers and users want from the website.

3.2 Analysis

Then, the project members continued to the results of segment requirements and improved their understanding about the problem. Some actions had even began during the requirement segment. Meanwhile, the object models began to improve the system processes. There were three main tasks at this stage, such as task analysis, user analysis, and use-case scenario.

3.2.1 Task Analysis

- The purpose of task analysis was to understand in detail what tasks the users wanted to achieve in their interface, and how they wanted to solve them.

- After that, in this phase, the technical information such as hardware and software were utilized. Table 1 and 2 show the details about the hardware and software requirements.

Table 2: Hardware Tools

No	Name of Hardware	Description
1.	Computer	Intel® Core 2 Duo processor 2.0GHz 512 RAM DDR 2180 GB hard disk
2.	Optical mouse	Cable mouse
3.	RAM	3GB
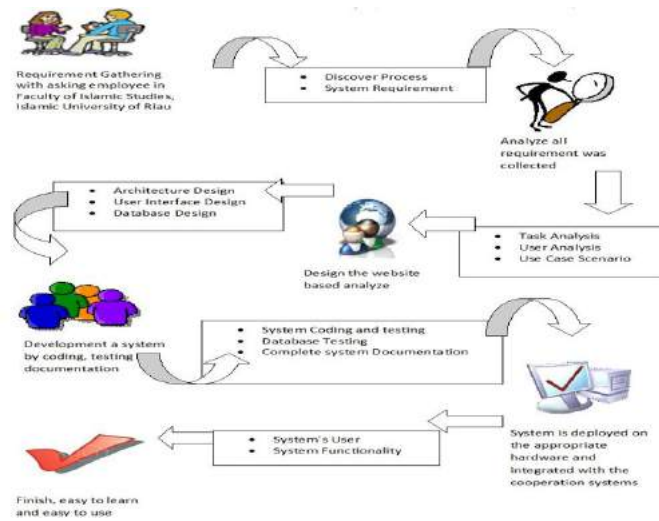
Figure 1: Rapid Application Development of E-Learning at Universitas Islam Riau

3.2.2 User Analysis

- The purpose of user analysis was to understand, at a high level, the users who would use the user interface and how they would use it.

- User analysis was carried out before project planning began, in other words, at the initial stage of the project.

- When no formal project was established, user analysis was carried out before project planning in order to provide management systems with an understanding of the workplace that could help determine system development needs.

- Workplace evaluation was implemented to determine the scope of the project and the project approach and problem statement.

- The user profiles should also be specified for the authorization of each user.

3.2.3 Use Case Scenario

The system flow needs to be refined and it has been compiled as use case diagrams, use case specifications, and sequence diagrams. This is crucial to understand the system flow more easily and effectively. The use case diagram of E-learning is shown in Figure 2. The use case Login shown in Figure 3 is for all users (Admin, Lecturer, and Student), which allows users to log in with valid username/ passwords to access the system. The use case Manage Course shown in Figure 4 is for admins and lecturers to manage course and assign at course in the system. The use case Manage Assignment is for admins, students

and lecturers to manage course assignment in the system. Figure 6 shows sequence diagram of Login Admin and Figure 7 shows sequence diagram of Manage Course.

Figure 2: Use Case Diagram E-Learning
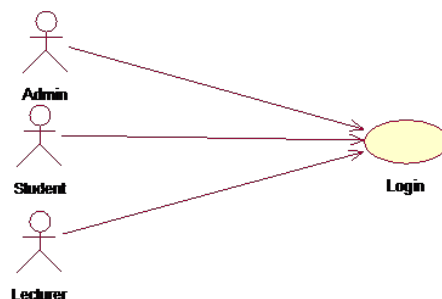
Figure 3: Use Case Login

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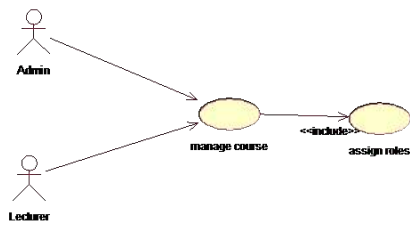
Figure 4: Use Case Manage Course
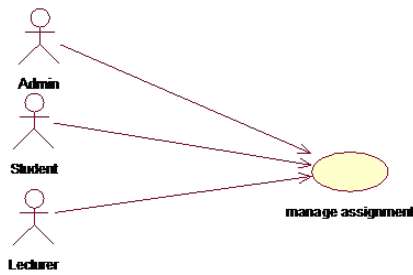
Figure 5: Use Case Manage Assignment
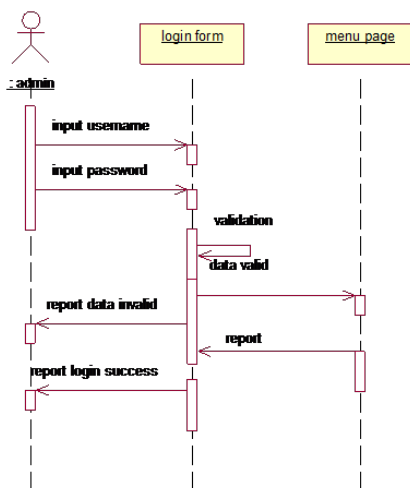
Figure 6: Sequence Diagram of Login Admin

3.3 Tools: Hardware, Software and Database

This system uses XAMPP as a web server, the application was created by Macromedia Dreamweaver by implementing PHP Programming Language and Database by MySQL. The hardware specification is 180 GB hard disk, Intel® Core 2 Duo processor 2.0GHz, and 3G RAM. The system built under Windows 7 operating system. This system uses XAMPP as a web server, the application was created by Macromedia Dreamweaver by implementing PHP Programming Language and Database by MySQL.
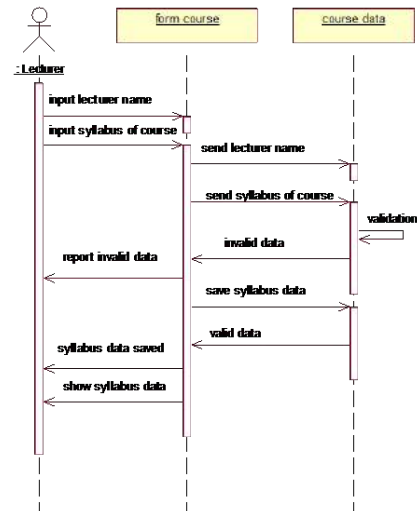
Figure 7: Sequence Diagram of Manage Course

Table 3: Admin Requirements

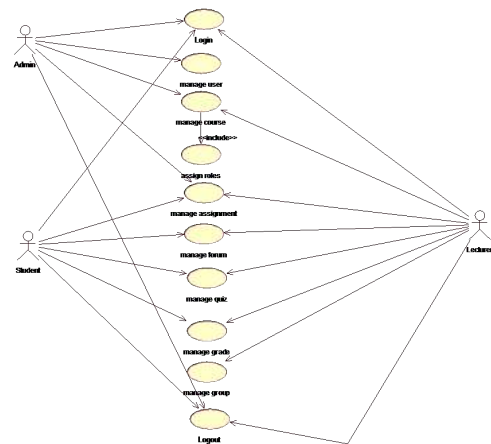| No	Requirement ID	Requirement Detail	Priority
	ELUIR-01	**Login**	
1	ELUIR-01-01	Admin has to input username and password	H
2	ELUIR-01-02	Login failed	L
	ELUIR-02	**Logout**	
3	ELUIR-02-01	Users have to log out by clicking 'Logout' after using the system	H
4	ELUIR-02-02	Users can directly log out from the system without clicking 'Logout' button	L
	ELUIR-03	**Manage User**	
5	ELUIR-03-01	Admin fills all the required fields about the new user	H
6	ELUIR-03-02	Admin click button "update profile" to save into data	H
7	ELUIR-03-03	Admin can view list of user after add new user	H
8	ELUIR-03-04	Admin can edit the user by clicking "edit"	H
9	ELUIR-03-04	Admin can delete the user by clicking "delete"	H
	ELUIR-04	**Manage Course**	
10	ELUIR-04-01	Admin create category for new course by clicking " add new category"	M
11	ELUIR-04-02	Admin fills all the required fields about new course	H
12	ELUIR-04-03	Admin click button "cancel" to cancel the confirmation.	L
13	ELUIR-04-04	Admin click button "changes save" to save into data	H
14	ELUIR-04-05	Admin assign role lecturer and student for course	H
15	ELUIR-04-06	Admin click "teacher" and then choose the user to assign role as lecturer	H
16	ELUIR-04-07	Admin click "student" and then choose the user to assign role as student	H
17	ELUIR-04-08	Admin click button "Assign roles in course" to save into data	H

3.4 Design

Maestro was designed based on information gathered in the previous stage. The design was referred to the requirement specifications from the organization and users (Hoffer et al., 2008) such as Architecture Design, User Interface Design, and Database Design.

Table 4: Lecturer Requirements Login and Logout

No	Requirement ID	Requirement Detail	Priority
	ELUIR-05	**Login**	
1	ELUIR-05-01	Lecturer has to input username and password	H
2	ELUIR-05-02	Login failed	L
	ELUIR-06	**Logout**	
3	ELUIR-06-01	Users have to log out by clicking 'Logout' after using the system	H
4	ELUIR-06-02	Users can directly log out from the system without clicking 'Logout' button	L

Table 5: Lecturer Requirements: Manage Course

No	Requirement ID	Requirement Detail	Priority
	ELUIR-07	**Manage Course**	
1	ELUIR-07-01	Lecturer view his course	H
2	ELUIR-07-02	Lecturer can edit his course by clicking "setting" in "administration" menu	H
3	ELUIR-07-03	Lecturer fills all the required fields about his course	H
4	ELUIR-07-04	Lecturer click button "cancel" to cancel the confirmation.	L
5	ELUIR-07-05	Lecturer click button "changes save" to save into data	H
6	ELUIR-07-06	Lecturer can registered/add student take his course by clicking "assign role" in administrasi menu	H
7	ELUIR-07-07	Lecturer click "student" and then choose the user to assign role as student	H
8	ELUIR-07-08	Lecturer click "add" to add student for take his course	H
9	ELUIR-07-09	Lecturer click "remove" to delete student from his course	M
10	ELUIR-07-10	Lecturer click button "assign roles in course" to save into data	H

Table 6: Lecturer Requirements: Manage Assignment

No	Requirement ID	Requirement Detail	Priority
	ELUIR-08	**Manage Assignment**	
1	ELUIR-08-01	Lecturer can add assigment to his course by clicking "Assignment" in add activities menu	H
2	ELUIR-08-02	Lecturer fills all the required fields about assignment	H
3	ELUIR-08-03	Lecturer click "save and return to course" to save into data and return to course	H
4	ELUIR-08-04	Lecturer click "cancel" to cancel add assignment	L
5	ELUIR-08-05	Lecturer click "save and display" to save into data and display that	H

3.5 Development

The system code was tested to make sure that there was no error and to detect any malfunction of the system before implementing the system. The system was tested using http://localhost to make sure it run smoothly, in order and consistent. During the testing, a lot of shortages and errors have been successfully found. The errors found from the testing were wrong page link, invalid data and page error. All mistakes

have been corrected and now the system completely functions well.

During the system testing, all the data inserted by users were checked in the database to make sure all the data were successfully stored. Besides, the functions that needed the data to be retrieved back were also tested. To retrieve the data in the database, users faced a session that prompted them to enter specific data correctly for security purposes. The entire database had no error and functioned well.

Complete System documentation or draft report finished after the system coding and testing was done. The documentation is important as it contains everything about the system from start to end.

3.6 Project Requirement

Project requirements is divided into two parts, functional requirements and non-functional requirements. Admin requirements are explained in Table 3 and lecturer requirements are explained on Table 4 to Table 9. Non-functional requirements are the functions of non-technical aspects in order to make the users interested to come to E-Learning UIR system. For that, I created the design of E-Learning UIR system as interactive as possible and provided good content on it so users would come to see it.

3.7 Interface

As shown in Figure 8, the user login page is the first step that must be taken to enter the system in accordance with their respective rules such as student or lecturer. As shown in Figure 9, the home page is the main page after the user has logged into the system. in this page, the user will have a special menu according to their roles such as student or lecturer. For example, after students log into the system, the homepage will display courses taken by the student during the semester. As shown in Figure 10, Student Course page contains lecture materials presented by lecturers as well as assignments, quizzes and exams. with this anytime students can access lecture materials anytime and anywhere.

Figure 8: User Login

Figure 9: Home Page

Figure 10: Student's Course Page

Table 7: Lecturer Requirements: Manage Quiz

No	Requirement ID	Requirement Detail	Priority
	ELUIR-09	**Manage Quiz**	
1	ELUIR-09-01	Lecturer can add quiz to his course by clicking "quiz" in add activities menu	H
2	ELUIR-09-02	Lecturer fills all the required fields about quiz	H
3	ELUIR-09-03	Lecturer click "save and return to course" to save into data and return to course	H
4	ELUIR-09-04	Lecturer click "cancel" to cancel add quiz	L
5	ELUIR-09-05	Lecturer click "save and display" to save into data and display that	H
6	ELUIR-09-06	Lecturer can add question into quiz by click list of question in "make new question" menu	H
7	ELUIR-09-07	Lecturer fills all the required fields about question	H
8	ELUIR-09-08	Lecturer click button "cancel" to cancel the confirmation.	L
9	ELUIR-09-09	Lecturer click button "changes save" to save into data	H
10	ELUIR-09-10	Lecturer add question into quiz by click "add to quiz"	H
11	ELUIR-09-11	Lecturer click button "delete" to delete question.	L

Table 8: Lecturer Requirements: Manage Forum And Grade

No	Requirement ID	Requirement Detail	Priority
	ELUIR-10	**Manage Forum**	
1	ELUIR-10-1	Lecturer can add new forum in his course	H
2	ELUIR-10-2	Lecturer click button "tambah topik baru" to add new topic	H
3	ELUIR-10-3	Lecturer fills all the required fields about new topic	H
4	ELUIR-10-4	Lecturer click button "browse." To attach file	M
5	ELUIR-10-5	Lecturer click button "post to forum" to save into data	H
6	ELUIR-10-6	Lecturer can delete his topic	L
7	ELUIR-10-7	Lecturer can response about student opinion by click "tanggapan"	M
	ELUIR-11	**Manage Grade**	
8	ELUIR-11-01	Lecturer can give grade for student	H
9	ELUIR-11-02	Lecturer can give grade Quis for student by click link to kuis "name kuis"	H
10	ELUIR-11-03	Lecturer can give grade Assignment for student by click link to assignment "name of assignment"	H

Table 9: Lecturer Requirements: Manage Group

No	Requirement ID	Requirement Detail	Priority
	ELUIR-11	**Manage Group**	
1	ELUIR-12-01	Lecturer can make a group for student in his course	H
2	ELUIR-12-02	Lecturer click buttton "Auto-Created group" to make group by automatically	H
3	ELUIR-12-03	Lecturer click button "cancel" to cancel add group	L
4	ELUIR-12-04	Lecturer click button "preview" to preview group	M
5	ELUIR-12-05	Lecturer click button "Continue" to save group into data	H

ously has a concrete significance for students and lecturer because this project was developed for solving their problems in the learning process.

4 CONCLUSION

The development of E-learning System is very rapid and efficient by using the RAD method. E-Learning at Universitas Islam Riau is a management software/ system which has complete functions for university activities about learning within students and lecturers. It totally changes conventional learning to fully automatic learning using computer machine. This project goal was to provide solutions for the students and lecturers in managing their course. This research obvi-

REFERENCES

Abdellatief, M., Sultan, A. B. M., Jabar, M. A., and Abdullah, R. (2011). A technique for quality evaluation of e-learning from developers perspective. *American Journal of Economics and Business Administration*, 3(1):157–164.

Amasha, M. A. and AbdElrazek, E. E. (2016). An m-learning framework in the podcast form (mpf) using context-aware technology. *International Journal Of Advanced Computer Science And Applications*, pages 226–234.

Aswati, S., Ramadhan, M. S., Firmansyah, A. U., and Anwar, K. (2017). Studi analisis model rapid application development dalam pengembangan sistem informasi. *MATRIK: Jurnal Manajemen, Teknik Informatika dan Rekayasa Komputer*, 16(2):20–27.

Cidral, W. A., Oliveira, T., Di Felice, M., and Aparicio, M. (2018). E-learning success determinants: Brazilian empirical study. *Computers & Education*, 122:273–290.

Daud, N. M. N., Bakar, N. A. A. A., and Rusli, H. M. (2010). Implementing rapid application development (rad) methodology in developing practical training application system. In *2010 International Symposium on Information Technology*, volume 3, pages 1664–1667. IEEE.

Delors, J. (2013). The treasure within: Learning to know, learning to do, learning to live together and learning to be. what is the value of that treasure 15 years after its publication? *International Review of Education*, 59(3):319–330.

Hoffer, J. A., George, J. F., and Valacich, J. S. (2008). *Modern Systems Analysis and Design*. Pearson Prentice Hall.

Hubalovsky, S., Hubalovska, M., and Musilek, M. (2019). Assessment of the influence of adaptive e-learning on learning effectiveness of primary school pupils. *Computers in Human Behavior*, 92:691–705.

Kendall, K. E. and Kendall, J. E. (2013). *Systems Analysis and Design (Ninth Edit)*. Prentice-Hall, Inc.

Kovacova, L. and Vackova, M. (2015). Implementation of e-learning into the process security education in universities. *Procedia-Social and Behavioral Sciences*, 182:414–419.

Maheshwari, S. and Jain, D. C. (2012). A comparative analysis of different types of models in software development life cycle. *International Journal of Advanced Research in Computer Science and Software Engineering*, 2(5):285–290.

Oproiu, G. C. (2015). A study about using e-learning platform (moodle) in university teaching process. *Procedia-Social and Behavioral Sciences*, 180:426–432.

Wan, S. and Niu, Z. (2018). An e-learning recommendation approach based on the self-organization of learning resource. *Knowledge-Based Systems*, 160:71–87.

Constructivism of Problem-based Learning Failure in Increasing Students Critical Thinking and Strategy of Cognitive Conflict

Zetriuslita and Dedek Andrian

Department of Mathematics Education, Universitas Islam Riau, Pekanbaru, Indonesia
{*zetriuslita, dedekandrian*}*@edu.uir.ac.id*

Keywords: Critical Thinking, Curiosity, Problem Based Learning.

Abstract: The aim of this research was described and analyzed the apply constructivism based on Problem-based learning model and cognitive conflict strategy for the increasing ability of MCT (mathematical critical thinking) and MCA (mathematical curiosity ability). This research adopted a quasi-experimental with pretest-posttest control group design. This research used the design of the mixed method with sequential explanatory strategy. The population consists of students teachers of Mathematics Education Program of Riau Islamic University. The instrument of collecting quantitative data is essay test and questionnaire and interview sheet, observation sheet to collect qualitative data. The findings show that (1) no difference MCT ability and MCA disposition with taught by Problem based learning model and cognitive conflict strategy with explicit direct instruction (EDI) approach, namely; high, medium, low; (2) but in thinking process development in teaching and learning, were founded that there were difference MCT ability and MCA dispositions with have taught by problem-based learning model and cognitive conflict strategy(high, medium, low); It known through observation, interview and result in teaching and learning.

1 INTRODUCTION

Critical thinking is a one skill must be owned by every person. With critical thinking, students will always be careful in carrying out something and make a decision based on a found problem. In Higher Education, this capability is needed for each course requires students to can think critically, because by using critical thinking, students should solve the problem is given, including a course on Number Theory. The results of research Lee, Wootton, Chang, and Phan ()(Kondakci and Aydin, 2013) showed a positive relationship between critical thinking and academic achievement. Students need critical thinking when facing a challenge, and he can make decisions, evaluation, and consideration well the received information, used for solving the problem, make plans for actioning. This capability enables students can find alternative what he thinks is important and consider to make decisions in order to solve the existing problems.data or information can be used make conclusions that are true and the same time see a contradiction or whether there is any consistency or irregularities in the information. In critical thinking, people analyze and reflect on the results of thinking. In short, someone who thinks critically always be sensitive to the information or situation at hand and tend to react to situations or information.

About curiosity, Suhadak (2014) states that curiosity is characterized by the activity of searching and finding that appear enthusiastic to learn, find out and investigate. Suhadak opinion is also supported by McElmeel (2002) hat the information about the curiosity of student can be known from the student motivation for learning, investigating, and finding out. This variable is important developed in the teaching and learning process in the mathematics classroom. because curiosity is part of the motivation (Shellnut, 1996). Elliott, et al (2000) suggest that an important role curiosity in learning more is that curiosity can encourage and build knowledge learners (Suhadak (2014). Therefore, the increase of curiosity in the classroom should be the goal of mathematics learning. Because when students have a high level of curiosity on something, the closer they with the learning environment, a classmate even in group study (Binson, 2009).

To develop students' critical thinking and curiosity required a study that investigates all aspect about critical thinking and curiosity, which believed that learning directed to learners who are dominant

and nature educators and guiding learners in teaching and learning. One allegedly adopts learning is problem-based learning (PBL) and cognitive conflict strategy.

History about Problem-based learning (PBL) begun from medical education at the faculty of medicine at McMaster University in Canada in the mid-1960s. This concept as soon as adopted by three other medical schools, the University of Limburg at Maastricht in Netherlands, University of Newcastle in Australia, and University New Mexico in the United States (G. Camp, 1996). According to (Chyn,) stated that the problem-based learning approach has a powerful pedagogical and teaching and learning system explicitly and directly teach critical thinking skills to students various level. G. Camp (1996, p.3also stated that the constructivist view of learning facilitates, PBL can be adopted from pre-school to post-graduate training and broadens its application far beyond medical training.

From its early history, PBL in the medical world and has been proved growing, then the other in education had been developed as well, especially in mathematics education. among others Orhan Okinoğlu and Rohun (Tandogan and Orhan, 2007) apply PBL in his research concluded that PBL affects the outcome of learning, understanding concepts, and attitudes of learners. While research Sheryl MaCSath, John Wallace, Xiaong Chi, (2009) applying Based Learning Active Learning in his research to the principles namely, a) use small groups to collaborate resolve the problem, b) students as a learning center, c) use a real problem and d) the teacher as a facilitator. His research concluded that the Active Learning Based Learning can improve learning outcomes, attitudes, and concepts of learners.

PBL is based on the cognitive constructivist learning theory Piaget (1896-1980) and the social constructivist Vygotsky (1896-1934) (Orey, 2010). Piaget stated that the cognitive structure as schemata. This theory explains that learning based on the cognitive development of children. While Vygotsky said that learners in constructing the concept need to pay attention to the social environment. In Vygotsky's theory, there are two important concepts that Zone of Proximal Development (ZPD) and scaffolding. According to (Herman, 2006), ZPD is the distance between the actual development level is defined as the critical thinking ability independently and the level of cognitive development is defined as the ability to think critically under adult guidance or in collaboration with peers whose capacity is higher.

Besides PBL, strategy of cognitive conflict can also reinforce students' critical thinking skills,

Cognitive Strategies can be defined as a mental procedures used to achieve the goal of cognitive ranging from the most instinctive as sensing up on the ladder of higher cognitive i.e. observation, save and recall, imagination and thinking (Surya, 2015). (Bruner, 1971; Gagne, 1985) in the Sun (2015) to interpret cognitive strategy refers to the process used in finding and solving problems. While cognitive conflict can be interpreted as there is a common perception (opinion) that raises a conflict between two groups. Then if the individual happens indecision in choosing one or more choice from a selection, the individual has a conflict.

Of cognitive strategies and cognitive conflict combined into cognitive conflict strategy. This strategy is one of the constructivism learning. Piaget constructivist theory states that when someone builds a science, it is to establish a balance higher knowledge required assimilation, namely contact or effective cognitive conflict between the old concept with a new reality (Woolfolk, 1984). The views Piaget stated that learners are actively reorganizing the knowledge that has been stored in the cognitive structure. The development of cognitive structures one with adaptation in the form of assimilation and accommodation.

According to (Santrock, 2002), assimilation is a thinking process by which information coming into the people brain and changed in a way to match the structure of the brain itself. While the accommodation is the process of changing the structure of the brain because of the observations or information. More Santrock explains about the assimilation and accommodation, that there are two steps done in the process of learning to change the concept. The first phase of the second stage of assimilation and accommodation. With the assimilation of students uses the concepts they already have to deal with the new phenomenon. With accommodation learners change the concept that no longer fit with the new phenomenon they face.

Stimulation of cognitive conflict in learning will greatly assist in the assimilation to be more effective and meaningful for learners. For that approach to cognitive conflict needs to be done in the mathematics learning strategy. (Dahlan and Rohayati, 2012) says that cognitive conflict rarely occurs in the context of collaborative but in the personal context. When collaborating is a time to solve conflicts that arise in the individual learner (personal). Furthermore, Ismaimuza (2010) states that the cognitive conflict strategy commonly has a pattern such as exposing alternative framework, creating conceptual cognitive, encouraging cognitive accommodation.

2 RESEARCH METHODOLOGY

The quasi-experimental approach was used in this research (Creswell, 2010; Cohen, 2007) which aims to acquire numeric data on MCT and MCA students have taught using PBL and Cognitive Conflict Strategy (PBLCCS) and have taught using EDI. Design research is using a combination of quantitative and qualitative methods, known as a mixed method with sequential explanatory strategy (Creswell, 2010). The collection of data carried out by two way, namely; quantitative during the experiment in the classroom and qualitative after quantitative analysis have done.

3 RESULT

3.1 The Quantitative Data and Statistical Tests of Critical Thinking Skills

Based on data analysis to increase students' critical thinking skills mathematically, can be described in the following Table 1.

Table 1: Gmean and standar deviation of MCT

Class	N	GMean	SD	Error
EC	25	,4987	,22500	,04500
CC	26	,4772	,21175	,04153

From Table 1, it can be seen that the gain-average (Gmean) and the standard deviation of critical thinking skills students experimental class (EC) and the control class (CC) is not much different and tend to be relatively the same. Furthermore, by using statistical tests, will be the homogeneity significance of variances and differences in an average of improvement of critical thinking ability (MCT) by using the statistics software namely SPSS 20.00.

Table 2: homogenity test of variances and MCT enhancement

Levene's Test for Equality of Variances	
F	Sig.
,131	,719

From Table 2, test results Lavene, obtained by means sig sig = 0.719 $\geq \alpha$, where α = 0.05. In accordance with the criteria of testing, accept H0, meaning that both classes of homogeneous variance.

From Table 2 also shows that Sig = 0.727 $\geq \alpha$, thank H0, meaning that there is no difference critical thinking skills between experimental class and control class.

3.2 The Quantitative Data and Statistical Tests of (MCA) Improvement

As for seeing the results of an answer to a mathematical curiosity of students, can be seen in Table 3 below:

Table 3: Recapitulation of student response to the questionnaire data for all indicators MCA.

	Positive statement (+)				Negative statement (-)			
	SL	SR	JR	TP	SL	SR	JR	TP
N	256	548	368	17	34	11	418	287
%	22	46	31	1	4	13	49	34
JS	68				83			
μ	76							

Information :

SL : Always

SR : Often

JR : Rarely

TP : Never

JS : Percentage of SL + SR and JR + RP

μ : Average of Percentage

Table 4: Gmean and standar deviation of MCA

Kelas	N	GMean	Std. Deviation	Std. Error Mean
EC	25	,094	,242	,04847
CC	26	,028	,294	,06603

Information:

EC : Experiment Class

CC : Control Class

Gmean : Gainmean

Based on the table, it can make a conclusion that EC and CC almost no different because the different of GMean only in a small range. It's mean, there is no difference in the ability of EC and CC. This result can be proven on Table 6 Based on SPSS software analysis.

From table 6, from Lavene test results, obtained by sig = 0.576 $\geq \alpha$, where α = 0.05. In accordance with the criteria of testing, accept H0, meaning

Table 5: Test Statistics for homogenity and enhancement of ability curiosity

Levene's Test for Equality of Variances		t-test for Equality of Means		
F	Sig.	t	df	Sig. (2-tailed)
,576	,451	1,865	49	,068

that both classes of homogeneous variance. From Table 6 also shows that sig (2-tailed) = 0.068 ≥ α, accept H0, in other that no difference in upgrading mathematical curiosity experimental class students with grade control.

3.3 Description of the Critical Thinking based on the Students' Academic Ability Level

For further analysis of the data based on the students' academic ability level is a student group of high, medium and low, can be described the results of the pretest, posttest and N-Gain of critical thinking skills of students:

Table 6: The description of the pretest results, posttest and N-Gain of (MCT).

Group	Rerata Pretest		Rerata Postest		Rerata NGain	
	EC	CC	EC	CC	EC	CC
High	9,0	4,5	24,5	22,5	0,75	0,70
Middle	3,05	2,09	13,05	17,8	0,36	0,55
Low	2,00	1,40	7,50	9,00	0,19	0,26

Information :
Rerata : Average

From table 6, it can be seen that NGain critical thinking skills among groups of EC and CC is not much different, for medium and low group CC group, Ngain is higher than the EC.

3.4 Qualitative Analysis of the Critical Thinking Process Mathematical and Mathematical Curiosity

Based on the result of observations and interviews, it can be described how the process of critical thinking and mathematical curiosity. This result can be seen pada Table.

Table 7: Result of observations from critical thinking and mathematical curiosity process based on group

Group	Observation result	
	Critical Thinking Process	Curiosity Process
High	students were excellent in asking a question about the given task. Students give opinions when the discussion was carried out. Student as soon as asked to lecturer if there are the confused problem have found during teaching and learning process	most students asked when there is a thing wasn't understood. If observing from the spirit in finishing the given task, students very enthusiastic in learning
Middle	the student asked his friend in the group, show students have a curiosity on the settlement of the given problem	The students ask a friend in the learning group, if students can't get a satisfactory answer, the students can get an answer from the lecturer
Low	The students follow a group discussion and listen well	no task is given in a group discussion

3.5 Interview Result and Assessment in Learning Process

All students interviewed about the process of critical thinking about the outcome in answering the questions provided. The results of these interviews were divided into three groups: a group of students of high, medium and low group students.

Table 8: Results of interviews about the critical thinking process mathematical and mathematical curiosity group of students of high, medium and low

Group	Interview result and Assessment in learning process			
	CTPR	CTA-Mean		CAt
		EC	CC	
High	Problem is given to make us think critically, create confusion, but challenged to find solutions. Enthusiastic investigated in a group. Worksheets provided are helping the understanding of the material provided	2,59	2,09	The question make curious, the question makes sense to know what the answer is. Curious about the answer. Worksheets are given to stimulate us to better understand it, has never been given a worksheet like this
Middle	The question makes us have read more carefully, confusing too, but want to know what the solution crate. Give an explanation beforehand	2,46	2,28	The question make curiosity arises, what about the intent, but sometimes confused too, yet want to know what the answer
Low	Very confusing question and the question should be read many times	2,33	1,88	not understand what that means because, confusing and intriguing

Information

CTPR : Critical Thinking Process and Result

Cat : Curiosity Attitude

4 DISCUSSION

Based on the quantitative analysis of mathematical critical thinking and curiosity did not differ significantly from those taught using PBLCCS in the experimental class compared to using EDI in the control class. This means that the application PBLCCS not give significant effect. From observations on the application of this PBLCCS, students have not been able to construct their own what will be learned without considerable assistance from educators (lecturers). From the interviews, their hopes of learning, first there is a detailed explanation, there is setting the example, new students are given the opportunity to learn in a group. Most of the students are unfamiliar also in learning no explanation is given in advance or if there is an explanation, it is very minimal, so that they do not know what to do about a given task. In this case, the student has not been able to independently build their knowledge, need more detailed assistance of educators in understanding the material provided. Yet effective means minimizing guidance to improve critical thinking skillsThis result appropriate with previous studies of (Sweller, 2006), in a study that minimizes instruction or teaching tends to be ineffective. Over half a century of empirical research on this issue has given clear evidence and guidance for teaching that minimizes significantly less effective and efficient than guidance specifically designed to support the cognitive processes needed for learning. Also (Camp,) states whether PBL is just a paradigm shift from teacher learning center to the student center or just a mere fad? So results of research from (Zetriuslita, ; Zetriuslita et al., 2015) about profile of mathematical critical thinking ability student and (Zetriuslita et al., 2015) about profile of mathematical curiosity ability student still low. It means that we have to can something to increasing both of them.

But in the process, critical thinking skills so evident and mathematically when learning takes place, it is concerned with their thought processes in understanding a given task. They eagerly asked, investigate what should be done, seen also their sense of confused but curious about the completion of a given problem. Likewise curiosity (curiosity) developed this PBLCCS like the questions they convey, 'bu this mean anything? ",” A way to resolve how bu?’ And other questions indicating they are keen to find out the solution. However, in the process, they are very enthusiastic in solving challenging problems, they are curious, challenged that in their discussions eager to collaborate, although not yet gave the impact to increase critical thinking skills.

5 CONCLUSION

Based on the result, it can be concluded that PBL and cognitive conflict strategy can’t give a satisfactory in improving the student critical thinking and curiosity, but if see from the process of critical thinking and curiosity during the learning, the results show that the process the development of critical thinking and the attitude of curiosity towards mathematics run well during teaching and learning process. Educators expected can implement this concept in a good situation and the right way so it is expected to have an influence on students critical thinking ability

REFERENCES

Binson, B. (2009). Curiosity Based Learning (CBL) program. *US-China Education Review*, 12(6):13–22.

Camp, G. 1996. *Problem-Based Learning: A Paradigm Shift or a Passing Fad?Medical Education Online*, 1:2.

Chyn, M. Y. *2011*. The power of problem-based learning in developing critical thinking skills: preparing students for tomorrow’s digital futures in today’s classrooms.

Cohen (2007). *et*. al.

Creswell, J. W. (2010). *Research Design*. Qualitative, Quantitative and Mixed Method Approaches.

Dahlan, J. A. and Rohayati, A. (2012). Implementasi strategi pembelajaran konflik kognitif dalam upaya meningkatkan high order mathematical thinking siswa. *Jurnal Pendidikan*, 13(2):65–76.

Herman, T. (2006). *Pembelajaran Berbasis Masalah untuk Meningkatkan Kemampuan Berpikir Matematis Tingkat Tinggi Siswa Sekolah Menengah Pertama (SMP)*.

Orey (2010). *Emerging Perspectives on Learning, Teaching, and Technology*. Switzerland.

Santrock, J. W. (2002). *Life-span development*. McGraw-Hill New York.

Surya (2015). *Strategi Kognitif dalam Proses Pembelajaran*. Alfabeta Bandung.

Sweller, e. (2006). al. *Why Minimal Guidance during Instruction Does Not Work: An Analysis of the failure of Constructivist, Discovery, Problem Based, Experientel, and Inquiry-Based Teaching.*

Educational Psychologist, vol. 41, no. 2, hh, 41(2):75–86.

Tandogan, R. O. and Orhan, A. (2007). The effects of problem-based active learning in science education on students' academic achievement, attitude and concept learning. *Online Submission*, 3(1):71–81.

Woolfolk, A. E. (1984). *Eductional phsycology for teachers*. New Jersey: Prentice-Hall.

Zetriuslita. 2014. *Profil sikap ilmiah rasa ingin tahu (curiosity) matematis mahasiswa. Jurnal Ilmu Pendidikan STKIP Kesuma Negara. ISSN*, 2085-7144.(1):41–46.

Zetriuslita, A., R, and Nufus, H. (2015). Profile ability think critically students in completing mathematical problems based on the level of academic ability. *Proceeding The International Conference on Mathematics Science, Education, and Technology (ICOMSET). Faculty of Mathematics and Science, State University of Padang, Indonesia. ISBN*, pages 978–602–19877–3–5.

Legal Reforms of Trademarks in Order to Increase Investment in Indonesia

Syafrinaldi[1], Rani Fadhila Syafrinaldi[2] and Heni Susanti[1]

[1]*Faculty of Law, Universitas Islam Riau, Jl.Kaharuddin Nasution No.113, Pekanbaru, Indonesia*
[2]*Faculty of law, Universitas Gadjah Mada, Yogyakarta, Indonesia*
{syafrinaldi, heni}@law.uir.ac.id, ranisyafrinaldi@gmail.com

Keywords: Protection of Trademarks, Investment, Economic Development.

Abstract: Intellectual Property Right is an important aspect for the economic growth of a developing country. One of the ways to strive the economic system is through investments. It is believed that Foreign Direct Investment can be a measurement tool for a country's economic growth, FDI may increase capital formation and create job opportunity, promote exports such as manufacturing, access of skilled labor to production networks at the international level and creating some brand names as well as technology transfer and spillover effect. These advantages will automatically contribute to a country's economic growth which will help a developing country to eradicate poverty and achieve peoples' welfare. However, these benefits could not be achieved if a country lacks national platforms for intellectual property protection. Country should be able to develop technology rather than relying merely on natural resources and for this exact reason, an adequate protection of IPR is very necessary. The absence of adequate protection for such rights could make investment in intellectual works less attractive thus affecting economic development and the expansion of world trade. This paper introduces empirical studies of trademarks protection and how it can help economic growth in a developing country, provides an overview of the topic as well as findings on the issues.

1 INTRODUCTION

Information and communications revolution began in the 1800s when the industrial revolution caused millions of people to change their lifestyle. Headrick argued that the Information Era has no beginning, as it is as "old as humankind." However, he suggests that "in the course of history there have been periods of sharp revolutions in the amount of information that people had access to and in the creation of information systems to deal with it" (Headrick, 2000). As we entered the 21 st century, the information era is marked by the rapid advance of science, the advent of online world and digitalization as well as the information system and technology that transform people's lives. Globalization is a real result of advances in science and technology. Intellectual Property Rights (Consideration of Law No. 28 of 2014) is an important matter in the fields of science, technology, art and literature that has an important function in nation-building and promoting public prosperity that has been mandated by the constitution namely the 1945 Constitution of the Republic of Indonesia. The existence and very broad development, especially in

this field of knowledge, requires a process or effort to increase protection and legal certainty for citizens or owners of intellectual property rights.

One of the things that deserves the attention of the state is an establishment of legal protection of ownership rights granted by the state to every citizen. The same type or form of legal protection efforts for IPR holders must also be provided to IPR which is acknowledge as part of efforts to protect human rights (see also article 27 (2) of the UN Declaration of Human Rights). These two things are basically identical due to the fact that both rights are legal objects and are things that can be owned individually or in groups by legal subjects.

The Agreement on the Establishment of the World Trade Organization (WTO) on April 15, 1994, intensified globalization in the field of law that is closely related to the scope of global trade development and intellectual property rights and their attachments namely Trade Aspects Related to the Form of Intellectual Property Rights Agreement (TRIPS Agreement). WTO is a rule of law in the field of trade between countries at the global level and has a high level of enthusiasm to eliminate all bad business or trade prac-

tices.

In the development of international trade which will continue to grow, such as goods and services as human intellectual products, has a very relevant role nowadays. An economic value that has been inherent in intellectual property. Therefore it can be said that with the clarity of elements and standardization of law in the field of protection of intellectual property rights, a new legal concept has emerged, namely the globalization of law. Intellectual Property Rights consisting of copyright, patent, trademarks, varieties of plants, trade secret, industrial design and integrated layout design is a powerful weapon in the economic development of a nation to become a developed country (welfare state). One of the WIPO strategic realignment program is "The challenges we face include addressing the stress on patent and copyright systems as a result of rapid technological change, globalization and increased demand, reducing the knowledge gap between developed and developing countries, and ensuring that the IP system continues to serve effectively its fundamental purpose of encouraging creativity and innovation in all countries".

Many international rules and regulations have been established by the international community with the aim of providing legal protection in a simpler way. Madrid Agreement on International Trademark Registration, 2196 and the Protocol relating to the Madrid Agreement on International Trademark Registration, 1989 and General Regulations based on the Madrid Agreement on International Trademark Registration and Related Protocols of the Agreement, 2008 is an international legal regulation in the field of trademarks which provides a way easier to register trademarks internationally. Moreover, to support the country's economy, the protection of geographical indications and the use of traditional knowledge must be increased.

2 THE IMPORTANCE OF INTELLECTUAL PROPERTY RIGHTS FOR ECONOMIC DEVELOPMENT

One of the ways to strive the economic development is through investments. "Many authors believe that Foreign Direct Investment could be an engine of a country's economic growth, because FDI may enhance capital formation and employment generation, promote manufacturing exports, bring management know-how, access of skilled labor to international production networks and established brand names and

technology transfers and spillover effects (SAMAD, 2010). At the most fundamental level, FDI is a forward-looking decision that binds a multinational to a long-term operation in a host nation. As such, any factor that raises the expected profits of such an operation will raise FDI. In our case, stronger IPRs can raise the firm's perception that it will earn and retain higher returns on its protected knowledge-based assets" (Ghosh and Yamarik, 2019).

"FDI can help the improvement of environment and social condition in the host country by relocating 'cleaner' technology and guiding to more socially responsible corporate policies" (Kurtishi-Kastrati, 2013). Many other potential advantages include reduces in scarcity of capital, raises labor productivity, reduces income disparities, increases competition and reduces foreign exchange gaps. These advantages will automatically contribute to a country's economic growth which will help a developing country to achieve people's welfare and alleviate poverty.

However, these benefits could not be achieved if a country has a weak national platforms and a weak intellectual property rights protection. Intellectual Property Rights is a set of given by a state to the creator and these set of rights are protected by the state for a limited period of time from unauthorized commercial exploitations. These rights include copyright, trademarks, geographical indication, patent, trade-secret, industrial design, as well as plant variety rights. Superior competition in the current world economy in the development of the latest technology related to natural resources and traditional production factors and this reason cannot be supported without adequate protection of intellectual property rights. The absence of adequate forms of legal protection for these rights (Seyoum, 1996) can make investments in the creative world.

Intellectual property right is indeed a powerful tool for economic growth and development of a nation (Syafrinaldi, 2010). Data shows that generally exports by developing countries in the form of natural resources became less relevant for the country's development. The percentage of deterioration of export reaches 70% in 1900 and was down by 20% by the end of the 20th century (see Resources Matter, in the Message of the Director General of WIPO). The data tells us that, relying on merely the natural resources of a country in fact cannot bring prosperity and welfare towards the state. However, by relying on the intellectual property rights, there have been many countries that have given us a definite proof that those said rights can help transform the country into a developed country (industrialized country). The intel-

lectual property is a constant economic potential that will continue to undergo a development and progress through creative and innovative work.

"Various technology development in various fields, that is either simple in nature or high tech, is the result of human invention that is patented and thus protected by the law, by both international and national provisions. Legal protection of the intellectual property rights contain economic rights" (Ng-Loy, 2008) that are high in value as well as moral right (Davis, 2012).

According to this sense, it can be concluded that the law plays an important role and determine the economic development of a society either local, national and international. More over, in this globalization era, the necessity of the law is not only needed by the public and the justice seekers in a case at the court only, but also by the business actors, farmers and technocrats who also rely on the law which purpose is to provide protection for their own profession.

According to the provisions of Article 15 of the Trade Agreement concerning aspects of Intellectual Property Rights (TRIPs): "Any sign, or any combination of signs, capable of distinguishing the goods or services of one undertaking from those of other undertakings, shall be capable of constituting a trade mark". Things that can be explained in this sense. First, trademarks are interpreted in substance: a sign. It can be denominations, letters, numbers, color combinations, or a combination of these elements. Second, the trademark is determined by its function, the mark must be distinctive. Initially trademark law was designed to meet the objectives of public policy regarding consumer protection. This prevents the public from being misled about the origin or quality of the product. Third, the trademark is interpreted in a legal term: *"This is a type of industrial property. Trademark protection gives owners the exclusive right to use signs to identify goods or services produced or authorize other parties to use them in return for payment. Practically, the owner can be a physical or legal person, (the majority of trademarks are owned by companies)"* (Çela, 2015).

Madrid Agreement acknowledge that international trademarks registration is done in one of the trademarks office of the member countries or at the offices of the WIPO by filling in the registration form. With those procedures, trademarks has obtained a legal protection internationally in member countries without having to perform the registration in their respective countries. The principle of the first to file apply to this international trademarks registration due to the fact that the law only provides protection for registered trademarks (constitutive principle).

"The international registration referred to by the Common Effluent Regulations of the Madrid Agreement concerning the International Registration of Marks and the Protocol Relating to that Agreement is a trademarks registration made in accordance with the Madrid Agreement or the protocol or in accordance to both. The protocol should be seen as the law as a tool of economic development in an effort to attract foreign investors to Indonesia. Therefore, the participation of Indonesia to become a member of the Madrid Agreement and its Protocol must be really bring benefits for the development of intellectual property rights in Indonesia, especially trademarks"(Wipo, 2018) The trademarks act not only provides protection towards foreign good and services but also to the goods and services of domestic product from small, medium and large business. Past experience of Indonesia that is not so good in the development of the law in the field of trademarks should not be happening again. The IP system can support economic, social and cultural development if it is used strategically(Wipo, 2018).

2.1 The Necessity of Bold Legal Measures from the Government of President Jokowi

Basically, the concept of IPR covers intellectual property rights which are inherent to the owner and are permanent or exclusive, and the rights obtained by other parties upon permission from the owner are temporary. *"The results of this ability to think are ideas that are then embodied in the form of creation or invention. While the rights obtained by other parties on the permission of the owner, as well as the right to reproduce, the right to use certain products or the right to produce a certain product"*(Muhammad, 1982).

There are many laws and regulations in Indonesia concerning intellectual property rights which only act as passive laws, because in reality these laws have not been implemented to the utmost. This will affect the potential economic strength of existing provisions that cannot be achieved in the community and state. it can be said that the effectiveness of law and law enforcement in Indonesia, especially in the field of intellectual property rights is not at its limit.

"It is time for the enactment of Act No. 20 of 2016 concerning trademarks and geographical indications to be followed up with updates and to be incorporated (Syafrinaldi, 2010) with a variety of international provisions in the field of trademarks, such as the Madrid Agreement and its Protocol as well as the Singapore Treaty, 2006. This is the right moment for Indonesia's Government under the leadership of President Joko

Widodo and Muhammad Jusuf Kalla to use the law as a tool of economic development and as well as the ability of the law to attract the investors to invest their funds in Indonesia through some actions. First, Indonesia should ratify the Madrid Agreement and its Protocol. Secondly, implementing the Act No. 20 of 2016 concerning trademarks and geographical indications to the maximum."

Trademarks and geographical indication measures, aspects of geographical indications that exist in Indonesia must be of particularly serious concern to the country, which in this case is the government at both the central and regional governments. this is because in various regions still have a lot of wealth and considerable economic potential that can be done and formed into a creative economy. In fact the conditions in many areas is almost the same, only a small percentage of areas in Indonesia that already brought up the aspects of the commercial value of geographical indications, for example, "the Kopi Arabika Toraja, Kopi Arabika Gayo, Kopi Arabika Kintamani Bali, Tembakau Hitam Sumedang, Tembakau Mole Sumedang, Susu Kuda Sumbawa, Kangkung Lombok, Madu Sumbawa, Beras Adan Krayan, Kopi arabika Bajawa Flores, Vanila Kepulauan Alor, Ubi Cilembu Sumedang, Salak Pondoh Sleman, Kopi Liberika in Meranti, Riau, and so on".

Geographical Indication is a sign that shows the region of where the goods natively came from based on its geographical environmental factor including its natural factor, human factor, or a combination of both said factors which give reputation, quality and particular characteristic to the produced goods and/or products (Article 1 Number 6 of Act No. 20 The year 2016 concerning Trademarks and Geographical Indications).

Trademarks are generally different from other geographical indications that are not related to natural and human factors. in this case the definition of geographical indication is the exclusive right granted by the state to the holders of registered geographical indications, the meaning is that if as long as reputation, quality and characteristics are the basis of geographical indications still remain.

(hashita, 2019) India is able to produce more products of geographical indication that could depend on from the various districts, then rest assured that the Indonesian economy will be better."

Filing for geographical indication registration is an absolute requirement to get the protection of the law and this is what makes geographical indication different with the designation of origin that does not require the registration. "A registered Geographical Indication enjoys a legal protection, which persists as

Table 1: The export value of Indonesia and some countries in the field of GI.

No	State	Product	Volume (Tons)	Value
1.	Indonesia	Coffee	900,000	$1.2 B
2.	Thailand	Rice	1.400.000	12,23 B Thai Baht
3.	Sri Lanka	Ceylon Tea	-	$1.5 B
4.	India	Basmati Rice	5.000.000	$250 M

far as the features and or the quality on which the protection has been conferred still exist (Article 56 paragraph (7) of Trademarks and GI Act)." Which exists like in Thailand, for coverage of geographical indications in that country according to B3 which include such as Rice, Silk, Grapes and Spirits. compared to the provisions contained in Article 2 paragraph (2) of Government Regulation No. 51 of 2007 goods can be in the form of products in agriculture, foodstuffs, handicraft forms, or other types of goods. Another interesting example of the geographical indication to pay close attention to is Ceylon Tea from Sri Lanka which is the best product of the geographical indication that has a very high economic value. "The contribution towards economic provided by Ceylon Tea is directly and indirectly employed by the tea industry"(Hasitha, 2013) :

• 3Rd Largest Foreign Exchange earner.

• Generates an annual income of USD 1.5 Billion.

• Covers entire food import bill of the island.

• Constitute 65 percent of the nation's Agricultural Export revenue.

• Contributes 2 percent to the country's GDP.

• 2 Million People (10 percent of population)

According to data released by the Agency for the Development of Exports of Agricultural and Processed Products, another thing that can be explained is that the country of India is also one of the countries in the world that is able and has been able to enjoy the results and economic benefits of geographical indications, for example is the type of basmati rice. India stated that the export of basmati rice India reached the numbers of 370.000, 57 tons from April 2013 until March 2014 with the value of Rs 2,929,900,000.96 or worth more than Rp 3 Trillion,- . The number of this exports rose by 10,000 tons from the previous year.

India provides limitations on the geographical indication, "in relation to goods, means an indication

which identifies such goods as agricultural goods, natural goods or manufactured goods as originating, or manufactured in the territory of a country, or a region or locality in that territory, where a given quality, reputation or other characteristic of such goods is essentially attributable to its geographical origin and in case where such goods are manufactured goods one of the activities of either the production or of processing or preparation of the goods concerned takes place in such territory, region or locality, as the case may be" (Sreenivasulu, 2013).

Traditional knowledge is one of the field of IP that also receives very little attention from Indonesian government. Therefore, traditional knowledge has not yet been able to be displayed to the surface optimally to become national commodities that could be commercialized. The terminology of the "traditional knowledge" is used for fields which include traditional knowledge (TK), genetic resources (GRs) and traditional cultural expressions (TCEs). *"Traditional knowledge (TK) is defined as "knowledge, know-how, skills and practices that acres developed, sustained and passed on from generation to generation within a community, fills up forming part of its cultural or spiritual identity"*(Wipo, 2018).

TCEs have strong ties with the social and cultural identity of the original people of a local, including in it know-how and skills which it possessed in accordance with the values and trust of that local communities. The legal protection given is a means of an effort to promote creativity, enhance cultural diversity and preserve local cultural heritage. In this context, the copyright Act No. 28 of 2014 is pretty much accommodating the protection in the provisions of article 40 and other related article. This was seen as a progress in the copyright field compared with the Act No. 19 of 2002 concerning Copyrights, although there are still some provisions that are debatable.

Genetic material can be in the form of natural materials such as plants, animals, microbial decomposition or other original materials that have a hereditary unit function. Genetic resources (GR) if associated with genetic material that has an actual value. for example, in the form of some plant material, animal origin, or microbial decay origin, such as medicinal plants, agricultural plants, and animal breeds.

Indonesia is still not too late for excelling in the field of traditional knowledge if the current open opportunities is not wasted. The commitment of the government is expected to promote the intellectual property as a strategic plan to promote the economy of the nation. IPR management system that it is required for the golden opportunity can be achieved for the future of justice and peace.

3 CONCLUSION

"Investment is influenced by various factors, such as political, economic, legal and social culture. especially in the field of intellectual property law, the provisions of the legislation in the field of intellectual property must be able to provide guarantees to every citizen that the national legal rules of Indonesia must be in accordance with international provisions. Enactment of Law No. 20 of 2016 concerning Trade Marks and Geographical Indications must be immediately followed by Indonesia's participation as a participant in various international provisions in the field of trademarks, such as the Madrid Agreement and its Protocols and Singapore. Agreement, 2006."

There are numerous things that determined matters relating to investment, those are political, economic as well as social. Specifically, stipulations of laws and regulations concerning intellectualproperty law shall provide a certainty that Indonesia's national laws are in accordance with the international provisions.

In Joko Widodo and Jusuf Kalla administration era, there are several actions and efforts needed to be accomplished in order to carry out and execute the laws to the utmost and to ensure that these laws would attract and influence investors to invest their funds in Indonesia. First, Indonesia must immediately ratify the Madrid Agreement and its Protocol and adapt it to the legal character of the nation. Second, the Government must immediately assign and create pilot projects in the field of intellectual property that the goal is to achieve prosperity for every citizen of Indonesia

The set of laws and regulations which shall exist in the field of intellectual property rights must be utilized to the utmost and shall be used as a tool in the protection and development of the creative economy in Indonesia. These laws shall be able to guarantee creativity and innovation as well as ensuring that these innovations are protected by law. It is very necessary that the Government is able to show good faith as well as a strong and sincere political will that the provisions of the Act in the field of intellectual property rights are no longer only existing laws, but rather feasibly implemented so that in the future Indonesia will be able to rely on intellectual property as a result of intellectual creation of human minds that are able to bring prosperity to the nation and state.

REFERENCES

Çela, M. (2015). The importance of trademarks and a review of empirical studies. *European Journal of Sustainable Development*, 4(3):125–134.

Davis, J. (2012). *Intellectual Property Law Core Text*. Oxford university press.

Ghosh, S. and Yamarik, S. (2019). Do the intellectual property rights of regional trading arrangements impact foreign direct investment? an empirical examination. *International Review of Economics & Finance*, 62:180–195.

hashita, H. (2019). Presentation by mr. hasita de alwis: "ceylon tea" sri lanka's best known geographical indication.

Headrick, D. R. (2000). *When information came of age: Technologies of knowledge in the age of reason and revolution, 1700-1850*. Oxford University Press.

Kurtishi-Kastrati, S. (2013). The effects of foreign direct investments for host country's economy. *European Journal of Interdisciplinary Studies*, 5(1):26.

Muhammad, A. (1982). *Hukum Perikatan*. Alumni.

Ng-Loy, W. L. (2008). *Law of intellectual property of Singapore*. Thomson Sweet & Maxwell Asia.

SAMAD, G. (2010). Intellectual property rights and foreign direct investment: Analysis of 14 south and south east asian countries, 1970-2005.

Seyoum, B. (1996). The impact of intellectual property rights on foreign direct investment. *The Columbia Journal of World Business*, 31(1):50–59.

Sreenivasulu, N. (2013). *Law relating to Intellectual property*. Partridge Publishing.

Syafrinaldi, S. (2010). *Hukum tentang perlindungan hak milik intelektual dalam menghadapi era globalisasi*. UIR Press.

Wipo (2018). Protocol Relating to the Madrid Agreement Concerning the International Registration of Marks.

Bringing Collaborative Problem Based Learning (CPBL) into a Flipped Classroom: A New Strategy for Teaching Writing

M. Aries Taufiq[1], Marhamah[2] and Rahmi Eka Putri[1]

[1]*Universitas Negeri Padang, Jl. Prof. Dr. Hamka, Padang, Indonesia*
[2]*Universitas Islam Riau, Pekanbaru, Indonesia*
{*ariespertama, marhamahahmadhamid, amethyst.himekawaii*}*@gmail.com*

Keywords: Collaborative Learning, Problem Based Learning, Flipped Classroom.

Abstract: This study is conceptual research. It designs the integration of Collaborative Problem Based Learning model with collaborative learning model implemented in flipped classroom for teaching writing at university. The strength of this model lies on the fact that it is the student-centered approach. Enriching the learning environment with the use of technologies can also offer students better learning opportunities. One method for incorporating technology like videos is the flipped classroom, which brings an innovative perspective to traditional lectures. This study discusses about the model of Collaborative Problem Based Learning which is implemented into a flipped classroom. The flipped classroom involves blended learning - a combination of face-to-face in-class learning and distance learning. It is a perfect choice as the model encourages students' active participation, promotes support from teacher and peers to handle homework and allows more free time in class. The flipped classroom model seems to be more favorable in higher education than in K-12 education. This is because the model lends itself to active learning.

1 INTRODUCTION

Writing is found to be difficult skill by students. It is due to the fact that the process of writing covers many aspects such as content, organization,vocabulary, language use, and mechanics. According to National Writing Project (2003), the complexity of writing causes teaching writing is very challenging task for English teachers in education field. Besides, this complexity may affect the students' attitude on writing. Considering the problems encountered by students, Harmer (Duch et al., 2001) states that teachers should find the appropriate methods and methodological beliefs to lead the teaching practice.

For this reason, it is suggested for teachers to find other methods to teach writing. The use of problem based learning (PBL) can be a solution to stimulate students to develop their writing skill. By utilizing this strategy, the students should be active to manage their own way to learn. The instructor will be the facilitator for giving problems to be solved and possible learning sources to be used. Gallagher and Reynolds (Gallagher, 1997) assert that one of the characteristics of PBL is the use of student-centered approach and teachers are facilitators who serve as the initial stimulus and framework for learning. In addition, enriching

the learning environment with the use of technologies can also offer students better learning opportunities. Video is one of effective technological tools for teaching when used properly (Hartsell and Yuen, 2006).

This model attempts to utilize the use of Problem Based Learning which is combined with collaborative learning for teaching writing at university. The strength of this model lies on the fact that it is the student-centered approach. Since the students are the center of learning, they feel free to study the topics they are interested in and manage the way how to study including identifying their learning needs, planning classes, leading class discussions, and assessing their own work and their classmates' work. In addition, students become more effective problem-solvers and self-directed learners while the lecturers become a tutor or cognitive coach who models inquiry strategies, guides exploration and help students clarify and pursue their research questions. This article discusses about the model of Collaborative Problem Based Learning which is implemented into a flipped classroom. The flipped classroom involves blended learning - a combination of face-to-face in-class learning and distance learning. It is a perfect choice as the model encourages students' active participation, promotes support from teacher and peers to

handle homework and allows more free time in class. The flipped classroom model seems to be more favorable in higher education than in K-12 education. This is because the model lends itself to active learning.

2 RELATED THEORIES

2.1 Problem Based Learning

Problem Based Learning (PBL) is a total approach to education that challenges students to learn through an active engagement in real life problems. Today, PBL is used extensively in elementary, secondary and tertiary education institutions worldwide, and has also been adopted in various fields of professional training, such as nursing, engineering and architecture, among many others (Ioa,). The key characteristics of PBL are that it involves team work and communication skills, a problem-solving, critical, analytical and creative capacity, as well as individual research.

As (Duch et al., 2001) declare, problem-based learning is one educational strategy that helps students build the reasoning and communication skills necessary for success today. Actually PBL derives from a theory which suggests that for effective acquisition of knowledge, learners need to be stimulated to restructure information they already know within a realistic context, to gain new knowledge, and to then elaborate on the new information they have learned (Kilroy, 2004). Therefore, problem-based learning can be implemented to assist the students to increase their understanding or cognitive competence toward content subjects written in English. By applying this strategy, both students' understanding and communication skills can be constructed.

In brief, the PBL strategy starts the session with the students' activities by giving problems/questions related to the topics that should be discussed in groups. Students classify the questions that they can answer and they cannot answer at that time. The teacher facilitates the students with content materials to help them answer the questions. Then the students share the tasks that will be done individually or in groups. They discuss all the problems together until the tasks are completed. If they get problems they can ask the teacher to verify their answers. Then the teacher invites each group to report their answers to the other groups. The other groups can give comment, questions, or any other addition toward the report of the presenting group.

2.2 Collaborative Learning

Collaborative can be interpreted as collaboration or collaboration. (Laal and Laal, 2012) define collaborative learning as a teaching and learning approach that involves a group of students to work together to solve problems, completing tasks, and creating a product. Meanwhile, Smith and MacGregor (Laal and Laal, 2012) define collaborative learning as a term that incorporates various educational approaches that involve intellectual relations between students, or between students and teachers together. Generally students work in groups of two or more members, seek for comprehension, solutions, understanding, or creating a product. Whereas, according to (Dillenbourg, 1999), Collaborative Problem Based Learning is a collaboration performed by two or more people who have the same goal, to solve a particular problem. This learning involves the cooperation process among students to solve problems as the main process to construct their own knowledge, supported by the initial knowledge the students possess.

(Gunawan, 2006) Classifies five important elements in the process of collaborative learning. They are:

- A sense of togetherness.
- There are mutually supportive interactions among group members.
- There is a sense of responsibility individually and in groups for the success of the learning process.
- Good interpersonal communication skills in a small group.

There is a process of reflection on their functions and abilities to work together as a group.

2.3 Flipped Classroom

The flipped classroom intentionally shifts instruction to a learner-centered model in which time in the classroom is used to explore topics in greater depth and create meaningful learning opportunities while students are initially introduced to new topics outside of the classroom. The flipped classroom involves blended learning, a combination of face-to-face in-class learning and distance learning. Students will benefit from participating in class group discussion and engaging in online video lessons and assignment that must be completed additionally outside of the class time. Comment that the flipped classroom approach "is an integration of face-to-face and online learning experiences—not a layering of one on top of the other". The flipped classroom approach shifts the responsibility from teacher to the students.

According to (Bergmann and Sams, 2012), a flipped classroom can be described as a setting where that "which is traditionally done in class is now done at home, and that which is traditionally done as homework is now completed in class" (p.13). In other words, the sequence is inverted. Meanwhile, according to Lage, Platt, and Treglia (Lage et al., 2000), "Inverting the classroom means that events that have traditionally taken place inside the classroom now take place outside the classroom and vice versa" (p. 32). The flipped classroom helps foster learner autonomy through online video lessons and class activities at campus. Reynard suggests that classroom lessons be used as scaffolding rather than using it as the core instruction as in traditional classes (Reynard, 2007). Teacher should spend class time, a very significant part of learning process focusing on dialog practice, working in groups or demonstrations.

A flipped classroom frees up class time for teachers and presents learning choices to students rather than just informing them in a sit-and-listen format. With this model, teachers "... can deliver this instruction by recording and narrating screencasts of work they do on their computers, creating videos of themselves teaching, or curating video lessons from trusted Internet sites"

2.4 The Learning Model

The learning model is a plan or a pattern that is used as a guide in planning classroom learning. The model is a general pattern of learning behavior applied to achieve the expected competencies/learning objectives. Learning model is a pattern of interaction between students and teachers in the classroom that involves approaches, strategies, methods, learning techniques applied in the implementation of teaching and learning activities. A learning model not only determines what the teacher must do, but it also involves the stages, the principles of the reaction of the teacher and students and the supporting system required.

Arends (Agus, 2009) states that a learning model refers to the approach including the learning objectives, the stages in learning activities, the learning environment and classroom management applied in the classroom. Meanwhile, according to Joice & Weil (Isjoni, 2013), a learning model is a pattern or plan planned in such a way and used to compile the curriculum, organize the subject materials, and give instructions to the instructor in his class. Whereas (Istarani, 50) asserts that learning model is the entire series of presentation of teaching material covering all aspects before, while and after the learning performed by the teacher and all related facilities that are used

directly or indirectly in the learning process.

Students are actively involved in an effective and meaningful learning they are the center of learning activities and the formation of competencies and characters. The learning model is very closely related to the learning style of students and the teacher's teaching style. The teacher's efforts in teaching students are very crucial to achieve the success of planned learning goals. Therefore, the selection of various methods, strategies, techniques and learning models is the main thing.

Related to this, (Rusman and Pd, 2012) suggests six characteristics of the learning model. First, the learning model is based on educational and learning theory proposed by experts. After that, the learning model has a specific educational mission or purpose. Then, a learning model can be applied as a guide for improving learning activities in the classroom; for example, the synectic model is designed to improve creativity in language learning. Next, the fourth characteristic is that the learning model has parts of the model called sequences of learning steps (syntax), reaction principles, social systems, and support systems. Furthermore, the learning model has an impact as a result of the application of the model. Finally, the teacher can make teaching preparations based on the learning model used. Moreover, Joyce et al. (2015) state that a model has at least (a) the sequence of steps of learning (syntax), (b) the principles of reaction that explain how the teacher evaluates students and how to respond to what students do in the learning process, (c) a social system that describes the collaboration form between teachers and students in learning or the role of teachers and students and their relationships and the types of rules that must be established/ implemented, (d) support systems that refer to the conditions needed to support the implementation of the learning model, including facilities and infrastructure such as tools and materials, learning environment, as well as teacher and student readiness, (e) effects of the model (instructional and accompaniment effect).

3 FINDING AND DISCUSSION

Based on the literature review and preliminary research, the researchers design a teaching model that suitable for teaching writing which integrate collaborative and problem based learning. This model will be applied in flipped classroom.

Collaborative problem based learning model is a learning model beginning with a problem that can be solved in groups. The guidelines for applying collaborative problem based learning are divided into three

categories: guidelines for teachers, students and guidance for both teachers and students.

a. Guidelines for teachers

- The teacher as a facilitator.
- Create a collaborative learning environment.
- Formulate the focus of the problem.
- Give an explanation when asked by students.

b. Guidelines for students

- Determine how to use information and various sources obtained to solve problems.
- Determine and take into account the time allocation for individuals and groups.
- Formulate the focus of the problem.
- Give an explanation when asked by students.

c. Guidelines for both teachers and students

- Teachers and students collaborate to determine learning issues and objects.
- Teachers and students gather the necessary learning resources.
- The teacher evaluates students, both individually and in groups.

In this model, the steps of collaborative problem based learning are as follows:

- Learning begins with giving challenging problems.
- Students are given the opportunity to identify and design solutions to these problems individually before they learn in groups.
- Students learn in small groups of 4-6 people to clarify their understanding, criticize friends' ideas in their groups, make conjectures, choose resolution strategies, and solve problems given, by clashing arguments.
- Students solve the problem given by the teacher individually.
- Students present the results of solving the problems obtained

Collaborative Problem Based Learning settings are performed in small study groups, in which each group consists of 3-5 students. Before assigning the students to work in group, the teacher first gives the problem to be solved. Then, the teacher asks students to work in group to solve problems given by the teacher. In this model, the intended collaborative problem based learning is a small group based learning model by providing small group problems to be solved and revealing the results of their work to other. The steps applied are:

- Each student is given individual problems.
- The teacher makes a small group of 2-5 students.
- After individual problems are given, students can work in groups with the knowledge gained from individual problems.
- Students solve the problems in groups
- The results of group work are submitted to other groups
- Other groups give responses.

Based on the description above, the steps taken are students completing the problem individually,after students finish the problem in groups, then one of the group representatives presents the results of the group's work in front of the class to another group.

3.1 Model of Teaching

The model of teaching is described below:

3.1.1 Syntax

- Planning

Planning stage is the first activity. In this stage, the lecturer prepares online materials such as video and asks students to watch the video and do the tasks that follow. After that, in the classroom, 3 to 5 students work in a group and start planning their writing by discussing the problem given by the lecturer. At this stage, the students discuss the problem, then, generate the solution of the problem. After that, the possible solutions are listed and constructed into single sentences. In short, at planning stage, the learning starts with constructing ideas from the problems provided. After that, the students work collaboratively to discuss the possible solutions for the problem. In this process, the students might work individually first before coming to the discussion to seek the possible solutions.

- Drafting

At drafting stage, the students write their first draft of writing in a group. They generate the listed possible solutions they have discussed at the previous stage. At this stage, students work together to construct their writing. They might discuss how to arrange the sentences they have constructed to make it united and discuss the appropriate conjunctions to complete the writing product.

- Revising and Editing

After the drafting stage, the next stages are revising and editing stages. At revising stage, the students check the other group's writing and give feedback. It

is done by managing the students to do peer correction. The writer and the corrector check the writing product, then, the corrector gives feedback. This is the activities done for revising stage. After that, editing stage begins after the writer gets some feedback from the corrector. The writers go back to their initial group and they write the second draft based on feedback given by other group's members. Next, they do the second peer correction with different group. The activities are performed like the previous revising stage. In short, the two stages, revising and editing, are done simultaneously. These stages end when the lecturer check the students' writing product and give final feedback related to the structure of the text to each group before they present their writing in front of the class. However, the lecturer needs to observe the students during the activities and give assistance when possible. At last, the students present their writing and stick their final draft in front of the class.

- Evaluating

The last stage is evaluation. In evaluating stage, the lecturer gives final correction and revises students' writing. After that, the lecturer concludes the lesson they discuss that day.

3.1.2 Social System

The social system describes the role and the relationship between the lecturer and the students. The figure the represents the model shows the relationship between the lecturer and the students. Before the planning stage, the lecturer prepares some topics or problems to be discussed by the students. It is the stage when the lecturer makes sure that the students are ready to involve in learning activities by activating students' schemata, developing it, and makes sure that the students know the purpose of the learning that day. The next stage is the time for students to be more active by discussing the problems and planning their writing from the problems they discuss. The lecturer's responsibility is only to monitor students' activity and make sure that the students know what they are doing. The lecturer might give assistance when needed. Since the students are already starting to plan their writing, the role of the students emerges at this stage.

After the planning stage, the students' responsibility is increasing but the lecturer's is decreasing. This is because students are expected to write their first draft of writing by generating the solution of the problem they have discussed at the previous stage. Moreover, at this stage, the lecturer should minimize assisting help for the students. This happens until the last editing stage. Finally, at the last stage which is evaluation, the lecturer becomes the center of the learning

process since it the lecturer's responsibility to correct and students' writing product. In addition, the lecturer will also conclude the topic discussed on that day.

3.1.3 Principles of Reaction

The principles of reaction tell the lecturer how to involve students and how to respond to what the students do. It is described in almost all of the stages of teaching. At the planning stage, the lecturer involves the students by discussing the problem and the solutions that they are going to write about. It aims to activate students' background knowledge related to the topic for the lesson. During other stages, the lecturer is expected to respond to the students when they have difficulties in understanding and generating the ideas for their writing.

3.1.4 Support System

Support system describes the supporting conditions required to implement the model. In this model, the students need support system like various books and reference materials to help them find the solutions of the problem given by the lecturer. If it is possible, the lecturer might allow the students to use the internet service to find related sources to the topic.

3.1.5 Effects of the Model

As seen in the figure previously, this model, like other models, result in two types of effects: instructional and subsidiary. Instructional effects are the direct effects of the model resulted from the contents and skills on which the activities are based. Since the model provides problem based learning with the focus of teaching writing collaboratively, it is expected that the students are able to understand the stages in writing, to produce a good writing product, and in the end, eventually to have better language proficiency especially in writing. After that, the subsidiary effects are the indirect effects of the model. Since this model applies collaborative learning in which the students are expected to work collaboratively, there is a possibility that the students will be able to build their communication and critical thinking skills.

4 CONCLUSIONS

The problem based learning approach with collaborative learning strategies is actually a model that combines problem based learning with collaborative learning. Group discussion and brainstorming become the focus to be taught in this model. The distinct

feature of this model is that at the end of the process, there is evaluating stage for the lecturer to correct students writing and conclude the points of the topic of the lesson discussed in the classroom. Hence, it is expected that when the lecturer implements this model, which combined two kinds of learning approaches and strategies, in the writing class, the students will be able to write with better comprehension and competence since they are taught how to write systematically and they are provided with several activities to practice how to write.

REFERENCES

Ioannou, C. (2000). Problem - Based Learning. Retrieved From:http://www.cs.bham.ac.uk/resources/project_reports/ShowOverview.asp?id=4. - Google Search.

Agus, S. (2009). Cooperative learning teori dan aplikasi paikem. *Yogyakarta: Pustaka Pelajar*.

Bergmann, J. and Sams, A. (2012). *Flip your classroom: Reach every student in every class every day*. International society for technology in education.

Dillenbourg, P. (1999). *Collaborative learning: Cognitive and computational approaches. advances in learning and instruction series.* ERIC.

Duch, B. J., Groh, S. E., and Allen, D. E. (2001). *The power of problem-based learning: a practical" how to" for teaching undergraduate courses in any discipline.* Stylus Publishing, LLC.

Gallagher, S. A. (1997). Problem-based learning: Where did it come from, what does it do, and where is it going? *Journal for the Education of the Gifted*, 20(4):332–362.

Gunawan, A. W. (2006). Genius learning strategy. *Jakarta: Pustaka Utama*.

Hartsell, T. and Yuen, S. C.-Y. (2006). Video streaming in online learning. *AACE Journal*, 14(1):31–43.

Isjoni, H. (2013). Cooperative learning efektifitas pembelajaran kelompok. *Bandung: Alfabeta*.

Istarani, M. R. (50). Tipe pembelajaran kooperatif. *Medan: CV. Media Persada*.

Kilroy, D. A. (2004). Problem based learning. *Emergency medicine journal : EMJ*, 21(4):411–3.

Laal, M. and Laal, M. (2012). Collaborative learning: what is it? *Procedia-Social and Behavioral Sciences*, 31:491–495.

Lage, M. J., Platt, G. J., and Treglia, M. (2000). Inverting the Classroom: A Gateway to Creating an Inclusive Learning Environment. *The Journal of Economic Education*, 31(1):30.

Reynard, R. (2007). Hybrid learning: Challenges for teachers. *The Journal*.

Rusman, D. and Pd, M. (2012). Model-model pembelajaran. *Raja Grafindo, Jakarta*.

Understanding the Models of Framing Analyses Approaches in Media Framing Studies

Dafrizal Samsudin

Department of Communication Science, Universitas Islam Riau, Pekanbaru, Indonesia
dafrizal@comm.uir.ac.id

Keywords: Frame, Framing Analysis Model, Media Framing.

Abstract: The aim of this paper is to critically review various models of framing analysis approach based on the critical analysis of various relevant kinds of literature proposed by famous scholars who concern with the framing studies. The review of framing analysis models revealed that every different model of framing analysis approaches scientifically used to dig the typology of news framing in news text. Those differences derived from different ways of scholars critically viewed and interpreted the context of the philosophical and epistemological meaning of framing. The paper shows that the different framing analysis approaches used in media framing studies such as the internal structure of the media package, episodic vs thematic, multi-dimensional, structures of news discourse, the 'categorization' concept, four functions of framing, framing deductive approach, and list of the frame.

1 INTRODUCTION

According to (Goffman, 1974) and Dezin and Keller (Denzin and Keller, 1981), the idea of framing for the first time appeared in the 1950s through Bateson in his book titled "The steps for mind ecology", the first edition in 1972 and the second edition in 1987. Bateson argues that 'frame is a meta-communicative' and every meta-communicative message is known as a psychological frame.

Then, Tuchman (Tuchman, 1978), a cultural sociology background, contributes to the concept of framing in his book 'Making news: A study in the construction of reality', focusing on framing the issue of social perspective news, especially social reality construction. Through his book, Tuchman was known as one of the first scholars to discuss theoretically news frames. Tuchman laid the conceptual basis of the frame in the assumption of 'news is a window on the world'.

Furthermore, in the media and communications perspective, the early 1990s, many scholars studied media framing such as Iyengar (Iyengar, 1990)(Pan and Kosicki, 1993)(Cappella and Jamieson, 1997)(Scheufele, 1999)(Tankard Jr, 2001)(De Vreese, 2005) . Basically, the studies on media framing are not only theoretical but also include an analytical approach to media content. However, this article will highlight various models of framing analysis approaches proposed by famous scholars who focus on the media framing study since early the 1990s.

2 FRAMING APPROACHES

Essentially, in the context of media and communications studies, discussions on framing are not limited to philosophical, theoretical, and conceptual definitions outlooks. However, many scholars complement their discussion emphasis on introducing various perspectives on the model of framing analysis methods. Dealing with that, this paper critically discusses some approaches of framing analysis proposed by a number of famous scholars such as Gamson and Modigliani (Gamson and Modigliani, 1989)(Iyengar, 1990)(Pan and Kosicki, 1993)(Edelman, 1993)(Entman, 1993)(Semetko and Valkenburg, 2000)(Tankard Jr, 2001).

2.1 Internal Structure of Media Package

Gamson and Modigliani (Gamson and Modigliani, 1989), in their study of media discourse and public opinion on issues of nuclear power based on constructionist perspective, proposed a scenario of news fram-

ing that is gathered into the concept of media packages. In details, those scholars explained that a package has an internal structure, known as "core frame". In other words, it is a central organizing idea or frame. Then, the package offers more than a few condensing symbols which comprise (1) the five framing devices are metaphors, exemplars, catchphrases, depiction and visual images. (2) three reasoning devices namely roots, consequences, and appeal to principles (Gamson and Modigliani, 1989).

In other words, the vital elements of framing of the news such as five framing devices and three reasoning devices, introduced by Gamson are a distinctive and unique characteristic of the Gamson and Modigliani framing approaches in the context of the study on media discourse especially based on the data acquired from news text.

2.2 Episodic and Thematic

Meanwhile, according to Iyengar (Iyengar, 1990), the model of framing analysis method is divided into two forms namely thematic frame and episodic frame. The framing analysis method is used to reveal Iyengar's hypothesis in his study asserts that how people understand the issue of poverty depends on how the issue is framed. In terms of its operational concept, Iyengar details as follows.

First, the thematic frame refers to news that contains information in a general trend. Iyengar exemplifies like; poverty rates, government definition changes to the term poverty, the number of countries experiencing significant increases in hunger and so forth. Second, the episodic frame refers to news trends that focus on aspects of individual experiences or more specific perspectives. In this case, poverty is highlighted in the context of individual experiences, such as the living conditions of a certain individual under economic standards (Iyengar, 1990).

2.3 Multi-dimensional

In addition, Swenson referred by Tankard (Tankard Jr, 2001) as a multi-dimensional concept, in the study of news reporting on abortion issues suggested the eight-dimensional method of coding to identify or measure the framing of the news; 1) The author's gender element; 2) Placing news (front page, editorial page, the first section, but not first page); 3) Use of terms that refer to pro-choice groups (pro-choice, abortion rights, pro-abortion, anti-life, combination, not applicable), 4) The use of terms referring to pro-life groups (pro-life, right to life, the anti-abortion, anti-choice, combination, not applicable);5) The woman's right or

the fetus right are considered paramount. 6) Morality orientation of the article. 7) Discussion when life begins and 8) Term used to refer the fetus.

2.4 Structures of News Discourse

Pan and Kosicki (Pan and Kosicki, 1993), in their study of news framing analysis, presented a media framing method for identifying news discourses from a constructionist approach. In their points of view, news discourse is a socio-cognitive process. Consequently, they feature a concept of news framing method by focusing on the development of news texts that cover the four structures of news discourse dimensions; i) The syntactical structure refers to the pattern of arrangement of words or phrases into sentences. ii) The script structure is focused on the stability and consistency of the sequence of activities and components of an event that is treated as a structured mental representation of an event. More specifically, this section relates to how an event is packaged as news that contains a generic aspect of the news that consists of who, what, when, where, why and how. iii) The thematic structure is to focus on how journalists assemble various issues into a moderate topic, but at the same time include events, actions or statements related to the issue. In addition, the thematic structure consists of a summary represented by the headline, lead, or conclusion, and the main body which includes episodes, background information, and quotes. So the thematic structure of the news is referred to as the hierarchical layer in the connectivity of a theme with various sub-themes connected to the supporting elements. iv) The rhetorical structure is focused on how journalists create effective news, such as the use of images, prominence of important points, and the clarity of news reporting, making the frame of news discourse meaningful, more factual and acceptable.

2.5 Categorization

Another scholar, Edelman (Edelman, 1993), a University of Wisconsin political scholar, also presented a framing method known as the 'categorization' concept. Basically, Edelman suggested that the concept is based on his understanding of the emergence of the ever-changing social reality of the world as a result of changes in the way the observations are framed and categorized. This is because the purity of the social world reality in Edelman's view is determined by the way framing and interpretation of the problem.

Furthermore, Edelman said that the existence of distinctive characterizations, causes and consequences of a phenomenon is a result of changes in

what is highlighted and neglected, and particularly in the classification of observations. In this case, Edelman further cast his gaze; i) Categorization as a necessary condition of abstract thinking and the use of symbols in reasoning and expression. ii) Categorization is a special power of political conviction, passion, fear, and antagonism (Edelman, 1993).

2.6 Four Functions of Framing

According to Entman (Entman, 1993) in his study on the clarification of framing paradigms that are considered to be dispersed, looking at the core of the concept of framing is at the stage of selection and salience. Consequently, Entman stated that to frame is to select some aspects of a perceived reality and make them more prominent in a communicating text". Then, the frame is positioned in four locations in the communication process; the communicator, the text, the receiver, and the culture.

Practically, Entman carries four framing functions: the first, define problems-recognize what causal agents are doing, what are their losses and their profits and are usually measured by cultural values. Second, diagnose causes is to identify the causes of the problem. Third, make moral judgments that evaluate causal agents and their effects. Fourth, suggest remedies is to suggest and justify treatments for the problems and predict the possible consequences (Entman, 1993).

2.7 Deductive Approach

Another framing approach was a deductive approach and suggested by Smetko and Valkernburg(Semetko and Valkenburg, 2000) in his study of European framing on newspapers and television news. While sharing the focus of the study with an agenda-setting approach at the level of public policy issues on news and public perceptions on the issue, the focus of framing analysis goes beyond the focus of agenda-setting, which is to shift from 'what people talk or think about ' being 'how they talk and think about issues in the news' (Semetko and Valkenburg, 2000). And with regard to this, Smetko and Valkenburg (Semetko and Valkenburg, 2000) present two approaches to analyzing the content of news frame; i) Inductive approach refers to an analysis of one news openly exploring the possibility of framing starts by defining pre-conceptual frames gradually. ii) The deductive approach refers to pre-setting a specific frame as a content analysis variable to verify the expansion of the frame part that appears in the news. But in formulating a comprehensive framing analysis approach,

Smetko and Valkenburg (Semetko and Valkenburg, 2000) chose to use a deductive approach to assess the prevalence of frames in the news, especially investigating the five news frames as follows: First, the Conflict frame which emphasizes conflicts between individuals, groups, or institutions as a tool to capture the interests of the audience. Second, the Human interest frame is to show the human view or emotional point of view of the depiction of an event, issue or questions. Third, Economic consequences frame is to report events, problems or issues that bring economic consequences to an individual, group, institution, region or country. Fourth, Morality frame is to put events, questions or issues in the context of religious and moral values, because of the norms of professional objectivity, journalism often references to moral frames. Fifth, Responsibility frame which describes issues or problems that act as a responsibility attribute to the cause and solution of either government or individual or group (Semetko and Valkenburg, 2000).

2.8 List of Frame

Through an empirical perspective in quantitative terms, Tankard (Tankard Jr, 2001) views the framing of recognizing the ability of a text or a media exposure in defining a situation, issues and defining the subject matter in a debate. The importance of the framing analysis approach is based on some of the following critical considerations; First, framing offers an alternative to an objective paradigm, and an outdated bias to help foster the impact of communication and facilitate media practitioners. Secondly, framing has a very strong impression on the audience and can help understand and test important aspects of the process of changing public opinion. Third, framing offers new insights and benefits for communication practitioners, including journalists, communication campaign planners, and social activists (Tankard Jr, 2001).

In this regard, Tankard proposes the 'list of frame' method as an alternative method in the media framing study of eleven mechanisms;1) Headlines dan kickers. 2) Subheads. 3) Photographs. 4) Photo captions. 5) Leads. 6) Selection of Sources or Affiliations. 7) Selection of Quotes. 8) Pull Quotes. 9) Logos. 10) Statistics, chart, and graphs. 11) Concluding statements or Paragraphs of articles (Tankard 2003:101). Whereas, in the context of framing procedures, in general, the 'list of frame' approach recommends a number of the following steps: i) make the range of possible frame explicit, ii) Place multiple possible frames within a list of manifestations, iii) Develop keywords, catchphrases, symbols, to detect

Table 1: Eight models of media framing analysis approach.(Research Method; 1) Qualitative Content Analysis. 2) Quantitative Content Analysis. 3) Survey-Experiment)

		Media Framing Analysis Approach			
Date	Prominent Scholar	Catchphrases	Models of Framing Analysis	Objectives of the study	Method
1989	Gamson & Modigliani	Media Package/ core frame"/ central organizing idea	A few condensing symbols; Five framing devices; metaphors, exemplars, catchphrases, depiction and visual images. Three reasoning devices; roots, consequences, and appeal to principles	Media discourse/ interpretive packages	1
1990	Iyengar	Thematic and episodic frame	Thematic frame Episodic frame	Thematic and Episodic News Frame	3
1990	Swenson	Multi-dimensional concept	Eight-dimensional framing of the news: The author's gender. Placing news. Use of terms to referring pro-choice groups. Use of terms referring to pro-life groups. The woman's right. Morality orientation. Discussion when life begins. Term refer the fetus.	Multi-dimensional framing of the news	2
1993	Pan and Kosicki	Structures of news discourse	Four structures of news discourse; The syntactical structure The script structure The thematic structure Retorical structure	News discourse	1
1993	Edelman	Categorization	Contestable categories	News discourse	1
1993	Entman	Selection and salience	Four framing functions: Define problems Diagnose causes Make moral judgments. Suggest remedies	Explaining the strength of a communicating text	1
2000	Smetko & Valkernburg	Deductive approach	Five news frames; Conflict frame Human interest frame Economic consequences Morality frame Responsibility frame	Prevalence of the frame in the news	2
2003	Tankard	Systematic and empirical	List of 11 framing mechanisms: 1. Headlines and kickers. 2. Subheads. 3. Photographs. 4. Photo captions. 5. Leads. 6. Selection of Sources or Affiliations. 7. Selection of Quotes. 8. Pull Quotes. 9. Logos. 10. Statistics, chart, and graphs. 11. Concluding statements	Media frames	2

frames, iv) Use frames in the content analysis category list, v) Get a coder for article code or other types of content into the category. This approach serves to identify explicit frames and gain objectivity rather than identification of frames (Tankard Jr, 2001).

3 CONCLUSIONS

Basically, the differences in framing analysis approach proposed by scholars due to variances in the viewpoints of the philosophical concept of the frame and framing. The difference can be seen from one of them is the difference in the catchphrases used. This case has also enriched the models of analysis of the media frames and they complement each other.

In addition, a number of framing analysis approaches in news frames studies can be run qualitatively with focus analysis on the quality of news text discourse or the inductive approach. Some scholars have relied on qualitative approaches such as Gamson and Modigliani (Gamson and Modigliani, 1989), Pan and Kosicki (Pan and Kosicki, 1993), Edelman (Edelman, 1993) and Entman (Entman, 1993).

Meanwhile, the quantitative approach of the media framing studies emphasizes the quantity of emergence of news frame in news texts that have been set as variables in news content analysis or also called a deductive approach. There are some scholars who choose to develop a media frame study based on empirical approaches such as Swenson , Smetko & Valkernburg (Semetko and Valkenburg, 2000), and Tankard (Tankard Jr, 2001). Meanwhile, Iyengar (Iyengar, 1990) introduced experimental methods in media framing studies. Finally, there are eight models of media framing analysis approach as in the figure below:

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REFERENCES

Cappella, J. N. and Jamieson, K. H. (1997). *Spiral of cynicism: The press and the public good.* Oxford University Press on Demand.

De Vreese, C. H. (2005). News framing: Theory and typology. *Information Design Journal & Document Design*, 13(1).

Denzin, N. K. and Keller, C. M. (1981). Frame analysis reconsidered.

Edelman, M. (1993). Contestable categories and public opinion. *Political communication*, 10(3):231–242.

Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. *Journal of communication*, 43(4):51–58.

Gamson, W. A. and Modigliani, A. (1989). Media discourse and public opinion on nuclear power: A constructionist approach. *American journal of sociology*, 95(1):1–37.

Goffman, E. (1974). *Frame analysis: An essay on the organization of experience.* Harvard University Press.

Iyengar, S. (1990). Framing responsibility for political issues: The case of poverty. *Political behavior*, 12(1):19–40.

Pan, Z. and Kosicki, G. M. (1993). Framing analysis: An approach to news discourse. *Political communication*, 10(1):55–75.

Scheufele, D. A. (1999). Framing as a theory of media effects. *Journal of communication*, 49(1):103–122.

Semetko, H. A. and Valkenburg, P. M. (2000). Framing european politics: A content analysis of press and television news. *Journal of communication*, 50(2):93–109.

Tankard Jr, J. W. (2001). The empirical approach to the study of media framing. In *Framing public life*, pages 111–121. Routledge.

Tuchman, G. (1978). *Making news: A study in the construction of reality*, volume 256. Free Press New York.

The Implementation Corporate Social Responsibility Factors That Affect the Corporate Political Activities in Riau Province

Made Devi Wedayanti[1], Achmad Nurmandi[2] and Hasse J.[2]

[1]*Universitas Islam Riau, Pekanbaru, Indonesia*
[2]*Department of Political Science, Universitas Muhammadiyah Yogyakarta, Yogyakarta, Indonesia*
madedeviwedayanti@soc.uir.ac.id, {nurmandiachmad, hasse}@umy.ac.id

Keywords: Factors, Corporate Social Responsibility, Corporate Political Activity, Individual Factors, Institutional Factors, Company Factors.

Abstract: This study shows the implementation Corporate Social Responsibility factors that affect the Corporate Political Activities in Riau Province. The research problem is still coming up from the companies side due to the implementation of corporate social responsibility. The research problem is that there are still companies that make the implementation of corporate social responsibility a form of company political activity. This research is descriptive qualitative, the method of collecting data in the form of information interviews. Analysis of the data obtained is done through data collection, verification, presentation, and conclusions. The results of the study are three factors that influence CSR part of the CPA, namely individual factors, institutional factors and company factors.

1 INTRODUCTION

The theory developed about CSR comes more from economics (Scherer and Palazzo, 2011). The definition of CSR politics from political science or public administration focuses more on corporate responsibility activities as political actors that focus on public deliberation, collective decisions and public services (Scherer and Palazzo, 2011), which not only provide health facilities , education and environmental development. The idea of a company as a political actor in CSR is a challenge for future research (Frynas and Stephens, 2015).

Literature review on political CSR literature has two important aspects, namely legitimacy and institutions. Legitimacy is an important factor for companies to always exist in certain countries, which is a socially constructed reason or argument to provide justification for company actions that are accepted by the public (Scherer and Palazzo, 2011). Second, CSR politics is related to institutional analysis in social networks, national institutions and political rules. The institutional review of CSR analyzes institutional mechanisms (El Ghoul et al., 2017), involvement of civil society organizations, negotiating CSR standards in various countries (Den Hond et al., 2014) and issues such as the division of responsibilities within multinational companies between local

roles and roles at the international level (Jamali and Karam, 2018).

In the context of political institutions CSR has various types according to the political system of the country concerned. CSR politics in the United States and Europe is characterized by less regulation and more incentives for the company's social role (Matten and Moon, 2008). Meanwhile in Japan, France and South Korea, CSR politics gives a greater role to the collaboration of workers, trade unions and civil society organizations (Jamali and Karam, 2018). Philips, a company in the Netherlands, has been developing energy saving lamps for a long time, and is trying to lobby the European Union to legalize their products. Car companies in Germany reject filters that prevent air pollution in diesel cars and encourage other types that are more efficient. In developing countries, (Frynas and Stephens, 2015) note that there are still research gaps about complex formal and informal interactions. The institutional context is not only related to the state's formal institutional mechanisms and policies but also the social values inherent in them. The institutional and state values in question heterogeneity and content versus homogeneity and consensus color the implementation of CSR (Blindheim, 2015).

(Den Hond et al., 2014) introduced the concept of CSR as a form of CPA (Corporate Political Activity) activity. CSR activities are always related to the

company's political activity to increase its reputation. Companies increase CSR activities to gain political support, enlarge political coalitions, open access to policy makers (Den Hond et al., 2014). This form of CSR and CPA can be seen from the results of strategies used by companies in actively influencing policy makers (Den Hond et al., 2014). Thus it can be concluded first, CSR and CPA independently influence the reputation of the company. Second, the drive for CSR as part of the CPA comes from the recognition of problems generated through CSR and CPA efforts.

This research will be conducted in Riau Province. Riau Province as the city which is the lyrics of the oil city has many large and medium industrial companies. Based on data from the Riau Province Central Statistics Agency 2017, the total business sector of the city is 526,966 companies with 14 types of companies. The author tries to answer what factors influence CSR part of implementing the CPA. After conducting research the Riau provincial government does not yet have empirical data related to CSR of all provinces in Riau only limited to making regional regulations Riau province No. 6 of 2012 concerning corporate social responsibility in Riau province, due to not running a corporate social responsibility forum in each district and for evaluation The implementation of corporate social responsibility forums will be the next research to be investigated. therefore this research is only limited to looking at CSR implementation factors which are made into political activity of the company based on the 2018 rehbein theory.

2 DISCUSSION

It is not always business in terms of CSR as a form of political support that is said to be successful, there is an implementation of CSR which makes companies weak in getting political support. CSR sometimes has contradictions with CPA policies. When a company does not equate CSR and CPA, then shareholders can be deliberately misled and provide references about companies that cannot be trusted (Den Hond et al., 2014).

Some researchers have also carried out studies on supporting CSR not part of implementing the CPA. An example of a company is a manufacturing company listed on the Indonesian stock exchange based on this CSR which provides a misalignment of government tax management, this is related to increasing the level of the company to implement CSR. A company in Slovenia develops a national corporate social responsibility (CSR) policy through multi-party partnerships but because of the factors that support

the government, making it unable to obtain political support, in this case the government becomes an actor with executive power to support and support CSR policies at the national (Golob and Hrast, 2018). Multinational companies (MNCs) often carry out corporate social responsibility (CSR) activities that support providing 'public goods' and improving governance in policy making. This political CSR activity (PCSR) will run well by increasing socio-political legitimacy and is useful in building relations with the state or other external stakeholders. Using theories relying on resources, protection theory, and social capital literature, finding MNC subsidiaries is highly dependent on local resources, has a greater relationship with related business managers and policy makers (Shirodkar et al., 2018). CSR taken is not part of the CPA which is often caused because it is not related to interests between the company and the government.

Other studies assess CSR and CPA strategies at the macro level using safety factors and at the micro level using company-level & individual factor factors (Rehbein et al., 2018) and In general institutional factors, CSR and CPA related to macro planning are available in the following figure:
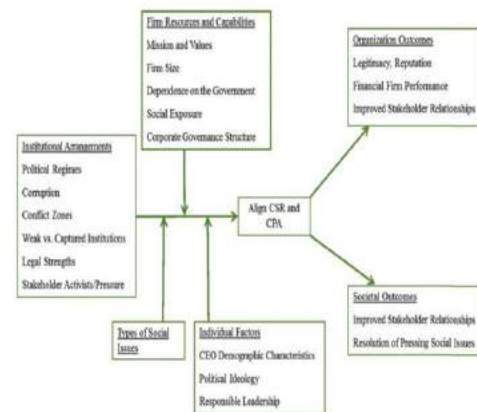
Figure 1: CSR and CPA Related.

From the De Hond & Rehbein (Den Hond et al., 2014)(Rehbein et al., 2018) study above, it can be seen that the factors that influence CSR as part of the CPA in the company have 3 factors, First, individual factors which state that the character of the CEO or leader influences CSR as part of the CPA . Furthermore, the second factor, which is the source of resources and capabilities of the company, Rehbein (Rehbein et al., 2018) says that mission and value, company size, corporate governance structure, and corporate social exposure are influencing factors in supporting CSR as part of the CPA. The third factor, namely institutional environmental factors such as corruption, legal strength, pressure pressure, stake-

holders become a supporting factor for CSR to be part of the CPA (Rehbein et al., 2018).

First, individual factors consist of top leadership characteristics, corporate structural characteristics of CSR and CPA departments, and interactions between these departments, and the presence of agents of social change in the company (Wickert and De Bakker, 2018). In individual factors, there are many individuals, from CEOs, CSR managers to outside affairs managers or public affairs managers who might have an impact on the formation of corporate social and political responses. However, (Aguinis and Glavas, 2012) note that at the individual level there is a lack of information about individuals doing CSR. Most of the discussion of previous researchers emphasized how attitudes to protect, moral development, and commitment to social problems enhance corporate CSR. Similar research (Wickert and De Bakker, 2018) focuses on social issues and seeks to understand the obstacles faced by CSR managers in implementing CSR. However, most research focuses on the role the CEO plays in determining trade-offs between shareholders and stakeholder priorities. Similar research (Mellahi et al., 2016) argues that the focus on top management is very important to understand the types of non-market strategies developed by the company. Previous research suggests that the flow of research that emerges in responsible leadership can be a possible source of understanding top management decisions. (Doh and Quigley, 2014), for example, focus on how top management can develop a more inclusive approach with regard to various stakeholders, while (Strand, 2014) explores why the company's sustainability position is placed on the top management team and whether this affects the organization. This can represent a CSR problem at the company's leadership level and can facilitate alignment with CPA activities that are also strategic (Hadani and Schuler, 2013).

Second, company resources & capability factors Enterprise level factors such as company mission, company values, shareholder ownership, structure and governance, concessions and financial visibility (Aguinis and Glavas, 2012). Similar research deals with additional empirical studies and a review of the literature examining resources in CSR corporate governance (De Villiers et al., 2011) (Jamali and Karam, 2018) also examined for a comprehensive review of this literature (Walls et al., 2012). With respect to CPA, (Lux et al. 2011) based on previous analysis provides an overview of the specific factors of the company that shape the company's political investment, such as company size, company diversification, and government sales. Based on previous CPA and CSR research, it is possible that the company's re-

sources and capabilities have a significant role in driving company decisions in implementing CPA. The author previously found that it is important to integrate several drivers that CSR is part of implementing the CPA. For example, including company mission and values, corporate strategy, financial resources, visibility, and social and political exposure all seem to be important in supporting motivation to support CSR as part of CPA (Mellahi et al., 2016).

Third, institutional environmental factors, companies will be motivated to make CSR as part of the CPA determined by the environmental characteristics of the country of origin of the company. Institutional factors are determined from the social interactions of the company's home country to create incentives and barriers to the development of corporate social or political policies (Dorobantu et al., 2017)(Mantere et al., 2009)(Mellahi et al., 2016)(Windsor, 2007). But some research on institutions on CSR and CPA has developed separately. In relation to CSR, there is a broad debate about institutional factors that discuss the types of social policies, practices and reporting that are applied by companies (Jackson and Apostolakou, 2010) (Marano and Kostova, 2016)(Matten and Moon, 2008)(Rathert, 2016). Similar research has been carried out to understand the relationship between institutional factors and the possibility that companies will form political connections (Dorobantu et al., 2017) find that companies are more likely to form political ties when they do business in countries where governance is more corrupt and property rights protected the weak in the country. Given that institutional factors influence corporate decisions regarding CSR in CPAs, it is likely that the political and social institutional arrangements of the home countries will affect work and influence the implementation of CSR as part of the CPA (Dorobantu et al., 2017).

Riau Province is a province that has been established as a plantation company. And from 210 companies in Riau province based on the results of the study, it was found that there were three factors that influence CSR as part of the CPA, first individual factors: this factor can support CPA activities determined by the background of stockholders and company leadership background, the greater the shareholder's role and company leaders in the government, the greater the activity of company activities that can be done. for example if the company has a leader or shareholder who has a background that comes from a general or a holder of power, the implementation of company activities will run well, both for licensing and company security. the second factor, is the company factor consisting of company mission, company size and cor-

porate social pressure. the more influential the company's mission towards the government mission, the greater the company's political activity. the larger the size of the company, the greater the movement of the company's political activity and the greater the company's social pressure, the greater the company's political activity. The third factor is institutional factors, this factor contains the power of law, zone of conflict and corruption. the greater the company's political activity, the greater the legal strength held by the company, the greater the company's political activity, the smaller the zone of conflict the company has. Furthermore, the greater the company's political activity, the greater the likelihood of corporate corruption.

3 CONCLUSIONS

The implementation of corporate social responsibility is one form of corporate political activity and to carry out corporate political activities, supporting factors are needed. The conclusion of this study is that there are three supporting factors, first individual factors, second, company factors, third, institutional factors.

First individual factors: this factor can support CPA activities determined by the background of shareholders and company leadership background, the greater the role of shareholders and company leaders in the government, the greater the activities of company activities that can be done. for example if the company has a leader or shareholder who has a background that comes from a general or a holder of power, the implementation of company activities will run well, both for licensing and company security. the second factor, is the company factor consisting of company mission, company size and corporate social pressure. the more influential the company's mission towards the government mission, the greater the company's political activity. the larger the size of the company, the greater the movement of the company's political activity and the greater the company's social pressure, the greater the company's political activity. The third factor is institutional factors, this factor contains the power of law, zone of conflict and corruption. the greater the company's political activity, the greater the legal strength held by the company, the greater the company's political activity, the smaller the zone of conflict the company has. Furthermore, the greater the company's political activity, the greater the likelihood of corporate corruption.

REFERENCES

Aguinis, H. and Glavas, A. (2012). What we know and don't know about corporate social responsibility: A review and research agenda. *Journal of management*, 38(4):932–968.

Blindheim, B.-T. (2015). Institutional models of corporate social responsibility: A proposed refinement of the explicit-implicit framework. *Business & society*, 54(1):52–88.

De Villiers, C., Naiker, V., and Van Staden, C. J. (2011). The effect of board characteristics on firm environmental performance. *Journal of Management*, 37(6):1636–1663.

Den Hond, F., Rehbein, K. A., de Bakker, F. G., and Lankveld, H. K.-v. (2014). Playing on two chessboards: Reputation effects between corporate social responsibility (csr) and corporate political activity (cpa). *Journal of Management Studies*, 51(5):790–813.

Doh, J. P. and Quigley, N. R. (2014). Responsible leadership and stakeholder management: Influence pathways and organizational outcomes. *Academy of Management Perspectives*, 28(3):255–274.

Dorobantu, S., Kaul, A., and Zelner, B. (2017). Nonmarket strategy research through the lens of new institutional economics: An integrative review and future directions. *Strategic Management Journal*, 38(1):114–140.

El Ghoul, S., Guedhami, O., and Kim, Y. (2017). Country-level institutions, firm value, and the role of corporate social responsibility initiatives. *Journal of International Business Studies*, 48(3):360–385.

Frynas, J. G. and Stephens, S. (2015). Political corporate social responsibility: Reviewing theories and setting new agendas. *International Journal of Management Reviews*, 17(4):483–509.

Golob, U. and Hrast, A. (2018). The reluctant state: A failed attempt to develop a national csr policy. In *The Critical State of Corporate Social Responsibility in Europe*, pages 121–136. Emerald Publishing Limited.

Hadani, M. and Schuler, D. A. (2013). In search of el dorado: The elusive financial returns on corporate political investments. *Strategic Management Journal*, 34(2):165–181.

Jackson, G. and Apostolakou, A. (2010). Corporate social responsibility in western europe: an institutional mirror or substitute? *Journal of business ethics*, 94(3):371–394.

Jamali, D. and Karam, C. (2018). Corporate social responsibility in developing countries as an emerging field of study. *International Journal of Management Reviews*, 20(1):32–61.

Mantere, S., Pajunen, K., and Lamberg, J.-A. (2009). Vices and virtues of corporate political activity: The challenge of international business. *Business & Society*, 48(1):105–132.

Marano, V. and Kostova, T. (2016). Unpacking the institutional complexity in adoption of csr practices in multinational enterprises. *Journal of Management Studies*, 53(1):28–54.

Matten, D. and Moon, J. (2008). "implicit" and "explicit" csr: A conceptual framework for a comparative understanding of corporate social responsibility. *Academy of management Review*, 33(2):404–424.

Mellahi, K., Frynas, J. G., Sun, P., and Siegel, D. (2016). A review of the nonmarket strategy literature: Toward a multi-theoretical integration. *Journal of Management*, 42(1):143–173.

Rathert, N. (2016). Strategies of legitimation: Mnes and the adoption of csr in response to host-country institutions. *Journal of International Business Studies*, 47(7):858–879.

Rehbein, K., den Hond, F., and Bakker, F. G. (2018). Aligning adverse activities? corporate social responsibility and political activity. In *Corporate Social Responsibility*, pages 295–324. Emerald Publishing Limited.

Scherer, A. G. and Palazzo, G. (2011). The new political role of business in a globalized world: A review of a new perspective on csr and its implications for the firm, governance, and democracy. *Journal of management studies*, 48(4):899–931.

Shirodkar, V., Beddewela, E., and Richter, U. H. (2018). Firm-level determinants of political csr in emerging economies: evidence from india. *Journal of business ethics*, 148(3):673–688.

Strand, R. (2014). Strategic leadership of corporate sustainability. *Journal of Business Ethics*, 123(4):687–706.

Walls, J. L., Berrone, P., and Phan, P. H. (2012). Corporate governance and environmental performance: Is there really a link? *Strategic Management Journal*, 33(8):885–913.

Wickert, C. and De Bakker, F. G. (2018). Pitching for social change: Toward a relational approach to selling and buying social issues. *Academy of Management Discoveries*, 4(1):50–73.

Windsor, D. (2007). Toward a global theory of cross-border and multilevel corporate political activity. *Business & Society*, 46(2):253–278.

Framing Analysis of Ulama in the Presidential Election

Fatmawati Moekahar[1], Asrinda Amalia[2] and Aidil Haris[2]

[1]*Department of Communication, Faculty of Communication, Universitas Islam Riau, Pekanbaru, Indonesia*
[2]*Universitas Muhammadiyah Riau, Pekanbaru, Indonesia*
{*asrinda.amalia, aidilharis*}*@umri.ac.id, fatmawatikaffa@comm.uir.ac.id*

Keywords: Ulama, Framing, Political Communication.

Abstract: The bargaining position of the ulama in the midst of Indonesia's political dynamics ahead of the Presidential Election Indonesia in 2019 is in influential opinion leaders. Although ahead of the 2019 presidential election the votes of the ulama were divided, but this condition did not discourage politicians from continuing to hold the ulama to seize power. The aims study is framing analysis to the news at kompas.com and republika.com. This study uses a qualitative methodology with Robert N. Entmant's framing analysis model. The results of the discussion it was concluded that the framing of the two media in revealing the reality of the results of ijtima ulama 2 was objective while still carrying different media agendas. The neutrality of the media in the content of the news is more focused on maintaining group relations between the two camps of the presidential and vice-presidential couples who are equally supported by the clerics. This is assumed to keep ukhwah Islamiyah in the Indonesian Muslim community so that it is not divided by black campaign discourses, especially discourses that corner ulama. Thus, it can be understood that scholars and power in the perspective of political communication are the opposite components.

1 INTRODUCTION

Ulama and power are like two sides of a coin which in essence are inseparable. The independence achieved by the Indonesian people is inseparable from the role of the ulama as the front guard. Therefore, the relationship between the ulama and the power becomes an inseparable component of the unitary state of the Republic of Indonesia.

The bargaining position of ulama in the midst of Indonesian politics ahead of the Presidential Election of the Republic of Indonesia in 2019 is in influential opinion leaders. Although ahead of the 2019 presidential election the votes of the ulama were divided, but this condition did not discourage politicians from continuing to hold the ulama to seize power. The political dynamics in Indonesia have unwittingly brought massive involvement of ulama to participate in affiliation with practical political forces. As a result, this condition caused the ulama to be drawn towards practical politics in order to seize power. When carefully understood, ulama are people who have Islamic scholarship that focuses on developing Islamic propaganda and propaganda. When scholars are involved in practical politics, in essence they are never a problem. Even so far, the involve-

ment of ulama in the political sphere has become something very possible.

The problem now is, how does mass media frame this reality into a news that has ideological, factual, and balanced values, so that this phenomenon becomes an objective reality. The relationship between ulama and power is not seen from the political aspect, but must be seen from various other aspects. It is undeniable that the existence of mass media is currently defeated by the development of social media. If you see the rapid development of communication technology, mass media is in a very competitive position. In fact, some of the media owners were forced to slam the steering wheel by affiliating to power or playing the role of capitalist media business by putting forward maximum profits. As a result, mass media coverage seemed to be a 'special order' for affiliate groups.

Therefore, to see how far the media ideology plays a role, this study focuses on the study of framing analysis on the results of ijtima ulama 2 related to the discourse on the choice of president and vice president for the 2019-2024 period. The aim is to analyze the framing of the media against the coverage of the ijtima ulama 2 related to the determination of the choice of the president and vice president of the Re-

public of Indonesia for the 2019-2024 period. There are two online media reviewed, namely kompas.com, and republika.com.

2 THEORITICAL REVIEW

Ulama and Power

The history of Indonesia during the colonial period, the Dutch government once restricted the political role of the scholars. Even various regulations made by the colonial only to alienate the ulama from various activities that could cause social-political turmoil. This effort was carried out by the colonial government because ulama were considered to be an influential group capable of mobilizing the masses to oppose the colonial government so that it could potentially create socio-political conflicts. So it is not surprising, if the strategy of seizure of power carried out by the ulama is not oriented to occupying the position of ruler, but seeks to save the Indonesian republic unit from the cruelty of the invaders.

In principle, the concept of power encourages the ongoing process of zero sum which can be analogous to that one party will benefit and the other party will bear the loss. Because it is this zero-sum approach that causes the inevitable power of conflictual situations with the logic of their thinking is that each other of the class facing each other will try to maintain or gain power. Thus, the actual power relations are sufficiently appropriate to be studied from the Marxian approach which considers that in power relations there is always a dominant (superordinate) class and subordinated class, and therefore it is possible for the resistance movement to be typical Marxian (Muslim et al., 2015).

In understanding Marxian power relations this can be traced from the four steps of the approach: first, power relations as manifestations of special modes or configurations of class domination rather than as a phenomenon of pure interpersonal relations. Second, power relations pay close attention to the relationship between economy, politics and the dominance of class ideology. Third, power relations pay attention to the limitations inherent in many executions of power rooted in a class or other form of class domination and try to explain this in structural contradictions and antagonisms. Fourth, Marxian directs strategies and tactics to reproduce, defend or overthrow class domination (Muslim et al., 2015).

Politics and Power

When talking about politics and power, the stereotype that emerges is that politics as a means of gaining power. In fact, the political meaning and power are not as cheap as that, precisely politics must be understood philosophically as a manifestation of the efforts of every citizen to achieve common good or mutual interests.

"The abuse of power in the political world that is often carried out by political actors raises the view that the main purpose of participating in politics is only to gain power. In fact, in essence the use of power in politics aims to regulate the interests of all people in the organization, not for personal or group interests. For this reason, the limitation of power is very necessary in order to grow the trust of members of the organization towards the holders of power and the creation of justice and comfort in life (Paramita, 2011).

In his article, Paramitha also explained that power is the capacity a person has to influence the way people think and behave in accordance with what they want. This power can be obtained from various sources which are divided into formal power and personal power. Power is usually synonymous with politics. Politics itself is interpreted as an effort to participate in managing and controlling community affairs.

"The abuse of power in the political world that is often carried out by political actors raises the view that the main purpose of participating in politics is only to gain power. In fact, in essence the use of power in politics aims to regulate the interests of the entire community, not for personal or group interests. For this reason, the limitation of power is very necessary in order to grow public trust in the holders of power and the creation of justice and comfort in life. Politics and power are exercised to balance the individual interests of employees and the interests of managers, as well as the interests of the organization".

Ulama and Politics

The phenomenon of scholars contributing to politics is not unusual. However, the position of the ulama in the midst of the ummah must be placed in a place that is in accordance with the realm of the ulama (khittah). Ahead of the upcoming 2019 Election and Presidential Election, the involvement of ulama in Indonesia's democratic political vortex must get the right attention. More than that, serious criticism is needed in order to return the ulama to their khittah and make religion a source of inspiration, not disintegration. This is what must be the attention of the Indonesian people when ulama are in a practical political vortex.

Zuhairi Misrawi in his article in Geotimes stated that the ulama were not actually involved in politics, either directly or indirectly. Ulama must be an example and heir of the Prophets who build harmony among the people, not just the opposite to encourage disharmony.

"Khaled Abiou el Fadl in And God Knows the Soldiers: The Authoritative and Authoritarian in Islamic Discourse (El Fadl, 2001), presents an interesting solution regarding the importance of understanding the authority of the ulama. He divided the two ulama models: authoritarian scholars and authoritative scholars. Authoritarian scholars will always regard their views as absolute truth. In fact, his views crossed the principles commonly used in the Islamic legal tradition. Not only that, authoritarian scholars will heed morality which is the foundation of every religious view.

On the contrary, authoritative scholars will use views that reflect objectivity, rationality, and prioritize general welfare. Authoritative scholars will be very careful in issuing their views, especially religious views which have a greater impact on the public".

Media Settings Agenda

The main theorem of the agenda setting is Maxwell McCombs and Donald Shaw. They wrote that the audience not only studied the news in other matters through mass media, but also learned how much importance was given to an issue on the topic of the way the mass media emphasized the topic (Nurudin, 2007). For example, in reflecting on what the candidates said in an election campaign, the mass media seemed to determine which topics were important.

"Assuming the Agenda Setting has advantages because it is easy to understand and relatively easy to test. The rationale is that among various topics published by mass media, topics that get more attention from the media will become more familiar to their readers and will be considered important in a certain period of time, and will be the opposite for topics that receive less attention from the media (Vivian, 2008).

Political Communication

There are two words in understanding political communication namely communication and politics. So that it can be understood simply that political communication is the whole process of transmitting, exchanging, and seeking information (including facts, opinions, beliefs, etc.) carried out by participants in the framework of institutionalized political activities. This definition requires the process of political communication to be carried out institutionally. Therefore, communication carried out between friends or relatives is not included in the focus of the study. Nevertheless, the concepts studied in political communication are very large, which due to limited space, will only take a few (Syaiful Rohim, 2009).

3 METHODS

This study used qualitative approach. The data collection technique was carried out through documentation in the form of online media clips about news about the results of Ijtima Ulama 2 at kompas.com and republika.com, which were then analyzed using Robert N Entmant framing analysis.

There are several important aspects in Robert N Entmant's framing analysis, namely; Define Problems (Defining the Problem) How is an event / issue seen? As a what? Or what problem? Diagnose causes (estimating problems or sources of problems). What event was seen caused by what? What is considered the cause of a problem? Who (actor) is considered the cause of the problem? Moral judgment (making moral decisions) What moral values are presented to explain the problem? What moral values are used to legitimize or delegate an action? Treatment recommendation. What solutions are offered to solve the problem / issue? What path is offered and must be taken to overcome the problem? (Kriyantono et al., 2014).

4 RESULTS AND DISCUSSION

- **Ijtima Ulama II Supports Prabowo-Sandiaga, This Is Jokowi's Comment ... (Edition 17 September 2018)**

In the news, the editor of Kompas presented Joko Widodo's comments about Ijtima Ulama 2. It was explained that Indonesia was a democracy. That there was one group then supporting Prabowo, another group supporting Jokowi and Kiai Ma'ruf Amin were part of the dynamics of democracy. Here's the quote:

"KOMPAS.com - President Joko Widodo responded to the results of Ijtima Ulama II which stated that he supported the pair Prabowo Subianto-Sandiaga Uno in the upcoming 2019 Presidential Election. According to Jokowi, as a democracy, the support of a group for certain vice presidential candidate pairs is common. "Indonesia is a democratic country. That there is one group then supports Pak Prabowo, another group supports me and Kiai Ma'ruf Amin, that is democracy. So please, it is not prohibited in a democratic country like ours," Jokowi said when met at MNC Tower, Jakarta" (Kompas, 2018a).

- **Prabowo Attends the Second Meeting of the GNPF Ulama (Edition 16 September 2018)**

In this report, the Kompas editorial directed more about the presence of Prabowo at the meeting of the

Table 1: Ijtima Ulama II Supports Prabowo-Sandiaga, This Is Jokowi's Comment.

Define Problem	The definition of the problem is directed and clear, namely Jokowi's response to the results of the ijtima ruling ulama 2
Diagnose Causes	The issue that was rolled out directed the public to Jokowi's response to the ulama's support for Proabowo.
Moral Judgement	By choosing the incumbent Presidential Candidate informant, he was impressed that Jokowi did not question the results of the ulama's ijtima verdict.
Treatment Recommendation	There is an emphasis on the common thread of the problem, that the results of ijtima ulama are a dynamic of democracy. The treatment recommendation statement was impressed that Jokowi accepted the ijtima ruling ulama 2.

Table 2: Analysis of News Framing Entitled: Prabowo Attends Second Meeting of the GNPF Ulama.

Define Problem	The definition of a directed and clear problem is the presence of Prabowo at the Ijtima meeting Ulama 2 and the response of the Chair of the GNPF to the reason for holding the ijtima ulama 2.
Diagnose Causes	The discourse that was rolled out focused more on the reason for holding the ijtima ulama.
Moral Judgement	The moral value presented by the editor of Kompas.com is trying to see ijtima ulama as a political dynamic in democracy.
Treatment Recommendation	The solution offered in the news is the objectivity of reality that is presented in a directed manner.

two GNPF scholars and the reason GNPF held ijtima; scholars 2. Next quote:

"Previously, the Chairman of GNPF Yusuf Muhammad Martak said the meeting of the ulama was a meeting of the two GNPF scholars. For information, at the first meeting, the GNPF cleric recommended two combinations of presidential and vice presidential pairs. First, Prabowo Subianto partnered with Ustadz Abdul Somad. Secondly, Prabowo Subianto was accompanied by the Chairman of the PKS Syuro Council Salim Segaf Al-Jufri. "Because the two vice presidents recommended were not accommodated, it was appropriate and upheld the respect we gave to the forum in the second ijtima (meeting)," Yusuf said at a press conference at Grand Cempaka. In this second meeting, said Yusuf, the GNPF ulama will convey various aspirations and struggles that have been carried out (Kompas, 2018b).

- **Hasto: Jokowi Already Runs the Pact of Integrity of Ijtima Ulama**

In the September 17 2018 edition, the Kompas editor directs his coverage of the Jokowi camp's response to the results of ijtima ulama 2 and the fact that integrity has been made. Here's the quote.

"KOMPAS.com - The stronghold of Joko Widodo-Ma'ruf Amin honored the support given by the Fatwa Guards National Movement (GNPF) to the pair Prabowo Subianto-Sandiaga Uno in the 2019 Presidential Election. Secretary of the National Campaign Team (TKN) Hasto Kristiyanto said, all parties were free to determine political choice. "The attitude of the campaign team, we believe that freedom of opinion, assembly, including to express aspirations give support to which candidate pairs we respect," Hasto said at Cemara Post, Central Jakarta, Monday (09/17/2018). Regarding the integrity pact, Hasto claimed that Jokowi had run it during the administration period. According to Hasto, Jokowi had not merely promised "black and white", but had realized it. "President Jokowi in his leadership also did what became an integrity pact that was generated from the order of the cleric where Jokowi also carried out publicity programs very well," he explained. "

Framing Analysis of News Regarding Ijtima Ulama 2 at republika.co.id

- **Participants of the Ijtima Ulama Are Requested to Provide Support (September 16, 2018)**

Republika.co.id's September 16, 2018 edition entitled "Participants of the Ulama's Ijtima Requested to Provide Support" emphasized to the audience that ijtima ulama as a final decision on GNPF, and all partici-

Table 3: Framing Analysis News Entitled: Hasto: Jokowi Already Runs the Pact of Integrity of Ijtima Ulama .

Define Problem	Defining the problem is quite objective even though it still directs the discourse by selecting pro Jokowi's informants
Diagnose Causes	TThe media agenda was directed to Jokowi's team's attitude towards the decision of Ijtima ulama
Moral Judgement	There was a moral decision that was impressed that Jokowi was not just a promise. The editor directs the public discourse that Jokowi has integrity.
Treatment Recommendation	That Jokowi runs public relations programs very well.

Table 4: Framing Analysis News Entitled: Participants of Ijtima Ulama Requested to Provide Support.

Define Problem	Defining objective issues. Nevertheless the editorial staff of Republika continued to roll out the discourse that the GNPF and all its wings in all regions to support the results of Ijtima 'Ulama 2.
Diagnose Causes	The reality analysis is directed at convincing the public that the ulama's decision to become the final verdict.
Moral Judgement	Moral decisions emphasize that do not regard GNPF as a former ulama fighter as a political fighter.
Treatment Recommendation	The recommended recommendation is to require the Ijtima Ulama participants to socialize the results of this recommendation to all Muslims.

pants to the wing-syap GNPF must commit to support it. The following is the excerpt of the news:

Republika.Co.Id, Jakarta - The National Fatwa Guards Movement (GNPF) of the Ulama has just completed Ijtima Ulama and National Figure II at the Grand Cempaka Hotel on Sunday (9/16). Ijtima Ulama and National Figures II I plenary session decided and determined four things.

The Chairperson of Organizing Committee of the Ijtima Ulama and National Figures II, Ustadz Dani Anwar said, firstly, to set Prabowo Subianto as a presidential candidate in the presidential election in 2019. Second, set Sandiaga Salahuddin Uno as his vice presidential candidate.

"Third, bind all Ijtima Ulama and National Figures II participants to provide support to the presidential and vice-presidential candidates recommended in this decree," Ustaz Dani said through a written statement to Republika at the Grand Cempaka Hotel, Sunday (9/16).

Ustadz Dani, who is also the Chairperson of the Ijtima Plenary Session I Ulama and National Figure II, said that the fourth stipulation required the Ijtima' Ulama participants to socialize the results of this recommendation to all Muslims. In addition, Ijtima Ulama and National Figure II also produced 17 points of integrity facts for candidates for president and vice president (Republika,).

- **Official Ijtima Ulama II Supports Prabowo-Sandiaga (September 16, 2018)**

News titled "Official Ijtima Ulama II Supports Prabowo-Sandiaga" reveals that the ulama and the

entire Muslim community in Indonesia support Prabowo-Sandiaga. The editor emphasized that the ulama's decision was the decision of the Muslim community. The following is the excerpt of the news:

REPUBLIKA.CO.ID, JAKARTA - Ijtima Ulama II officially declared support for the pair of presidential candidates-vice-president Prabowo Subianto-Sandiaga Uno, after being signed by the former pegen Kopassus integrity pact. Prabowo arrived at around 1:00 p.m. when the Ijtima Ulama II plenary session continued on Sunday (9/16), and signed the integrity pact at around 2:30 p.m. WIB. The Ijtima Ulama II Forum, according to Habib Rizieq, through a message played at the session, said there were three main agendas in the forum. First, directly listening to the reason Prabowo chose Sandiaga Uno as a vice presidential candidate rather than the vice president of the Ulama I Ijtima recommendation, Ustadz Abdul Somad and Salim Segaf Al Jufri. This is to avoid mutual suspicion and divisions within the ulama's body and the Nationality Coalition. Second, the signing of an integrity pact by the candidate pairs as a form of strong agreement and binding on both. Third, to arrange the winning steps for Prabowo-Sandiaga Uno. Prabowo, after the signing of the integrity pact conveyed his gratitude and gratitude for the support provided by

ijtima ulama. "On behalf of Prabowo-Sandiaga to thank the Ijtima Ulama II of the GNPF Ulama for the trust given to us, for the sincere support given, this is truly a touching time for me, and I have promised Ijtima that I will do what "I will offer the best, as long as my body and soul are dedicated to the Indonesian nation and state," Prabowo said at a press conference.

Table 5: Analysis of Framing News Entitled: Ijtima Ulama II Official Supports Prabowo-Sandiaga.

Define Problem	The definition of editorial issues was very clear and directed that Ijtima Ulama II officially expressed support for the pair of presidential candidates-vice president Prabowo Subianto-Sandiaga Uno.
Diagnose Causes	The analysis of events stressed that support for the pair of presidential candidates - vice president Prabowo Subianto-Sandiaga Uno was a follow-up of the first Ijtima Ulama.
Moral Judgement	The moral decision presented was the signing of an integrity pact by Prabowo Subianto-Sandiaga Uno as a commitment to the Islamic ummah.
Treatment Recommendation	The recommendation that was discussed was Ijtima Ulama II Officially Supporting Prabowo-Sandiaga.

- **Kiai Ma'ruf Responds to the Results of Ijtima Ulama II (September 17, 2018)**

News titled "Ma'ruf Kiai Responding to the Results of Ijtima Ulama II" was an editorial effort to balance the news about the results of the ijtima ulama 2. General President (Presidential Election) 2019. He remains optimistic that the pair Joko Widodo (Jokowi) -Ma'ruf can win the 2019 Presidential Election. The following is the quote:

REPUBLIKA.CO.ID, JAKARTA - Will be vice presidential candidate (vice presidential candidate) KH Ma'ruf Amin not worried about the results of Ijtima Ulama II which supports the pair Prabowo Subianto-Sandiaga Uno in the 2019 Presidential Election. He remains optimistic that the couple (Jokowi) -Ma'ruf can win the 2019 Presidential Election. "Yes, I don't think there is a problem," he said at the KMA

House, Jalan Saharjo, Tebet, South Jakarta, Sunday (9/16). He claimed, he also received support from the scholars from the Islamic boarding school. According to him, around 400 scholars have expressed support for the Jokowi-Ma'ruf pair on Saturday (9/15). He considered, scholars who support Jolowi-Ma'ruf are people who truly have knowledge about Islam. Because of this, he was not afraid of being left behind by clerics. "His ulama is truly a cleric, a cleric, and that supports Jokowi-Ma'ruf Amin. So there is no problem," he said. He stressed that the differences of opinion between the ulamas would not necessarily divide Muslims. According to him, all groups have the right to determine support.

Table 6: Kiai Ma'ruf Responds to the Results of Ijtima Ulama II .

Define Problem	The explanation of the definition of the problem is very clear that KH Ma'ruf Amin was not worried about the results of Ijtima Ulama II supporting the pair Prabowo Subianto-Sandiaga Uno.
Diagnose Causes	An analysis of the events emphasizes that the difference in views between these scholars will not necessarily divide Muslims.
Moral Judgement	Moral decisions are explained that all groups have the right to determine support.
Treatment Recommendation	The recommended recommendation is that scholars who support Jokowi-Ma'ruf are people who truly have knowledge about Islam.

Based on the results of the framing analysis, it is clear that the kompas and republika are still objectively describing reality. However, the media agenda presented provides a framing that the two media have alignments with each pair of presidential candidates. The neutrality of the media in the content of the news is more focused on maintaining group relations between the two camps of the presidential and vice-presidential couples who are equally supported by the clerics. This is assumed to keep ukhwah Islamiyah in the Indonesian Muslim community so that it is not divided by black campaign discourses, especially discourses that corner ulama.

Thus it can be understood that scholars and power

in the perspective of political communication are the opposite components. The ulama ideally became the ummah communicator who was the heir of the prophets, while the authority was the guardian. That is, in the perspective of political communication, scholars have a very important role in the sustainability of a country. It must be admitted that the phenomenon of scholars contributing to politics is not unusual. However, the position of the ulama in the midst of the ummah must be placed in a place that is in accordance with his khittah.

5 CONCLUSIONS

Based on the results of the discussion it can be concluded that the framing of the two media in revealing the reality of the results of ijtima ulama 2 is objective while still carrying different media agendas. The media agenda directed by the two media was very impressive in favor of one of the presidential candidate pairs. In the perspective of political communication, scholars have a very important role in the sustainability of a country. Scholars take part in politics is not a strange thing. However, the position of the ulama in the midst of the ummah must be placed in a place that is in accordance with his khittah.

REFERENCES

El Fadl, K. A. (2001). *And God knows the soldiers: The authoritative and authoritarian in Islamic discourses*. Univ Pr of Amer.

Kompas (2018a). Ijtima Ulama II Dukung Prabowo-Sandiaga, Ini Komentar Jokowi...

Kompas (2018b). Prabowo attends Ulema's Ijtima II meeting — Republika Online.

Kriyantono, R., Sos, S., and Si, M. (2014). *Teknik praktis riset komunikasi*. Prenada Media.

Muslim, A., Kolopaking, L., Dharmawan, A., and Soetarto, E. (2015). Dinamika peran sosial politik ulama dan jawara di pandeglang banten. *MIMBAR : Jurnal Sosial dan Pembangunan*, 31(2):461–474.

Nurudin, N. (2007). *Pengantar Komunikasi Massa*. Raja-Grafindo Persada.

Paramita, P. D. (2011). Keterkaitan antara politik dan kekuasaan dalam organisas. *Dinamika Sains*, 9(21).

Republika. Ijtima Ulama II Menetapkan Empat Hal Ini — Republika Online.

Syaiful Rohim, H. (2009). Teori komunikasi: Perspektif, ragam, dan aplikasi. *Jakarta: Rineka Cipta*.

Vivian, J. (2008). Teori komunikasi massa, edisi kedelapan (the media of mass communication,). *Terj. Tri Wibowo BS Jakarta: Kencana Prenada Media Group*.

Communication Strategy of Campaign's Steps Monitoring in Local Election 2018 by Election Supervisory Board

Fatmawati Moekahar, Abdul Aziz

Department of Communication, Faculty of Communication, Universitas Islam Riau, Pekanbaru, Indonesia
{fatmawatikaffa, abdulaziz}@comm.uir.ac.id

Keywords: Strategy, Communication, Campaign.

Abstract: This research is concerned with communication strategy in monitoring of campaign's steps by the election supervisory board in local election 2018, in the context of a theory of social action. Based on Laswell paradigm: Who, Says what, In which channel, To whom, With what effect. This study uses qualitative methods with descriptive studies. The results of this study says that the Election Supervisory Board in Riau Province to monitoring of campaign's steps in local election 2018 by changing the attitudes and behaviour of the election participants through disseminating information or message related to rules. Communication strategies by the election supervisory board to monitoring campaign's steps as a political activity as well as an arena of ideas and beliefs people have are systematically related to actual, and material conditions of existence.

1 INTRODUCTION

The stages of local election 2018 have been completed. The elected governor's Riau 2019 - 2024 were the pair Syamsuar - Edy Nasution. The pair has won 799.289 votes. Although the general election process has been completed, efforts to improve the implementation of electoral process to be continue. Especially by the organizers. Improvement efforts are carried out through an evaluation mechanism for various stages of the implementation process. In terms of supervision, the implementation of the elections contained several findings of violations both administrative and criminal by Bawaslu Riau (Election Supervisory Board at Riau Province). Bawaslu Riau is one of the election administration institutions in the province as organizers of general elections that are given the task and authority in overseeing the election of the Governor.

Supervision is the activity of observing, reviewing, examining, and assessing the process of organizing elections in accordance with laws and regulations. The legal basis for the implementation of the 2018 elections is Law No. 07 of 2017 concerning the implementation of elections. Research by Herminus (2017) says that it is very important that the oversight process is carried out by the Supervisory Committee because it can minimize the level of errors in the election. Election supervision aims to ensure the implementation of elections in a direct, general, free, confidential, fair, and with the aims to realize democratic elections, integrity, credibility, transparency and accountability. In supervision, Bawaslu often finds obstacles due to several things, including: the existence of multiple interpretations of the legislative rules of election participants, the lack of public political education, limited understanding of election supervisors at lower levels (Interview with Rusidi Commissioner's Bawaslu, September 5, 2018) (Agustino, 2008). Because of that, it needs an appropriate monitoring strategy so that the election administration can run optimally. Furthermore, the Bawaslu commissioner said that the election stage found the most violations was during the campaign. For example, in the second period of the campaign, there were 79 violations from the four pairs. The duration of time is only monitored for 2 weeks, March, 2 – 14, 2018. The violation consists of five forms, namely campaign violations without Notification Receipt (STTP), inadequate installation of Campaign Props (APK), use of candidate governor stickers on vehicles, involvement village head and the device, use of public facilities for the campaign (Cangara, 2014a; Cangara, 2014b).

This research was conducted to find out how the Riau's Bawaslu communication strategy in monitoring the campaign stages in the Riau Election 2018. The reason for choosing the campaign stages was because based on evaluation data from Riau Bawaslu, the campaign stages were the most found violations in the 2018 regional election. Considered as a quite

interesting step in terms of supervision because there are technical interpretations of the rules from the election participants with the election supervisory committee.

2 METHOD

The research method used is qualitative research with descriptive approach. The descriptive qualitative research aims to describe fact, condition, and situation at the time. Qualitative descriptive research interprets and tells data related to the situation that is happening. There were 10 informants, who was people who had extensive experience and knowledge regarding the topic of this research.

3 THEORITICAL REVIEW

In dealing with communication problems, planners are faced with a number of problems, especially in relation to the strategy of using available communication resources to achieve the goals to be achieved. Rogers (1982) limits the notion of communication strategies as a design to change human behavior on a larger scale through the transfer of new ideas. A communication planning expert Middleton (1980) makes a definition by stating "communication strategies are the best combination of all communication elements ranging from communicators, messages, channels (media) to recipients to effects (effects) designed to achieve communication goals". The same as expressed by lasswell, he defined to communication strategies with five steps: Who, Says what, In which channel, To whom, With what effect (Suryadi, 2018). The choice of strategy is a crucial step that requires careful handling in planning communication, because if the choice of strategy is wrong or wrong then the results obtained can be failure, especially losses in terms of time, material and energy(Denzin and S., 2005; Effendy and Uchjana, ; Alo,).

The stages of communication strategies proposed by Cutlip (Cutlip, 1962), Center and Broom (2006), namely: 1. Develop goals both short term (as a communication influence) and long term (as a relationship gauge). 2. Planning a communication program to improve goals. 3. Take action and communicate (by implementing public programs, actions and communications designed to achieve specific goals for each public in order to achieve program objectives) 4. Evaluate the program by evaluating the preparation, implementation and results of the program. Fergusson (Fergusson, 1999) said communication planning is about sets

of action in a goals.

4 RESULTS AND DISCUSSIONS

Based on results, researchers categorize communication strategies by Lasswel paradigm:

Who

Who is about communicator. Communicator is a person who is given task delivering a message to audiens. In this research, communicator is employee of Bawaslu at the Riau Province, District/City, Sub-District, and Village. A number of indicators related to this component are: confidence, credibility's, fairness, discipline, healthy, and knowledge.

Bawaslu Riau consist of five division. There are monitoring division; prosecution of violation division; human resources and organization division; law, data and information division; and dispute resolution division. Bawaslu Riau has formed 36 District/City Supervisory Committee, 498 Sub-District, 1,859 Village (PPL) and 11,920 (TPS Supervisors). In carrying out its duty, Bawaslu Riau is assisted by secretariat team. Bawaslu Riau of Secretariat is headed by the Head of the Secretariat, which consists of 3 subdivisions, namely: the administrative sub-section, the technical sub-division of the legal sub-section, public relations and relations between institutions.

Says what

'Says what' is about a message. a message can be effectively received by the audience if it fulfills 3 main things: message organization, message structure and request message (Rakhmat and Surjaman, 1999). A message is a set of rules about supervisory campaign in local election. A set of rules consist of election law (Law No.07 of 2017 and Law No. 10 of 2016), PKPU No 1-5 of 2017, and other related regulation. Bawaslu Riau have to monitoring of campaign steps in election based on regulation.

In supervision of campaign based on KPU Regulation No.0 2 of 2018 concerning changes to KPU Regulation No. 01 of 2017, about Programs and Schedule for Implementation of Governor and Deputy Governor Election, Regent and Mayor for local election 2018. In supervision, Bawaslu Riau divide into three activities:

- **Preparing supervision**

There were 5 vulnerabilities at the campaign stage: 1) money politic. The use of money as a tool for buying voice support and bribery both for voters and for election organizers that can benefit or harm certain candidate pairs. Money is used by candidate pairs to influence people's choices. 2) black cam-

paign. Money politics in the form of covert campaigns, false information, and negatives that utilize online networks such as blogs, websites, and social media that have a wide range, so that they can be easily consumed by the public. This is used to manipulate public awareness so as to give a certain affective response to couples. 3) use of state facilities, especially by incumbent. 4) Mobilization of the State Civil Apparatus 5) Use of Educational Facilities and Places of Worship.

- **Planning Supervision**

Method's Campaigns carried out by Political Parties, Candidate and Campaign Teams :

- Limited meetings;
- Face-to-face and Dialogical meetings;
- Distribution of Campaign Materials to the public;
- Installation of Campaign Props (APK);
- Other activities that do not violate campaign prohibitions and statutory provisions;

All forms of the campaign are a focus of supervised Bawaslu Riau. In the election of the Governor's Riau held simultaneously in 2018. Time Schedule of campaign supervision by Bawaslu Riau are as follows:

Table 1: Time Schedule of Campaign supervision.

No	Campaign Steps	Start	Finish
1	Limited meeting, face to face, APK, and other activities	February, 15, 2018	Jun, 23, 2018
2	Public Debate	February, 15, 2018	Jun, 23, 2018
3	Campaign in mass media	Jun, 10, 2018	Jun, 23, 2018
4	Quiet period	Jun, 24, 2018	Jun, 26, 2018

Bawaslu Riau along with its ranks have tried to work optimally to minimize and resolve any dynamics and problems that occur at each stage. The supervisory performance carried out by Bawaslu Riau along with its ranks is a concrete step to prevent any dynamics and problems in the election 2018.

Supervision strategy with the prevention of violations and the enforcement of violations, namely. Violation prevention is an action, steps, an early effort to prevent potential violations that interfere with the integrity of the process and election results. While the enforcement of violations is a series of handling violations that include findings, acceptance of reports, collection of evidence, clarification, assessment, and/or the provision of recommendations and

forwarding of the results of findings/reports to the authorities to be action.

The strategies supervision's campaign by Bawaslu Riau: a) Drafting the insecurity map; b) Coordinate and consolidate the relevant stakeholders; c) Direct supervision at each steps; d) investigation; e) participative supervision.

- **Supervision**

Bawaslu Riau supervises in the form of Supervision and Monitoring of supervision to Regency, District and Village at each stage of the campaign. The Monitoring Activities of Bawaslu Riau are as follows:

Table 2: Monitoring Activities for Campaign Steps by Bawaslu Riau.

No	Description	Time	Place
1	Campaign supervision and campaign props (APK)	March, 28-29 2018	Kampar
2	Monitoring to campaign props (APK)	March, 7-8 2018	Siak
3	Supervision to Campaign and Campaign props (APK)	March, 13-15 2018	Bengkalis

In the campaign stage the dynamics and problems are always played by the candidate pairs and campaign teams in taking community support. The campaign stages in the election of the Governor's Riau, where during the campaign period all campaign teams of the candidate pairs had committed campaign administration violations, namely by not taking care of STTP during the campaign. There was also a campaign outside the campaign zone that had been jointly established by all the Candidate Pairs, there were also several candidate pairs who always campaigned through meetings with reasoned citizens who were invited by the residents and there was even money politics from the candidate team especially towards the times the end of the campaign and can be proven up to the District Court and convicted by the Judge. And then, it was found the participation of the Village Devices, the Village Head and the involvement of ASN in conducting campaign activities for one of the candidate pairs. There is still a Non APK one of the candidate pairs still installed. the Campaign Team of each Candidate Pair does not release a campaign notification letter to Bawaslu Riau.

- **Evaluating Supervision**

Bawaslu of Republic of Indonesia has forwarded the circular letter concerning the supervisory work tool of

the election of governor in 2018 to Bawaslu province and the ranks down. This is a guideline in conducting supervision by Panwaslu District/city in Riau province. With this surveillance tool is very helpful Panwaslu Regency/city in conducting supervision of the election of governor's Riau.

In the supervision campaign, Bawaslu Riau and Panwaslu District/city managed to coordinate well with the District Panwaslu and PPL and the TPS supervisor in making efforts to prevent potential violations in the rules Campaign. Coordination between the Bawaslu Riau and KPU Riau both so that the election of governor went well. The evaluation of supervision conducted socialization to the political party and public about the understanding of regulation and the sanction of violations at each sub-stage in the election of Riau in 2018.

In which channel

Channel referred to here is media. Bawaslu Riau used a several media to delivered message to audiens. There are two categories media: mass media and conventional media. Mass media used to large number and wide range. For examples: Radio, Television, Newspaper, and baliho. Although conventional media used to limited audiens and closed range. For examples: Bawaslu Riau give to announcement about regulations to political parties.

To whom

The audience targeted at election supervision is all election stakeholders, including: political parties, candidate pairs, successful teams, and the public as electoral voters. They come from a very diverse community, both religion, ethnicity, education and knowledge. therefore it is possible to have different perceptions in receiving messages related to election regulations.

With what effect

The expected impact of the supervisory activities carried out by Bawaslu Riau is a change in attitudes and behaviors that adhere to the rules of the election, especially related to election campaigns.

5   CONCLUSIONS

The results of this study says that the Election Supervisory Board in Riau Province to monitoring of campaign's steps in local election 2018 by changing the attitudes and behaviour of the election participants through disseminating information or message related to rules. Communication strategies by the election supervisory board to monitoring campaign's steps as a political activity as well as an arena of ideas and beliefs people have are systematically related to actual,

and material conditions of existence.

REFERENCES

Agustino, L. (2008). *Pilkada dan Dinamika Politik Lokal*. Yogyakarta: Pustaka Pelajar.

Alo, L. *2011*. Komunikasi Politik, Jakarta.

Cangara, H. (2014a). *Komunikasi Politik: Konsep, Teori. dan Strategi, Jakarta*.

Cangara, H. (2014b). *Perencanaan & Strategi Komunikasi*. Jakarta: Rajawali Pers.

Cutlip, S. M. (1962). *Effective public relations*. Pearson Education India.

Denzin, N. K. and S., L. Y. (2005). *Handbook of Qualitatif Research (terjemahan)*. Yogyakarta: Pustaka Pelajar.

Effendy, O. and Uchjana. *2007*. Ilmu Komunikasi Teori dan Praktek, Bandung.

Ferguson, S. D. (1999). *Communication planning: An integrated approach*, volume 1. Sage.

Rakhmat, J. and Surjaman, T. (1999). *Psikologi komunikasi*. Remaja Rosdakarya.

Suryadi, E. (2018). Strategi komunikasi: Sebuah analisis teori dan praktis di era global. *Bandung: PT. Remaja Rosdakrya*.

Correlates of Stakeholders Engagement towards Government Programs (GP) in Malaysia

Faridah Ibrahim[1], Siti Maziha Mustapha[1], Kho Suet Nie[2], Amli Hazlin Ahmad Mokhtar[1], Dil Froz Jan Salem Shah [1]

[1]*Infrastructure University Kuala Lumpur,Kajang, Malaysia*
[2]*Taylors University, Malaysia*
{*faridah, maziha*}*@iukl.edu.my, SuetNie.Kho@taylors.edu.my,* {*amli, dilfrozjan*}*@iukl.edu.my*

Keywords: Stakeholders, Engagement, External Public, Government Programs, Participation.

Abstract: The implementation of government's program is vital to the development and economic growth of a country. Stakeholder engagement theory posits that the successful implementation of policies and programs will depend on how well the programs are accepted by both internal and external stakeholders. This study looks into the external stakeholders, namely the citizens of Malaysia and their engagement towards government programs. This study is carried out using survey research method via self-administered questionnaires on 361 respondents in the Klang Valley, Malaysia. Research questions were formulated to answer the following: to what extent is the level of participation among the stakeholders in government programs; to identify what factors that are related to stakeholders' engagement; and to determine which predictors contribute most to stakeholder engagement. From the survey, it was found that several important factors were related to the stakeholders' engagement towards government programs. Among the correlates were media dependence, governmental proximity, leadership, community integration and perception of current issues. The study found that governmental proximity and leadership are the most important predictors of stakeholder engagement. The study implied that strong participation empowered the people to be engaged either physically or virtually towards the implementation of the government programs. It is recommended that future government programs include peoples' participation in terms of idea contributions and decision making for the successful implementation of the programs.

1 INTRODUCTION

The early Stakeholder Engagement theory (SET) is concerned with the understanding of relationships between organisation and individuals and groups who can affect it or be affected by it, which could be engineered to achieve success (Freeman, 1983). Stakeholder engagement has become an important factor in organisations, both private and public, and findings from research have shown a strong link between engagement and outcomes of organisations. Nalick et al. (2016) found in their study that there is an intersection between organisation and stakeholders where there is a two-way information flow and this will encourage acceptability among the stakeholders through sustained collaborative relationships. Studies by various researchers (Freeman and McVea, 2001; Greenwpod, 2007; Saks, 2006; Ali and Sonderling, 2017) have shown that the key drivers of engagement are communication, bottom-up information flow, and

proximity or close relationship between stakeholders and committed organisational leaders. These studies have also identified gaps and issues pertaining to predictors of engagement and the factors that could help to increase engagement. Studies also showed that much of the research has been done in the U.S and hence more research is needed to explore in other countries where the concept of engagement is still in its infancy.

Employee voice can be defined as the capacity for employees to provide ideas and views into decisions that are made by organisations for the wellbeing of the people (Bahtiar et al., 2018). It has been found that one of the main drivers of employee engagement is for the employees to have the chance to provide feedback from bottom-up (Truss et al., 2006). In an organisational setting, employee involvement is considered as a 'soft' strategy by the leaders to tap greater participation and productivity. Likewise, in a larger organisation such as the government, it is imperative

to get people's engagement in policies and governmental programs in order to achieve optimum output for the effort and initiatives invested. According to Ali and Sonderling (2017), lack of genuine participation in development process could be one of the major reasons for the failure of development projects in achieving their goals.

2 BACKGROUND OF STUDY

Stakeholder engagement, also known as 'Citizenship Participation' is an important element in nation building and maintaining an equitable power balance in an organisation or a country is vital (Greenwpod, 2007; Ihugba and Osuji, 2011). Stakeholders, who can be categorised as internal and external stakeholders according to Hill and Jones (2001), are defined as "those groups and individuals who can affect or are affected by the achievement of an organisation's objectives"(Freeman and McVea, 2001).

Strategic use of stakeholder engagement will result in cost effective investment and successful implementation of programs or policies by an organisation or a country. This study looks at the relationship of selected factors with stakeholders engagement in the implementation of the Malaysian government programmes (GP) under Pakatan Harapan (PH). The Malaysian corporate entities and the higher echelon have been talking about engagement in recent years ever since US former President Barack Obama introduced global engagement in his country's foreign policy. Where Malaysia is concerned, stakeholder engagement in GP is a necessity since it may lead to the successes or failures of programs initiated by the government. Hence, it is important to explore to what extent stakeholders engagement contribute to the successful implementation of government programs and to what extent are the relationships between the critical factors and stakeholders' engagement.

3 PROBLEM STATEMENT

Stakeholder engagement is a crucial factor in national development and nation building. Various studies in this area have found that stakeholder engagement can positively benefit both the organisation and society (Freeman and McVea, 2001; ?; Sandeep et al., 19; Ihugba and Osuji, 2011; Faridah et al., 2019). Likewise, Noland and Philips (2010) argued that stakeholders engagement must be intergral to an organisation's strategy if it is to achieve real success (Noland and Philips, 2010; Idris, 2018).

Malaysia as a nation that can be considered as "an organisation" has implemented various programs for the sake of national development. Under the previous govenment, the Government Transformation Program (GTP), through GTP 1.0 and 2.0, were aimed at improving the quality of life of Malaysian citizen. Earlier studies by the Performance Management Delivery Unit (PEMANDU) of Malaysia found that more than half of the respondents were aware of GTP's trajectory and goals. However, on average the rakyat's perception of the GTP came in at 7.4 out of 10. This study by PEMANDU surveyed 2040 respondents to assess the general public awareness and perception of the GTP. However, the study did not dwell into factors that predict stakeholder engagement towards government's program.

Among the developing countries, Malaysia has always embarked on major reform and modernisation in most of their development programmes. From the past government to the current new government under PH, much attention has been given to improve the quality of life of the citizen. With the change of government, more programs are initiated with similar goals and expectations. However, these programs will not be successful without the full support and commitment from the people. To ensure that there is return of investment, the government needs to strategise in its planning and implementation. Therefore, it is timely that such a study be conducted to investigate the important correlates and predictors of engagement. The following research questions were formulated to address this problem:

4 RESEARCH QUESTIONS

- To what extent is the level of engagement among the people towards Government programs?
- Are there significant relationships among selected factors with stakeholders' engagement?
- Which of the predictors contributes the most to stakeholder engagement?

5 LITERATURE REVIEW

In an early definition, Kahn (1990) described engagement as to be psychologically as well as physically present when occupying and performing a role in an organisation or other setting. Truss et al. (2006) defined employee engagement simply as "passion for work". Robinson et al. (2004) defined engagement as 'one step up from commitment' and has often likened

the term to established constructs such as 'organisational commitment' and 'organisational citizenship behaviour'(Robinson, 2006). Therefore, organisational commitment differs from engagement in that it refers to individuals' attitude and attachment towards their organisations. Kahn (1990) argued that the employees or people in the organisation feel obliged to be more deeply involved in their performance as a form of repayment in exchange for the resources they received from their organisation. If organisation fails to provide these resources, individuals are more likely to withdraw or disengage themselves from these roles. There is also a general understanding that there is a connection between employee engagement and organisation and that the outcomes of engagement are positive (Saks, 2006).

Gallup Organisation (2004) cited an international survey which showed encouraging evidences that organisation can only reach their full potential by emotionally engaging employees and customers. The Gallup findings also showed that higher workplace engagement predicts higher earnings among their publicly traded business. However, findings on engagement at the international level showed some interesting trends. Findings from a global survey by Towers Perrin (Seijts and Crim, 2006) showed that Mexico and Brazil had the highest percentages of engaged employees, while highly developed countries such as Japan and Italy had the largest percentages of disengaged employees. This research also indicated that the employees expressed far more empowerment especially in tasks that affected their work and lives. It was found that leaders at these highly engaged organisations, created a trusting and challenging environment, in which employees were motivated to innovate in order to move the organisations forward. This indicted that good leadership is an important element in enhancing engagement among organisational members and people as a whole.

According to the Towers Perrin survey, building engagement is a continuous process and that the vital factors for engagement include strong leadership, accountability, autonomy, a sense of control over one's environment and opportunities for development. The research also showed evidence that the most important driver of engagement is leader's interest in the people's well-being.

In the current globalised world, with the proliferation of new media technology, there is a tremendous improvement in information dissemination. Creating proximity with the people and providing adequate information are one of the ways to engage with the people. Hong (2013) found that a vast majority of US politicians has a Twitter account as an instru-

ment of engagement (Hong, 2013). Ali Salman et al. (2018) reiterated that people have moved to a new internet-based medium and digital media for political engagement and support in Malaysia. This view is supported by Samsudin (2018) who contended that the emergence of internet facilities had influenced and changed the ways citizens participate. Bahtiar et al. (2018) suggested that participation provide citizens of a country to express their views and aspirations and be able to participate in decision making that may affect their future. Likewise in Indonesia, Ika (2018) reported that technologies had transformed governments to become more transparent and more accessible to citizens.

However, despite the benefits and advantages of the social media, the government is facing challenges due to the fact that social media are difficult to control and monitor as compared to conventional or traditional media. While the new media have the potential to disseminate information quickly and benefit the users, the content could create doubt making it difficult for users to believe. Social media is blamed for promoting immorality and usage of inappropriate language (Ali and Sonderling, 2017; Salman, 2009; Salman et al., 2018). Along similar lines, Ika (2018) also argued that neither government nor citizens benefitted from feedbacks and collaboration that new technology could facilitate because the government are still doing their jobs of spreading the same old propaganda through new forms of technologies. Hence, it can be seen that the conventional media that are usually handled by professional and trained journalists have the upper hand.

6 METHODOLOGY

This study embarked on a quantitative research using survey method via questionnaire to collect data. A total of 361 respondents in the Klang Valley, Malaysia, were surveyed through self-administered questionnaires. The questionnaires were distributed to respondents from a sample chosen based on stratified sampling in which four zones in Klang Valley were selected namely Ampang, Kajang, Shah Alam and Lembah Pantai. The duration for data collection was three weeks in the month of April 2019. The questionnaires were constructed based on the research questions identified from the problem statement and literature reviews. The following research questions acted as the baseline for this study:

- To what extent is the level of participation among the people towards Government programs?

- Are there significant relationships among selected factors with stakeholders' engagement?
- Which of the predictors contributes the most to stakeholder engagement?

7 RESULTS AND DISCUSSION

7.1 Demographic Profile of Respondents

The focus of this research is on the external stakeholders namely the citizens. A total of 360 respondents answered a self-administered questionnaire. All of the respondents were located in the Klang Valley, Malaysia. The respondents comprised of 45.7% (165) male and 54.3% (196) female. A majority of them were Bachelor and Masters degree holders 46% (166), followed by the rest who were school-leavers. About 70.4% (254) were from urban areas, 19.1% (69) from sub urban and 10.5% (38) from rural areas.

In terms of age, majority of the respondents were from the younger adults between the age of 26-25 years (36.8%), 24 years below (34.4%), the adults from the age range of 36-45 years recorded 13.6% and above 46 years,15.2%. Majority worked in the private sectors (64.3%) compared to public sectors (4.7%) and the rest were students and business people. About 95% received their education locally and only 5% foreign educated. Majority received monthly income between RM2000 to RM4000 (35.1%), followed by below RM2000 (30.2%) above RM4001 (18%) and no income (16.9%) mainly from the students' group.

7.2 Reliability Test

To answer the research questions, items for the selected variables (both Dependent and Independent variables) were analysed. All of the items were measured using 5-point Likert scales ranging from strongly disagree to strongly agree. A reliability test was conducted to check on the appropriateness, acceptability, reliability and dependability of the instruments. Table 1 showed the reliability for the selected variables used in this study. The Cronbach's alpha for all items recorded a high score within the range of .70 to .80 indicating the appropriateness and the reliability of the items used.

7.3 Level of Engagement

The extent in the level of engagement among stakeholders was analysed using descriptive analysis. Ta-

Table 1: Reliability Test.

Variables	Number of Items	Cronbach's alpha
Current issues	11	.808
Participation/ Engagement	14	.784
Traditional media	6	.791
New Media	6	.798
Governmental proximity	14	.752
Leadership	9	.766
Community Integration	10	.799

ble 2 showed the differences in the average mean illustrated by the selected variables. The results indicated that community integration recorded the highest mean 3.49 (SD=0.505), followed by new media dependence with the mean score of 3.47 (SD=0.609). The third is current issues which recorded mean 3.39 (SD=0.444). The fourth is leadership which recorded mean 3.133 (SD=0.723). Leadership came forth place with mean score of 3.134 (SD=0.723). Traditional media recorded the lowest mean 2.89 (SD=0.678). These findings indicated that the respondents' community integration, new media exposure, current issues, leadership, governmental proximity received encouraging mean scores with a small dispersion indicated by the standard deviation.

For the community integration domain, stakeholders across all levels agree that they belong to the community; know the rules, feel accepted by the community; can be independent, feel close to others, know the people well and like where they lived. For the governmental proximity, the stakeholders agreed that the government's work positively impacted their lives, satisfaction with the benefits package, mutual trust and respect, and the government-people work relationship. In terms of leadership, the agreement level is for teamwork, concern for the people's wellbeing, commitment to work, bridging the people with government and practicing of uniform rules.

For the media dependence domain, the computed mean for the traditional media and new media do not show a big difference. The stakeholders used both media to get information regarding government programs and also to update their knowledge and getting in-depth and instantaneous information. They also seek the media for clarification on information pertaining to the government programs. For the current issues domain, much have been highlighted on the stakeholders' agreement on several political, eco-

nomic and social factors such as rate of employment, corruption, crime, rise in petrol prices, Sales and Services Tax - SST 2.0, and media freedom.

Table 2: Mean and Standard Deviation of Selected Variables in Relation to Stakeholder Engagement.

	Computed Mean	Computed Std. Deviation
Current issues	3.380	0.444
Traditional Media	2.892	0.678
New Media	3.465	0.609
Govt. Proximity	3.036	0.589
Leadership	3.134	0.723
Community Integration	3.488	0.505

7.4 Correlates of Stakeholders' Engagement

Correlation analysis using Pearson one-tailed was used to determine if there is any significant relationship between engagement (dependent variable) and the independent variables namely current issues, dependence on traditional media and new media, government proximity, leadership and community integration. Table 3 showed the correlation between the identified variables with stakeholder engagement. The study found that four factors were significantly correlated to engagement in the implementation of government programs. Based on Guildford (1956) rule of thumb, the relationships between the government proximity (r=0.670, p<0.05) and leadership (r=0.570, p<0.05) with stakeholder engagement are moderately related. Three variables of the selected variables (traditional media: r=0.361; current issues: r=0.147; community integration r=0.158) are weakly related to stakeholder engagement. It is interesting to note that dependency on new media showed no relationship with stakeholder engagement (r = 0.089). The study supports earlier findings by Kahn (1990) and Seijts & Crim (2006) that emphasized on the importance of leaders' encouragement and proximity between leaders and people in enhancing engagement among organisational members and people as a whole. Traditional media had a weak relationship with stakeholder engagement whilst new media had no relationship prove to show that the stakeholders depend more on the traditional media to obtain information on government programs compared to the new media. This could be due to the level of trust they have on the new media which are said to be quite

loose in terms of control and too often were equated with the usage of misappropriate words. The results supported earlier observations by Ika (2018) and Ali Salman et al. (2018).

Table 3: Correlations Between Selected Variables and Stakeholder Engagement (N=361).

Variables	r	Significance
Current issues	0.147	.005*
Traditional media	0.361	.000*
New Media	0.089	.090
Government proximity	0.670	.000*
Leadership	0.570	.000*
Community Integration	0.158	.003*

7.5 Predictors of Stakeholder's Engagement

The results of the regression analysis (stepwise) for the predictors of stakeholder were presented in table 4 (Appendix).

Prior to the test, several tests were undertaken to check on normality and multicollinearity. The results showed all items of the date were normally distributed and there was no issue of Multicolinearity.

The criterion variable, engagement was tested using six predictors which were, current issues, dependence on traditional media and new media, governmental proximity, leadership and community integration. The regressional analysis showed four models which were statistically significant. As shown in Model 1, the best predictor was governmental proximity which showed $\beta=0.670, p<0.05$. This means that governmental proximity accounted for 67% of explained variance. Model 2 identified two variables mainly governmental proximity ($\beta=0.526$, p<0.05) and leadership ($\beta=0.219$, p<0.05). The two variables accounted for 74.5% of explained variance, showing an increase of 6.20%. Model 3 identified three variables which includes governmental proximity ($\beta=0.498$, p<0.05), leadership ($\beta=0.202$, p<0.05) and traditional media ($\beta=0.115$, p<0.05). The three variables accounted for 81.2% of explained.

Model 4 identified four variables namely governmental proximity (($\beta=0.515$, p<0.05), leadership ($\beta=0.215$, p<0.05), dependence on traditional media ($\beta=0.112$, p<0.05) and community integration ($\beta=0.079$, p<0.05). The four variables accounted for 92.1% of explained variance, showing an increase of 25.1%. The stepwise regressional models showed that with the inclusion of three variables in model 4, the

Table 4: Regressional Analysis (Stepwise) between Engagement and Selected Variables (N=361).

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.035	1.975		3.055	.002
	Govt. proximity	.780	.046	.670	17.091	.000
2	(Constant)	4.072	1.982		2.055	.041
	Govt. proximity	.612	.059	.526	10.344	.000
	Leadership	.322	.075	.219	4.299	.000
3	(Constant)	1.494	2.164		.690	.490
	Govt. proximity	.579	.060	.498	9.679	.000
	Leadership	.297	.075	.202	3.974	.000
	Traditional Media	.271	.096	.115	2.829	.005
4	(Constant)	5.467	2.954		1.851	.065
	Govt. proximity	.599	.060	.515	9.910	.000
	Leadership	.317	.075	.215	4.219	.000
	Traditional media	.263	.096	.112	2.750	.006
	Community Integration	-.150	.076	-.079	-1.967	.050
a. Dependent Variable: Participation 3						

variance explained is only 25.1% compared to model 1 that showed governmental proximity alone contributed 67.0% of the variance. This proved that governmental proximity is the best predictor for stakeholder engagement. This is followed by leadership. The two predictors, governmental proximity and leadership came out as the strongest predictor variables for stakeholder engagement.

These findings have supported various mainstream findings from scholars in stakeholder engagement (Kahn, 1990; Bahtiar et al., 2018). Kahn (1990) argued that the employees or people in the organisation feel obliged to be more deeply involved in their performance as a form of repayment in exchange for the resources they received from their organisation.

Hong (2013) found that a vast majority of US politicians has a Twitter account as an instrument of engagement. Creating proximity with the people and providing adequate information are one of the ways to engage with the people. These findings also supported other Stakeholder Engagement theorists (Freeman, ; Freeman, 1984; Freeman, 1984; Freeman and McVea, 2001; Greenwpod, 2007; Saks, 2006; Ali and Sonderling, 2017) who argued that the key drivers of engagement are communication, bottom-up information flow, and proximity or close relationship between stakeholders and committed organisational leaders.

The basic tenet of stakeholder engagement such as participation, proximity, leadership, media dependence, community integration, state of current issues is selected as the baseline to analyse the data in this study. The findings of the study revealed that governmental proximity which is an indication of close government-citizen relationship had formed a catalyst that make stakeholders want to be engaged with the government in the implementation of various governmental programs. The good and positive relationship were basically due to trust, respect, inclusivity of the government, satisfaction with work culture and the benefits package provided. Another important factor is that the stakeholders believed that the government's work had positively impacted their lives. According to Nalick (2016) Stakeholder Engagement theory stressed that there is a point of intersection between the government and the stakeholders on certain programs and activities. Such a situation had encouraged acceptability and triggered engagement among the stakeholders which in turn will sustain collaborative governmental-citizen relationships (Nalick et al., 2016).

The stakeholders were positive and accepting towards the efforts made by the government to enhance their wellbeing. This is in line with various studies in this area which have found that stakeholder engagement can positively benefit both the organisation and society (Freeman & McVea 2001; Greenwood, 2007; Ihugba & Osuji 2011). Similarly, the findings of this study supported the views expressed by these scholars that proximity and closeness of the governmental-citizen relationship had positively led to engagement. This study also found participation which stressed the stakeholder's involvement in decision making, the freedom to voice out complaints about pressing issues as well as giving feedbacks and suggestions is an important element in engagement. Ali and Sonderling (2017) had identified in their study that genuine participation is the missing link in the development process that had caused failure of development

projects in achieving their goals. Bahtiar et al. (2018) also suggested that participation provide citizens of a country to express their views and aspirations and be able to participate in decision making that may affect their future.

This study also identified the prevalent role of leadership as an enhancement factor in stakeholder's engagement in the implementation of GP. The findings showed strong leadership that emphasised mutual trust and respect, commitment to a good work culture, teamwork and a sense of social responsibility, and the use of uniform policies are essential elements that had charted a positive path towards engagement. This is similar with the views by Robinson et al. (2004) who identified key factors associated with stakeholder engagement included behaviors such as effective leadership, two-way communication, high levels of collaboration and teamwork, a commitment to stakeholder wellbeing and clear, accessible policies and practices (**?**; Simmons, 2003).

On the other hand, the findings of this study showed interesting revelations. Despite the benefits and advantages of the new media which contributed tremendously to the current global societies, this study found that the traditional media have a competitive edge over the new media. Traditional media which include newspapers, television and radio showed a weak relationship with stakeholder engagement in the implementation of GP while new media have no relationship with stakeholder engagement. Traditional media were sought by stakeholders in this study to obtain information especially in-depth and instantaneous information on government programs, update knowledge also seek clarification. This finding echoed earlier contention by Ali Salman (2009) who argued while the new media have the potential to disseminate information quickly and benefit the users, the content could create doubt making it difficult for users to believe. Some of the reasons identified were immorality and usage of inappropriate language. Hence, it can be seen that the traditional or conventional media that are usually handled by professional and trained journalists are more acceptable when it comes to the transmission of governmental programs.

8 CONCLUSIONS

The results of this study via survey clearly indicate the positive responses of the respondents towards stakeholder's engagement in the implementation of government program. Much of the responses were subjected to how they perceived their proximity with the

government and the effective leadership exhibited by the government via the appointed leaders and representatives as front-liners. The stakeholder's engagement in this study is also triggered by their exposure and media dependency especially the conventional media. Also play an important role in engagement is their level of community integration that dwell into their sense of belonging and comfort living in the environment. Apart from that, how they perceive the current situation in the country politically, economically and socially, also spelled out their engagement. Negative perception will lead to disengagement, unproductive venture and even hostility. In conclusion, this study is able to address the level of engagement among the stakeholders and what are the factors that correlate and predict engagement in the implementation of government programs. This study has successfully showed that engagement of stakeholders is predominant in the successful implementation of programs by the government. It is hoped that future implementation of government programs will take into account the necessity to engage with people for a healthier return of investment and the betterment of the nation's people in the future.

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REFERENCES

Ali, A. C. and Sonderling, S. (2017). Factors affecting participatory communication for development: The case of local development organisation in Ethiopia. *Jurnal Komunikasi: Malaysian Journal of Communication*, 33:80–97.

Bahtiar, M., Dauda, S. A., and Haslina, H. (2018). Youth offline political participation: Trends and role of social media,. *Jurnal Komunikasi: Malaysian Journal of Communication*, 34(3):192–205.

Faridah, I., Siti, M. M., Amli, H. A. M., Froz, D., S., J. S. H., and Koh, S. N. (2019). Youth as Stakeholders and their Engagement towards government programs. *Jurnal Komunikasi: Malaysian Journal of Communication*, 35(2):211–226.

Freeman, R. E. *Strategic Management: A Stakeholder Approach*.

Freeman, R. E. (1984). *Strategic Management: A Stakeholder Approach*. Boston, MA: Pitman.

Freeman, R. E. and McVea, I. (2001). A stakeholder approach to strategic management. In *Hitt, M*. Oxford University Press, Freeman, R. E. & Harrison, J. (eds). The Blackwell handbook of strategic management. Oxford.

Greenwpod, M. (2007). Stakeholder engagement: Beyond the myth of corporate social responsibility. *Journal of Business Ethics. Vol*, 74.

Hong, S. (2013). Who benefits from Twitter? Social media and political competitions in the House of Representatives, Government Information Quarterly. 30:464–472.

Idris, I. K. (2018). Government social media in Indonesia: Just another information dissemination tool. *Jurnal Komunikasi. Malaysian Journal of Communication, Volume 34*, 34.

Ihugba, B. U. and Osuji, O. K. (2011). Corporate citizenship and stakeholder engagement: Maintaining an equitable power balance. *EGBO Electronic Journal of Business Ethics and Organisational Studies. Vol*, 16(2).

Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal. Vol. 33*, 33:692–724.

Nalick, M., Josefy, M., Zardkoohi, A., and Bierman, L. (2016). Corporate Socio- Political Involvement: A reflection of Whose Preferences? Academy of Management Perspective. 30(4).

Noland, J. and Philips, R. (2010). Stakeholder engagement. *discourse ethics and strategic management, International Journal of Management Reviews*, 12.

Robinson, I. (2006). *Human Resource Management in Organizations*. CIPD: London.

Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology. Vol. 21. No. 6*, 21(6):600–619.

Salman, A. (2009). Ict the new media and development: Malaysia's experience. *The Innovation Journal: The Public Sector Innovation Journal*, 15:1–5.

Salman, A., Azul, M., S., M., Agus, M., Y., M. Y., and A. (2018). Political engagement on social media as antecedents for political support among voters in Malaysia. *Jurnal Komunikasi: Malaysian Journal of Communication*, 34:152–165.

Sandeep, K., Gatenby, M., Rees, C., Soane, E., and Truss, K. (19). *Employee Engagement: A Literature Review*. Working Paper Series, No.

Seijts, G. H. and Crim, D. (2006). *What engages employees the most or*. the ten C's of employee engagement, Ivey Business Journal, March/April, pp 1-5.

Simmons, J. (2003). Balancing performance. *accountability and equity in stakeholder relationships towards more socially responsible HR practices, Corporate Social Responsibility and Environment Management*, 10:129–140.

Truss, C., Soane, E., Edwards, C., Wisdom, K., Croll, A., and Burnett, J. (2006). *Working life: Employee attitudes and engagement*.

Professionals as Stakeholders: Engagement in Malaysian Government Programs

Siti Maziha Mustapha and Faridah Ibrahim

Infrastructure University Kuala Lumpur, Kajang, Malaysia
{*maziha, faridah*}*@iukl.edu.my*

Keywords: Stakeholders, Engagement, Government Programs.

Abstract: The objective of this study is to investigate the level of engagement towards Malaysian government programs among stakeholders. This study focused on the external stakeholders namely the Malaysian citizens who are professionals. The research questions addressed the following: What are the government programs identified by the stakeholders? What is the perception of the stakeholders towards the programs? How engaged are the stakeholders with the programs? What expectations do the stakeholders have on the future government programs? From the Focus Group Discussion (FGD), it was found that stakeholders identified government programs from five sectors namely transportation, education, housing, employment, healthcare, and economy. The stakeholders were totally engaged in keeping track with government programs and were aware of many of the programs implemented. They had mixed feelings towards the benefits of the programs. The stakeholders admitted that they paid attention and showed concern on the effectiveness of the programs implemented. They were clear about the different channels of communication that they could use to voice out their views and concerns. They were able to exercise their skills and capabilities to utilize multifarious channels in ensuring their voices were heard. They expressed their expectations that the government would keep their promises and continue to improve current programs and create future programs that would form a nation that is progressive and free from ill practices.

1 INTRODUCTION

Malaysia as one of the developing countries is dependent on acceptance and support of the people to ensure a successful implementation of government programs. From the past government to the current new government under Pakatan Harapan (PH) much consideration has been given to improve the public's wellbeing. Prior to PH, the past government under Barisan Nasional (BN), had presented 1Malaysia with a tagline "People First, Performance Now" mirroring the promise to make the administration more performance driven and results oriented. Under PH, the emphasis is on reconstructing the nation and meeting expectations. The objective of this study is to discover the engagement level of external stakeholders toward programs implemented by the Malaysian government.

2 BACKGROUND OF STUDY

Stakeholder engagement or 'Citizenship Participation' is vital in building a nation and maintaining a balanced power within (Greenwood, 2007)(Ihugba and Osuji, 2011). Stakeholder Engagement Theory is viewed as essential to check the efficacy and the notable aspects of execution of government programs According to Freeman and McVea (Freeman, 2010) stakeholders are "those groups and individuals who can affect or are affected by the achievement of an organisation's objectives". The succes of the program implementation by a country or company depends heavily on the extent of acceptance and reception by the people.

The building block of the development programs initiated by the current Malaysian government focusses on enhancing the well-being and quality of life of Malaysian people. When the US President Barack Obama introduced global engagement in his country's foreign policy, the importance of stakeholder engagement in governmental policies and programs gained momentum and became a much debated topic in re-

cent years. Malaysia, as a developing country has begun to show interest on the importance of stakeholder engagement in its development practices. Thus, exploration into the extent of stakeholders engagement would shed light on the successful implementation of government programs. Through a qualitative method via focus group discussion (FGD), this study aims to illuminate the importance of stakeholder engagement in the successful implementation of government programmes. The findings will indicate the responsiveness and support of the people towards government programs.

3 PROBLEM STATEMENT

Internal or external stakeholders play instrumental roles in nation building (Hill and Jones, 2001). Examples of internal stakeholders are stockholders, organisational employees including managers and Board members while external stakeholders are customers, suppliers, governments, unions, local communities and the public. It has been well documented that stakeholder engagement can positively benefit both the organisation and society in the long run (Freeman and McVea, 2001)(Greenwood, 2007)(Ihugba and Osuji, 2011).

A nation can be considered as "an organisation" at a bigger scale. The implementation of programs by a nation's government will generate fruitful outcome if the plans and programs are well received by the stakeholders (Ibrahim et al., 2019). The absence of stakeholders engagement would lead to failure to meet the common goals aimed at improving the well-being of the people.

Findings from previous studies showed that engagement is a two way relationship between the employer and the employee, and in this context the relationship between government and the people(Kular et al., 2008)(Saks, 2006)(Crabtree, 2005)(Kahn, 1990). Kahn (1990) argued that employees are willing to exchange their engagement for whatever benefits they can obtain the organisation or government. Saks (2006) agreed that engagement is one of the ways for people to return the favour to the organisation or gavernment.

Global engagement has been coined by US former President, Barack Obama in the nation's foreign policy. This policy has gained momentum and has cecome an examplar for other nations and Malaysia is without exception. Following this example, Malaysia under the previous government has launched the Government Transformation Program (GTP), through GTP 1.0 and 2.0. The programs were

aimed at improving the quality of life of Malaysian citizens through stakeholder engagement. A study by the Performance Management Delivery Unit (PEMANDU) of Malaysia found that more than half of the respondents were aware of GTP's trajectory and goals. However, the study did not dwell into the importance of stakeholder engagement. Under the current government the stress on stakeholder engagement in governmental policies and programs is in full force. Hence, the current study was conducted to explore the people's awareness towards the new government's initiatives to further improve the people's quality of life.

Through a qualitative method via focus group discussion (FGD), this study aims to highlight the extent of stakeholder engagement influnce among the external public particularly the professionals. This study hopes to contribute towards the influnce of the stakeholder engagement theory in the the succesful implementation of future government programs.

4 RESEARCH QUESTIONS

- What are the government programs identified by the stakeholders?

- What is the stakeholders' perception towards the programs?

- How engaged are the stakeholders with the programs?

- What expectations do the stakeholders have on the future government programs?

5 LITERATURE REVIEW

The stakeholder refers to a person who holds a stake in the activities of the organisation in some ways. Stakeholders may include employees, customers, suppliers the state, the local community, society, bankers, special interest groups, the environment and technological progress (Argenti, 2018). Freeman (Freeman, 1983) defined a stakeholder as any individual or group who can affect, or is affected by, the achievement of the organisation's objectives.

The Stakeholder Theory has evolved over the past decades and is applicable in both public and private entities. The Stakeholder Theory posits a strong relationship between the stakeholders and government or organization will help to affect changes that could be geared towards achieving successful organizational goals Freeman (Freeman and McVea, 2001).

Many scholars (Idris, 2018)(Sharif et al., 2014)(Ali and Sonderling, 2017) viewed that communication and information technology have changed the way the government communicate with the public. In the age of globalization, Social media is seen to be an important medium and has been utilized to promote a positive perception of the government through information sharing which strengthen citizen and government relationship. Ali et.al (Sharif et al., 2014) found that social media plays a role and has the advantage in channeling the information compared to the traditional media. However, mainstream media is more popular among professionals and adults. According to Groshek and Han (Groshek and Han, 2011), alternative media and new media are fragmented, non-responsive and even more exclusionary than mainstream, and hence, mainstream media played a role in shaping readers' perception.

This study will shed light on the perception of professionals as stakeholders towards the implementation of Government Programmes. The findings of this study will serve as guidelines for the government in their planning and implementation of future Government programs. Findings from The Guardians in New Zealand (Ibrahim et al., 2019) showed that engagement and communications with stakeholders are important and this provides direction for communication strategy, create awareness into stakeholders' perceptions and knowledge of the organisation. According to May et.al (May et al., 2004), emotional factors are linked closely with an individual's personal satisfaction and the inspiration to engage with their organization. Some key areas in stakeholder engagement were effective leadership, a commitment towards employee wellbeing, two-way communication between stakeholders and government organization's employees (Noe et al., 2017).

According to Kahn (Kahn, 1990), in the context of stakeholder engagement, employees are willing to exchange their engagement as a repayment for the resources they receive from their organisation or government. When the government fails to provide these resources and meet the expectations, individuals are more likely to withdraw and disengage themselves from their roles. Hence, the amount of commitment and engagement an individual is prepared to give to fulfil their citizen role may be dependent on the economic and socio-emotional resources received from the government via the government programs.

6 METHODOLOGY

The data was collected using the Focus group discussion (FGD). FGD was conducted among three different groups of stakeholders. The first group comprises of experienced professionals within the age range of 45 to 55. The second group comprises of young professionals within the age range of 30 to 44 years. The third group comprises of young adults within the age range of 20 to 29. All three groups have a combination of male and female participants with a total number of five participants in each group.

This paper focusses on the first group comprises of experienced professionals within the age range of 45 to 55 from different ethnics (Malay, Chinese and Indian). The choice on professionals was made due to the importance of the professionals' perception in supporting government's programs since they are the influencers for young generation and decision makers in the family institutions and society. All interviews were tape-recorded and transcribed verbatim. Interview respondents were invited to elaborate on each question. The data analysis technique employed was thematic analysis. It was carried out to identify popular trends in the responses. The data was triangulated with existing various stakeholders theories.

7 RESULTS AND DISCUSSION

- What are the government programs identified by the stakeholders?
- What is the stakeholders' perception towards the programs?
- How engaged are the stakeholders with the programs?
- What expectations do the stakeholders have on the future government programs?
- What are the government programs identified by the stakeholders?

The stakeholders identified the following government programs which were categorized into six sectors namely transportation, education, housing, employment, healthcare, and economy

- Transportation – the stakeholders identified several transportation programs which they knew had been implemented by the current and previous government. The programs were Mass Rapid Transit (MRT), East Coast Rail Link (ECRL), Express Rail Link (ERL), Light Rapid Transit (LRT) and e hailing.

- Education – the stakeholders showed their awareness of government's efforts to improve schools and institutions of higher learning and were aware of the educational support namely PTPTN and MyBrain provided by the government.

- Housing- the stakeholders were very aware of the government's initiatives in improving the housing problem. They mentioned the affordable housing program like Perbadanan PR1MA Malaysia

- Employment – initiatives from the government in creating programs to provide jobs to the young were mentioned by the stakeholders, for example Skim Latihan 1Malaysia's (SL1M) and TVET (Technical and Vocational Education and Training).

- Healthcare – the stakeholders mentioned the healthcare support provided by the government such as Klinik 1Malaysia or now known as Klinik Komuniti and the public hospitals.

- Economy - Majority of the stakeholders interviewed agreed that the shift from GST to SST 2.0 initiated by the new government was helpful in reducing the price of goods. The stakeholder also mentioned Urban Transformation Centre (UTC).

What is the stakeholders' perception towards the programs?

The five stakeholders who were interviewed expressed both positive and negative reactions to the programs. Several positive reactions were on the convenience of means of transportation, satisfaction on the newly introduced changes to the education sector, medical support and employment opportunities.

On the other hand, even when they do appreciate the government's initiatives to increase affordable housing and provide better jobs, they still have their qualms regarding the price of houses and cars, the rate of unemployment, long queue at government hospitals and minimum improvement in living expenses.

The stakeholders mentioned the following regarding the programs:

S3: rapid railway to the east coast, which to me is something I look forward to, because it will be so convenient for us to go back home in the east coast, and then I remember the ECRL to Singapore, but that particular project I wasn't so happy because I thought whatever that we have now is fast enough already...

S2: the MRT project that goes all the way to near my house.. I think that has impacted a lot on the way I travel to work because finally I don't face too much of a traffic jam because the commuters are now using MRT to go to work in KL so they don't clog my highway..

S3: alright I think since the new government has taken over, I have paying a lot of attention to the education sector, ... I like most is that they are trying to improve access to education because the philosophy behind education is that everyone should have equal access education, so what they have done is that they have given voice to the teachers, to the stakeholders, to the parents and so on, now parents can link directly to the teachers, they can say things openly and so on, and then the latest one in the news they have also given voice to the lecturers...you know especially the lecturers who have got opinions that are different from the ruling party...

S1: I really like the one the present minister Dr Maszlee he talked about the freedom, and especially he talks about the higher education institution, university and college university, and I think the output previously has given a lot of restriction, to the student, of course now they have actually gone through a few round of amendments.

S3: I read about how they are revamping the feeding the children program, because they notice the children who come from poor are so hungry, when they are in school they cannot learn. Even there is food program at school, but it is not nutritious enough to sustain their attention for the 5 hours that they are in school. So now they are concerned... what they trying to do is trying to improve the quality of free food provided to the poor children in school. I felt I was very happy to read that because finally somebody is paying attention to the children

S4: I do appreciate what the government is trying to do...but even now houses are still so expensive, cars are also expensive and living expenses are not improving much... S1: I'm looking at it ...am more concerned about the job opportunity for our younger generation, we have such economic growth in our country, that's number one, and then we talk about the work force, do we really need to depend so much on foreign workers or can our people took up the job? I am worried...unemployment will lead to all sorts of problems.

S2: I appreciate all the programs that have helped my family and I to live a better life. The education opportunity, medical support, public transportation, better jobs and many more...I am concerned about our economic recovery...without that, we can't have a better life.

S5: I don't really use public transportation as I have my own car...I don't go to public hospitals or clinics coz the queue is long. I went to public schools and university...but after that I don't use anything that the government has given...

How engaged are the stakeholders with the identi-

fied programs?

All the stakeholders expressed how engaged they are in the government programs except one. He mentioned that he preferred to be independent and not hoping for endowment from the government. He cited that the programs had no impact on him. The stakeholders who are professionals were robust in terms expressing their views via various communication channels both new media and face to face. The following verbatim illustrates the stakeholders' levels of engagement.

S2: I paid attention to all government programs. . . I will discuss in my WhatsApp group. . . any grievances. . . anything we like. . .

S1: I believe that there must be a balance between income and cost of living. I get involved to make sure that I have a say in what happens in the future. . . we must pay attention to the government's programs and express our views. . . so the younger generation will have a chance of a stable and prosperous life.

S3: We want active participation, and as the citizens we can't be sitting quietly and complain. . . I think everybody is educated, if we have an issue, we voice it out. . . we go to the problem.. go to the source of the problem, then that will be direct..we can email, meet face to face, tweet, or any other means of communication.

S4: I do get involved. . . can talk to NGOs. . . NGOs have done a good job in letting the government know of people's grievances.

S2: I think letting our wakil rakyat know is a good way to voice our concerns. I take any opportunity to get my views heard. . . hopefully the government can take appropriate action.

S5: I am managing on my own. Don't really rely on anything from the government. . . it's easier to be independent. I don't get involved.. whatever programs the government do. . . don't have impact on me..

What expectations do the stakeholders have on the future government programs?

All of the stakeholders were in total agreement with regards to what they expected from the government. First and foremost, they wanted transparency in all government programs. They also expected the government to be inclusive, fair in their dealings, corruption free and fulfil their promises.

S1: whatever it is that the government wants to implement, I just want them to be fair, not bias towards a certain race. . . or only for their political supporters. . . do it for the rakyat..be transparent.

S4: there must a platform for the rakyat to meet and voice their concerns to government officials. Don't think that the poor and people from rural areas don't matter. . . they do matter. . . the facilities must be provided and available to all.

S5: to me, very simple. Keep your promises. Implement programs that could help the rakyat. Be transparent.

S3: My hopes for the future. . . 4 things... more transparency, no more corruption, lower cost of living and better living conditions like Norway and Sweden. Improve government programs so everyone can progress and prosper. . . .so the children will have a better life.

S2: You walk the talk..we want the government to be like NIKE, ok, just do it. You promised, now action. We are here. Our support as rakyat is unwavering..make life better, safer and richer for all of us..my only hope. . . is for the government to be honest, fair, and make all the good things happen!

The findings of the study revealed that the professionals were totally engaged in keeping track with government programs and were aware of many of the programs that benefitted them. They were very realistic in the ways they perceived the government programs. They could see the positive sides of the programs as well as those that need to be further improved. They were practical in their outlook and this standpoint led them to be more engaged.

They expressed support for the programs and recognized the limitations. This is in line with Faridah et.al (Ibrahim et al., 2019) and Nalick et al. (Nalick et al., 2016). Faridah et.al (Ibrahim et al., 2019) found that youth in Malaysia expressed support but identified weaknesses of the government's programs. Nalick et al. (2016) suggested that there is a point of intersection between the government and the stakeholders on certain programs and activities. This will encourage acceptability among the stakeholders which in turn will sustain collaborative relationships.

The findings from this study are consistent with earlier studies in this area (Freeman and McVea, 2001)(Greenwood, 2007)(Ihugba and Osuji, 2011)(Ibrahim et al., 2019) which proved that with strong stakeholder engagement, both government and society will benefit. Nevertheless, it is interesting to note that the possibility of stakeholders being disengaged. This could happen should the programs initiated by the government did not meet their expectation and be of benefit to them.

The stakeholders have expressed that they can freely voice out their views and concerns. They were confident in being actively participating and using different channels of communication be it social media or face to face interaction. This study has added a new insight where professionals as stakeholders were assertive in their expression of views compared to the youth as stakeholders. The youth, in an earlier study

by Faridah et.al.,(Ibrahim et al., 2019), dominantly utilized only social media as medium of expression.

It was also found that the stakeholders were involved in government's programs because they wanted their voices to be heard so that the government can take appropriate action. This finding is line with a study by Faridah et.al (Ibrahim et al., 2019). Lawler and Worley (Lawler and Worley, 2006) argued that in order for organisations to have positive impact on stakeholder engagement, people need to be empowered. They highlighted that the level of involvement can be increased when the highest possible level of power is given to the people. This then will lead to a maximum level of engagement by the stakeholders.

The stakeholders were willing to contribute because the ultimate goal is to realize their dreams and benefit them. This supports Saks (Saks, 2006) and the earlier work of Kahn (Kahn, 1990) who suggested that people are more likely to exchange their engagement for resources and benefits provided by their government. This is also in line with the suggestion from Faridah et al. (Ibrahim et al., 2019) who mentioned the reciprocal obligation between people and government.

In this study, one of the dominant findings is the expectations of the stakeholder towards the government. The findings illustrated that people expected the government's initiatives to match their values, demands and aspirations for a better future especially for the younger generation.

Understanding stakeholder's perception towards the government programs is absolutely significant as the government-people collaboration will result in a win-win outcome. Based on the findings from this study, it is recommended that the government consistently find alternative ways to actively engage with the stakeholders where inclusivity is not side lined. Upon receiving the feedback from stakeholders, it is hoped that the government will be proactive in addressing the problems and making strategic moves to ensure continuous, sustainable improvements for the future of the nation.

8 CONCLUSIONS

The study dwells on the perception of professionals as stakeholders and their engagement towards government programs. The study found that stakeholder engagement is critical for successful implementation of programs by a country, government or company. Engagement will empower people to contribute and put forth necessary suggestion for the betterment of the implemented government programs and future initia-

tives by the government.

The stakeholders identified government programs from six sectors six sectors namely transportation, education, housing, employment, healthcare, and economy.

Several stakeholders reacted positively towards the programs. They felt that the programs have benefitted them in many ways. Nevertheless, there was also a negative reaction regarding the minimal impact of the programs on the stakeholders. Despite the negative reaction, the stakeholders were very attentive and concerned towards the government's initiatives.

The results of this study clearly indicated the resourcefulness of the professionals in information seeking as well actively giving feedback regarding the government programs through multifarious channels. They believed their active engagement would prompt the government to take immediate action. Being passive was not an option.

Several profound findings in the forms of stakeholders' expectations and aspirations were identified. Close to the hearts of the stakeholders were transparency, inclusiveness, fairness, corruption free practices, lower cost of living, better living conditions, safe and a prosperous nation.

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REFERENCES

Ali, A. C. and Sonderling, S. (2017). Factors affecting participatory communication for development: The case of a local development organization in ethiopia. *Jurnal Komunikasi: Malaysian Journal of Communication*, 33(1).

Argenti, J. (2018). *Your organization: What is it for?: challenging traditional organizational aims*. Routledge.

Crabtree, S. (2005). Engagement keeps the doctor away. *Gallup Management Journal*, 13(1):1–12.

Freeman, R. E. (1983). Strategic management: A stakeholder approach. *Advances in strategic management*, 1(1):31–60.

Freeman, R. E. (2010). *Strategic management: A stakeholder approach*. Cambridge university press.

Freeman, R. E. and McVea, J. (2001). A stakeholder approach to strategic management. *The Blackwell handbook of strategic management*, pages 189–207.

Greenwood, M. (2007). Stakeholder engagement: Beyond the myth of corporate responsibility. *Journal of Business ethics*, 74(4):315–327.

Groshek, J. and Han, Y. (2011). Negotiated hegemony and reconstructed boundaries in alternative media coverage of globalization. *International Journal of Communication*, 5:22.

Hill, C. W. and Jones, G. R. (2001). *Strategic management theory*. Houghton Mifflin.

Ibrahim, F., Mustapha, S. M., Mokhtar, A. H. A., Nie, K. S., et al. (2019). Youth as stakeholders and their engagement towards government programmes (gp). *Jurnal Komunikasi: Malaysian Journal of Communication*, 35(2).

Idris, I. K. (2018). Government social media in indonesia: just another information dissemination tool. *Jurnal Komunikasi: Malaysian Journal of Communication*, 34(4).

Ihugba, B. U. and Osuji, O. K. (2011). Corporate citizenship and stakeholder engagement: Maintaining an equitable power balance. *EJBO: Electronic Journal of Business Ethics and Organizational Studies*.

Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of management journal*, 33(4):692–724.

Kular, S., Gatenby, M., Rees, C., Soane, E., and Truss, K. (2008). Employee engagement: A literature review.

Lawler, E. and Worley, C. G. (2006). Winning support for organizational change: Designing employee reward systems that keep on working. *Ivey Business Journal*, 70(4):1–5.

May, D. R., Gilson, R. L., and Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of occupational and organizational psychology*, 77(1):11–37.

Nalick, M., Josefy, M., Zardkoohi, A., and Bierman, L. (2016). Corporate sociopolitical involvement: a reflection of whose preferences? *Academy of Management Perspectives*, 30(4):384–403.

Noe, R. A., Hollenbeck, J. R., Gerhart, B., and Wright, P. M. (2017). *Human resource management: Gaining a competitive advantage*. McGraw-Hill Education New York, NY.

Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of managerial psychology*, 21(7):600–619.

Sharif, N. B. H. M., Ali, M. N. S., and Abdullah, M. Y. H. (2014). Literasi visual dalam imej digital fotografi forensik penyiasatan. *Jurnal Komunikasi: Malaysian Journal of Communication*, 30.

The using of Facebook in Malaysia's 14th General Election: An Analysis of INVOKE

Zawiyah Mohd Zain and Zalinah Ahmad

School of Government, UUM COLGIS, Universiti Utara Malaysia, Kedah, Malaysia
{zmzain, zalinah}@uum.edu.my

Keywords: Facebook, Barisan Nasional, General Election, Pakatan Harapan.

Abstract: The Barisan Nasional coalition had dominated Malaysian election for more than 60 years. Most of the time, the coalition party were able to have majority to form the government. However, Barisan Nasional had lost their powers to Pakatan Harapan coalition during 14th election in year 2018. The usage of social media such as Facebook may influence the result of the election. Therefore, the purpose of this paper is to discuss the using of Facebook as platform for political campaign in Malaysian 14th general election by using of INVOKE Facebook as a discussion case. This paper uses secondary data such as books, journals, social media and research reports. Information from secondary data is analyzed by using content analysis method and thematically discussed. This paper argues that Facebook is the effective medium to get support from the people in 14th general election. This is due to two factors, first, Facebook had easier and greatest platform to reach among potential voters and it can be targeted very specifically to voters' locations, demographics and interests. Second, via Facebook, peoples had discussed various scandals that happened during Najib Razak's premiership as Prime Minister during May 2013 until May 2018. One of the popular Facebook account during 14th general election campaign is INVOKE Facebook, the volunteer organization that supported Pakatan Harapan candidates.

1 INTRODUCTION

Social media is a medium used to promote social networking specially explore the usage of social network websites, Majority of American citizens gather online and offline social capital because the primary purpose of social media use is to maintain and increase one's online and offline social networks (Ellison et al., 2007). Social media is a popular media platform around the world including Malaysia. This media is synonym with the increasing number of internet users around the world. In 2019, there are 4.44 billion of internet users and the number keeps increasing by 9.1% year-by-year. In addition, the user of social media is 3.48 billion increased by 9.1% year-by-year also. In Malaysia, the number of internet users in 2018 was 25.1 million, which represented 79% from 31.83 million of Malaysian population (Smartinsights,).

Political candidates may have limited control over how mainstream news media may frame the election. Therefore, they are using social media as a platform to design and provide alternative election narratives (Howard et al., 2006)(Kreiss, 2012). Candidates have adopted digital communication for strategic purposes, allowing supporters to engage with the

campaign. The use of internet in Malaysia as a part of political campaign has been widely applied since the reformed era, known as Reformasi, in which, after Anwar Ibrahim was sacked from cabinet in 1998. His supporters switched to alternative media, namely Internet because government restricted the issue to be broadcast in main media. The popular application during reformed era and 1999 general election was website. With the development of technology, there have various applications of social media likes blogs, Linked in, You Tube, Twitter, Facebook and Instagram.

Social media has been popular for the purpose of gaining supports from voters since 12th General Election (GE12), through blogs and news portals (Sani and Azizuddin, 2014). While in the 13th General Election campaign (GE13), the most popular social media is Facebook, Instagram, WhatsApp and twitter. During the 14th General Election (GE14), the Internet campaign is more focused on Facebook, and it is one of the factors that BN lost its power in GE14 and no longer formed the government. The Internet World Statistics in year 2017 estimated that out of Malaysia's 32 million people, some 22 million people are Facebook users (Chinnasamy and Manaf, 2018).

Therefore, the purpose of this paper is to analyze the use of Facebook in GE14 in Malaysia.

According to (Sani and Azizuddin, 2014), during GE13 Barisan Nasional's, also known as BN (the political party that previously formed the government) image was marred by the issues of graft and abuse of power such as Port Klang Free Zone scandal, National Feedlot Corporation scandal on cow-and-condominium fiasco, and the Scorpene submarine Saga. Pakatan Rakyat (PR) coalitions exploited the issues through social media to gain votes, later contributing to the significant outcome of the election. BN won 133 parliamentary seats and maintained the federal power with seven seats fewer than 2008 election. BN also lost popular votes to PR, and during the following election in 2018, BN lost its power to Pakatan Harapan (PH) coalitions (previously known as PR).

Welsh (Welsh, 2018) argued there are two factors that contributed to the BN's failure to retain the power during GE14. The first factor is the social political conditions which is political polarization and anger among Malaysian about various issues (such as 1MDB scandal, corruption, the implementation of Goods and Services Tax - GST). The second factor is the extensive use of modern campaign through social media (such as Facebook and WhatsApp).

In addition, Nadzri (Nadzri, 2018), as identified four major contributing factors, and all these factors are interconnected to the fall of BN in GE14. First, the existence of a much more credible, representative, and stronger opposition during GE14 has influenced the result of GE14 in which the inclusion of Mahathir, Bersatu and Warisan within PH coalition. Second, the rupture existed among the elites within the ruling regime also contributed to the failure of BN to remain in power. . Third, the existence of influential negative issues surrounding Najib's administration. Finally, the advancement use of ICT and its impact on the emergence of a digital had influenced on creating more participative society in Malaysia.

2 RESEARCH METHODOLOGY

This section will discuss the method used by the authors to study the using of internet in the political campaign. The researchers used secondary data such as articles from the selected journals, books that focus on social media as well as research reports published by other scholars who are relevant to the topic under study. Besides, the specific Facebook accounts also have been monitored before and after the General Election in order to gauge the extensive used of the

social media by political candidates. The INVOKE Facebook also has been explored since the account really influenced public in terms persuade public in choosing the political candidates. All the information derived has been analyzed by using the content analysis method and thematically discussed.

3 FINDINGS AND DISCUSSION

This section will discuss the findings based on secondary data that both authors used to get information on usage of social media. The focus will be on the using of Facebook, as a main social media instrument used by the candidates in the general election.

3.1 Social Media and Facebook

Statistics showed that 29% of the entire world population has used social media (aresocial.sg). Out of the 2.1 billion do have active social media accounts, 1.685 billion are the active mobile social accounts. Among popular social media platforms, Facebook is way ahead with more than 1.3 billion active user accounts monthly. Thus, the scenario makes the social network something akin to the largest virtual nation of the world. It has close to 1 billion daily for active users (Zai, 2016).

Kaplan and Heinlein (Kaplan and Haenlein, 2010) defined social media as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content". Additionally, social media applications are websites that "communicate with the users, while giving them information." It is this two-way nature of social media that make it preferable than the traditional media networks. The most popular social media application is the Facebook. Mark Zuckerberg, a student in Harvard University, had created Facebook in 2004 as a way to connect with fellow students. Initially, the media was adopted by high school and college students. However, during its initial public offering filing in year 2012, there were 845 million active users of the social network worldwide. In addition, approximately 161 million active monthly users in the United States of America and making it the leading social media service in the world. If Facebook were a country it would be the third largest country behind China and India (Safranek, 2019). The Facebook users can communicate by sending the friends requests. They have options to deny the requests or accept them. In case of adding friends they can update their status, can write on the friend's time line, send private and public mes-

sages, share pictures and make audio and video calls. The Facebook provides the facility of joining pages and groups, liking, following and searching their interest groups and events.

3.2 The using of Social Media in General Election

During the 12th General Election in year 2008, opposition parties highly depended on using internet for political campaign because they were barred from using main media by the ruling government. The focus was on news portal application and blogs. The ruling party, BN had disregard and ignored the use of internet since the printed media and electronic media were under their controlled and believed that these two media had more advantages over the blogs (Ronasina, 2018). Consequently, BN failed to get two-thirds majority in Parliament (House of Representative).

The 13th General Election was considered as an era of social media in election because the usage of twitter, Instagram and Facebook for political campaigns. Both contested parties (BN and PR) had extensively used the social media and took the opportunities to interact and got support from public at large. For instance, ex-Prime Minister, Najib Razak was active in twitter and popular in Facebook as well. Similar like previous elections, opposition parties or coalition, and social activists did not have access to dominant mass media and they had to use the media social platform effectively. Towards 13th General Election, they have used social media to express dissatisfaction towards Najib Razak and his ruling party (BN) and urged public to reject UMNO and BN for the coming election. There were several issues that had been raised via media social. First, the luxurious expenses recorded on Najib's family during oversea vacation and purchasing of expensive accessories by Najib's wife, Rosmah Mansur. Second, government action in designing and implementing Akta Perhimpunan Aman (Peaceful Assembly Act) and SOSMA to replace Internal Security Act (ISA) that was abolished in 2011. Third, public were dissatisfied with government action on introducing new tax, known as goods and services taxes while the costs of living keep increasing from time to time. As a result, PR had successfully reduced the number of seats won by BN in the 13th General Election. The BN maintained 133 seats in which previously were 140 seats and PR had achieved popular votes by 50% as opposed to BN (47% of popular votes).

3.3 Facebook and 14th General Election

The 14th General Election was held on 9th May 2019. This general election had witnessed three-cornered contest among main political parties, namely Barisan Nasional, Pakatan Harapan and Warisan, and Gagasan Sejahtera (PAS). For the first time, BN had lost the power since 1957. PH had put a history by gaining enough seats to form a government. PH and Warisan had won simple majority by having 129 seats as compared to BN (79 seats). PAS on the other hand, had won 18 seats. In terms of percentage, PH had managed to get 50.1% of votes, BN got 32% of votes while PAS got 18% of votes (Cheng and Pey, 2018).

The main reason why BN had lost the election was due to political campaign through social media specifically Facebook. Towards the 14th General Election, social media, like Facebook had been extensively used for the purpose of the campaign. One of the main reason of using Facebook because of its characteristics such as less concern on distance and time, borderless and the huge number of Facebook users. Facebook can boradcast the political campaign activities, forum, current news, live video coverages to followers and targeted audience or public at large. In fact, the posted video can be viewed at any time. Previously, public relied on the dominant mass media especially electronic media to get information about current political news and it only showed news from the ruling party. Thus, through Facebook, public can get information from both sides – ruling and opposition parties. They can view the activities and news from the opposition parties as well. Besides, candidate running for the election may show their political campaign activities by uploading photos and news.

Moreover, by using smartphone, the process would be faster and easier to upload the photos and events and update the candidates'status from time to time. All the displays about candidates' activities either formal or informal may create close relationship between candidates and voters or public in general. Indirectly, the voters may support the candidates. This approach was consistent with the trend among public who were the Facebook users by updating status and uploading photos and sharing information. During the 14th General Election, among the candidates who used Facebook account to deliver their messages were Najib Razak, Dr. Mahathir Mohamad, Wan Azizah Wan Ismail, Mohamad Sabu, Nurul Izzah Anwar, Khairy Jamaluddin, Lim Guang Eng, Syed Saddiq, Hannah Yeoh and others.

Furthermore, media social like Facebook offered direct communication with followers and public at large. Any questions or issues can be posted and get

the immediate answer or explanation by the candidates. The candidates may display current news without the help from reporters. The Facebook account holders may update information, status, and news and upload any other relevant materials by themselves. They may not need the reporters or other people to update their status. Besides, the communication among followers also occurred and these interactions may expedite the process of delivering the messages.

Second reason was the issues and scandals that overwhelmed the government administration that created dissatisfaction from public towards BN and Najib Razak. One of the issues was about the introduction of GST in year 2016. GST imposed had increased the price of goods and cost of living. Besides, the misuse of power within the administration of government link corporation, such as 1MDB. There was a claim that the money from 1MDB had been channeled to Najib Razak's personal bank account (Saravanamuttu, 2016)(Wright and Hope, 2018). Another issue was corruption and misuse of power in other government link corporations such as FELDA, Tabung Haji and MARA. These issues were widely discussed among Facebook users. According to Chinasamy & Norain (Chinasamy, 2019) issues like GST, candidates' reputations and 1MDB scandal were the main causes of political hatred expressed on social media platforms. In gaining support and momentum for the 14th General Election, Facebook INVOKE has been developed to expose and discuss the weaknesses of government administration.

3.4 INVOKE

What is INVOKE? INVOKE is a non-governmental organization created by Rafizi Ramli (an ex Member of Parliament from Pandan and Vice President of PKR). He developed INVOKE officially in year 2016. INVOKE had recruited nearly 42,000 volunteers to assist PH to win the election (14th general election). INVOKE had used multiple approaches or methods such as doing political campaign for PR candidates, and over the phone surveys covering almost 400,000 Malaysians. INVOKE had gathered data from social media, petitions and online communication involved huge numbers of voters. The weekly calls done by volunteers were aimed to identify swing voters in order to know their voting preferences. By having the profile of voters' political preferences, INVOKE may identify issues and provided messages that were effectively persuade these groups of voters. In fact, political campaigns are increasingly using sophisticated data analytics to direct targeted messages to potential voters (Kreiss, 2016). Besides volunteers to help

in campaigns, INVOKE also mobilized polling and counting agents (PACAs) nationwide to monitor the election process. By doing so, it may contribute in reducing incidents of reported electoral fraud in the election.

INVOKE had interacted with public by using varieties of social media platforms such as YouTube, Facebook, twitter and Instagram. INVOKE established its Facebook account on 28th December 2016 and received 105 million 'LIKE' till May 2019. Some of the activities showed were live events or activities on political campaign. INVOKE used a modified truck as a vehicle to reach voters and bring all political campaigns all over the country. INVOKE arranged series of talk and dialogues with public over national issues, such as salary/pay rise, price increase in goods and GST, illegal foreign workers. In addition, live press conference on issues in government such as 1MDB, FELDA, MARA and Tabung Haji also had been aired under INVOKE platform. For instance, INVOKE had live press conference on issues of Tabung Haji on 13th October 2017 and it had reached up to 6.6 million viewers. Besides, INVOKE also produced local and foreign news to public. For instance, GST new was released on 27th July 2017 while news about Rohingya refugee crisis was also uploaded on 17th September 2017. INVOKE also had prime news at 8 in the evening, known as INV8. This news program served as alternative news channel for public since BN monopolized the entire mainstream news channel during the campaign.

4 CONCLUSIONS

Before the general election, political campaigns did play important role in gaining supports from the voters. In Malaysia, the used of varieties social media as an interactive medium or platforms for political campaigns had contributed to the winning of political parties. Public or voters used social media to interact to each other and also share information. During 13th General Election, political actors had used You Tube, Facebook, twitter, blog and portal news to share information. However, during the campaign for 14th General Election, Facebook was a popular social media and effective platform that described the changes result of the general election. Facebook had been chosen due to its characteristics such as accessibility and borderless.

REFERENCES

Cheng, K. and Pey, J. Y. (2018). *The Numbers on Malaysia's 14th General Election. Penang Monthly Jun 2018*.

Chinasamy, S. (2019). *Facebook is expected to be the main platform to be used to disseminate information during the 14th*. New Straits Times.

Chinnasamy, S. and Manaf, N. A. (2018). Social media as political hatred mode in malaysia's 2018 general election. In *SHS Web of Conferences*, volume 53. EDP Sciences.

Ellison, N. B., Steinfield, C., and Lampe, C. (2007). The benefits of facebook "friends:" social capital and college students' use of online social network sites. *Journal of computer-mediated communication*, 12(4):1143–1168.

Howard, P. N. et al. (2006). *New media campaigns and the managed citizen*. Cambridge University Press.

Kaplan, A. M. and Haenlein, M. (2010). Users of the world, unite! the challenges and opportunities of social media. *Business horizons*, 53(1):59–68.

Kreiss, D. (2012). Acting in the public sphere: The 2008 obama campaign's strategic use of new media to shape narratives of the presidential race. In *Media, movements, and political change*, pages 195–223. Emerald Group Publishing Limited.

Kreiss, D. (2016). Seizing the moment: The presidential campaigns' use of twitter during the 2012 electoral cycle. *New media & society*, 18(8):1473–1490.

Nadzri, M. M. (2018). The 14th general election, the fall of barisan nasional, and political development in malaysia, 1957-2018. *Journal of Current Southeast Asian Affairs*, 37(3):139–171.

Ronasina (2018). 2018. *UndiRosak Musuh Baru Harapan. Dlm. Tang Ah Chin*, pages 81–86.

Safranek, R. (2019). *The Emerging Role of Social Media in Political and Regime Change*. ProQuest Discovery Guides http://www.csa.com/discoveryguides/discoveryguides-main.php [1.

Sani, M. and Azizuddin, M. (2014). The social media election in malaysia: The 13th general election in 2013. *Kajian Malaysia: Journal of Malaysian Studies*, 32.

Saravanamuttu, J. (2016). *Power sharing in a divided nation: Mediated communalism and new politics in Six decades of Malaysia's elections*, volume 536. ISEAS-Yusof Ishak Institute.

Smartinsights. Global social media research summary 2019 — Smart Insights.

Welsh, B. (2018). "saviour" politics and malaysia's 2018 electoral democratic breakthrough: Rethinking explanatory narratives and implications. *Journal of Current Southeast Asian Affairs*, 37(3):85–108.

Wright, T. and Hope, B. (2018). *Billion Dollar Whale: The Man who Fooled Wall Street, Hollywood, and the World*. Hachette Books.

Zai, Y. (2016). State of Social Media in Pakistan in 2016.

Developing Interactive Multimedia Learning for Teaching Integral Calculus in College

Nana Sepriyanti[1], Remiswal[1] and Hutomo Atman Maulana[2]

[1]*Universitas Islam Negeri Imam Bonjol, Jl. Prof. Mahmud Yunus Lubuk Lintah, Padang, Indonesia*
[2]*Politeknik Negeri Bengkalis, Jl. Bathin Alam Desa Sungai Alam, Bengkalis, Indonesia*
{nanasepriyanti, remiswal}@uinib.ac.id,hutomomaulana@polbeng.ac.id

Keywords: Design Research, Interactive Multimedia Learning, Integral Calculus.

Abstract: This research aims to develop interactive multimedia learning in the form of Compact Disk by using Macromedia Flash Professional for teaching Integral Calculus in College. This research refers to the development model of ADDIE (Analysis, Design, Development, Implementation and Evaluation). The research's subject is students of mathematics department UIN Imam Bonjol Padang, Indonesia. Data were collected through observations, interviews, checklist, videotaping, and analyzing the students' works. The interactive multimedia learning was validated by experts in mathematics education and multimedia to meet the criteria of validity (relevance and consistence). The interactive multimedia learning was implemented and evaluated trough one-to- one and small group evaluation before it was tried out in a field test. The results showed that the interactive multimedia learning worked as intended in the classroom. Based on the results obtained, it can be concluded that the interactive multimedia learning is valid, practical and effective.

1 INTRODUCTION

Research suggests that despite the numerous benefits of using technology in mathematics education, the process of embedding technology in classrooms is slow and complex (Cuban et al., 2001)(Duderstadt et al., 2002). It has been suggested that adequate training and collegial support boost teachers' willingness to integrate technology into their teaching and to develop successful technology-assisted teaching practices (Becker et al., 1999). Supported by their teachers and by using different kinds of instructional materials (e.g. 'Traditional' worksheets on paper, interactive applets, quizzes) students were guided towards discovering the concepts of derivative and / or integral. These learning environments were tested in Austrian high schools with several hundred students (Embacher et al., 2006). Computer algebra systems (such as Derive, Mathematica, Maple or MuPAD) and dynamic geometry software (such as Geometer's Sketchpad or Cabri Geometry) are powerful technological tools for teaching mathematics. Numerous research results suggest that these software packages can be used to encourage discovery and experimentation in classrooms and their visualization features can be effectively employed in teaching to generate conjectures (Draaijers et al., 2004)(Lavicza, 2007).

The material in Differential Calculus includes number systems, multiple function operations, function limits, continuous functions, function derivatives and application of derived concepts. The material in integral calculus includes integrals, integral usage, transcendent functions, integration techniques, and unnatural indeterminate and integral forms. The purpose of studying calculus as proposed by Zhang, (Zhang, 2003) is that students understand mathematical ideas and to develop logical, profound and creative thinking skills. Moreover, it has functions to enhance the intellectual and imaginative abilities, so that students will gain skills in arithmetic and obtain useful tools for future needs. The successful of the students in understanding the material of this calculus will make it easier for the students to understand the material in a course that uses mathematics in their discussion.

Calculus consists of abstract concepts and has a lot of prerequisite knowledge. As a lecturer, we must be able to simplify the concept of abstract calculus into things that are easy to understand, innovate and create learning quality for calculus and fun in the classroom. Pleasant learning will certainly have an impact on the results of the studies obtained by students. Based on the observations in the Department of Mathematics, Faculty of Mathematics and Teacher Train-

ing in UIN Imam Bonjol Padang, the effectiveness of calculus learning is low. This is seen from the low of students' learning outcomes. The percentage of students who got A grade for a calculus course in the last 3 years only average 19.4%, and for the value of B only 49.2%, the remaining got the values of C, D and E. The low of effectiveness in learning calculus is also experienced by other students from another college. Several researchers have examined the problem of the low effectiveness of calculus learning, such as (Dhoruri et al., 2007)(Sepriyanti et al., 2017)(Yuan, 2002)(Zhang, 2003).

Based on the interviews with students of Tadris Mathematics class of 2016 with initials HN and DW it was obtained the information that the students realize that Calculus is very important to learn, but they faced the fact that the calculus is abstract and difficult, especially if the given problem is a matter of the story. Calculus is only considered as a collection of numbers and formulas that have nothing to do with their daily lives. Though the problems faced in everyday life cannot be separated from the problems of calculus.

Based on the results of interviews with the lecturer of Calculus, it has obtained information that the students' involvement has not been fully in the learning process, not yet effective in using the media and has not used multimedia-based interactive media for learning calculus yet, has not accepted what is explained by the lecturer either. This resulted in the student's difficulties in understanding the concepts that have been taught by the teacher, it is found that the students are also difficult in transferring the concept of calculus into real life. The learning process that took place has a low result on student learning activities and student's results in studying are also low.

The difficulty in understanding the abstract of calculus material and being far from everyday life has always been the pretext of students in studying calculus. The cause of such difficulties can be sourced from within the student as well as from outside, for example the way of presenting the calculus material or the learning atmosphere that being carried out. The difficulties experienced by learners are also encountered by Khambari, Luan, & Ayub (Khambari et al., 2010). They say to overcome these difficulties; Information and Communication Technology (ICT) can be an alternative solution. Information and Communication Technology such as computers, props, or other media are expected to improve the effectiveness of learning. Many countries consider ICT as a vehicle for upgrading the education system to a better degree and interpret ICT as an improvement and development of e-generation-based learning that will make efficiency in classroom activities.

By the 21st century is now Indonesia's educational experience a paradigm shift from behaviorists to constructivist. Responding to these changes, (Priyanto, 2009)(Rusman and berbasis Komputer, 2013) states that teachers / lecturers are not just teaching (transfer of knowledge) but must be a learning manager. It means that every lecturer is expected to be able to integrate the information and communication of technology (ICT) into learning activities, create learning conditions that challenge, creativity toward student activities, motivate students, use multimedia, multi methods, and various learning resources in order to achieve the expected learning objectives.

The rapid development of computer technology has been felt in various sectors of life, so that in learning the development of technology is needed. This is in line with the opinion expressed by (Akşan and Eryılmaz, 2011) in the education sector, for example the use of computers has been developed not only as a tool that is only used for administrative affairs, but also it is very possible to be used as a means of operating the learning media. For example, the existence of a multimedia computer is capable of displaying images and writings that are still and moving and vocal. This kind of thing should be responded positively by the teachers / lecturers so that computers can be one tool that helps in developing learning.

NCTM (1973) states that the use of computers as learning media actually has long been developed in many countries such as America and Britain. As a medium, the computer is useful for teachers as a tool in preparing teaching materials and organizing learning activities. Currently the use of computers as a medium of learning mathematics is rarely applied in schools because not many manufacturers offer special software of mathematics learning, so it takes expertise and tenacity of teachers to take advantage of software potluck. Therefore, the use of computers is dependent on the teacher as a facilitator in designing computers as a medium of learning mathematics.

(Arsyaz, 1997)(Muhson, 2010)(Sudjana and Rivai, 2010) revealed that various studies have been conducted on the use of instructional media in teaching and learning process to the conclusion that the process and result of student learning showed significant difference between learning without media and learning by using the media. Therefore, the use of learning media in teaching and learning process is highly recommended to enhance the quality of learning, including computer media. Based on these factors felt the importance of developing multimedia-based calculus learning media in the form of Macromedia Flash Professional.

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Research development in learning mathematics at the level of Higher Education is relatively new and not much studied, including research on the development of Interactive Multimedia-based learning by using Macromedia Flash Professional. Though problems in college, especially in mathematics education cannot be solved by only composing experimental research on strategies or learning methods.

Some researchers have observed this problem, such as (Khairani and Febrinal, 2016)(Sepriyanti et al., 2018) with the results of research indicates that the learning media developed valid, practical and effective because it can improve students 'concept understanding and improve students' positive responses in learning. Fahmi (Fahmi, 2014), the results showed that the learning media developed had an impact on students' mathematics learning behavior. Sinurat (Sinurat et al., 2015), the results showed that the media used in the mathematics learning can improve students 'mathematical skills and the last is (Safitri et al., 2013), with the results of research media Macromedia Flash learning developed effectively to improve students' conceptual understanding.

Based on researches that have been done by previous researchers, it gives an evidence that the use of Macromedia flash in learning is to give a potential impact on the process, attitudes, abilities and student learning outcomes. Therefore, the development of learning media Macromedia flash professional is in college is also very necessary.

2 METHODOLOGY

This research used the ADDIE model to develop the product. Expert validation is conducted to keep the quality of the product that consist of two contents/material experts and two media experts. The standard of the product isachieved if the experts gave at leastvalid for each criterion. The quality of instructional media (practicality) is carried out to 8 (eight) students of Tadris Mathematics Department UIN Imam Bonjol Padang who have taken Integral Calculus courses selected randomly from three classes, they are class A, B, and C. Time and place of this research were conducted on June 1, 2017 until September 20, 2017 at UIN Imam Bonjol Padang. In this study there are five procedures performed 1) Analytical phase (Analysis), 2) Design stage, 3) Development stage, 4) Implementation stage, 5) Evaluation stage. Data collection was obtained from several techniques, namely: observation, interview, and literature.

3 RESULTS & DISCUSSION

The initial design/prototype of interactive multimedia as follows:

- Opening page view

The opening page that appears on the learning media when it is run. This page has one button, the start button to go to the main page. It is shown in Figure 1.

Figure 1: Preview of opening page.

- Main page view

This main page consists of Pendahuluan (introduction), Materi (contents), Latihan (exercises), Evaluasi (evaluations), Referensi (references), and Profil (profiles). This page comes with a back sound once the view is opened. Each page on the main menu will be linked to the main page using the menu button.

Figure 2: This caption has one line so it is centered.

- The introduction main menu

If the introduction button on the main page is clicked, then it will show learning matrix as shown in Figure 3. This learning matrix contains the learning outcomes and contents that must be mastered by students on a
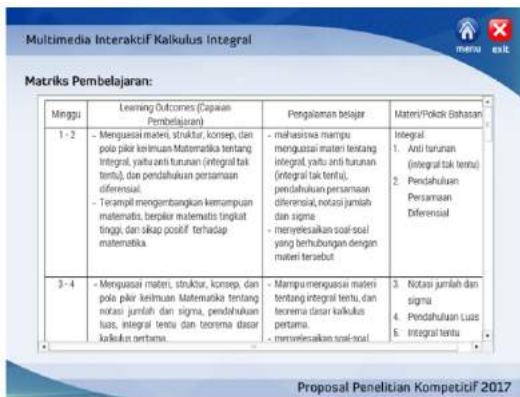
Figure 3: This caption has one line so it is centered.

weekly basis or meeting. It will help the student to adjust the time for each content.

- The contents main menu

Main menu of the contents consists of four main topics as shown in Figure 4. These topics were built by using a learning matrix that provided in introduction menu. The student must learn the topics sequentially from Integral (the definite integral), Penerapan Integral (applications of the integral), Fungsi Transenden (transcendental functions), and Teknik Integrasi (techniques of integration).
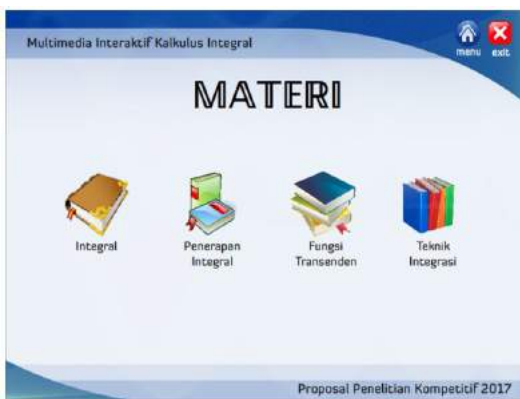

Figure 4: This caption has one line so it is centered.

- The exercise main menu

Exercise can be accessed by clicking Latihan onthe main page. There are four exercise packages based on the topics of study. The student can answer each exercise by inputting the answer in the box that has provided. They also can check whether correct or wrong the answer by clicking periksa button. Every correct answer will be marked by a green checklist next to the answer, while the wrong answer will be marked with a red cross as shown in Figure 5. Students can repeat

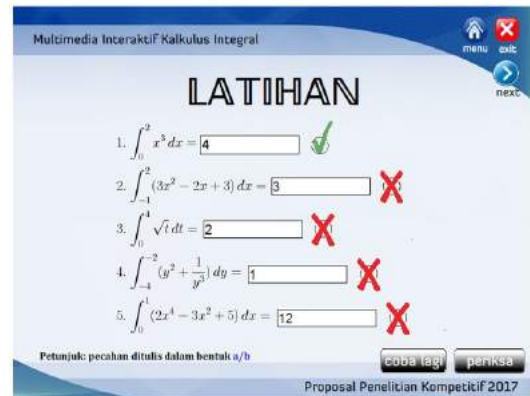typing the answer again by pressing cobalagi button so that the answer box will be blank.

Figure 5: This caption has one line so it is centered.

Students can re-try to answer the questions in the fields provided and re-examine the answers. However, students can also directly see the correct answer by pressing the (?) button so that the solution will appear as shown in Figure 6. The solution can be closed by clicking (X) button.
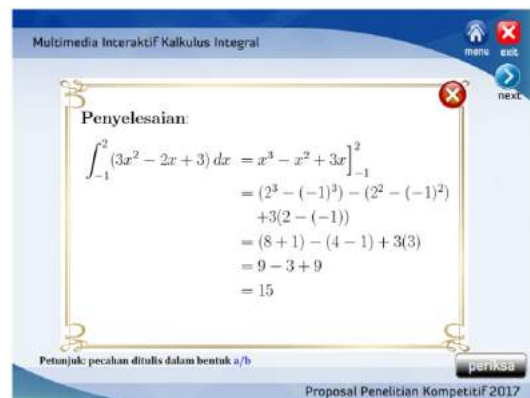

Figure 6: This caption has one line so it is centered.

- The evaluation main menu

Evaluation can be accessed by clicking evaluasi button onthe main page. Evaluation-1 is an evaluation aimed at measuring learning outcomes for integral review materials and application, while Evaluation-2 for transcendent functions and integration techniques. Evaluation can be selected by clicking on one of the buttons available on the page. Before starting the evaluation, it will be given an instruction at first page as shown in Figure 7. In each evaluation there were 10 questions to be answered with a duration of 60 minutes.

Problems will appear randomly, so that among students who one with another small will get the same

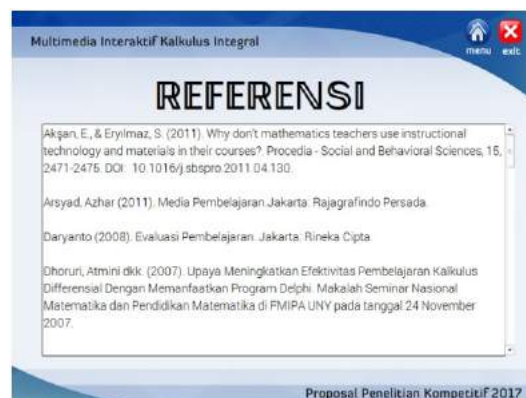Figure 7: This caption has one line so it is centered.

problem even though done simultaneously. Evaluation can be started by clicking MULAI (start) button on the page. On the top right there is a time indicating the remaining time available to answer the question. The problems will be answered by clicking on one of the available answer options. After the whole question is answered, then the value of the evaluation results can be known and included part of the material that has not been mastered by students as shown in Figure 8. Student who have not mastered the material can re-understand the material or try to answer the problem back by clicking cobalagi button once again.

Figure 8: This caption has one line so it is centered.

- Display Reference Menu

The reference menu contains reference-related information used in the development of learning media in the form of contents/study materials, practice and evaluation questions and some theories used in developing an interactive learning media. Reference can be accessed by clicking Referensi in the main page.

Expert validation is conducted to assess the designed product so that it can know its strengths and weaknesses. Validation is done by showing the design of the design and then the experts are asked to judge it. Expert validation consists of expert in media and in

Figure 9: This caption has one line so it is centered.

content. Validation from the expert in media side was done by the lecturer of mathematics education study program at the State University of Padang and lecturer of tadris mathematics at State Islamic University Imam Bonjol Padang. The experts see and listen to the learning media, then they judge by using closed and open questionnaire instruments. The result of validity as a whole is categorized as valid. However, if viewed from each aspect. Expert media validation results are shown in the Table1.

Table 1: The Expert Media Validation Result.

No.	Aspect of assessment	Percentage	Description
1	Coloring	75.00	Valid
2	The use of words and language	80.00	Valid
3	The screen display	83.30	Very Valid
4	Animation	75.00	Valid
5	Menu command	90.00	Very Valid
6	Design display	100	Very Valid
Total (overall)		83.85	Very Valid

Validation from the expert in contents side was done by two lecturers of calculus of tadris mathematics at State Islamic University Imam Bonjol Padang. The result of contents/materials validation results are shown in Table 2:

Table 2: The Validation Result of The Content Experts.

No.	Aspect of assessment	Percentage	Description
1	Instruction	75.00	Valid
2	Curriculum	85.30	Very Valid
3	Material	83.30	Very Valid
Total (overall)		81.80	Very Valid

The results of validity are categorized as valid,

both in terms of learning, curriculum, and material content.

- Implementation Phase

Once the learning media is validated and declared eligible for trial, then it will continue to the implementation stage. At this stage, the product is carried out in a small group that consist of 8 students of mathematics Tadris UIN Imam Bonjol Padang who took the integral calculus courses. Furthermore, each student was given a questionnaire to assess the learning media in terms of practicality.

- Evaluation Phase

An evaluation is conducted to know the results of the implementation of instructional media in terms of practicality by students. The results can be seen in Table 3, seen as a whole learning media is categorized very practical.

Table 3: The Result Of Practicality Test.

No.	Aspect of assessment	Percentage	Description
1	Operation	95.00	Very practical
2	User reaction	95.00	Very practical
3	The safety of the program	92.50	Very practical
4	Additional support facilities	92.50	Very practical
Total (overall)		94.25	Very practical

Based on the result of student's calculus integral test step shows that the obtain effectivity percentage value with effective category with an average score of 71.39 %. The percentage of students who got A grade for Calculus Integral course average 25 %, for the value of B is 46.43 %, for the value of C is 25 % and for the value of D is only 3.57 %.

Table 4: The Result Of Effectivity Test.

No	Grade	Percentage
1	A	25.00%
2	B	46.43%
3	C	25.00%
4	D	3.57%

4 CONCLUSIONS

CD interactive multimedia-based learning as the output of this research is a good learning media and it can be used independently by the student self. In order to save costs and use of the CD, these learning media can be copied and installed to the smartphone

directly. Based on the results of the study, the CD interactive multimedia-based learning of Integral Calculus has validity assessment in very valid criterion with an average score of 82.83 %. This validity is assessed from two criteria, namely: 1) Media expert validation criteria show that the qualitative media obtained is very valid with the percentage of 83.85%. So that the learning media is suitable for learning. 2) Contents/material expert validation criteria showing the qualitative which is the category is very valid, with percentage 81.80 %. So that learning media can already be used for learning.

The quality of instructional media is based on the aspect of practicality. Practicality is assessed from one criterion that is the quality of technical criteria (technical quality). Multimedia-based interactive multimedia learning media developed according to user trial subjects that has met the practical criteria that can be used with the percentage of practicality 94.25% and was produced in accordance with aspects of effectivity assessment so that the developed CD Interactive multimedia-based learning is included in effective criterion with an average score of 71.39 %. So, it is concluded that the learning media is suitable for the use as an interactive learning media.

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REFERENCES

Akşan, E. and Eryılmaz, S. (2011). Why don't mathematics teachers use instructional technology and materials in their courses? *Procedia-Social and Behavioral Sciences*, 15:2471–2475.

Arsyaz, A. (1997). *Media pengajaran*. PT RajaGrafindo Perada.

Becker, H. J., Ravitz, J. L., and Wong, Y. (1999). Teacher and teacher-directed student use of computers and software. teaching, learning, and computing: 1998 national survey. report# 3.

Cuban, L., Kirkpatrick, H., and Peck, C. (2001). High access and low use of technologies in high school classrooms: Explaining an apparent paradox. *American educational research journal*, 38(4):813–834.

Dhoruri, A., Listyani, E., Rosnawati, R., and Andayani, S. (2007). Upaya peningkatan kualitas pembelajaran kalkulus diferensial dengan menggunakan program maple pada mahasiswa prodi matematika fmipa uny. *Pythagoras: Jurnal Pendidikan Matematika*, 3(1).

Draaijers, L. J., Tempelman, F. R., Botman, Y. A., Tuinebreijer, W. E., Middelkoop, E., Kreis, R. W., and

van Zuijlen, P. P. (2004). The patient and observer scar assessment scale: a reliable and feasible tool for scar evaluation. *Plastic and reconstructive Surgery*, 113(7):1960–1965.

Duderstadt, J. J., Atkins, D. E., Van Houweling, D. E., and Van Houweling, D. (2002). *Higher education in the digital age: Technology issues and strategies for American colleges and universities*. Greenwood Publishing Group.

Embacher, F. et al. (2006). Medienvielfalt im mathematikunterricht (media diversity in mathematics teaching). *Project report for the Austrian Ministry of Education. Vienna, Austria.*

Fahmi, S. (2014). Pengembangan multimedia macromedia flash dengan pendekatan kontekstual dan keefektifannya terhadap sikap siswa pada matematika. *Jurnal AgriSains*, 5(2).

Khairani, M. and Febrinal, D. (2016). Pengembangan media pembelajaran dalam bentuk macromedia flash materi tabung untuk smp kelas ix. *Jurnal Ipteks Terapan*, 10(2):95–102.

Khambari, M. N. M., Luan, W. S., and Ayub, A. F. M. (2010). Technology in mathematics teaching: The pros and cons. *Procedia-Social and Behavioral Sciences*, 8:555–560.

Lavicza, Z. (2007). Factors influencing the integration of computer algebra systems into university-level mathematics education. *International Journal for Technology in Mathematics Education*, 14(3):121.

Muhson, A. (2010). Pengembangan media pembelajaran berbasis teknologi informasi. *Jurnal Pendidikan Akuntansi Indonesia*, 8(2).

Priyanto, D. (2009). Pengembangan multimedia pembelajaran berbasis komputer. *Insania*, 14(1):92–110.

Rusman, B. and berbasis Komputer, P. (2013). Mengembangkan profesionalisme abad 21. *Bandung: Alfabeta*.

Safitri, M., Hartono, Y., et al. (2013). Pembangunan media pembelajaran matematika pokok bahasan segitiga menggunakan macromedia flash untuk untuk siswa kelas vii smp. *Speed-Sentra Penelitian Engineering dan Edukasi*, 5(2).

Sepriyanti, N., Fauzan, A., Arnawa, I., and Lufri (2017). Calculus based on contextual learning model to cultivate students activity, interest and mathematical connection ability. *International Journal of Scientific & Technology Research*, 6(10):233–38.

Sepriyanti, N., Yulia, P., and A (2018). *The development of constructivism based module for the materials of composition and inverse function for science students of senior high school in Indonesia*. IJSTR.

Sinurat, M., Syahputra, E., and Rajagukguk, W. (2015). Pengembangan media pembelajaran matematika berbantuan program flash untuk meningkatkan kemampuan matematik siswa smp. *Jurnal Tabularasa*, 12(02).

Sudjana, N. and Rivai, A. (2010). Media pengajaran. *Bandung: sinar baru Algensindo*.

Yuan, Z. (2002). Improving the qualities of teaching calculus-by modern education theories and modern technology, the china paper.

Zhang, B. (2003). Using student-centered teaching strategies in calculus. *The China Papers*, 2:100–103.

Islamic Marketing Management Information System Model

Hamdi Agustin, Sri Indrastuti and Firdaus Abd Rahman

Faculty of Economics, Islamic University of Riau, Pekanbaru, Indonesia
{hamdiagustin, sriindrastuti}@eco.uir.ac.id, firdaus72@gmail.com

Keywords: Information, Islamic, Marketing Management, System.

Abstract: In various literature, the marketing information system model has been defined in various forms such as McLeod and Schell (2007), O'Brien and Marakas (2011) and Kotler and Armstrong (2014). But no one has looked at the Islamic perspective regarding marketing management information systems. This study purporse discuss the marketing management information system mode an Islamic perspective where every aspect of information is included in Islamic values. This paper can be used as a development literature in the field of management information systems. The results of this study found that inputs in marketing management information systems consist of Maximizing Value Information Systems, Market Information Systems and marketing research. While output produces a sharia marketing system consisting of products, values, promotions and places or distribution. The concept of Islamic marketing management information systems is based on the theory of *Maqasid Syari'ah*. This theory comes from the Qur'an and hadith.

1 INTRODUCTION

Information marketing is an important problem in business, consequently managing information marketing requires a marketing information system (Hajiheydari et al., 2018). In the literature, marketing information systems have been defined in various forms such as McLeod and Schell (McLeod and Schell, 2007), O'Brien and Marakas (O'Brien, 1998) and Kotler & Armstrong (Kotler and Armstrong, 2013). But no one has looked at the Islamic perspective regarding marketing management information systems. The concept of Islamic marketing management information systems is based on the theory of *Maqasid Syari'ah*. This theory comes from the Qur'an and hadith. In this theory explains the emphasis to prosperity of human life in the world and in the hereafter based on the balance of the goal of getting heaven and the blessing of Allah Ta'ala with the aim of obtaining momentary satisfaction namely the satisfaction of life in the world alone. Thus marketing management information systems must be based on Islamic sharia values.

Marketing information systems is a computer-based system that works together with other functional information systems to support company management in solving problems related to the marketing of company products (McLeod and Schell, 2007). Marketing information systems utilize information technology to support the main components of the marketing function (O'Brien, 1998). Marketing information systems consist of various components to provide accurate and accurate information to marketing decision makers (Kotler and Keller, 2011).

Based on the explanation above, it can be concluded that the marketing information system is an information system that supports various marketing activities in a company by utilizing information technology to provide the information needed regarding product marketing to those who need that information to achieve certain goals. Marketing information systems provide information for sales, sales promotions, price, marketing activities, market research activities and others related to marketing. The function of business marketing is related to the planning, promotion, and sale of products that are in the market today, and the development of new products and markets to better attract potential consumers and maintain relationships with current customers (O'Brien, 1998).

Information needed by marketing managers can be obtained through marketing information systems which are basically a collection of sub-systems that are interconnected with each other and cooperate harmoniously to achieve a goal of processing data related to marketing problems into information marketing needed by marketing management when making decisions in order to carry out its functions. Support provided by Information Technology-based informa-

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tion systems as shown in Figure 1 below.

Kotler describes the relationship between marketing information systems, the environment and marketing executives as information users. While Mc. Leod describes it in the form of another structure with an emphasis on aspects of information technology as shown in the following Figure 2.

Based on the picture above, marketing information systems can consist of sales accounting information systems, marketing intelligence information systems and marketing research information systems which are marketing input systems and reporting systems (Products, prices, promotions and places) and integration of all of them called marketing mixes. The model above shows a conventional perspective marketing management information system model. Both of these models have limitations on not including Islamic values in all aspects of information. This paper aims to discuss the marketing management information system model according to an Islamic perspective where every aspect of information is included in Islamic values. This paper is expected to be used as a development literature in the field of management information systems.

2 LITERATURE REVIEW

The concept of Islamic marketing gives a situation that indicates the development of Islamic marketing for humans in the future. To achieve the concept of Islamic marketing, an information system is needed data so as to produce information relating to the problem of how to maximize marketing value to achieve the welfare of human life both in the world and in the hereafter. The concept of Islamic marketing is the process of identifying and implementing a strategy of value maximization carried out by the company in order to work according to the guidelines and guidelines given in the al-Qur'ān and as-Sunnah.

Cox and Good in 1967 using the terminology of marketing information system for the first time (Cox and Good, 1967). However, applying the computer in marketing was first proposed by Kotlerin 1966. Nervous system marketing is the name of the marketing system first proposed by Kotler.He has explained how a firm can use a computer system for supporting marketing activities. Afterwards this concept gain lots of respect from other researchers which studied about marketing information systems. All studies about marketing information systems concluded a model in which the concept of system referred to a tool for changing input to output. In these models, marketing management has been a controlling and feedback unit

and used the output for organization's marketing activities and sell operations. Some of these conceptual models are explained in continuing.

Marketing information systems is a decision support system which must have marketing mix subsystems. These sub-systems can be used by marketing managers for answering critical questions about marketing plans (Montgomery and Urban, 1970) and (Crissy and Mossman, 1977). King and Cleland in 1974 have identified the marketing strategic planning as the most important marketing information system value (King and Cleland, 1974). Planning and developing product, pricing, distributing and promotion strategies are sub-systems for a marketing information system which proposed by Brien and Stafford in 1968. Moreover, they explained the usefulness of a marketing information system for planning and developing marketing plans (Brien and Stafford, 1968). Tull and Hawkins in 1993 have defined marketing information system as a producer, keeper and distributor of information for marketing managers (Tull and Hawkins, 2003).

In addition, the marketing information system can be defined as the structural composition of people, machines and processes, which are applied to the flow of information from internal and external sources. This information flow will be applied to decision making (O'Brien, 1998). Boone and Kurtz in 2007 has introduced a marketing information system as a computer-based system that has a steady flow of information to the marketing manager xxx(Boone & Kurtz, 2007).

Furthermore, jobber in 2007 to define the marketing information system as a system in which the official marketing data collected, stored, analyzed, and distributed to managers at according to their information needs on a regular basis (Jobber, 2007). Besides Kotler and Keller 2006 has defined marketing information systems more widely as people, equipment, and procedures to gather, sort, analyze, evaluate, and distribute the information needed, timely, and accurate information to decision makers marketing (Kotler and Keller, 2011).

At present, the marketing information system is very important as a tool that uses data and marketing information to support decision making in the field of marketing (Li et al., 2001)(Ying and Peters, 2011) (Hess et al., 2004). In addition, this decision is usually to design marketing campaigns and promotions (Lin and Hong, 2009)(Lee et al., 2009).
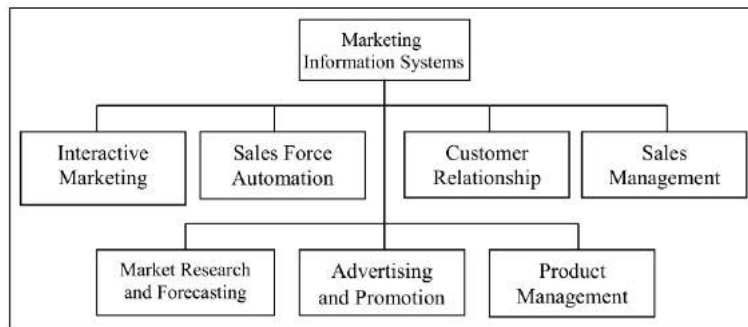
Figure 1: Marketing information system supports the main components of the marketing function.
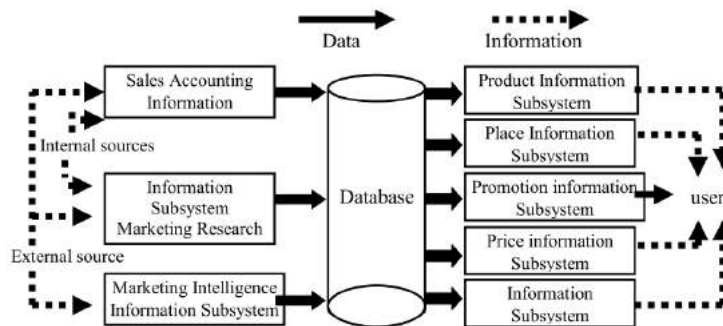

Figure 2: Marketing information system supports the main components of the marketing function.

3 RESEARCH METHOD

In this section, two research methods of this article would be described. These two research methods are design sciences which are applied for a developing framework of information systems of perspective of Islamic and content analysis, which is used for analyzing content and deriving knowledge from it.

4 RESULT AND DISCUSSION

The values of marketing relations in an Islamic perspective are different from the values that have been built up in conventional marketing theory. The form of service that is based on philosophical values of sharia that has a transcendental relationship, where these values are guided by Wahyu Allah, which have not yet been reached in conventional marketing theory, will provide two dimensions of relationship values, namely vertical and horizontal relations (habl min-Allah wa habl min naas).

Judging from the dimensions of horizontal relations have two influences: first, the relationship between customers and marketing, where customers will feel satisfied with the services provided by marketers of universities through gentle attitudes and be-

havior, generous and prioritizing customers (Itsar). If the customer is satisfied, it will create and increase customer loyalty, so that a long-term relationship between the customer and the marketer is built individually and then will be satisfied with the institution; second, creating a harmonious relationship between individual marketers so as to create a cool and peaceful atmosphere; third, the first and second influences in a sirrullah (something that is not able to be reached by logic) will foster customer sympathy towards marketers and companies.

The second dimension, is the vertical relationship to Allah Ta'ala, that the behavior of marketers guided by Islamic values originating from the Qur'an and as- Sunnah will realize that every service provided to customers is based on worship and is solely hoping for the pleasure of Allah SWT. Thus, you will avoid the arrogant / arrogant, arrogant and selfish attitude, because realizing that everything that is done in the world will be accountable before Allah Ta'ala. The righteous deeds will get heaven's reward and vice versa as a consequence of evil deeds is the torment of hell.

Figure 3, we provide an Islamic marketing management information system model. this model different from the model of conventional marketing management information system being addressed by McLeod and Schell (McLeod and Schell, 2007),

O'Brien and Maracas (O'Brien, 1998) and Kotler and Armstrong (Kotler and Armstrong, 2013).

4.1 Marketing Information Systems Have Three Input Subsystems (Figure 3)

4.1.1 Information Systems Maximize Value

The concept of Islamic marketing emphasizes the aspect of value maximization by way of honesty and justice which aims to provide a way of working the company to work according to the guidance of the al-Qur'an and as-Sunnah, as the Prophet did in doing business including delivering honest, complete and clear information in marketing products sold. This is what distinguishes the conventional marketing concept approach based on conventional ethical theory where the benchmarks of right or wrong are based on reason.

4.1.2 Market Information System

The market information system provides detailed data and information relating to the behavior and problems of the place where the marketing of products to be sold, including consumer interests, is known to be a profitable product to market. Market information systems are very important to know because they relate to consumers who will buy products that will be marketed so that the products sold can be sold in the market entered.

By knowing market information, it will enable consumers to get customer satisfaction. Customer satisfaction in the Islamic marketing perspective is based on Islamic sharia guidance, namely the Qur'an and as-sunnah. Customer satisfaction in an Islamic perspective is closely related to needs, desires, beliefs, benefits, blessings, beliefs and halalness. Customer satisfaction by providing the best service that is in accordance with the concept of Islamic marketing, in the Islamic perspective has provided a service concept that will be able to provide customer satisfaction such as being gentle, generous, and prioritizing the customer when trading.

4.1.3 Marketing Research

This subsystem provides facilities to design, collect, analyze, and report data on research results in the field of marketing systematically. The data collected in this subsystem are of two types, namely primary data (obtained from the distribution of questionnaires, surveys and observations) and secondary data (obtained from internal sources such as income statements, balance sheets, statistical reports, reference books and journal publications).

There are several ways to do this marketing intelligence, there are: 1), the marketing manager does it himself by reading references, by interviewing or direct interviews with customers, intermediaries, or anyone related; 2) buying information from outside; 3) work with intermediaries to convey the information needed; 4) establish marketing information centers to collect and distribute marketing information.

4.2 Output Marketing Information System

4.2.1 Products

If viewed from an Islamic perspective, it has certain specific limitations regarding product definition. In Islamic syari'ah there are 6 things that need to be fulfilled when offering a product:

- Products sold are needed by everyone;
- Products offered have clarity of goods, clarity of size or size, clarity of composition and use of good materials;
- Products sold are not damaged and defective;
- Products that are traded are halal products;
- Products sold do not contain gharar and fraud;
- Products sold do not mix low quality with good ones.

4.2.2 Value

The value contained in a product is divided into two, namely, first the price is materially valued by the money from the product sold. The two non-material values of the product because they are rewarded by Allah Ta'ala because they can help people with the products sold. For example, the business of selling drugs would be able to help people as intermediaries to cure their illnesses.

The definition of price is the amount of money that will be spent to obtain or enjoy an item or service. More broadly, price is the overall value exchanged by consumers to benefit from ownership of a product or service. In the Islamic concept a merchant can set the price for a product or service. However, in pricing, prices may not be too high so they can burden consumers.

Determining prices may not use methods that can harm other business people. Islam certainly allows traders to take advantage. Because the essence of
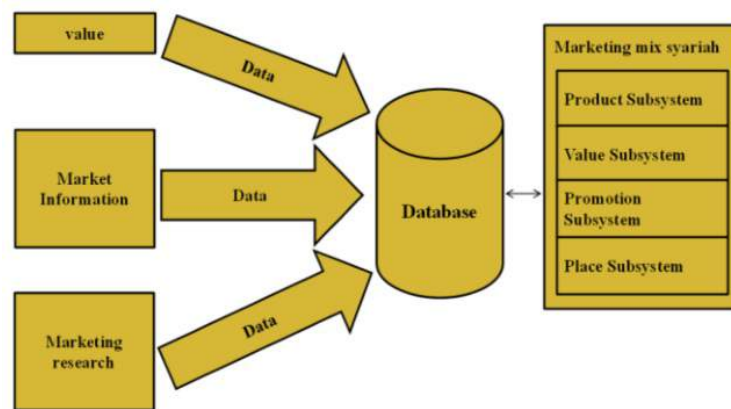
Figure 3: Islamic marketing management information system model.

trading is to look for profit. However, to take advantage of it, do not overdo it. Because, if the price set is a fair price, then the trader will definitely excel in quantity. In other words, getting a lot of profits from the number of items sold, the more visible the blessings of the fortune. In the process of pricing, Islam also views that prices must be adjusted to the conditions of goods sold. Rasulullah sells products at prices that can be absorbed by the market.

At one point, the Prophet was angry when he saw a merchant hiding wet corn under dry corn, then the merchant sold it at a high price. In a hadith the Prophet said: "Why don't you put the wetness on the food, so that people can know the situation. Whoever deceives, then he is not in our class" (HR. Muslim).

The above hadith indicates that if the item is good, it is only natural that the price is expensive. But if the item is of poor quality, it is naturally sold at a low price. The Prophet Muhammad also taught how to set a good price. Good items are sold at good prices. And lower quality goods are sold at lower prices. Not necessarily bad items are sold at high prices. Rasulullah also forbade false demand. Najasy transactions are prohibited because the seller tells someone else to praise the item or bid at a high price so that other people are interested in buying. In fact, the bidder himself did not intend to actually buy the item. He just wants to cheat other people who really want to buy.

Previously, this person had made an agreement with the seller to buy at a high price so that there was a real buyer at a high price with the intention to be deceived. The result is a false demand.

4.2.3 Promotion

Promotion is a tool used by companies to inform, persuade and remind consumers directly or indirectly about the products and brands they sell in the hope

that they buy the product. One of the promotions is through advertising. the purpose of promotion in the form of advertising is to focus on informing, informing consumers or prospective consumers about the advantages of the product being sold.

Another purpose of promotion is to inform potential consumers of the current changes, the quality and the existence of products or services to develop attitudes towards products, brands or companies while at the same time reminding consumers about product excellence.

Marketers need to consider several factors in creating and delivering messages that are effective in promotion. These factors include, restrictions on the type of media used, the ability to promote certain products, the image of advertising, social groups and government regulations.

Every message delivered in a promotion will offer two things, namely the reason for buying (through advertising) and the incentive to buy (through a sales promotion). In conventional marketing, promotion does not directly relate to religious values that govern every process in promotion in accordance with the rules of Islamic religion.

All messages in advertising that follow the teachings of Islam will spread good morals, like women with proper behavior and clothing. So that that assumes the message acts as a positive contribution such as honesty and advice for the family and society as a whole. Advertising marketers or producers in the Muslim world will benefit by improving and understanding Islamic values. Thus, prospective Muslim buyers will feel emotional connection. Prospective non-Muslim buyers may also feel more confident with the product because of the good and generally accepted universal values that Islam can show as a religion that is rahmatan lil alamin.

4.2.4 Place or Distribution

Distribution is a variety of activities carried out by the company to make its products easily available and available to target consumers by marketing these products. Distribution includes the types of relationships, intermediaries, storage, location and transportation. A Muslim businessman will not commit acts of tyranny against other competitors, bribes to smooth out his market channels and other acts of machevialis. In determining place or distribution channels, Islamic companies must prioritize places that are in accordance with the target market, so that they can be effective and efficient. So in essence, in determining the marketing-mix must be based on the principles of justice and honesty. The difference between an Islamic and non-Islamic business lies in the operational rules that make halal and haram, so care must be taken in carrying out the strategy.

In an Islamic perspective, more emphasis is on the closeness of the company to the market. This is to avoid any interception of goods before reaching the market. In a Hadith mentioned. Which means: "Ibn Umar said, Indeed the Prophet forbade someone to intercept merchandise before arriving at the market" (HR. Muslim).

The hadith above shows that the shorter the marketing channel to the market, the better. So that there were no unilateral transactions from speculators. The purpose or function of distribution is to accelerate the arrival of goods in the hands of consumers or markets at the right time. Distribution policy must at least meet three criteria. First, the accuracy and speed of time arrives in the hands of consumers. Second, the security of goods or products from damage. The three means of competition in providing speed and accuracy meet consumer needs.

5 CONCLUSIONS

In the literature, marketing information systems have been defined in various forms such as McLeod and Schell (2007), O'Brien and Marakas (2011) and Kotler & Armstrong (2014). But no one has looked at the Islamic perspective regarding marketing management information systems. This study purporse discuss the marketing management information system model an Islamic perspective where every aspect of information is included in Islamic values. This paper is expected to be used as a development literature in the field of management information systems. The concept of Islamic marketing emphasizes the aspect of value maximization by way of honesty and justice

which aims to provide a way of working the company to work according to the guidance of the Qur'an and hadith, as the Prophet did in doing business including delivering honest, complete and clear information in marketing products. The results of this study found that input in marketing management information systems consists of Maximizing Value Information Systems, Market Information Systems and marketing research . While output produces a syaroah marketing system consisting of products, values, promotions and places or distribution. The concept of Islamic marketing management information systems is based on the theory of *Maqasid Syari'ah*. This theory comes from the Qur'an and hadith.

REFERENCES

Brien, R. H. and Stafford, J. E. (1968). Marketing information systems: a new dimension for marketing research. *Journal of Marketing*, 32(3):19–23.

Cox, D. F. and Good, R. E. (1967). How to build a marketing information system. *Harvard Business Review*, 45(3):145–154.

Crissy, W. and Mossman, F. H. (1977). Matrix models for marketing planning-update and expansion. *MSU Business Topics*, 25(4):17–26.

Hajiheydari, N., Khakbaz, S. B., Pourestarabadi, M., and Heydarifard, Z. (2018). *Comprehensive framework for marketing information system: A systematic perspective with design science approach*. International Journal of Economics, Commerce and Management, VI(1).

Hess, R. L., Rubin, R. S., and West Jr, L. A. (2004). Geographic information systems as a marketing information system technology. *Decision Support Systems*, 38(2):197–212.

King, W. R. and Cleland, D. I. (1974). Environmental information systems for strategic marketing planning: Describes an information system for providing externally generated data to support strategic marketing planning. *Journal of Marketing*, 38(4):35–40.

Kotler, P. and Armstrong, G. (2013). Principles of marketing (16th global edition).

Kotler, P. and Keller, K. (2011). *Marketing management 14th edition*. Prentice Hall.

Lee, M. J., Lee, J. H., and Park, S. C. (2009). Intelligent information deriving using network panel data management system in marketing research. *Expert Systems with Applications*, 36(2):1410–1422.

Li, E. Y., Mcleod Jr, R., and Rogers, J. C. (2001). Marketing information systems in fortune 500 companies: a longitudinal analysis of 1980, 1990, and 2000. *Information & Management*, 38(5):307–322.

Lin, C. and Hong, C. (2009). Development of a marketing information system for supporting sales in a tea-beverage market. *Expert Systems with Applications*, 36(3):5393–5401.

McLeod, R. and Schell, G. P. (2007). *Management information systems*. Pearson/Prentice Hall USA.

Montgomery, D. B. and Urban, G. L. (1970). Marketing decision-information systems: an emerging view. *Journal of Marketing Research*, 7(2):226–234.

O'Brien, J. A. (1998). *Management information systems: Managing information technology in the networked enterprise*. McGraw-Hill Professional.

Tull, D. S. and Hawkins, D. I. (2003). *Marketing research: measurement and method: a text with cases*. Prentice Hall.

Ying, L. and Peters, M. (2011). Setting up the tourism engineering marketing information system of china. *Systems Engineering Procedia*, 1:301–308.

Determinants of Indonesia's Defense Technology Cooperation with Turkey: A Decision Making Perspective

Luerdi and Hizra Marisa

Department of International Relations, Universitas Abdurrab, Jl. Riau Ujung No.73, Pekanbaru, Indonesia
{luerdi, hizra.marisa}@univrab.ac.id

Keywords: Cooperation, Defense Technology, Domestic Politics, Military and Economic Capability, International Context.

Abstract: This paper aims to describe a number of determinants of Indonesia's technology cooperation policy with Turkey. That dominant literature on Indonesia's defense relations with its traditional partners either in East Asia or in Asia Pacific while less scholars' attention to such relation beyond the regions seems to exist is a gap the paper intends to fill. The research found that Indonesia's defense ministry's role as well as political support from political parties at the parliament, state economic-military gap and the trend of emerging powers' defense self-sufficiency and self-reliance along with increased global arm trades were the significant factors which encouraged the state to agree on the cooperation ranging from joint development, production to potential sale of armaments. The research applied the decision making theory developed by William D. Coplin providing such determinants as domestic politics, state economic and military capability and international context. In addition, the research made use of the qualitative approach with a descriptive analysis. The paper argues that Indonesia has been pursuing its defense technology independence within last decade; therefore, it diversifies its defense relation beyond its traditional partners.

1 INTRODUCTION

The paper seeks to describe the determinants encouraging Indonesia to carry out the defense technology cooperation with Turkey whose issue belongs to international cooperation and defense studies. Defense technology development, which is overwhelmingly associated with defense industry, is such a strategic agenda the states have taken into account including Indonesia that they will step up their domestic defense industry to meet, at least, a national deterrence function against any threat.

The Indonesian government has knowingly dealt on a number of defense frameworks through defense diplomacy with ten main partners namely the United States, Australia, Malaysia, Russia, China, France, Singapore, Netherland, India and South Korea, Syafwi as cited in (Laksmana, 2012). In addition to national deterrence capability, through which, the state contributes to regional stability and security. While the cooperation has taken shape in commonly various military deals, for instance, joint military exercises, intelligent exchanges, joint patrols around border areas and arms transfers, the meaningful defense technology development deal is a relatively new

sort of policy taken by the Indonesian decision makers only after 2012. The latter is based on a national constitutional mandate that the state is seriously aware with transfer technology instead of being an armaments importer state.

A mutually advantageous scheme is the characteristic of Indonesia's defense industry development to speed up the increase of defense technology acquisition as well as to control growing cost as the regards national interest (Pertahanan, 2015). The scheme is mainly aimed at reducing Indonesia's reliance on foreign military hardware supplies and is believed to be a pathway towards national defense system self-sufficiency. Such goals match the principle of Indonesia's defense industry independence in order to obtain strong, self-sufficient and competitive defense industry (Kemhan., 2018).

Indonesia and Turkey share characteristics as important regional actors affecting their region dynamics respectively. As a middle power which has long contributed to stability and security in Asia Pacific, Indonesia's defense modernization and independence are required to maintain strategic autonomy in pursuing regional diplomatic agendas (Gindarsah and Priamarizki, 2015). On the other hand, in a addi-

tion to being a member of North Atlantic Organization Treaty (NATO), Turkey is a new emerging power gaining a reputation in pursuing its self-sufficiency and self-reliance of domestic defense technology (MacGillivray, 2019) and building defense industry competitiveness with other states (BILGEN, 2010); therefore, it is able to encounter threats targeting its domestic and regional stability without or by little relying on foreign military hardware (Bağcı and Kurç, 2017).

The defense technology cooperation started off with Indonesia's President Susilo Bambang Yudhoyono's official visit to Turkey and the signing of memorandum of understanding (MOU) in June 2010 which was ratified four years later and formally codified in the 2014 Republic of Indonesia's Law Number 19 on the Ratification of Defense Industry Cooperation between the Republic Indonesia and the Republic of Turkey.

Both sides agreed on defense technology development overseeing joint research, production, modernization and potential sales, in addition to mutual interests, security and integrity commitment explicitly stated in the law. Upon the parliament's approval, the Indonesian government was capable of commencing the concrete cooperation with Turkish government. Regarding technical and operational matters, both governments along with their respective ministries of defense and domestic defence firms talked over a number of deals which were becoming more intense shortly after Indonesia's President Joko Widodo's visit to Turkey in 2017. The cooperation covered a range of areas such as Kaplan medium tanks, MALE unmanned aerial vehicles, military communication equipment and 214-type submarines.

2 THEORETICAL FRAMEWORK

The research applied the foreign policy decision making theory in order to provide a description of driving factors with which Indonesia considered its defense technology cooperation with Turkey. The theoretical approach adheres to a basic assumption that any international action is defined in term of a series of decisions taken by domestic political units and state leaders either individuals or groups acting as main actors in a policy making process (Jensen, 1987). The approach reveals a black box in which a state decision making is processed and afterwards transformed into a state behavior or action.

(Coplin and Marbun, 1992) suggests some important determinants which enable to explain why a state would prefer any foreign policy such as domestic politics, economic and military capability and international context. The domestic politics, which refers to domestic political actors also called policy influencers, is such a fundamental factor which influences the state decision making. The policy influencers are divided into four types:

- Bureaucratic influencers; individuals or institutions in a state executive body who assist the decision makers in formulating and executing a state policy;

- Partisan influencers; political parties within a state legislature whose roles vary like bridging the gap between public demands and executive policies, either supporting and blocking a government's policy;

- Interest influencers, informal groups or organizations which represent particular interests and struggle to influence a government to either impose or deny any policy in accordance with their preferences; and

- Mass influencers, public opinions generated by particular population and frequently considered by the state decision makers while formulating a foreign policy (Coplin and Marbun, 1992).

The state decision makers need to balance their commitment to the state capability by considering constraints driven by both economic and military situation (Coplin and Marbun, 1992). Both economy and military, which have long been material powers and mutually affected, are often associated to the state geographical elements from which it has a capability of defending its security against potential threats coming from both outside and within. While domestic developments do matter in the state foreign policy making, the international environment, so-called international context, complements during the process. The international context is a product of the past, present and future behaviors preferred by all states which would be anticipated by the state decision makers (Coplin and Marbun, 1992).

The foreign policy decision makers are those who encounter a particular situation and they have to consider all determinants like domestic politics, economic and military capability and international context (Coplin and Marbun, 1992). Decision making is basically such a rational problem solving that the decision makers consider a number of existing alternatives of options as well as of goals, and one of which is taken as the best decision (Coplin and Marbun, 1992). On the other hand, a foreign policy action is the implementation of preferred option taken by the state decision makers. During the decision making process,

national interests remain the utmost of foreign policy goals which are actually the policy influencers' representation.

The paper argues that Indonesia's defense ministry and political parties were the bureaucratic and partisan influencer respectively whose roles influenced the decision making of such strategic policy. Such domestic determinants were bolded by Indonesia's economic-military gap along with international environment; emerging powers' ambition for defense technology self-reliance and the rise of global arms transfers. The Committee for Defense Industry Policy (KKIP, Komite Kebijakan Industri Pertahanan) was responsible for all strategic decision making regarding the national defense technology including foreign cooperation. As the state legitimate institution, the committee viewed the all determinants serving national interests namely defense and economy. The technical know-how or technology transfer from Turkey was the main goal of cooperation and with which the state would maintain a maximum deterrence capability against threats, boost domestic defense industry to reach military hardware independence and take advantage of economic profits through arms exports. Therefore, the cooperation scheme sought joint productions as well as potential joint sales, instead of sole armaments purchases.

3 METHODS

The research applied the qualitative approach with a descriptive analysis which only focused on the explanative unit; the factors (determinants) encouraging Indonesia to conduct the defense technology cooperation with Turkey. Due to a library research, it employed both online and offline resources ranging from books, scientific journals, reports and other relevant documents. The data were analysed through an analytical inductive technique with which the universal explanation on particular phenomenon was searched, comprising some stages:

- Defined a rough research question;

- Determined hypothetical explanation of the question;

- Collected data and checked cases;

- Confirmed the hypothesis provided that deviant cases were not found;

- However, in case of deviance, either the hypothesis ought to be reformulated and more data ought to be collected to check the cases, or the hypothetical explanation ought to be redefined in order to

remove the deviant cases (Bryman and Burgess, 2002).

The technique emphasized the importance on confirming, reshaping hypothesis, and redefining hypothetical explanation during data collection process and cases evaluation. Despite a confirmation of the cases during the research, collecting data remained necessary in order to result in a strong hypothetical explanation. The research eventually embraced the hypothetical explanation 'that Indonesia conducted the defense technology cooperation with Turkey was encouraged by both domestic and international environment all of which were processed in a decision making system.'

4 RESULTS AND DISCUSSION

Based on the theoretical explanation previously elaborated, the cooperation between Indonesia and Turkey was encouraged by a number of factors such as Indonesia's defense ministry's role and the parties' political support at the parliament, the gap between economic and military capability and the trend of emerging powers' preference for defense technology self-sufficiency and self-reliance along with the rising global arms transfers.

4.1 Defense Ministry's Role and Political Parties' Support

The KKIP is a committee representing Indonesia's government in coordinating national policies, which is responsible for planning, formulating, controlling, synchronizing and evaluating defense industry to meet self-sufficient military hardware (Kemhan., 2018; KKIP, 2018). As a coordinator, the committee is mandated to coordinate the execution and control of national policies on defense industry including cooperation with foreign states with the aim of advancing and promoting Indonesia's defense industry (Kemhan., 2018; KKIP, 2018).

The Indonesia's defense ministry was viewed the most influential actor in the committee acting as a second chair whose position was only right below the president, while other state ministries were subordinated within its coordination. Such position helped transfer its function such as planning, determining and executing defense policies (Kemhan., 2018). In the decision making process regarding the cooperation with Turkey, the ministry practically ensured that the two states' relation contributed to domestic arms availability and national defense technology

self-reliance in accordance with the defense ministry and KKIP's shared vision. It was demonstrated that the ministry's role molded the cooperation through several official visits and talks about a variety of plans and project agreements with its Turkey's defense ministry counterpart.

So did the political parties making up the parliament particularly the Commission I (Komisi I DPR RI) as the Indonesian government's partner in foreign relation matters pay support for the cooperation. After the MOU signatory, the commission delegates conducted visit to Turkey and carried out a meeting with Turkish stakeholders in order to gather information in addition to watching Turkish domestic defense industry development. The activities were initiated to ease deliberations on a constitutional draft on the two states' cooperation among the parties' fractions (Fallis, 2013).

Now that all fractions of the Commission I could agree on the cooperation draft by considering the goal of national defense technology capacity, the deliberation was brought to the parliament plenary session. Looking on the 2012 Indonesia's Law Number 16 on the defence industry prioritizing the empowerment of domestic armaments and defense technology independence, all political parties' representatives approved the cooperation draft to be the 2014 Indonesia's Law Number 19. Such ratification was a form of the political support coming from political parties at the Indonesia's legislature so that the Indonesian government had a legal mandate executing the cooperation which was one of the national strategic policies.

4.2 Economic-Military Gap

Indonesia is such a huge archipelagic state that it shall require a sufficient economic and military capability to guarantee its sovereignty. However, the relation of economic and military capability, on the other hand, created a vulnerability in maintaining a maximum state defense function.

The Coordinating Minister for Political, Legal and Security Affairs, L.B. Panjaitan (2016) once stated that in spite of an annually rising trend, the amount of military budget had never exceeded one percent of the national GDP (the average was only 0.78 and 0.82 percent from a period of 2000 to 2004 and 2005 to 2014 respectively). Realizing the military budget as much as 1.5 percent of the GDP as expected by many Indonesian leaders seemed long way to go as the amount would risk other public sectors. (Panjaitan, 2016).

Not only did the low ratio to GDP show, the military expenditure composition was becoming a consid-

eration for decision makers. The military expenditure had to be allocated not only for capital but also for personnel and goods. In fact, the combined personnel and goods expenditure dominated the whole expenditure compared to capital expenditure ideally used for upgrading the military hardware. That the capital expenditure only reached IDR 12.8 trillion (2010), 17.7 trillion (2011), 27.9 trillion (2012), 42.2 trillion (2013) and 30.4 trillion (2014) was by far lower than the others if combined (Panjaitan, 2016). The insufficient budget for capital expenditure markedly slowed up the state capability of meeting its minimum essential force (MEF) previously designed to build a deterrence strategy.

The situation was worsened by the state dependence on arms supplies from the main defense partners which absolutely cost its foreign policy and sovereignty against foreign interventions when it came to domestic problems. The arms embargo which the United States once imposed and Australia's interventionist foreign policy in East Timor separatism were fresh experiences for Indonesia (Laksmana, 2012). The other consequence of such dependence was that Indonesia had 173 variants of defense system transferred from 17 main supplier states which caused both complexity of inter-operation readiness and rising maintenance cost of worn out military hardware (Sebastian and Gindarsah, 2013; Gindarsah and Priamarizki, 2015). The situation was complicated with less competitive domestic defense industry because of low human resources along with less research and development programs related to defense technology (Tippe, 2018).

Having realized the economic-military gap, the state decision makers viewed that reducing dependence on major powers by improving on domestic production capability was a strategic policy rather than importing the ready-used arms. The cooperation in producing defense armaments with Turkey could be one of the solutions to help meet some of Indonesia's domestic defense system. The two states could share costs in producing medium tanks, drones, submarines and other military hardware. More importantly, Indonesia received the defense technology transfer through the cooperation which envisioned the future national defense technology independence.

4.3 Self-sufficiency and Self-reliance Preference among Emerging Powers and Increased Global Arms Transfer

Indonesia was aware of that the emerging powers had been pursuing their defense technology independence through their domestic defense industry empowerment. The globalization of arms transfers post Cold War provided opportunities for the states to meet their military armaments either alone or through cooperation with others which had more advanced defense technology taking shape in many kinds such as joint developments and productions, partnerships, mergers and acquisitions and joint ventures (Kurç and Bitzinger, 2018). Not only could such interaction keep a tight lid on cost among the states, it created rising arms trades in line with the export-oriented goal of their defense industry. (Institute., 2019) reported that there existed the global arms transfers not only engaging major but also a number of middle powers.

As a middle as well as a regional power, Indonesia perceived an opportunity to narrow the existing domestic defence weaknesses ranging from less developed defense technology acquisition, insufficient strategic military hardware to dependence on major powers' supplies. In addition, Indonesia looked on its future armaments exports as a consequence of defense globalization which it would possibly gained thanking to the defense technology cooperation. Turkey was viewed as a state with a respectable reputation for its domestic defense technology development and aggressive efforts to expand markets for its defense industry products. During a period of 2013-2017, Turkey ranked the 15th among top 25 global arms exporters (Institute., 2019). With the collaboration, Indonesia expected to meet some of its strategic arms need, boost its domestic defense industry through technology transfer and vary the market for its defense industry.

5 CONCLUSION

The interaction between domestic and international factors encouraged Indonesia to carry out the cooperation in defense technology with Turkey. For the state foreign policy decision makers, interpreting the situation and alternative options became a need to bring about a strategic policy as an effort to pursuit national interests. The defense technology cooperation between Indonesia and Turkey was influenced by Indonesian defense ministry and political supports

among political parties at the legislature, strengthened by the existing economic-military gap and the emerging powers' preference for defense technology self-sufficiency and self-reliance along with the rising global arms trades.

In Indonesia's point of view, the two states' cooperation would enable to step up its domestic defense industry capacity inasmuch as with which technology transfer entailed. The domestic defense technology development would benefit Indonesia in maintaining its territorial integrity and sovereignty through deterrence capability betterment, upholding its foreign policy independence to contribute to the regional stability and shifting to be a significant player in global armaments transfers in the future.

Turkey was one of the chosen partner states in realizing such agenda since Indonesia dealt on similar cooperation in Asia and other regions. The strategic decision within the cooperation with Turkey was limited to development and production of medium-tanks, military communication tools, drones and submarines, some of which are still ongoing. After all, the cooperation policy indicates that Indonesia has begun diversifying its foreign policy on international defense cooperation especially in term of technology transfer, no longer by only relying on traditional partners. The two states' relation could forward to strategic bilateral partnership bearing in mind that Turkey has been extending its foreign policy global role including into Southeast Asia.

REFERENCES

Bağcı, H. and Kurç, Ç. (2017). Turkey's strategic choice: buy or make weapons? *Defence Studies*, 17(1):38–62.

BILGEN, H. (2010). Competitiveness of defense industry in turkey. *International Journal of Economics and Finance Studies*, 2(1):63–70.

Bryman, A. and Burgess, R. G. (2002). Developments in qualitative data analysis: an introduction. In *Analyzing qualitative data*, pages 15–31. Routledge.

Coplin, W. D. and Marbun, M. (1992). Pengantar politik internasional: Suatu telaah teoritis. *Bandung: Sinar Baru*.

Fallis, A. (2013). Kunjungan Kerja Komisi I DPR RI Ke Turki. *Journal of Chemical Information and Modeling*, 53(9):1689–1699.

Gindarsah, I. and Priamarizki, A. (2015). Politics, security and defense in indonesia: The pursuit of strategic autonomy. In *Indonesia's Ascent*, pages 130–154. Springer.

Institute., S. I. P. R. (2019). *(2018) Trends in International Arms Transfers*. SIPRI Fact Sheet.

Jensen, L. (1987). *Explaining Foreign Policy*. The USA: Prentice Hall, Inc.

Kemhan. (2018). *Tugas dan Fungsi [Duties and Functions].* [Online] Available from: https://www.kemhan.go.id/tugas-dan-fungsi [Accessed 5th.

KKIP (2018). KKIP - Komite Kebijakan Industri Pertahanan Indonesia.

Kurç, Ç. and Bitzinger, R. A. (2018). Defense industries in the 21st century: A comparative analysis—the second e-workshop.

Laksmana, E. A. (2012). Regional order by other means? examining the rise of defense diplomacy in southeast asia. *Asian Security*, 8(3):251–270.

MacGillivray, I. (2019). *Turkey's Defense Industry: A Burgeoning, Global Business Reports: Turkey Aerospace and Defense.* [Online] Available from: https://www.gbreports.com/publication/turkey-aerospace-2016 [Accessed 4th.

Panjaitan, L. (2016). Menciptakan stabilitas melalui peningkatan pertahanan dan pemerataan ekonomi. In *Seminar Universitas Indonesia*, volume 20.

Pertahanan, K. (2015). *Buku Putih Pertahanan Indonesia 2015*.

Sebastian, L. C. and Gindarsah, I. (2013). Assessing military reform in indonesia. *Defense & Security Analysis*, 29(4):293–307.

Tippe, S. (2018). Defense offset policy in indonesia. *International Journal of Administrative Science and Organization. [Online]*, 20(2):85–89.

Strengthening Islamic Psychosocial and Self-confidence in Develophing Student Thinking Creative

Desi Sukenti[1] and Syahraini Tambak[2]

[1]*Fakultas Keguruan dan Ilmu Pendidikan, Unviersitas Islam Riau, Pekanbaru, Indonesia*
[2]*Fakultas Agama Islam, Universitas Islam Riau Pekanbaru, Indonesia*
{*desisukenti@edu.uir.ac.id, syahraini_tambak@fis.uir.ac.id*}

Abstract: The purpose of this study was to study self-motivation and psychosocial Islam towards the creative thinking of the Indonesian Language and Literature Education Study Program. The research problem encountered in this study is the low creative thinking of students in learning in special classes on learning media courses. The population is all students of the Indonesian language and literature education program who collected 183 people. The sample used was 132 people as the research data. The data collection technique used was a questionnaire. The data were analyzed using Statistical Version 20. Analysis of the results of Islamic psychosocial self-confidence and confidence in the creativity of students of Indonesian language and literary education study programs. The results of the study prove the proposed hypothesis received regarding self- motivation and psychosocial Islam towards creative thinking of students in the Indonesian Language and Literature Education study program. Stages of students' self-confidence, high category, obtained mean (99.55). The psychosocial stages of Islam are categorized as moderate with Mean (143.11) and Creative Thinking with Mean (96.36), with a value of F=49.273 and a value of Sig.=0.000 (P¡0.05).This confirms that confidence has an influence on the creative thinking of students of the Indonesian Language and Literature Education Study Program Faculty of Teacher Training and Education, Riau Islamic University. There is a value (F = 31.238) and a Sig value = 0.000 (P ¡0.05). This confirms that Islamic psychosocial has an influence on the creative thinking of students of the Indonesian Language and Literature Education Study Program Faculty of Teacher Training and Education, Riau Islamic University, there is a value (F = 45,221) and a Sig value = 0,000 (P ¡0.05). This confirms that Islamic psychosocial influence has 0.194%; Self-Confidence has an influence of 27.5%; while the influence of Islamic social psychology and self-confidence have an influence on the creative thinking of students of the Indonesian Language and Literature Education Study Program, Faculty of Teacher Training and Education, Riau Islamic University 42.2% of this shows that psychosocial Islam and self-confidence can shape students' creative thinking.

1 INTRODUCTION

The learning process in Higher Education wants and brings students to have the ability to be able to create, explore and be innovative to bring up ideas or ideas in solving problems. Students' creative thinking has been encountered in various studies which are still in the low category. For example, in a study conducted (Huludu et al., 2013) the element of creative thinking seen from the element of fluent thinking was very low (9.09%) and the element of flexible thinking was also very low (27.27%). Another study also conducted (Sari et al., 2013) confirmed that the students' creative thinking elements were also low in terms of elaborating elements in the low category (15.38%).

Low creative thinking, also happened to students of Indonesian Language and Literature Education Study Program FKIP Riau Islamic University. This can be seen from the lecture routine activities in the class which shows that some students are still less able to think creatively when attending learning in the Learning Media course. This should not be the case, the students' creative thinking ability is actually in a good category. Because, lecturers have provided high motivation so that students are able to contribute when lectures take place. In addition, the lecturer has also formed a discussion group to discuss issues that are to be discussed in class.

Self-confidence is a concept of science that directs human attitudes or behaviors to believe in their own

ability to act or act. Without self- confidence, humans will not be able to develop themselves and their potential to be better, because high self-confidence is an aspect that greatly affects someone in the process of creative thinking. Therefore, creative thinking is important to be given to students through the lecture process. Besides self- confidence is important, it turns out there is another aspect that says that psychosocial Islam can also contribute well to students to develop creative thinking processes in accordance with the theory put forward by Khodijah (2006) that the factors that influence creative thinking are Psychosocial Islam. This is the reason for the researchers to discuss this research related to the influence of Islamic self- confidence and psychosocial on creative thinking of Indonesian language and literary education students. But the reality is not the case, there are some students of the Indonesian Language and Literature Education study program who have not been able to think creatively as expected. This can be seen based on observations during lectures in the class in the even semester of 2016/2017 that when students are told to ask questions about the material being discussed, they are unable to build good and quality questions. When students are asked to answer questions, they are less able to elaborate constructive answers. On the other hand, when students give comments on the issues discussed, they are not smooth enough to provide arguments so that it is difficult for other students to understand and are less flexible in describing examples relating to questions. The low creative thinking of students is assumed to be overcome by Psychosocial Islam and Confidence. Among the factors that influence creative thinking are self-confidence and psychosocial Islam (Munandar, 1999). According to Khodijah (2006) that the factors that influence creative thinking are Psychosocial Islam. Creative thinking is an expression (expression) of the uniqueness of individuals in interaction with their environment. The creative expression reflects the originality of the individual. From unique personal expressions, new ideas and innovative products can be expected and characteristics such as: being able to direct oneself to a particular object, being able to detail an idea, being able to analyze ideas and the quality of personal work, able to create a new ideas in problem solving (Munandar, 1999). Creative thinking means breaking away from the general pattern that has been embedded in the memory and able to observe something that escapes the observations of others. Humans who think creatively will produce creativity, it can be said that creativity is the ability of individuals to use imagination and various possibilities obtained from interaction with ideas or ideas, other people and the environment to make con-

nections and new and meaningful results (Ministry of National Education, 2008). Creative thinking teaches students to think high and deeply with a smart, balanced and accountable approach (Johnson, 2007). If children are given the opportunity to use higher levels of thought at each level of the class, they can finally distinguish between truth and lies; appearance and reality; facts and opinions; knowledge and confidence. Naturally they can build arguments using reliable evidence and logical logic.

Johnson (Siswono, 2004), creative thinking that implies perseverance, personal discipline, and attention involves mental activities such as asking questions, considering new information and ideas that are not usually with an open mind, making relationships , especially between something similar, freely associating with each other, applying imagination to every situation that evokes new and different ideas, and paying attention to intuition. Creative thinking means trying to solve a problem by involving a view and facts of data management in the brain (Uno Hamzah and Muhammad, 2014). Whereas creative thinking is a mental activity that solves problems, proposes methods, ideas or gives new views to an old problem or idea (Husamah & Setyaningrum, 2013). In line with that creative thinking is a mental activity that fosters original ideas and new understandings (Johnson, 2007).

Creative thinking is a mental activity to find a combination that has not been known before (Huludu et al., 2013). In line with that, creative thinking or creativity is a person's ability to generate new and useful ideas that are a combination of previously existing elements to be able to solve the problem at hand (Samsiyah et al., 2015). Meanwhile, different thoughts about the definition of creative thinking that creative thinking is the ability to find different ways (Sudarma, 2013). People are called creative because they are able to find ways that are different from others, thus giving birth to different products. Creative means different. Real creativity is the potential of all people, but not everyone can take advantage of this potential. Creativity is not someone's natural talent but must be guided and fostered because it depends on the ability to think and use the division of labor of the brain. According to the Ministry of National Education (2008), the characteristics of creative thinking are:

a   Tend to see a problem as a challenge to show self-ability

b   Tends to think of alternative solutions / actions that are not carried out by people in general

c   Not afraid to try new things

d Not afraid of being ridiculed by others because it is different from habits

e Not satisfied with the results obtained

f Tolerant to failure and frustration

Think about what might be done or done from a condition, condition or object. Creativity involves the disclosure or expression of ideas and feelings and the use of various ways to do it (Beetlestone, 2011). Creative thinking involves the selection of known elements from various fields and integrating them into new formats, using information in new situations; describe aspects of experience, patterns and analogies and unconnected fundamental principles. This aspect allows people who are solving problems to come up with different solutions and which were previously not obvious, creative problem solving can be developed extensively in various fields. Creative thinking does not show that the creative mind is qualitatively different; but the reflective process is an integral part of the creative process. Problem solving allows us to adopt creative behavior or a very strong drive to change (Beetlestone, 2011).

There are four stages in creative thinking, namely; (1) Exploring, identifying what things you want to do in the current conditions; (2) Inventing, seeing or reviewing various tools, techniques, and methods that have been owned that might help in eliminating traditional ways of thinking; (3) Choosing, identifying and choosing the ideas that are most likely to be implemented; (4) Implementing, how to make an idea implemented (Istianah, 2013).

Self-confidence is a very important factor for students, because the attitude of confidence will make individuals feel optimistic and able to adjust to their social environment. Self-confidence is defined differently in psychology literature. According to Maslow, self-confidence begins with self-concept. According to Centi, the concept of self is a person's idea of himself, which gives an image to someone about himself. Sulivan said that there are two kinds of self-concept, positive self-concept and negative self-concept. A positive self concept is formed because someone has continuously received positive feedback in the form of praise and appreciation. While negative self concepts such as ridicule and humiliation (Bastaman, 1995).

According to Lauster (1978) in (Andayani and Afiatin, 1996) that self-confidence is an attitude or belief in one's own abilities so that in his actions not too anxious, feel free to do things that are in accordance with the wishes and responsibilities of his actions, polite in interaction with others , has an encouragement of achievement and can recognize the strengths and

weaknesses of yourself. Lauster illustrates that people who have self-confidence have their own characteristics, do not need encouragement from others, are optimistic and happy, not excessive, able to work effectively, be responsible for work and have fun.

Formulated several aspects of self-confidence which are the indicators as follows; a. individuals feel confident about the actions taken (Afiatin and Martaniah, 1998). This is based on the belief in the strength, ability, and skills possessed. He feels optimistic, quite ambitious, does not always need the help of others, is able to work hard, is able to face tasks well and work effectively and is responsible for his decisions and actions. b. Individuals feel accepted by the group. This is based on the belief in their ability to relate socially. He feels that his group or other people like him, actively confronts his environment, dares to express his wishes or ideas responsibly and unselfishly. c. Individuals have a calm attitude. This is based on the belief in their strength and ability. He is calm, not easily nervous, quite tolerant of various situations.

There are several aspects of self-confidence as expressed by Lauster (2002), which are as follows:

a Personal abilities, namely the ability to have someone to develop themselves where the individual concerned is not too intelligent in action, not dependent on others and knows his own abilities.

b Social interaction, namely how individuals in dealing with their environment and recognize individual attitudes in adjusting to the environment, tolerate and can accept and respect others.

c Self-concept, namely how individuals perceive and assess themselves positively or negatively, recognize their strengths and weaknesses.

d Not afraid of being ridiculed by others because it is different from habits

e Not satisfied with the results obtained

f Tolerant to failure and frustration

The term psychosocial Islam stems from a psychosocial term that has colored the world of psychology. In the context of psychology, psychosocial refers to aspects of affection, such as emotions. According to Pandu Pramudita Sakalasastra and Ike Herdiana that humans are born as social beings, where one individual needs other individuals to survive and interact and socialize. Starting from the earliest lives we already have needs. Basic human needs can be fulfilled with the willingness and ability (Sakalasastra and Herdiana, 2012).

In general, psychosocial consists of two syllables, namely psychological and social. Psychic is referring

to the circumstances of one's personality, while social is an arena of human life that is interconnected between individuals and individuals and individuals with a certain structure. Awareness and social influence are mutual. This means that social quality will be influenced by the individual's psyche and at the same time the individual's psychological qualities are affected by social conditions.

Psychosocial is a term used to describe the relationship between a person's social condition and his mental or emotional health. From his words, the term psychosocial involves psychological and social aspects. For example, the relationship between a person's fear (psychological) of how he interacts with others in his social environment. A person who is mentally healthy will react in a positive way in many situations. Unlike people who are mentally unstable, they will react negatively to everything that happens in life (Bintaranny, 2013). Irrational (irrational) thinking is one sign of a person's psychosocial condition. Often the emergence of bad prejudice or negative thoughts (negative thinking) on many things that exist in life is one of the concrete manifestations of a bad psychosocial condition, which can lead to poor social relations.

Erikson's psychosocial theory of human development is more geared towards the development of identity. Erikson insists that human development goes on continuously throughout his life (Arikson, 1963). Erikson states in his theory of psychosocial development that each individual through eight levels of development is named as a psychosocial rating. Each level is illustrated by the various psychological crises that need to be resolved by individuals before the individual will experience the difficulties in dealing with the crisis at the time of its advent (Erikson, 1950). Erikson sees the whole range of human life in the order of psychosocial conflicts, where indentation is one of the crises that occurred during adolescence until the end of human life. Erikson further sees that the development of a human being can not be relegated from the social stimulus he experienced. Social stimulus is a dynamic driver in one's personality. Erikson's emphasis on this social stimulus empowers him with other psychoanalytic figures. In the psychosocial crisis experienced, Erikson also described the development of the radius of the social relations underlying the crisis, along with the social elements and modalities of each development task (Arikson, 1963).

Erikson accepted the perspective of Sigmund Frued's theory of infantile sexuality, but rejected Frued's attempt to describe the whole personality based on sexuality. Erikson underlies the first five stages of psychosocial development in a direct corre-

lation with Frued, but includes more social factors related to human development. Erikson thinks that personality continues to develop after puberty, and adds several stages between puberty and old age. He believes that children develop socially and that all social crises affect personality development. Erikson said that each stage must be fulfilled before individuals can reach the next stage (Arikson, 1963).

Based on the opinion above illustrates that psychosocial refers to the formation of human identity closely related to the social stimulus that they experience. The existence of this social stimulus becomes a dynamic and primary driver in one's personality until he finds his identity well. The process of forming an identity is indeed not something that is easy (Hasan and Aliah, 2008). One of the important tasks of social development is the formation of identity. Formation of identity can occur through debate or conflict in the form of various questions that must be answered one by one from social development. In order to look for identity see that the Qur'an describes conflict in human life as in QS. al-Shams, 91: 7-10 and QS. al-Balad, 90: 10-11 (Ali, 2015).

Formation of identity is not easy but very important. The formation of collective self-identity can be the social identity that shapes the dynamics of the community (Hasan and Aliah, 2008). In James Marcia's research (Hasan and Aliah, 2008) who classified individuals into four identity statuses, namely; identity haziness, foreclosure, moratorium, and identity achievement. People are classified as mortgaged if they have a certain identity, but make a commitment to that identity without experiencing a crisis to determine what is best for them. people with suspended status experience problems of identity crisis. However, this can be seen from the history of Islam where the Prophets sought a lot of identity from aspects of events that occurred in the social environment.

Thus, the psychosocial meaning that has been stated above, there are still very few figures who view psychosocial aspects of Islam. So the psychosocial meaning of Islam is still very minimal to be found and there is only one psychology that constructs this from the aspects of Islamic teachings, namely Khairil Anwar. He explored the psychosocial meaning of Islam which is very different from the definition put forward by psychologist Erikson, although when starting the excavation this meaning was also examined by the general theories.

Islamic Psychosocial according to Khairil Anwar is a view that involves perceptions, motivations, beliefs and social interactions based on Islam to see a social problem that will affect individual behavior attributes in society (Anwar, 2014). Islamic psychoso-

cial here focuses on the views of someone who is based on Islam that is used to see social problems and that will affect the behavior of a person's nature in society. The psychocial emphasis of Islam is more on sources based on Islamic teachings where one's behavior and identity in the social life of the community are based on the view of seeing a social problem.

This Islamic Psychosocial has important domains, namely (Anwar, 2014): First, intrinsic to Islam which is to recognize the concept of caliphate, recognize the concept of excellence in self, recognize mission, build mission, create insight, commitment, identity, intelligence, ideals, luck, creativity, obsession and worship. Second, attitudes and social perspectives, namely prejudice, mutual trust, mutual support, cooperation, open, defensive, closed, withholding information (consisting of non-cooperative and downward appearance), experience of life (consisting of material capital and spiritual capital) experience (consists of positive and negative), interests (consisting of pendeka term and long term), wisdom (wisdom) based on the rules of Allah SWT and His Messenger, comparison (high standard values, low standard values, objective and subjective), and literature (consists of religion, philosophy and science). Third; da'wah and self- worth namely faith and confidence that is true, istikhlas, ihsan (tawajuh), ihtisab, sincere (pleased), mujahabdah nafsi, sure in the sentence thayyibah, special prayer ', knowledge ma'a zikir, ikromul muslimin, tshihunniyat and da'wah wa al-tabligh.

2 METHODOLOGY

This research was conducted at the Teacher Training and Education Faculty in the Indonesian Language and Literature Education Study Program. This study belongs to the category of correlation research which aims to examine whether there is an influence of Islamic self-confidence and Islamic psychosocial on creative thinking of Indonesian Language and Literature Education Study Program students. The population in this study were all fourth semester students who took instructional media courses in Indonesian language and literary education study programs FKIP Riau Islamic University, totaling 199 students. The sample taken in this study is part of the total population of 199 people. The data collection used in this study is a questionnaire given to all students who take courses in Learning Media. The data analysis technique used descriptive and Anova using a statistical program/SPSS program (Statistical Product Service Solution) Version 17.0 (George, 2011).

Table 1: Confidence Level of Students

Variables	N	Mean	Level
Self esteem	132	99.55	high
Islamic psychosocial	132	143.11	moderate
Creative thinking	132	9636	high

3 RESULT AND DISCUSSION

Teachers and education faculties of Islamic University of Riau 81 people (61.36%) answered in the minimum or low category. meanwhile, it was illustrated that of the 132 students studied, they had maximum confidence of 117 students (88.63%) as shown in Table 1.

It is generally illustrated that the average level of confidence of Indonesian language and literature study program Teachers and Education Faculty of Islamic University of Riau with a value (mean = 99.55) with (SD = 7.324). the value (mean = 99.55) is seen at the predetermined level to be between (83.33-99.9) which is at the high category stage. thus, it can be affirmed that the level of confidence of students in the Indonesian language and literature study program in the teacher training and education faculty of Riau Islamic university is high. That the confidence of students in the Indonesian Language and Literature Study Program at the Teacher Training and Education Faculty of Riau Islamic University is at a high level. This illustrates that respondents generally have high self-esteem with a value (mean = 99.55) seen at a predetermined level in between (83.33-99.9), which is a high level.

Islamic psychosocial stages of Indonesian Language and Literature Study Program Teachers and Education Faculties of Islamic University of Riau 81 people (61.36%) answered in the minimum or low category. Meanwhile, it was illustrated that of the 132 students studied, there were a maximum of Psychosocial Islam as many as 117 students (88.63%). Based on Table 1, it is generally illustrated that the average psychosocial level of Islamic students in the Indonesian Language and Literature Education Study Program in the Teacher Training and Education Faculty of Riau Islamic University with a value (mean = 143.11) with (SD = 16.32). Values (mean = 143.11) are seen at a predetermined level between (120-150), that is, at the moderate category stage. Thus, it can be affirmed that the psychosocial level of Islamic students of the Indonesian Language and Literature Study Program in the Teacher Training and Education Faculty of the Islamic University of Riau is moderate. Psychosocial Islam students of Indonesian Language

and Literature Education Study Program Faculty of Teacher Training and Education Islamic University of Riau are at a moderate level. This illustrates that respondents generally have moderate Islamic Psychosocial with a value (mean = 143.11) seen at a predetermined level between (120-150), which is a moderate level.

Stages of creative thinking Indonesian Language and Literature Education Study Program Teacher Training and Education Faculty Riau Islamic University 80 people (60.60%) answered in the minimum or low category. Meanwhile, it was illustrated that of the 132 students studied, there were maximum creative thinking of 123 students (93.18%). Generally illustrated that the average level of creative thinking of Indonesian Language and Literature Education Study Program Teachers and Education Faculty in Islamic University of Riau with a value (mean = 96.36) with (SD = 8,374). The value (mean = 96.36) is seen at a predetermined level between (86.66-103.9) which is at the high category stage. Thus, it can be affirmed that the level of creative thinking of students in the Indonesian Language and Literature Education Study Program at the Teacher Training and Education Faculty of Riau Islamic University is high. This illustrates that respondents generally have high self-esteem with a value (mean = 96.36) seen at a predetermined level between (86.66-103.9), which is a high level.

By using a simple linear regression test illustrated, a value (F = 49,273) and Sig. = 0.000 (P ¡0.05). This confirms that self-confidence has an influence on creative thinking students of Indonesian Language and Literature Education Study Program Teacher Training and Education Faculty of Islamic University of Riau. Based on statistical analysis, the research hypothesis which states that there is an effect of self-confidence in creative thinking, students of Indonesian Language and Literature Education Study Program, Faculty of Teacher Training and Education, Islamic University of Riau is accepted.

Based on Table 2 above, it can be illustrated. To see the magnitude of the Islamic psychosocial influence on the creative thinking of students of the Indonesian Language and Literature Education Study Program Faculty of Teacher Training and Education, Riau Islamic University, Table 2 can illustrate that, where the value (R = 0.440a) and value (R Square = 0.194). This confirms that the psychosocial influence of Islam is 0.194 which, if it is minimized, becomes 19.4%, towards the creative thinking of students of the Indonesian Language and Literature Education Study Program, Faculty of Teacher Training and Education, Riau Islamic University.

In Table 3 it shows that the magnitude of the effect of confidence on the creative thinking of students of the Indonesian Language and Literature Education Study Program Faculty of Teacher Training and Education, Riau Islamic University. Value (R = 0.524a) and value (R Square = 0.275). This explains that confidence gives the effect of confidence of 0.275 which, if it is minimized, becomes 27.5%, towards creative thinking for students of Indonesian Language and Literature Education.

In Table 4 above it can be explained to see the magnitude of the influence of Islamic Psychosocial and student confidence in student creative thinking is 0.412 which, if minimized, becomes 41.2%, towards creative thinking of students of the Indonesian Language and Literature Education Study Program Faculty of Teaching and Education of Islamic Universities Riau.

The findings of this study are supported by research conducted (Fadillah, 2016) explaining that Islamic psychosocial values and student confidence are able to elaborate or add ideas / ideas in developing creative thinking. The findings of this study are supported by the results of research conducted (Aini et al., 2018) stating that good participant's confidence is able to shape the values of activeness as part of creative thinking in learning.

The findings made (Magdalena, 2018) explaining that a good way of developing students' creative thinking is by giving freedom to explore in expressing feelings / feelings that want to be expressed naturally as in terms of expressing responses and suggestions implemented in the teaching and learning process.

4 CONCLUSIONS

The concept stage of self-confidence in accordance with the research findings that have been put forward shows at a high stage. this shows that giving students the opportunity to explore and express opinions and collaborate in lectures already owned. the results of this study are in accordance with what was done (Tarlina and Afriansyah, 2016) showing that the creative thinking ability of students is high-level through creative problem solving. shows that the Islamic psychosocial level of Indonesian Language and Literature Education students is at a moderate stage. This illustrates that students of Indonesian language and literature education study programs in general are still in the moderate category. This shows that Indonesian language and literature study program students do not have a view in terms of perceptions, motivations, beliefs and social interactions based on Islam to see a

Table 2: Model Summary [b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin -Watson
1	.440[a]	.194	.188	7.548	1.988

a. Predictors: (Constant), Islamic Psychosocial
b. Dependent Variable: Creative Thinking

Table 3: Model Summary [b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin -Watson
1	524a	.275	.269	7.158	1.670

a. Predictors: (Constant), Self Confidence
b. Dependent Variable: Creative Thinking

Table 4: Model Summary [b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin -Watson
1	.642[a]	.412	.403	6.470	1.968

a. Predictors: (Constant), Islamic Psychosocial and Self Confidence
b. Dependent Variable: Creative Thinking

social problem that will affect the behavior of individuals in society as stated (Anwar, 2014). The findings of this study also show that the psychosocial stages of Indonesian language and literary education study students are seen to be a minimum still psychosocial in Islam while the maximum number of students is in the middle stage.

REFERENCES

Afiatin, T. and Martaniah, S. (1998). Peningkatan kepercayaan diri remaja melalui konseling kelompok psikologika: Jurnal pemikiran dan penelitian psikologi.

Aini, Z., Nirwana, H., and Marjohan, M. (2018). Kontribusi penguatan guru mata pelajaran dan kepercayaan diri siswa terhadap keaktifan siswa dalam belajar. *Biblio Couns: Jurnal Kajian Konseling dan Pendidikan*, 1(1):1–11.

Ali, M. M. (2015). *Holy Quran*. Ahmadiyya Anjuman Ishaat Islam Lahore USA.

Andayani, B. and Afiatin, T. (1996). Konsep diri, harga diri, dan kepercayaan diri remaja. *Jurnal Psikologi*, 23(1996).

Anwar, K. (2014). Pengaruh mental-kognitif islam dan amalan sunnah melalui pengantara psiko-sosial islam dan estim kendiri terhadap kawalan diri dalam kalangan pesalah laku remaja.

Beetlestone, F. (2011). Strategi pembelajaran untuk melesatkan kreatifitas siswa. *Diterjemahkan oleh: Narulita Yusron. Bandung: Nusa Media*.

Erikson, E. H. (1950). Childhood and society, new york (ww norton) 1950.

Fadillah, A. (2016). Pengaruh pembelajaran problem solving terhadap kemampuan berpikir kreatif matematis siswa. *FIBONACCI: Jurnal Pendidikan Matematika dan Matematika*, 2(1):1–8.

George, D. (2011). *SPSS for windows step by step: A simple study guide and reference, 17.0 update, 10/e*. Pearson Education India.

Hasan, A. B. P. and Aliah, B. (2008). *Psikologi Perkembangan Islam: Menyingkap Rentang Kehidupan Manusia dari Pra kelahiran hingga Pasca kematian*. Rajagrafindo.

Huludu, S., OROH, F. A., and BITO, N. (2013). Deskripsi kemampuan berpikir kreatif matematika siswa kelas xi pada materi peluang di sma negeri i suwawa. *KIM Fakultas Matematika dan IPA*, 1(1).

Husamah & Setyaningrum, Y. (2013). Desain pembelajaran berbasis pencapaian kompetensi: Panduan merancang pembelajaran untuk mendukung implementasi kurikulum 2013. *Jakarta: Prestasi Pustaka Publisher*.

Istianah, E. (2013). Meningkatkan kemampuan berpikir kritis dan kreatif matematik dengan pendekatan model eliciting activities (meas) pada siswa sma. *Infinity Journal*, 2(1):43–54.

Johnson, E. B. (2007). Contextual teaching and learning: what it is and why it's here to stay. contextual teaching and learning: Menjadikan kegiatan belajar-mengajar mengasyikkan dan bermakna.

Magdalena, M. (2018). Melatih kepercayaan diri siswa dalam menyatakan tanggapan dan saran sederhana melalui penguatan pujian pada pembelajaran bahasa indonesia. *Jurnal Kajian Bahasa, Sastra Dan Pengajaran (KIBASP)*, 1(2):237–245.

Munandar, U. (1999). *Pengembangan kreativitas anak berbakat*. Departemen Pendidikan & Kebudayaan.

Sakalasastra, P. P. and Herdiana, I. (2012). Dampak psikososial pada anak jalanan korban pelecehan seksual yang tinggal di liponsos anak surabaya. *Jurnal Psikologi Kepribadian dan Sosial*, 1(02):68–72.

Samsiyah, N., Rudyanto, H. E., et al. (2015). Kemampuan

berpikir kreatif dalam memecahkan masalah mate-tatika open-ended ditinjau dari tingkat kemampuan matematika siswa sekolah dasar. *PEDAGOGIA: Jurnal Pendidikan*, 4(1):23–33.

Sari, I. M., Sumiati, E., and Siahaan, P. (2013). Analisis kemampuan berpikir kreatif siswa smp dalam pembelajaran pendidikan teknologi dasar (ptd). *Jurnal Pengajaran MIPA*, 18(1):60–68.

Siswono, T. Y. E. (2004). Identifikasi proses berpikir kreatif siswa dalam pengajuan masalah (problem posing) matematika berpandu dengan model wallas dan creative problem solving (cps). *Buletin Pendidikan Matematika*, 6(2):1–16.

Sudarma, M. (2013). Mengembangkan kemampuan berpikir kreatif. *Jakarta: PT Raja Grafindo Persada*.

Tarlina, W. H. and Afriansyah, E. A. (2016). Kemampuan berpikir kreatif siswa melalui creative problem solving. *Eduma: Mathematics Education Learning and Teaching*, 5(2).

Uno Hamzah, B. and Muhammad, N. (2014). Belajar dengan pendekatan pailkem; pembelajaran aktif, inovatif, lingkungan, kreatif, efektif, menarik.

Heutagogy Approaches for Arabic Learning in Higher Education in Industrial Revolution 4.0

Saproni Muhammad Samin, Rojja Pebrian, Alfitri Zulkifli

Department of Education of Arabic Language, Universitas Islam Riau, Pekanbaru, Indonesia
{Safroni.ahmad, rojjapebrian, alfitri}@fis.auir.ac.id

Keywords: Heutagogy Approach, Arabic Lerning, Higher Education, Indrustrial Revolution 4.0

Abstract: This article aims to address a problem formulation of the Heutagogical Approach to Learning Arabic in the Era of the industrial revolution 4.0. This research is a qualitative using a descriptive method. Whereas data collection and theoretical sampling use the Library research method. In analyzing the data, the researcher uses descriptive analysis, while the framework of this research is that if at the global level today, the world of education demands a rapid adaptation process, and one of the approaches in education is the heutagogy approach, while language learning emphasizes on skills, so far where is the compatibility of Arabic learning with the Heutagogi approach. And the conclusion is that learning Arabic at the higher education level is very possible to use a heutagogic approach.

1 INTRODUCTION

Changes that occur very quickly in this world require the world of education to be able to adapt so that they can provide the answers needed by the demands of the times, just as the drums of the industrial revolution 4.0 (RI 4.0) have changed the patterns of human thought and gave birth to new paradigms in viewing various problems of life. In the world of education, at least the approach to treating students has come to one term that is prominent, the heutagogy approach, after passing through the pedagogy and andragogy approaches. Heutagogy was defined by Hase and Kenyon "as self-determined learning studies" (Kenyon and Hase, 2001).

Heutagogyis a holistic approach to improve students' abilities, by learning as an active and proactive process, and students serving as "The main agents in their own learning, which occur as a result of personal experience" (Hiryanto, 2017).

According to (Tjandra and Santoso, 2018) the Heutagogi Method is a method of learning in which teachers and learners learn from one another. This method was created with the aim of gaining knowledge effectively and efficiently, namely obtaining as much knowledge as possible in the shortest possible time. Based on the objectives of the Heutagogi Method, this method has the same vision as the RI 4.0 Era.

The teaching of Arabic as well as the teaching of other foreign languages, is the teaching of language skills. On the other hand, there are demands arising in the current era to optimize the abundant materials on the internet and foreign language learning applications that are also a lot of alternative choices according to the wishes of the community, so that it becomes a challenge to be investigated in Arabic language teaching the possibility of using heutagogical approach. Therefore, this article aims to address a problem formulation of the Heutagogical Approach to Learning Arabic in RI 4.0 Era. This research is a qualitative research using a descriptive approach. While data collection and theoretical sampling use the Library research method, which is a method using literature (literature), whether in the form of books, notes, or reports on the results of previous studies. (Hasan, 2002). In analyzing data, the researcher uses descriptive analysis, which is data analysis which aims to provide an explanation of the research subject based on data obtained from the subject studied systematically, actual and accurate. (Brata, 1991). Data analysis in this research was carried out before entering the field, while in the field, and after being in the field. (Sugiyono, 2014).

While the framework of this research is that if at the global level related to the emergence of the RI 4.0 requires the world of education to make a process of rapid adaptation to meet the demands of change that occurs and one of the approaches to treating students who become the continuation of the andragogical

approach is the heutagogy approach, then it needs formulate the compatibility of Arabic learning with the Heutagogi approach.

2 CHARACTERISTICS OF HEUTAGOGY AS AN APPROACH IN EDUCATION

RI 4.0 has changed the pattern of human thought and gave birth to new paradigms in looking at various life problems. The Heutagogi Method is a learning method in which teachers and learners learn from one another. This method was created with the aim of gaining knowledge effectively and efficiently, namely obtaining as much knowledge as possible in the shortest possible time. Based on the objectives of the Heutagogi Method, this method has the same vision as RI 4.0, which is to improve human resources. (Tjandra&Santoso, 2018)

The heutagogy method is a method in which the instructor and learner are reciprocal in the learning process carried out, so that with the same period of time, the ideas obtained will be two times more than the learning methods in general. In this method, the teacher does not provide certain restrictions, the instructor only facilitates the learner. (Ridha, 2018)

In this case (Halsall et al., 2016) confirms deeper about the heutagogy that it has been concluded that learning is determined solely by students, the shift of paradigm towards self-determined learning, heutagogy will largely determine learning experiences for students, it will be able to contribute to the improvisation of the quality and skills demanded of a graduate in today's society. using a self-determined approach to learning and teaching provides a transformative curriculum that will enhance students' abilities.

Before that (Canter, 2012) has also been detailed by saying "Taking into account that heutagogy meets the needs of learners but learners are the most of their life without their teachers and a big part of them are in fact e-learners, a heutagogical approach to e-learning is desirable. The new concept e-heutagogy fills this gap. Meanwhile (Rachel et al., 2017) reinforces by saying thatHeutagogy is able to empower students to be able to come up with a project that is more productive in the real world today.

More precisely, the heutagogical method is one of the missions to achieve the vision of the RI 4.0 Era (Tjandra & Santoso, 2018) and is highly compatible with 21st century learning characters (Banerjee, 2019).

Chris and Hase (2001) revealed that the heutagogical approach can be used to look into the future where we are able to know how learning will become a fundamental skill, this is in view of the rapid movement of innovation and changes in the structure of society and the workplace which are increasingly becoming a reality that we witness.

Meanwhile, according to Anderson and Wheeler in (Blaschke, 2012) that Heutagogy has been referred to as a "net-centric" theory, meaning that it greatly optimizes the main advantages of the Internet. and serves as a framework for teaching and learning of digital age.

Heutagogy on the other hand is very compatible also with the character of students who have the maturity of thinking and breadth of insight that makes them ready to do distance education (Blaschke, 2012). And further, according to Kenyon and Hase (2010) in (Blaschke, 2012) asserted that by combining heutagogic practices, educators have the opportunity to better prepare students who are qualified in the workplace and most importantly to become lifelong learners, as well as to foster student motivation by fostering them to be fully involved in topics they learn themselves, because they make choices that are most relevant or interesting to them own.

According to Canning & Callan, Kenyon & Hase in (Hiryanto, 2017) that the heutagogical approach can be seen as the development of the pedagogical approach to the andragogical approach to the heutagogic approach, which ultimately demands maturity and autonomy for students. It can be said that older students need less control from instructors compared to less mature students, because they need more instructor guidance.

As has been mentioned by (Naqvi et al., 2019) that Heutagogy is a study of independent learning. students are treated as important and primary agents in their own learning process, born of their own personal experiences. this approach applies a holistic approach to developing students' abilities, with learning as an active and proactive process. (Ridha, 2019) added that Learners and teachers exchange ideas about what is appropriate for learners to learn and how to learn them or the steps of learning and what learning resources are used to achieve the specified learning goals. In other words, the learner's position is more as a facilitator or learning consultant.

In a study conducted by (Glassner, 2019) of prospective educator students, the results showed that most students in all programs experienced a sense of autonomy and capacity, learning as wandering, and more symmetrical (non-hierarchical) interaction and dialogues with lecturers and peers their group

colleagues. Heutagogy approaches increase students' intrinsic motivation for learning and reduce the gap between formal learning in the education system and natural learning in the real world.

3 TEACHING ARABIC AT THE HIGHER EDUCATION LEVEL

Since the 1970s there has been a paradigm shift in language learning. Language learning activities (more precisely teaching) which initially focused on the instructor and the teaching activities gradually shifted the focus towards students and their learning activities (Wenden and Rubin, 1987; Lessard-Clouston, 1997 and Shmais, 2003). Starting from that decade, attention to the existence of students with all its variables, including learning strategy variables (Asrori, 2012).

According to ArdaArikan in (Wahab, 2015) In this post-method era, many things have changed and require proactive and creative teachers to find a good approach and strategy, according to the goals and needs of students in learning Arabic. it can be said that this post-method era was recognized by the abandonment of "only method arguments" in determining language learning strategies. in this case, language teachers are expected to be able to produce techniques and strategies as well as to create an effective learning atmosphere in enriching the teaching process. So, not the method is more important than Arabic material, but the professionalism and understanding of the teacher's role and function as transformative intellectuals is more important than the method itself Basically teaching Arabic as other foreign languages, teaches about the four abilities (maharaat) that consists of alkalaam (speaking), al istima '(listening), alqiraoah (reading) and al kitaabah (writing).

Asrori (2012) in her inaugural teacher's oration stated that Arabic learning needs to be directed to the formation of situations that allow students to learn. It was intended that their Arabic learning activities did not depend much on the presence and design of lecturers. Moreover, by balancing the role of lecturers and students in learning Arabic, student independence is increasingly formed so that they continue to learn in a directed manner, even though it is outside the learning context.

According to Muslims (2016) The process of learning Arabic must be directed to encourage, guide, develop and foster students' Arabic language skills, both productive and receptive, as well as foster a positive attitude towards the language. The ability to speak Arabic and a positive attitude towards Arabic is very important, because it can help students to be more motivated to do more productive, creative, and innovative language activities in order to develop their Arabic language skills. For this reason, the ability of lecturers to manage the learning process through creative, innovative and fun models is a solution that can be applied to Arabic learning today.

4 CHARACTERISTICS OF STUDENTS IN THE RI 4.0 ERA

According to a World Bank report, there are 13 main qualifications of abilities needed as workers, that is; communication, positive work habits, mathematics, problem solving, English, writing teamwork, curiousity, creativity, grit, digital awareness, contextual thinking (Kemenristekdikti, 2018). Departing from the above, that as human beings who are competing in the RI 4.0 era, we need to ensure that students must have the following soft skills, namely the ability to solve problems, adaptability, collaboration, leadership and creativity and innovation.

This is reinforced by (Ridha, 2018) that the output to be produced from the implementation of this heutagogy are generations who have certain competencies with the capacity to develop and the capability to apply it to various situations and conditions in the field that are always changing and developing or in other terms generation of lifelong learners life is always evolving Therefore, if our education today is directed at the application of heutagogy, then the metacognitive abilities, the ability to understand and formulate a vision going forward must begin to be taught from the early education level.

However, what needs to be underlined is that in practice heutagogy places more emphasis on the level of autonomy and the maturity of learners in their learning, as Blaschke (2012) points out that the learners' maturity level influences the learning needs of the learner, that is, the more mature a person is in terms of the independence of their learning, the percentage of learner control must be further reduced.

In other words, although it is very promising, successful implementation of heutagogy will only be maximized if the target of learning has sufficient level of independence and maturity of learning, namely having a clear vision of learning, having a good understanding of learning trends and learning styles (metacognitive skills) possessed. (Ridha, 2018)

Lack of ability and awareness to understand life goals, learning tendencies and learning styles that

are owned indirectly impedes efforts in personal development, both personality, competence and personal capacity and capability.

Furthermore Asrori (2012) emphasized that learning independence is a prerequisite for successful students. Independent students will be responsible for their abilities, results and learning process. Creative independent students try to develop ways, actions, techniques, and learning activities without waiting for instructions from the instructor.

5 CONCLUSION

There is no doubt that heutagogy is a very compatible approach to the RI 4.0 era. where Educators today are required to develop the concept of lifelong learners who can develop and survive in the era of the global economy, namely Students where they have the ability to creatively and effectively apply their competencies and skills to new situations in a constantly changing and complex world. forming competent students is essential for life in a culture and economy that is rapidly changing, characterizing the postmodern era. In addition to, the development of Arabic learning has reached the gate of the post-method era, where methods are no longer seen as the main factors determining the success of the language learning process on the one hand, and on the other hand, language teachers are given greater freedom and space to determine learning strategies and techniques, without being bound by certain methods whose philosophical assumptions have already been established in the language teacher or teacher before teaching language in the classroom. So based on the characteristics of each of the heutagogical approaches, the characteristics of the demands of the RI 4.0 era and the characteristics of Arabic teaching in tertiary institutions, it can be concluded that the heutagogic approach for learning Arabic at the university level in the era of the RI 4.0 era is a necessity.

REFERENCES

Asrori, I. (2012). *Menuju Pembelajaran Bahasa Arab Yang Lebih Memandirikan (Maha) Siswa Yang Lebih Memandirikan (Maha) Siswa*. Naskah Pidato Pengukuhan Guru Besar.

Banerjee, P. (2019). *Heutagogy: A Self-Determined Approach Enhances Constructivism, International Journal Of Scientific Research And Review, 07(06)*. Pp. 223-230.

Blaschke, L. M. (2012). *Heutagogy And Lifelong Learning: A Review Of Heutagogical Practice And Self-Determined Learning, Irr Odl, 13(01)*. Pp. 56-71.

Canter, M. (2012). E-heutagogy for lifelong e-learning. *Pp. 129-131. Doi:*, 10.

Glassner, A. (2019). *Heutagogy (Self-Determined Learning): New Approach, Journal Plus Education, (Si Isat/2019)*. Pp. 40-44.

Halsall, J. P., Powell, J. L., Snowden, and M. (2016). Determined learning approach: Implications of heutagogy society based learning. *Cogent Social Sciences. Cogent*, 37.

Kemenristekdikti (2018). *Membangun Indonesia Dengan Tenaga Kerja Berkualitas*. Pp. 1-19.

Kenyon, C. and Hase, S. (2001). *Moving From Andragogy To Heutagogy In Vocational Education*. Eric.

Naqvi, T. F., Parvez, and J. (2019). Considering heutagogy as an innovative approach for skill development dr. , *Socialsci Journal*, 3.

Rachel, R., Komattil, and R. (2017). *Heutagogic Approach To Developing Capable Learners, 39(3)*. Pp. 295-299.

Ridha, M. (2019). Heutagogi dan arah pendidikan 4. *0 Kita. Available at: https://tinyurl.com/yyms4ts9 (Accessed:*, 24.

Tjandra, E. and Santoso, I. C. (2018). *Metodologi Heutagogi dalam Perspektif Keilmuan di Bidang Desain Interior pada Era 4*. 0.

Wahab, M. A. (2015). Pembelajaran Bahasa Arab Di Era Posmetode, ARABIYAT: Jurnal Pendidikan Bahasa Arab dan Kebahasaaraban, 2(1). 10:59–74.

Integrated E-Learning Implementation at University Learning Process

Sri Yuliani[1] and Dicki Hartanto[2]

[1]*Universitas Islam Riau, Pekanbaru, Indonesia*
[2]*Universitas Islam Negeri Sultan Syarif Kasim, Riau, Indonesia*
tengkunila@psy.uir.ac.id, dips.puspita@gmail.com

Keywords: Integrated E-Learning, University Learning Process.

Abstract: Even e-learning application in some universities in Riau has began in 2010, but in learning practice, the e-learning has not been done with integration with other methods. Therefore, the study was interested to be done. The study was conducted at 2 universities in Riau in 2018. The sample of study was the students followed e-Learning. The sampling technique was purposive sampling. From the findings, it is seen that the application of distance education or e-learning during the processes of learning in both universities were still limited. From the interviews, the students' opinions were summarized as follows: 1) To provide appropriate materials in the e-learning, 2) To offer more variations in e-learning, 3) To add more attractive images, 4) To integrate the e-learning in learning processes 5) To announce information about activities in the university, 6) To add words and video of motivation, 7) Each material should be attributed to applied context. The integrated design of e-learning in the university is proposed to be implemented in both university with the steps of integrated e-learning that can be divided into 3 steps as below: 1) Preliminary 2) Progress and 3) Evaluation. In supporting the e-learning integration, the facilities and methods required were identified.

1 INTRODUCTION

The implementation of ICT (Information and Communication Technology) recently grows so rapidly. Even, the current ICT utilization has developed to various areas such as economic, social, trade, agriculture, education and other areas. This phenomenon is increasingly recognized inseparable from the belief in the benefits perceived by the public in assisting the tasks and activities undertaken. When the use of ICT in the 2000s was considered a new and luxurious, but currently, ICT is no longer like that happened 10-15 years ago. From the people in the village to the city, from lower education to university is very dependent and really need this ICT utilization. From various usage of ICT, browsing activity may be one of the most common Internet activities performed. By browsing, an internet user will obtain the desired text. Off course, an administrator (usually abbreviated admin) of e-learning course can see the potential of research in e-learning. But they are not alone. People who have used the Internet also (or using e-learning) can see the potential of the research. The emergence of e-learning research is still virtually new, because it is the advent of e-learning is also crowded not until a dozen of years.

Presently, the number of universities that have implemented Distance Education or e-learning is still very minimal. From total 4,741 universities in Indonesia, only 15-20 campuses of them have already applied the online lectures. "How many of the 4,741 tertiary institutions, about 15-20 universities have already implemented e-learning," said Minister of Research, Technology and Higher Education, Mohamad Nasir after the ceremony commemorating the 2019 National Education Day, on University of Indonesia (UI) campus, Depok, Thursday, May 2, 2019.

The lecturers preparation is not only done through training, but also grouping or clustering. From the results of FGD, the next stage is training the campus to prepare studio infrastructure. "The next is the online lecture system, later the lecturers and later we will coordinate the chancellors in universities in Indonesia," Nasir concluded. The Ministry of Research, Technology and Higher Education targets an increase in the higher education gross enrollment rate (APK) of 50 percent in the next five years. In addition to continuing to run lectures on conventional (face-to-face) courses, the target will also be boosted by increasing the application of Distance Education or e-learning in universities.

In general, we should understand on what the e-Learning is in fact. e-Learning is a distance learning which use technology, network of computer and or Internet. e-Learning makes possible the learners to learn through computers in their respective places without having to physically go to follow lessons / lectures in class. e-Learning often understood as a form of web-based learning that can be accessed from the intranet on a local network or the Internet.

Although the application of e-learning systems that exist today are very varied, but all of it is based on a principle or concept that e-learning is intended as a distribution of learning materials through media of electronic or the Internet, so that students are able to access them anytime from around the world. The characteristic of learning with e-learning is to create a learning environment that is flexible and distributed. The flexibility became the key word in the e-learning system. Students become very flexible in choosing the time and place to study because they do not have to come in somewhere at a certain time. On the other hand, the lecturer can renew its learning materials anytime and from anywhere. In terms of content, the learning material can be made very flexible ranging from text-based lecture material to material that is loaded with multimedia components.

The quality of learning with e-learning was also very flexible or varied, which could be worse or better than face-to-face learning system (conventional). To get a good e-learning system is needed a good design as well. The distributed learning refers to learning in which teachers, students, and teaching materials situated in different locations, so that students can learn anytime and from anywhere they are. In designing e-Learning systems, we need to consider two things, namely the participants or students who become targets and the expected learning achievements. An understanding of the learners is very important, namely, among others, the expectations and their goals in a follow e- learning, the speed in accessing the Internet or a network, bandwidth limitations, the cost for Internet access, as well as background knowledge concerning the readiness of the following study. To understand the outcomes of learning required to determine the material scope, learning achievement assessment framework, as well as prior knowledge.

From the research of the KTP students, the readiness of PSB course participants in e-Learning are as below : 1). Quite adequate utilization of IT experience to follow e-Learning, but there was still 7% who did not have sufficient experience, 2). Accessibility of technology usage has a great achievement of 70%, but the rest of 30% is still limited in accessibility, 3). IT-based learning habits of students were adequate, but there were 14% of students that were not used to learn by utilizing IT, 4). Online learning preferences of students shows that 19% of students preferred the conventional way. From the results, it deserves to be utilized as a communication option that complements the traditional classroom, but still requires the consistently development, where it is visible on the side of the design that was quite feasible used but it was only in the good criteria (75%). In the aspect of media display, it's categorized as good (74%). Specifically from the aspect of media, the usage of images and videos that were relevant to support the presentation improved the quality of the web significantly (Pujiriyanto, 2010).

E-Learning application in the universities in Riau, Indonesia varied based on facility and supported policy in each university. In UIN Sultan Syarif Kasim Riau as a state university in Riau, e- learning had initiated with workshop and training provided to lecturers from 2010 to 2014, while in Universitas Islam Riau had started e-learning from 2015. In fact, there are still small number of lecturers that apply it in the process of learning. To encourage the achievement of the vision and mission of university and study programs, they should be formulated in the Strategic Plan of each university, therefore e-Learning and its implementation for the lecturers and students to face 4.0 Industrial Era are very urgent to be applied. Therefore this study is very interested to be done by the universities in Indonesia, especially in Riau.

2 LITERATURE REVIEWS

Yusuf (2005) explained that the education has been influenced by ICTs, that have undoubtedly given the effects on the teaching, learning, and research. Then Al-Ansari (2006) had the opinion which a lot of researches have proven the benefits to the education quality. ICTs provide the potential to innovate, accelerate, enrich, and deepen the skills, to motivate and engage the students, to help experiences of the schools to work practices, create economic viability for tomorrow's workers, as well as to strengthen teaching and helping schools change (Davis and Tearle, 1999; Lemke and Coughlin, 1998; cited by Yusuf, 2005). Then Jhurreev (2005) declared that so many has been declared and reported about the technology effects, especially computers, in education. In the first, the computers were used to teach computer programming but the development of the microprocessor in the early 1970s

saw the introduction of affordable microcomputers into schools at a rapid rate. The computers and applications of technology became more pervasive in society which led to a concern about the need for computing skills in everyday life.

New Media Consortium (2007) states that ICT gives an entirely new learning environment for students, thus requiring a different skill set to be the successfulness of critical thinking, research, and evaluation skills are growing in importance as students have increasing volumes of information from a variety of sources to sort through. ICT is changing teaching and learning processes by adding elements of vitality to learning environments including virtual environments for the 6 purposes. ICT is a potentially powerful tool for offering educational opportunities. It is difficult and maybe even impossible to imagine future learning environments that are not supported, in one way or another by ICT.

E-learning is learning that is structured with the aim of using electronic or computer system that can support the process of learning (Michael, 2013), while according Chandrawati (2010) e-Learning is a distance learning process by combining the principles of the learning process technology. Ardiansyah (2013) defines e-Learning as a learning system that is used as a tool for teaching and learning process is carried out without having to come face to face directly between teachers and students. According (Heinich et al., 2005), e- learning can often be done in a live, face-to-face teaching and learning is called blended or mixed (hybryd learning). Likewise, e-Learning is intended to complement online learning, not for conventional learning.

The characteristics of E-learning based on the opinion of Nursalam (2008: 135) are described as follows:

- To utilize the electronic technology service.

- To utilize the computer advantages (digital media and networks of computer)

- To use the teaching materials which is independent (self-learning materials) and then stored in the computer, so it can be accessed by the lecturers and students anytime and anywhere.

- To use the schedule of learning, curriculum, learning progress results, and all matters related to the education administration can be checked any time on the computer.

E-Learning in a broad sense can include the learning that are available in electronic media (internet) either formally or informally. E-Learning formally, for example learning with the curriculum, syllabus, subjects and tests that have been organized and prepared on a schedule agreed upon relevant parties (manager of e-Learning and learners themselves). The learning like these are usually high level interaction and required by the company to its employees or distance learning managed by universities and companies (usually consulting firms) which are usually engaged in the e-Learning provision to the public (Rahmasari and Rismiati, 2013).

According to Pranoto et al (2009: 309) that some of the benefits of learning E-learning can be described as follows:

- The e-learning utilization to support the implementation of the learning process can improve the students absorption on the material being taught.

- Increasing the active participation of students.

- Improving the self-learning ability of students.

- Improving the quality of teachers and training materials.

- To improve the ability to display information with information technology devices, where the devices are very difficult to implement.

While related to integrated e-learning, the study of Geoffrey Kituyi and Irene Tusubira (2013) concluded that the requirements for the integration of e-learning and other learning methods were identified as the use of projectors, mixing face-to- face and e-learning, harmonizing course content for e-learning and face-to-face during design phase and incorporation of 3D pictures in face-to-face. In addition, the use of videos, audio tapes, guest lecturers, textbooks and other reading materials and training were also suggested as requirements for successful integration of e-learning. These findings agree with Kanovsky and Or-Bach (2001); Raja (2004; O'Neill et al, (2004).

3 METHODS

3.1 Location, Sample, Sampling Technique and Instruments

Research was done at the State Islamic University (UIN) of Sultan Syarif Kasim Riau and Universitas Islam Riau in 2018, Pekanbaru.

Data was collected with purposive sampling in both university. population was restricted to students who had been studying in this college at least for 2 year, so that they can provide objective opinions and

judgments and unreliable about the implementation of e-learning in learning processes.

The research instruments used in this study were Interviews, observations and documentations from the universities in Riau.

3.2 Research Steps

The steps performed in this study are as follows:

- Preparation: theoretical frameworks and research instruments
- Development: Design Development of integrated e-Learning
- Application of e-Learning: integrated e-Learning Application
- Model of integrated e-Learning based on interviews and observations.
- Conclusion: Summing up the findings of research

3.3 Data Analysis

The data was analyzed descriptively after the observations and interviews done. According to Agus Irianto (2004) that even descriptive research results are simple, but the user of this simplification can take the meaning of the data. The assumption that this would cast doubt not always true, because there is the possibility of the nature of existing data can only be analyzed descriptively.

Procedures of analysis began with the descriptions of e-learning implementations in both universities with their own characteristics. Then, the proposed model of integrated e-learning is submitted as the future model of integrated e-learning that can be applied in each university.

4 FINDINGS AND DISCUSSION

4.1 Research Findings

From all the descriptive statistical analysis obtained in the study, then the researcher subsequently provided conclusions and discussions related to the data that was generated. Discussion and conclusions obtained were followed or supported by the theories that have been constructed by the researchers associated with the discussion.

In addition to the existing theory, researcher also included some information or additional information obtained from the students or respondents' opinions about the role of higher education in general. The application of ICT through e-Learning at UIN Sultan Syarif Kasim Riau is done as follows:

- 1) E-learning UIN Suska Riau is implemented with integrated online learning paradigm using the LMS (Learning Management System) which is very well known "Moodle".
- The system of e-learning has been functioning as being expected and can be accessed via the URL: http://elearning.uin-suska.ac.id
- With e-learning system, the lecturers can manage the learning material, namely: preparing a syllabus for the course, uploading the learning material, assigning tasks to the student, the student receives a job, creating the tests / quizzes, providing students' scores, monitoring the activity of students, interacting with students and other lecturers through discussions in forums and chat and others. In addition, students can access information and learning materials, interact with students and lecturers, conducting transactions of lecturing assignments, taking tests / quizzes, and so forth.
- E-learning at UIN Sultan Syarif Kasim Riau is implemented by using LMS Moodle. LMS is a software for creating course materials on-line (web based), managing learning activities and results, facilitating interaction, communication, cooperation between lecturers and students.
- e-Learning with Google Classroom also has been developed by PTIPD UIN Sultan Syarif Kasim Riau to support learning processes with online base.

Moodle is an open source LMS which can be got freely through http://moodle.org. Moodle can easily be used to develop an e-learning system. The e-learning portal with Moodle can be modified as needed. Currently there are over 28 thousand e-learning sites in more than 186 countries developed with Moodle (http://moodle.org/sites/). Meanwhile, in Indonesia there are more than 157 sites developed with Moodle e-learning included in UIN Sultan Syarif Kasim Riau.

The designed e-Learning in UIN Sultan Syarif Kasim Riau can be found as below :

Universitas Islam Riau (UIR) has been carrying out an E-Learning program since 2015, but has not been implemented effectively. E-Learning is a computer electronics that gets learning materials that are suitable for their needs and delivered teaching materials to students using internet media, or other computer network media.

Figure 1: E-Learning with Moodle in UIN Sultan Syarif Kasim Riau

Figure 2: Implementation of e-Learning for all faculties in UIN Sultan Syarif Kasim Riau

The purpose of UIR is to implement E-Learning to improve the quality of lecturers in providing learning, making it easier for students to understand the material and assignments given by the lecturer because they have been informed from the beginning. So that the classroom atmosphere becomes more active.

E-learning implemented in Universitas Islam Riau with integrated online learning paradigm is described as below :

- Implementation was done by each faculty with various methods

- Lecturers and students must have an UIR email. UIR email can be registered at sikad.uir.ac.id on the email registration menu provided like edu.uir.ac.id for the lecturers and student.uir.ac.id for the students

E-Learning application is intended for all lecturers and all fields of study. For this reason, UIR needs to make various efforts so that this system can be implemented such as making internet shops so that students who do not have laptops can also take part in this program. "By implementing this system,

the lecturers in the class are only facilitators both theoretically and pragmatically. "Field issues and empirical data can enrich students and lecturers in conducting discussions and there are still many obstacles faced such as lecturers who are still stuttering technology and students who do not have facilities such as laptops and UIRs themselves do not have large capacity servers to accommodate this system so that communication is smooth and not slow," said Deputy Rector I UIR, Dr. Nurman, S.Sos, M.S (AKLaMASI on Friday 24/2/2017).

Figure 3: E-learning in FKIP UIR

Figure 4: E-learning in Psychology UIR

When interviewed about E-learning there were students who disagreed like Putri Royantika (Teaching and Education Faculty) and Nartiyani (Faculty of Economics) on the basic reason that the e-Learning system was complicated and difficult, while Desti Nur Anisa Sundari (Faculty of Communication Sciences) if e-learning is implemented it will make it easier to follow the fields of study provided by lecturers and more closely follow technological developments.

In recent years, UIN Sultan Syarif Kasim Riau has continued to promote the development of ICT in order to support the development of the quality of teaching, administration and finance in supporting

the effectiveness and efficiency of higher education in order to support the achievement of the vision and mission of UIN Sultan Syarif Kasim Riau, one of which is related to the development of technology.

As for efforts in improving the quality and academic services, UIN Sultan Syarif Kasim Riau issued several strategic policies such as the implementation of SIMAK (Academic Management Information System), KRS Online and Free Wifi for the academic community. Even in 2015, it was developed further of Integrated Systems of Iraise through the innovation conducted by Computer Center at UIN Sultan Syarif Kasim Riau. This was done in addition to the use of technology in support of academic and simplify the process of academic services, as well as to amend paradigm from a manual system to a digital system.

While in the field of teaching education, UIN develops special blog for lecturers and students, provides special e-mail for university such as: dicki.hartanto@uin-suska.ac.id, continues to develop e-learning, e-journal that can be accessed directly online, the alumni- online based tracking system, the manufacture of correspondence and other online. In 2015, LPPM is also as one of the institutions at UIN Sultan Syarif Kasim Riau that applied the registration process for research and community services with online system. From the use of ICT, it is expected in the next few years, both academic, financial and teaching began gradually shifting from the traditional one into the multimedia system.

4.2 Discussion

The below model is one integrated model that was proposed by Geoffrey Kituyi and Irene Tusubira (2013) that was divided into 3 phases as below :
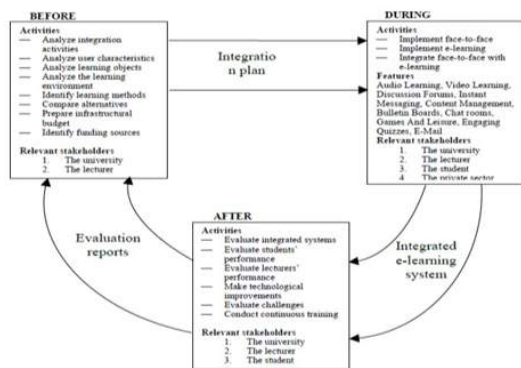

Figure 5: Integrated E-learning Framework by (Kituyi and Tusubira, 2013)

The application of e-learning in both university in Riau still varied and have different design, although

they have some similarities like the implementation of e-mail for lecturers, staffs and students. In learning process, UIN Sultan Syarif Kasim Riau has used e-learning with moodle, while in UIR has applied e-learning by using blogspot or any designed web in each faculty. In general, the implementation of e-learning in the universities in Riau is still very limited and not grow quickly.

The current implementations of e-learning can be explained as below :

- E-learning is applied in moodle and blogspot or paid web design.
- E-learning is not managed properly by both universities
- Methods of e-learning implementation in both universities are not clear.
- There are no particular policies from universities to implement e-learning.
- Limited training and workshops are done to support e-learning application in the university.

Therefore, the integrated design in e-learning in the university is proposed to be implemented in both university that become the sample of this study.
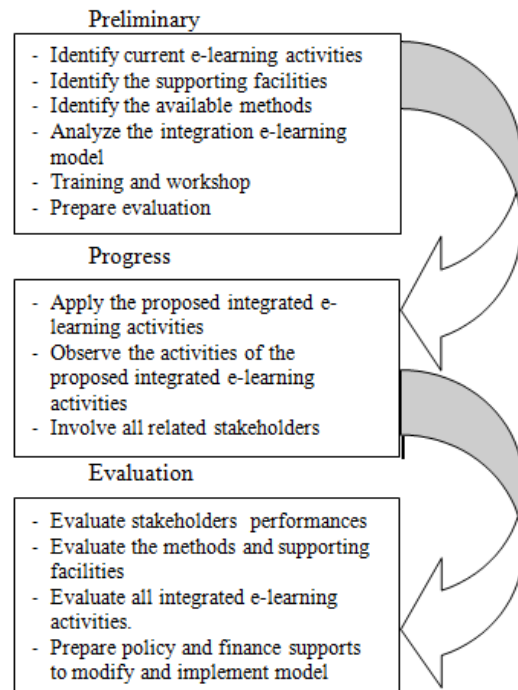

Figure 6: Proposed Integrated E-learning Model (Yuliani and Hartanto, 2019)

To support the e-learning integration, the facilities and methods required were identified like projection equipment as infocus; implementation of e-learning

methods to teach online and direct learning method to administer the tests and exams; course content harmonization for e-learning and direct learning method during design phase; incorporation of 3D pictures, audio and videos in classrooms among others, integration traditional methods with update social media implementation like Whatssup, Line, Facebook, Instagram and others online methods like website or blogs that can be freely done.

From the observations and interviews, some respondents' opinions of students about e-Learning-based are summarized as follows: 1) To provide appropriate materials with integration, 2) To offer more various learning, 4) To announce information about activities in university, 5) To integrate e-learning in learning processes 6) To add words and video of motivation, 7) Each material should be attributed to applied context.

5 CONCLUSIONS

This study concluded that the e-Learning implementation in both universities seems limited and need to develop the alternative model by the supports of university management. Some efforts to improve the e-learning as below: 1) To provide appropriate materials in the e- learning, 2) To offer more variations in e-learning, 3) To add more attractive images, 4) To integrate the e-learning in learning processes 5) To announce information about activities in the university, 6) To add words and video of motivation, 7) Each material should be attributed to applied context. The integrated design of e-learning in the university is proposed to be implemented in both university with the steps of integrated e-learning that can be divided into 3 steps as below: 1) Preliminary 2) Progress and 3) Evaluation. In supporting the e- learning integration, the facilities and methods required were identified. Then, it is recommended to conduct next study on the e-Learning implementation based on integration by each university and lecturers. Then, the design of e-Learning should be updated frequently to improve the learning processes.

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REFERENCES

Al-Ansari, H. (2006). Internet use by the faculty members of kuwait university. *The electronic library*, 24(6):791–803.

Ardiansyah, I. (2013). *Eksplorasi Pola Komunikasi dalam Diskusi Menggunakan Moddle pada Perkuliahan Simulasi Pembelajaran Kimia*. Universitas Pendidikan Indonesia, Bandung-Indonesia.

Chandrawati, S. R. (2010). Pemamfaatan e-learning dalam pembelajaran. *Jurnal Cakrawala Kependidikan*, 8(2).

Heinich, R., Molenda, M., Russell, J. D., and Smaldino, S. E. (2005). *Instructional technology and media for learning (8ed)*. Merrill prentice Hall, New Jersey.

Jhurree, V. (2005). Technology integration in education in developing countries: Guidelines to policy makers. *International Education Journal*, 6(4):467–483.

Kituyi, G. and Tusubira, I. (2013). A framework for the integration of e-learning in higher education institutions in developing countries. *International Journal of Education and Development using ICT*, 9(2).

Michael, A. (2013). Michael allen's guide to e-learning. *Canada: John Wiley & Sons*.

New Media Consortium, . (2007). *Horizon Report*. retrieved July 1 2007 from www.nmc.org/pdf/2007_Horizon_Report.pdf.

Nursalam and Efendi, F. (2008). *Pendidikan dalam Keperawatan*. Salemba Medika, Jakarta.

Pranoto, Alvini, d. (2009). *Sains dan Teknologi*. PT Gramedia Pustaka Utama, Jakarta.

Pujiriyanto (2010). *Pengembangan E-Learning Berbasis Learning Management System Pada Mata Kuliah Pengelolaan Sumber Belajar E-learning berbasis LMS*. Laporan Penelitian.

Rahmasari, G. and Rismiati, R. (2013). *E-Learning Pembelajaran Jarak Jauh. Penerbit Yrama Yudha, Bandung*, volume 103. Yrama Yudha, Bandung.

Yusuf, M. O. (2005). Information and communication technology and education: Analysing the nigerian national policy for information technology. *International education journal*, 6(3):316–321.

Pekanbaru City Citizens Motivations in Communicating with Refugees in Indonesia

Happy Wulandari, Abdul Muati Ahmad and Jusang Bolong

Faculty of Modern Languages and Communication, Universiti Putra Malaysia, Selangor, Malaysia
hwulandari03@gmail.com, {abmuati, jusang}@upm.edu.my

Abstract: Discovering the motive of why local citizens like to engage in communication with refugees can provide an overview and insight to us in the study of intercultural communication in the situation of local citizens and refugees in Pekanbaru city, Indonesia. This study used a qualitative method and rely on the researcher, an open-ended in-depth interview, and observations to collect data. Data collected analyzed by using thematic for the transcription and disclosure analysis for the observation data. Informants gathered by using purposive sampling, other than requirement applied for that, the informants willingness to be involved in the study also be considered. As this study focus on fulfilling the objective of the study, the result revealed the motive the local citizens have why they want to communicate with the refugee is: inclusion, friendliness, and potential prospect.

1 INTRODUCTION

A discovery of Pekanbaru city citizens motive of communication branched from researcher curiosity on why the local as the host community would engage in communication with refugees despite there was no obligation for them to do so and with the situation where both parties disabilities in the language barrier. The local could leave refugees alone since they are under UNHCR and immigration care, but they dont. Instead, they are trying to have a relationship with refugees, communicate with them casually, hang out with them, and maintain a friendship with them. In addition, quoting the authority, the situation between the local in Pekanbaru with refugees is *conducive, orderly and fine*. As a result, researcher attracted to understand the motive of the local behavior in communicating with refugees.

This study of how Indonesian treats and behaves on refugee is expected to contribute to government policy on how to treat its society, on how to have a role in a global level by involving the community, and bring out the image of the Indonesian intercultural communication act and view toward the new phenomenon, and foreign issues. Indeed, with that purpose, this study would be beneficial not only for the government but also for any institution related department to refugees and the host community and the social issue in society.

2 BRIEF PICTURE OF REFUGEES AND HOST COMMUNITY SITUATION

The wave of refugees begins for a reason where a person, a group of people, sometimes a village forced out of their country because of combat, conflict or violence in their country. Usually, refugees remain close to the nearest countries from which their origin before joining resettlement to the third country. For example, Rohingya to Indonesia or Somali to Kenya, while others keep moving on in the hope to get permanent protection or permanent place to continue their lives restored. These people, later taken care by UNHCR or related humanity organization to channel to a certain developed country to get protection or even new permanent citizenship.

Now there are approximately 68, 5 Million of them around the world (UNHCR, 2018). Under the reason of humanity, many countries help these people temporarily, including Indonesia as one of the transit countries in South Asia.

Despite the fact that refugees need to be helped because of their situation, the continuity life between

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the host community and the refugees is not necessarily peaceful, most of it is in a fragile situation where mistrust swirl around the air. For example, xenophobia and anti-refugee in German (Benček and Strasheim, 2016), the protest of South Korea toward Yemeni refugee to the government (Smith, 2018) even though the government is trying to transforming its policies and practices toward the growing population of refugees (Schattle and McCann, 2013), and other patterns that can be easily found on the news nowadays.

If the assumption toward the issues between host community and refugee is because dissimilarities of the people and the refugee in those countries have to one another, apparently, that is not necessarily true. Such as Jordanian and Syrian which eventually after two years accommodating them, high tension rise between them (Luck, 2013) By the same token, a Somali refugee in Kenya, where the Human Security Issues there was in solving the easily broken social environment between both (Kumssa and Jones, 2014).

In contrast to those phenomena, the local citizens and refugees in Indonesia known as a secured and nonviolent up until now. Then this becomes unique and worth to examine in depth form so it can be revealed what an advantage in the situation Indonesia might be.

3   REFUGEES IN INDONESIA

As a transit country, Indonesia government together with the UNHCR, actions in three steps to help the refugees: discovering-settling-monitoring during the time refugees remain in Indonesia. As for how it has been known that refugees mostly coming from paths that mostly not in the safe way, such as Myanmar refugees who arrived after moment wobbling in the sea and helped by Indonesia fishery who found them. That is why Indonesia government start its work by discovery.

Once in the past, Indonesia successfully participates in helping the victim of the Vietnam War by serving one from its islands in Pulau Galang, Batam City, Indonesia to accommodate Vietnam War refugees in 1970s-1990s. The camp is emptied by now since the Vietnam Wars refugees fled back to their country. However at the time 1970s-1990s many things happened there, as a human being there were sickness, life, and death, so things from the past remain there.

Pekanbaru City is one of the 13-pointed city to accommodate international refugees, known for it's an encouraging and safeguarded relationship between

the local citizens and the refugees (Putra, 2015). There is 1,133 population of refugees in Pekanbaru city who come from 11 countries, Afghanistan, Pakistan, Iran, Iraq, Srilanka, Myanmar, Palestine, Bangladesh, Jordan, Somalia, and Sudan (Harismanto, 2019).

Acting as a transit country means Indonesia giving momentary accommodation for refugees. It is, but practically it doesnt. According to the Pekanbaru immigration officer, truthfully it is unlimited. After 10 years accommodated in Indonesia, its up to the refugees with UNHCR where will they be going next (Harismanto, 2017). Apparently, with third countries undermining their acceptance, refugees may be stuck for a lifetime in Indonesia (Bemma, 2018; Cochrane, 2018).

Table 1: Refugees in Indonesia in December 2016

Country	Refugees	Asylum-seekers	Total
Afghanistan	4,379	2,775	7,154
Myanmar	887	67	954
Somalia	545	898	1,446
Sri Lanka	343	197	540
Nigeria	-	725	725
Iraq	374	572	946
Others	1,296	1,344	2,640
Total	7,827	6,578	14,405

Source: UNHCR Indonesia Factsheet, December 2016

4   PEKANBARU CITY ON REFUGEE

According to UNHCR, Pekanbaru is in the top five cities that accommodate the most refugees from 13 cities (Ant, 2018) with the number growing, recent data stated there are 1.176 refugees in Pekanbaru (Putra, 2018).

Refugees in Pekanbaru is coordinated under legal political and human rights coordination ministry, managed by the authorized immigration together with International Organization for Migration (IMO) that also part of UNHCR. So the immigration work in discovery, accommodate, security, and observation. Since this a coordinated work from the central government, then local authorization continue the responsibility following the guidance from the center.

Because the number continues to grow, immigration in Pekanbaru had to manage refugees onto several places called as community house and detention house. Those named Wisma Panel Rumbai, Siak Resort,, Hotel Rina, Hotel Satria (1, 2, 3), Hotel D Cops, Wisma Indah, Hotel Tasoya, and Wisma Novri where

this study conducted (Putra, 2018). In addition, recently the Pekanbaru immigration had to move some of refugees onto farther place named Hotel Orchid (Armanda, 2019), with the reason to make refugees comfortable, minimize clash between them, and other reasong related to health and sanitary.

Pekanbaru is the capital city of Riau Province, in Indonesia. It is in Sumatera Island; with its 1,046 Million residents (Jumlah Penduduk, 2017) make it one of the most populous cities on this island, after Medan and Palembang. Since it is located on the Siak River, which drains into the Strait of Malacca and with its access to the busy strait and trading port, made Pekanbaru City famous for its trade route (Pekanbaru, 2019). Known as Malay island, Pekanbaru city shared Malay cultural value and Muslim religion as the major religion followed by the society.

Most of refugees are Muslim, since they come from Muslim country such as Afghanistan, Iraq, and Iran which researcher thought this similarity could be the aspect that chance of those refugees to stay in Pekanbaru bigger. Even some of them come from Myanmar, however those who arrived in Pekanbaru happened to practice Islam too. However, further research on this is necessary that researcher would like to ask it to the informants in this study.

5 RESULTS AND DISCUSSIONS

Pekanbaru city hosts 1,133 international refugees onto 8 community houses and 1 detention house (Harismanto, 2019). Community house placed among locals residence which made refugees immediately contact with locals in their daily activity.

Table 2: Refugees in Wisma Novri

Nation	Total
Palestine	33
Myanmar	32
Iraq	27
Afghanistan	11
Iran	8
Somalia	5
Sri Lanka	4
Syria	1
Jorda	1
Pakistan	2
Total	124

Source: Pekanbaru city Immigration, 2015

In the first place, following the Interpersonal Communication Motives Model (ICM) by Graham et al.,

(1993), directed that motive communication evaluated by the reflection in how a person talks with others (communicator style), who a person talks to (relationship level), and what a person talks about (self-disclosure). Considering those aspects, there are three themes arises as to the result of the research objectives. The motive of communication is for the sense of inclusion by the local citizens toward the refugees, then as the sign of friendliness, and the last is potential prospect which means informants see refugees as a potential market.

In addition to this aspect, the researcher also considers the result of the Hofstede cultural dimension, to see the possibility of locals behavior from a culture point of view. The Hofstede insight releases the result on the page with the details of Indonesia as follow: low score in uncertainty avoidance, a high score in power distance, a collectivist culture, considered low masculine, and a long term orientation culture.

Table 3: Refugees in Wisma Novri

Name	Gender	Age	Brief Background
Yul	Female	52	The wife of the leader who often interacts with refugees.
Dre	Male	23	The son of the leader, a young local citizen who likes to mingle with the young refugees.
Jok	Male	49	A local citizen who used to work as a security guard.
Sya	Male	45	A local citizen who works as a security guard.
Gar	Male	45	A local citizen who annually mingles with refugees.

5.1 Inclusion

Local citizens have a habit to communicate with the refugees for the purpose of passing the time or they usually say it like just feeling like it. In most cases, the conversation between Yul (one of the informant) and the refugees usually takes place in a house while selling food for lunch. Meanwhile, Mar who is a refugee mother of four from Myanmar and her sons often visited and helped Yul in arranging the items. Furthermore, both wore similar theme clothes named as daster in Indonesian language. *Daster* is a simple blouse, usually has *batik* pattern that is usually worn by mothers at home.

Yul stated that she recognizes most of the refugees around the community house. However, she only talks with those who often communicate with her such as Mars family from Myanmar. Mar often visits her house to sit down or sometimes help her prepare food to sell every day. Mar has four kids; hence, she will bring the kids together when visiting Yuls house.

In addition, Yul likes to share food with Mar and her family after all the chores are done, while Mars kids also like to buy snacks from Yuls store.

On the other hand, **Jok, Sya,** and **Gar** have random refugee friends to talk to; however, Moh (censored) from Iran and Nor from Myanmar are the most often ones. In particular, they always share conversation regarding *war, family, or jokes*.

As the whole interview is done, most informants said the situation what they feel and think of refugees were, I feel sorry for them, the second said They are the victim of war I could not imagine how sad is that the third said They have no place to go, the fourth showed a gesture of sigh, the fifth sad frowned and said Well Pity

Sometimes, the inclusion between the local and refugees in their interaction means they will sit, talking, and doing nothing together under this one big tree around the area. They spent their break time there, mostly after 4 PM both parties would start to gather around the spot. Yul said, this is not an obligation, but somehow both parties know about this habit, its like a thing they have to control each other presence. For example, if Gar didnt see Moh several times when he was together at the spot, he would ask other refugees about Moh, what happen to him or simple where he was.

5.2 Friendliness

The informants stated that their communication occurs normally and they kept repeating Just happen like that as the same answer. In addition, they even answered using *masa iya mau ditolak* in Bahasa Indonesia expression which showed that they are fine when the refugees come to approach and appreciate them.

On the other setting, informant Gar and Moh often talk under the tree near the community house. Gar with his black and blue security uniform and Moh with his t- shirt and short pants, both sat side by side chatting. They were joking and smoking together. It is a casual gesture for them to share cigarettes when they are engaging in a conversation. One time, Moh jokingly insisted to Gar to give him cigarettes because he knew that Gar just got an incentive from his works, Gar then shared his happiness. Not only that, when some of informants and refugees saw that, they wanted it as well, so that time refugees and informants enjoyed cigarettes while talking together.

While informants being asked, how usually the communication started, they said the communication Just happens like that. In a situation where they dont expect visit by their refugees friend, they still interact with them, they answered in Indonesia language *masa iya mau ditolak* which has an expression even though they dont feel like to have a guess or not in the mood to interact, they dont find any reason to reject if so, they dont want to.

Ya They come to you or sit near you. *Do you want to shush them off*? Of course not. They are not doing anything wrong. **Sya** said.

. I close with Mar (the Myanmar refugee), she comes daily here. Help me with cook, chores, *I do not ask her to, but she comes, and I am just welcome to her*. I guess it is boring there (refer to inside the building), that is why they like to be outside around the building. Yul said.

Then beside being friendly researcher would propose to being understanding because the informants understand that refugees may need friends to talk to and they wanted to support.

This also probably affected by a collectivist culture, where they like to keep harmony and peace to one another. Hofstede said collectivists are less concerned with people who belong to some other group the out-group and tend to view boundaries between one group and another to be relatively impermeable. Then this may because Yul and Mar not engage in disclosure conversation these times. So regardless of refugees is in fact out a group of the local community, the locals through the informants behave in the sake of harmony to their environment.

5.3 Pontential Prospect

Lastly, informants see refugee as a potential consumer. In the beginning, informants not that aware of this idea. Because they were focusing more on the excitement of foreign people come to their area. Then after times goes by, after engaging longer with them, from the information shared, they start to realize the possibility. Then, informants started by renting them vehicles that in the present moment no longer permitted by the government, other than that the local still sell vegetables, and else as needed by the refugees.

The locals will come to the refugees and ask what they need, then they search the items and when they found it, they sell it to refugees. In other time, for example, if they think its something refugees possibly need, they do not ask, they directly bring the items and offer to them. In addition, near the refugee building, in the same alley, there are six houses that own personal stores. Couple of them positioned at the front of the building, and besides the building, they

sell food, mineral water in galloon that has refugees as their daily buyer.

Seeing items they sell and how they sell it, it doesnt seem like the local would like to dig refugees money, because they knew at the first place how and why refugees could have arrived at their area and they feel sorry for that.

6 INDONESIA'S CULTURAL DIMENSION

Hofstede research about Indonesia national cultural dimension concluded in the site named Hofstede-Insight. According to the result of study, Indonesia cultural dimension can be read as follows.

6.1 Low Score of Uncertainty Avoidance

According to the previous study, Indonesia known as the average position in the range (Irawanto et al., 2011). Meanwhile Hofstede stated that *Indonesia has a low preference for avoiding uncertainty*. Means there is a strong preference of separation of internal self from external self when facing the uncomfortable situation, for example when in an angry state; she would try not to show negative emotion externally. So, it is possible for an Indonesian, in this matter the local as they might intentionally hides his or her negative feeling toward refugees existence.

6.2 High Power Distance

According to Hofstede, Indonesia scores high on this dimension with the following characters; reliant on hierarchy, imbalanced rights between power holders and non-power holders, superiors distant, leaders are directive, management controls, and delegates. Furthermore, the communication is indirect and negative feedbacks are hidden. In that situation, it is possible in the field that the local citizens acceptance in the moment when they started accepting refugees in their area is because they are affected by the government as they acknowledge its central position.

6.3 Collectivism

Momeka (as cited in Forysth, 2006) said collectivists feel a close empathy with one another and, so, are more possible to adopt a mutual orientation to their groups. They emphasis their tie and energy on people who fit in to their group the in-group and are less concerned with people who belong to some other

group the out-group. They assess their involvements in their groups more, this relationship consider to be steady and long-term, and tend to view limitations between one group and another to be relatively impermeable.

So, as is in the Chinese philosophy where collectivism is valued, its not grounded on what a person has done as an individual, but what a person has done as a group member. They have faith in helping family or company is far more important than helping yourself (Berko et al., 2010). Another example is African cultures wherein communication; explicit verbal messages are avoided, as a result showing rejection or saying no directly is often avoided. This culture focused on keep up a good relationship with others (Hebbani et al., 2010). In this situation, it would one thing be hold by the local citizen in keep up in harmony with refugees.

6.4 Femininity

Agreeing to Hofstede, *Indonesia considered low Masculine* (i.e., high Femininity culture). However, he points that it is not so low like North European countries. Indonesia is less masculine than other Asian countries like China, Japan, and India. Means, in Indonesia status and visible symbol of success are essential but it is not always material gain that brings motivation. In feminine culture, people value equality and solidarity where conflicts fixed by compromise and negotiation.

Furthermore, local citizens agreed that the refugees may misbehave at some points, but they stated they would not take it personally and choose to be understanding. The local citizen chose not to give much attention on it for the first time as the local also emphasize the value of tolerances if there is a miscommunication. All these signs showed by the informants describe the characteristic of this assertive behavior.

6.5 Long Term Orientation

Long-term orientation is the extent to which a culture emphasizes pragmatic, future-oriented perspective (Moon et al., 2014). Besides, Hofstede talked about this culture as for how every society has to maintain some relations with its past while dealing with the challenges of the present and future. Thus societies handle these two objectives differently. The long term usually thinks more because they tend to think for future sake, while the short term cultures think for the present moment.

Hofstede said that Indonesia has a realistic culture

with high in long term orientation. Means, the society show an ability to adapt traditions effortlessly, also has a stout tendency to save and invest, thriftiness, and diligence in accomplishing outcomes.

7 METHODOLOGY

This is a pure research that objects to understand the experience of the local citizens on their communication interaction with refugees, by focusing on the reasons why they want to be involved in communication activities with refugees. The research area will be in one of the 8 community houses, namely Wisma Novri, where in this area there are around 124 refugees from 11 nations. Wisma Novri itself is a building owned by a local citizen that has been hired since 2014 by UNHCR for temporary refugee residences even if it is not determined.

There were five informants selected based on the purposive sample. The researcher also considers the willingness factor for informants to be involved in this research. Informants interviewed mostly with some refugees around, so researcher benefitted by the interaction both made along with the interview.

There is a classification of data sources, such as primary and secondary data sources. Primary, including informants as those who are directly experienced in the phenomenon under study. Secondary are supporting documents such as the release of reports from UNHCR, Indonesian immigration, and other related authorization as well as testimonies or answers directly from the authorities, who in this study were from the Head of Tanah Merah Village where the Wisma Novri area is located.

In the field, 5 informants were selected. Where these five people will be given the same questions in the theme of exploring what their motives for communication are to refugees. Along with the interview given, the researcher also applied observations on the gestures delivered by them during interviews.

Additionally, observations were carried out outside interview period, which later would be confirmed again with the informants. From the data collected, researchers will conduct daily transcripts of interview data and note fields for observation. Next, the daily results will be seen from the code generated to consider the data saturation point. Until finally, all data will be analyzed using discourse analysis for data from observation and analysis thematic for data from transcript texts.

All data that has been collected, then analyzed, will be validated using Triangulation, which is used is the method triangulation, theory triangulation, and data source triangulation. For example, all the data later, will be asked again or confirmed again to the informants involved.

8 CONCLUSION

As the result of this research, five informants and three supportive refugees were selected. For the most part, the informants refer to local citizens who had the most interaction and highest communication rate with the refugees. Secondary data from the authority was obtained from the village leader as part of data affirmation. The research used the thematic analysis for data interview as well as a discourse analysis for data observation after the data collection process reached the saturation point. The data was then validated by using triangulation.

In the beginning, before refugees directed to the research area, UNHCR together with the immigration officers went approach the local community through small meeting with the head of the village and the head of the area. They told the local and related officials that they would bring refugees in and live in the building. They came couple of times and with that, they also asked the local to eagerly participate in refugees adjustment moment. In addition, Indonesian government guaranteed the local with safety in case problems occur between them and the refugees. As the result, the early briefing by the authority on refugee before they actually settled and the safety, could have made the locals confidently wanted to engage in the communication with refugees.

There were five informants presented and a supportive three refugees. Informants were the local citizens who had the most interaction and communicate constantly with refugees. Also, as data affirmation, there was secondary data from the authority that was the village leader. After data collection reached a saturation point; this research proceeded to use the framework analysis for data interview and discourse analysis for data observation. Then data validated by using triangulation.

Then, relying on proxemics zone, the local citizens and refugee are in an intimate zone, where they stay or sit comfortably close to each other, share the cigarettes and delivered jokes to each other. However, speaking from the quality of their interpersonal relationship, they are not that close in term of an interpersonal relationship, which is to be in this relationship it required self-disclosure that not occurred in the local citizens refugee relationship in the researched area.

According to the field observation, Yul frequently interacted to Mar the Myanmar refugee inside her

house, both of them wore the typical casual dress of Indonesian motherly for homey setting, called daster, both wore short hijab, and they discuss a casual topic such as food seasoning or weathercast. Correspondingly, based on the topic of their conversations, self-disclosure such as favoritism (favorite food, favorite movie) was absent in the interaction.

In addition, cultural discussion in communication considered as one since they connect to each other. Many scholars look it based on the values it united. Because values give order and guidance to peoples thought and actions as they face the commonality in the social order (LeFebvre and Franke, 2013) so that, it can be used to predict the behavioral pattern in society.

Hofstedes result in cultural dimensions in Indonesia seen in both areas (the Hofstedes result and research field). Since as known that Hofstedes result covers a national area, however, looking at how distinctive a culture in an area, the result may or may not entirely pictured in the local area. In that sense, the Hofstedes result combined with the actual condition of research area. Which then helped in explaining the cause of certain behavior made by the local.

In a nutshell, the local citizen engaged in communication with the refugees based on three aspects, that is to say inclusion, friendliness, and potential prospects. Resulting, the local citizens and refugee were observed to be in an intimate zone based on the proxemics zone because they stayed or sat comfortably close to each other. However, they are not that close judging from the quality of their interpersonal relationship. Self-disclosure is required to be in this relationship, but none was found in the local citizens refugee relationship.

REFERENCES

Bemma, A. (2018). *Refugees in Indonesia Told to Assimilate but Not Settle*. February 9).

Benček, D. and Strasheim, J. (2016). Refugees welcome? a dataset on anti-refugee violence in germany. *Research & Politics*, 3(4):2053168016679590.

Berko, R., Aitken, J. E., and Wolvin, A. (2010). *ICOMM: Interpersonal concepts and competencies: Foundations of interpersonal communication*. Rowman & Littlefield Publishers.

Cochrane, J. (2018). Refugees in indonesia hoped for brief stay. *Many May Be Stuck for Life. (2018, January.*

Harismanto (2019). *Ditampung Tanpa Batas Waktu*. Setelah 10 Tahun Bebas Mau Apa.

Hebbani, A., Obijiofor, L., Bristed, H., et al. (2010). Intercultural communication challenges confronting female sudanese former refugees in australia. *Australasian Review of African Studies, The*, 31(1):37.

Irawanto, D. W., Ramsey, P. L., and Ryan, J. C. (2011). Tailoring leadership theory to indonesian culture. *Global Business Review*, 12(3):355–366.

Kumssa, A. and Jones, J. F. (2014). Human security issues of somali refugees and the host community in northeastern kenya. *Journal of Immigrant & Refugee Studies*, 12(1):27–46.

LeFebvre, R. and Franke, V. (2013). Culture matters: Individualism vs. collectivism in conflict decision-making. *Societies*, 3(1):128–146.

Luck, T. (2013). In jordan, tensions rise between syrian refugees and host community. *Washington Post*, 22.

Moon, S.-J., Kim, C. S., and Kim, T. W. (2014). Chinese immigrants in korea: The relationship between interpersonal communication and acculturation. *Asian and Pacific Migration Journal*, 23(3):325–344.

Putra, Y. M. P. (2015). Pekanbaru tampung 1. *176 Pengungsi dan Pencari Suaka. (2018, February.*

Schattle, H. and McCann, J. (2013). The pursuit of state status and the shift toward international norms: South koreas evolution as a host country for refugees. *Journal of Refugee Studies*, 27(3):317–337.

2019 Election and Strengthening Political Identity:
The Importance of the Role of Nu & Muhammadiah in Maintaining Quality Democracy

Syafhendry and Setyo Utomo

Departement of Government Science, Universitas Islam Riau, Pekanbaru, Indonesia
syafhendry.ip@soc.uir.ac.id , setyoutomo993@gmail.com

Abstract: Post-reformation, the 2019 election was felt as the most present election tension among the community, compared to the previous elections since the 1999 general election. The use of identity politics by attracting religious sentiments into the political realm was truly massive and almost split the affiliated communities in the two big poles of sympathizers and supporters of two vice presidential candidates Joko Widodo-Ma'ruf Amin vs. Prabowo Subianto-Sandiaga Uno. Islam as the majority religion in Indonesia, greatly determines the future of democracy in Indonesia. The success of the implementation of post-reform democracy which is driven by Islam, must be maintained and continued. NU and Muhammadiah as representations of the two largest Islamic organizations in Indonesia are required to provide enlightenment to build moderate community thinking, to strengthen the building and quality of democracy. The 2019 presidential election is expected to be a learning to prepare a quality democracy far from the use of identity politics.

1 INTRODUCTION

After the wave of reform 98 has placed Indonesia as an ideal model of democracy, for world countries including the Islamic State in the Middle East. After the fall of the Suharto regime, Indonesia has transformed into a stable democratic country and has experienced significant economic growth. As a nation with a pluralistic society with a majority of Muslims, Indonesia is able to present democracy as an ideal system in the practice of nationhood. This has also shifted the western view of the Islamic world which initially doubted democracy could grow in Islamic countries. Indonesian Islam has promoted the world, that Islam and democracy can compare well, without having to contradict the two. The success of the democratic process in Indonesia is marked by the running of elections that are safe, peaceful, run democratic without being accompanied by conflict and war. Indonesia's success in building the democratization process brings appreciation and praise from world leaders. US Secretary of State Hillary Clinton called Indonesia an example of democracy for the Muslim world. While giving a speech at the State Palace, even Clinton said "Indonesia is a model of how Islam, democracy, modernity and women's rights can grow together and harmonize in a country". Not to forget, President Obama in his

last address at the UN General Assembly (Tuesday, 20/09/2016) praised Indonesian democracy as a good example for the model of world democracy. Obama stated "Indonesia has succeeded in making the people the holders of sovereignty". This is in line with the rise of the democratic movement that is widespread in most Islamic countries in the Middle East (Arya Fernandez, 2019).

But efforts to advance and maintain the democratization process go well in countries with heterogeneous societies are not easy and without obstacles. The 2019 election shows, Indonesia has just entered a test that is quite crucial in its democratic journey. Where the issue of SARA (ethnicity, religion, race and between groups) really surfaced and became a wild ball to bring down opponents, in order to win the election. As a country whose people have just learned about democracy, they have not fully realized that the issue of SARA is actually a form of black campaign that is intentionally created by political forces to win the contestaton is very risky for the integrity of this nation.

The phenomenon or problem in this study is the strengthening use of religious sentiment in the 2019 presidential election amidst a pluralistic society, which can be an entry point for radical thinking that

can threaten the future of democracy in Indonesia. The important role of NU and Muhammadiah as the largest Islamic community organization in Indonesia is here, so that people are not trapped in the use of identity politics in democratic practices in Indonesia.

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2 METHOD

This research uses a qualitative approach with a case study research design. According to Creswell (2014: 14) case studies are investigative designs found in many fields, especially evaluations, where researchers develop in-depth analysis of a case, often a program, event, activity, process, or one or more people. Meanwhile, according to Yin (2018), case studies are empirical methods that investigate contemporary phenomena ("cases") in depth and in real world contexts, especially when, and may not be clear. In the context of this research, the focus of this study is to analyze the strengthening of identity politics in the 2019 elections in Indonesia, especially the strengthening of identity politics in the 2019 presidential election in Indonesia. This is due to the strengthening use of religious sentiment by sympathizers and supporters of two pairs of presidential candidates in the 2019 presidential election. This condition can be a serious threat to the future of democracy in Indonesia.

Data collection in this study comes from documentation and archival records such as books, research journals, reports, survey data, and articles in mass media and online media. The power of data collection techniques according to Yin (2018) is stable, inconspicuous, specific, and broad. Data collected from various sources are then analyzed using approaches and theories that are relevant to research and produce research conclusions.

3 THE MASS OF THE POLITICS OF IDENTITY

During the implementation of the campaign period lasting 8 months, the public was more served by campaigns that manipulated racial issues, identity politics, fake news content and speeches of hatred that were far from presenting substantive issues. This condition is aggravated by the massive campaign mobility on social media, by presenting SARA issues and containing hate speech (Pukapol UI, 2019 "Managing

Political Identity: Counter-Narrative Strategy Against Politicization of Identity Politics in 2019 Election Through the Involvement of Candidate Campaign Teams") . Public was carried away by being trapped in mutual support actions due to the strengthening of sensitive issues made by the buzzers by loading content with religious sentiment. The use of religious issues to attack the presidential candidates is very easy to find, both on social media, even in religious lectures which mention the Jokowi regime as anti-Islam, criminalizing the ulama to pro against China. The National Fatwa Guards Movement (GNPF Ulama) and the Islamic Defenders Front (FPI), have become Islamic forces that often display religious issues in the public sphere. The political elite seems unable to control themselves, by drawing on the issue of SARA (ethnicity, religion, race and between groups) to the political vortex. Even black campaigns that tend to attack the personal self of each candidate are unavoidable. This can be seen from the narratives and movements that were built by the team and sympathizers of the two pairs of candidates to attack each other with the aim of bringing down the opponent, while also intending to gain sympathy and support from the community. Even splits appear to be intensified through or by users of social media to sow disputes and spread disinformation that can lead to misunderstandings in the community. This further adds to the complexity of the problem, this condition is increasingly difficult to eliminate in the near future, because the use of social media is very high by the community.

Since the elections in 1999, the 2019 elections have been felt to be the most extreme resulting in polarization and almost dividing society. Many hope that post-election tensions will decrease, but it seems that it is not as simple as what is desired. Various actions and protests continued to color after the election. The siege of the Bawaslu office and the refusal of the Constitutional Court's ruling on the results of the presidential election accompanied by the tendency to reject election results by sympathizers and mass supporters of the presidential candidate pair showed that the 2019 election had given rise to serious problems that could give rise to potential structural and horizontal conflicts.

The new thesis was discovered by Mietzner and Muhtadi (2018) in (Arya Fernandez, 2019) stating that the phenomenon of strengthening conservatism among voters after the action movement 212 by the National Movement Guards Fatwa Council of Indonesian Ulema (GNPF MUI) figures. Before the actions of 212 conservatism among Muslim voters experienced deterioration, in the period 2010 to 2016. In different publications, Mietzner, Muhtadi and Halida

(2018) explained that mass mobilization in action 212 affected an increase in support for the agenda of the Islamic political agenda. The LSI survey findings, as quoted by Mietzer, et al., Also showed an increase in the average rejection of non-Muslims in filling political positions from 42.3% in 2016 to 49.6% in 2017. The mobilization of action 212 was also encouraged because previously there were voter rejections against non-Muslims. Muslims in politics and refusal to co-exist with people of different faiths.

Noise in elections, both presidential elections and regional elections is not a new phenomenon in a democratic event both in Indonesia and in western countries. Efforts to attract religious sentiments, racial sentiments, tribes to the political territory are often practiced by politicians and elites. So that it requires maturity and political awareness for the community, not to be easily trapped in issues that are not substantive. In the noise of democracy there are gaps in the creation of seeds of conflict and excessive fanaticism. Therefore, psychologically, democracy requires people who are sufficiently educated, open minded, tolerant, able to accept differences, and can show empathy for others. Efforts to burn racial sentiments to an extreme stage have occurred in political history that took place in Germany. What happened in Germany in the mid-1930s is an example of the danger of fanaticism. At that time, their economy was knocked down by the financial crisis in Europe and America. Plus, Germany had just lost in World War I. Millions of people were unemployed, poor, hungry and frustrated. In such conditions Adolf Hitler and the Nazi Party won elections. German Chancellor Hitler revived fascism and killed democracy. Hitler, according to Professor of University of Indonesia Psychology HamdiMuluk, gained a single loyalty in the country by manipulating the fears of the German people. Chancellor also conquered Poland so that World War II broke out. From here shows that blind fanaticism can drown common sense (Arya Fernandez, 2019)

Identity politics is part of an attempt to politicize the use of the identity of a collective group of feelings of 'confusion' which are the main basis for bonding group ties and collectivity. Identity here can take the form of ethnicity, race, religion, class and others. This primordial bond is then politicized in such a way by interest groups for certain purposes, including for political purposes. Puritanism or the teachings of purity or orthodoxy also play a major role in producing and distributing the idea of 'goodness' towards members on the one hand, while on the other hand closing the reasoning of resistance or critical members of certain identity groups. Identity politics, according to (Abdillah, Ubed, 2002) is a politics whose main focus

is study and its problems regarding differences based on physical body assumptions, political ethnicity or primordialism, and religious, belief, or language conflicts.

Blind fanaticism can flourish in a democratic political climate such as in the 2019 general election. Fanatics are vulnerable to cognitive bias. Sometimes fanatics can no longer accept the truth from other groups. Zealots only believe that only the group is right. In some conditions, the feeling of love for the group itself which encourages a person to fight for his group is something normal and natural. In a political partisan attitude that encourages loyalty and willingness of people to volunteer for parties is sometimes needed. But what was alarming was, when religious-based populism became increasingly violent. While politicians continue to be engrossed in playing identities, fan voters to stay hot. Therefore, to be a critical voter, everyone must introspect to examine fanaticism within themselves. Only in that way can we save our democracy.

4 NU & MUHAMMADIAH MUST DARE TO AGENCY

Islam as the majority religion in Indonesia must realize that the challenges of nationality in this era of modernization are increasingly complex and extreme. The atmosphere of information disclosure through the proliferation of information technology that can be accessed by each individual community can have a serious impact on unity in the community. Islam as a religion that brings the message of rahmatanlil'alamin (mercy to all nature), must be able to provide a real solution for every challenge and dynamic that occurs in the era of modern democracy.So that the presence of Islam is truly able to provide calm and peace not only for individuals, but for the collective life of nation and state. Islamic principles and values, which humanize humans, are expected to bring enlightenment and maturity to society in democracy.

In many sources and teachings, Islam teaches the practice of democracy in the life of nation and state, even the practice of democracy itself has been going on since the era of the leadership of the Prophet Muhammad, until the reign of khulafaurrasyidin. The consultative model during the khulafaurrasyidin is a form of democratic spirit known as ahihalliwal'aqdi which has the function of electing the head of state or government through a process of deliberation and election. Here is very clear in the early days of Islamic rule that has been applied in the state system (Farih, 2016; Jati, 2013). According to experts in

contemporary Islamic thought democracy must provide the same space and place for all groups in society. The value of justice, equality must be upheld together. Like the opinion of Abdurrahman Wahid and Nurcholis Madjid which states that democracy contains two values, namely the value that is fundamental and that is derivative. According to Abdurrahman Wahid, the main values of democracy are freedom, equality, deliberation and justice. Freedom means individual freedom before state power and a balance between the individual rights of citizens and the collective rights of society. Nurcholish Majid, as quoted by Nasaruddin, said that a country is called democratic to the extent that the state guarantees human rights, among others: freedom of expression, freedom of association and assembly. Because democracy rejects detectiveism, feudalism and authoritarianism. In a democratic country, the relationship between the authorities and the people is not a power relationship but based on laws which uphold human rights(Jurdi, 2011; Muhammadiyah, 1995).

NahdlatulUlama (NU) and Muhammadiah as spread Islamic organizations in Indonesia that have moderate understanding, are increasingly being demanded for their active participation in guarding the journey of democratization in Indonesia. The values and democratic practices that have been taught by NU figures, Muhammadiah, such as Abdurrahman Wahid (4th Republic of Indonesia president) and BuyaSyafi'IMa'arif (former General Chair of PP Muhammadiah) who continue to be consistent in guarding dignified democracy need to be continued by the next generation. It is inevitable for activists, individuals and Islamic civil society groups in NU and Muhammadiyah, to make the same effort to contribute to enlighten the community by promoting the ideas of dignified democracy among Muslims and maintaining the independence of civil society as the main pillar for maintaining and carrying out the process quality democratization, far from the issue of SARA and the politicization of identity politics. At the same time the creation of critical groups is also very necessary to create control and balance to control the running of government by the power of society.

5 THE ROLE OF ISLAM IN PROMOTING DEMOCRATIZATION IN INDONESIA

In the long journey of this nation, Islam as the majority religion has played an important role in push-

ing the democratization process in Indonesia. The existence of NU and Muhammadiyah as the largest Islamic organization is undoubtedly in an effort to strengthen the building of civil society in Indonesia. To strengthen the democratization process in Indonesia, NU and Muhammadiyah are required to be brave enough to put on a body and continue to be consistent in continuing the function of political education towards their followers and the general public, to carry out a dignified democratic process. The success of NU and Muhammadiah in guarding the process of political transition after the fall of the New Order under Suharto's authoritarian government to a democratic system of government must be the spirit, that the two largest Islamic community organizations are always awaited to play a role in overseeing the democratization process in this democratic government. The presence of Gusdur (Abdurrahman Wahid) as Chair of the PBNU and AmienRais who served as chairman of the PP. Muhammadiyah at that time with the 98 student movement had increased public awareness in demanding the administration of democratic governance. So that the process of transition of power at that time from totalitarian rule under the Soeharto regime to democratic reform government could run smoothly(Muhammadiyah, 2015; Olsan et al., 2003).

After the fall of Soeharto, efforts to strengthen democratization also continued when Gusdur entered the government, where in the 1999 election Gusdur was elected as President and AmienRais sat as chairman of the Republic of Indonesia MPR. Gusdur's policy to revoke the dual function of the Indonesian Armed Forces (TNI) that returned the military to the function of national defense was as an entry point and basic foundation to strengthen the democratization process in the practice of the life of the nation and state. With the return of military power to the function of national defense, civil society groups regained their role in voicing and participating in determining State policy. Even since reformation, various figures and civil society groups have formed political parties, as a sign of the presence of a democratization room, where every community has the same political rights to vote and be elected, both in the executive and legislative branches. The freedom to establish a political party had never happened before under the rule of the new order which had been in power for 32 years, because the existence of political parties was restricted and controlled by the State, namely only 3 political parties were permitted namely, PPP, PDI and GolonganKarya all under control of the Suharto regime.

From the above conditions, it shows the great commitment of Islamic leaders to realize democratization efforts that are actually carried out in the sys-

tem of government in the reform era. Even Gusdur's efforts as president of Indonesia at that time to realize democratization in Indonesia had to be paid dearly because Gusdur had to lose his power as President of the Republic of Indonesia because of the democratization process that emphasized freedom in politics. Political power in parliament at that time succeeded in carrying out political propaganda which led to the overthrow of Abdurrahman Wahid from the seat of the President of the Republic of Indonesia even though in an unconstitutional manner. Even though Gusdur had to step down to lose its power as president, the democratization process in Indonesia continued until now, even making significant progress in the process of nation and state. So from here Islamic figures such as Gusdur, NurkholisMadjid, BuyaSyafi'iMa'arif can be said to be reformers in efforts to democratize the political system and the government system in Indonesia.

The ideas of democratization that have been built by Islamic reformist figures such as Gusdur, NurcholisMadjid on young activists from the two largest Islamic organizations have led to a strong movement for the continuation of the democratization process in the next generation. Young Islamic activists continue what has been pioneered by reformists in building Islamic legitimacy over democratic ideas, but in the format of new social movements that are in line with a more moderate contemporary context. namely social movements that no longer emphasize the struggle for identity politics, but emphasize diverse identities. It no longer emphasizes the interests of organized large groups, such as political parties, but the interests and rights of citizens are no longer dependent on state support, but rely on the independence and autonomy of civil society.

6 CONCLUSION

The future of democracy in Indonesia will be largely determined by the efforts of Muslims in developing and maintaining democratic consolidation both at the level of awareness and practice of democracy on two levels: the state and society. NU and Muhammadiah as the largest Islamic organization in Indonesia are required to give their role in seeking dignified democracy, fostering inclusive and moderate attitudes among diverse societies.

REFERENCES

Abdillah, Ubed (2002). *Politics of Ethnic Identity: Struggling Signs without Identity*. Magelang: Indonesian Foundation.

Arya Fernandez (2019). *Politics of Identity in the 2019 Election: Projections and Effectiveness*. Jakarta: CSIS ELECTION SERIES.

Farih, A. (2016). Nahdlatul ulama (nu) dan kontribusinya dalam memperjuangkan kemerdekaan dan mempertahankan negara kesatuan republik indonesia (nkri). *Walisongo: Jurnal Penelitian Sosial Keagamaan*, 24(2):251–284.

Jati, W. R. (2013). Ulama dan pesantren dalam dinamika politik dan kultur nahdlatul ulama. *ULUL ALBAB Jurnal Studi Islam*, 13(1):95–111.

Jurdi, S. (2011). Muhammadiyah dalam dinamika politik indonesia 1966-2006.

Muhammadiyah, P. P. (1995). *Berita Resmi Muhammadiyah*. June.

Muhammadiyah, P. P. (2015). Tanfidz keputusan muktamar muhammadiyah ke 47. *Berita Resmi Muhammadiyah: Yogyakarta*.

Olsan, T., Forbes, R. A., MacWilliams, G., Norwood, W. S., Reifsteck, M. A., Trosin, B., and Weber, M. M. (2003). Strengthening nurses' political identity through service learning partnerships in education. *JOURNAL-NEW YORK STATE NURSES ASSOCIATION*, 34(2):16–21.

Pukapol UI (2019).

Umar, Nasaruddin. Demokrasi dan musyawarah: Sebuah kajian analitis. *Komunikasi Perguruan Tinggi Islam*, V(12002):36.

The Fourth Industrial Revolution based Innovation for Information and Communication Technology based Teaching

Yaya S. Kusumah

Study Program of Mathematics Education, School of Postgraduate Studies, Universitas Pendidikan Indonesia (UPI)
y4yaskusumah@gmail.com

Abstract: As we move into the Fourth Industrial Revolution Era, due to the massive development of the newest digital technology, our world is now so complex, interconnected, borderless and dramatically unpredictable. The demand from the borderless world is that critical and creative thinking skills are required for excellent communication, direct or indirect, real or virtual. The huge flow of information, which is so tremendous in the integrated system of globalized world, should be analyzed and synthesized carefully for the advancement of education and science. Information and knowledge in this era can be accessed through various mobile devices, using various available software and put in cloud computation storage easily. Place is no longer a barrier, as information and knowledge can be accessed under expanded networking services, from almost anywhere by almost any means. Information and communication technology-based teaching (ICT-based teaching), which covers digital and mobile learning, should be used as it is so important for students' life and career, and can give them critical and creative mathematical thinking abilities for selecting, classifying, analyzing and interpreting data and information. In this paper, ICT-based teaching under interdisciplinary theme will be discussed, based on the challenge and demand in the Fourth Industrial Revolution Era.

1 THE REQUIRED SKILLS FOR SOLVING PROBLEMS IN THE 4TH INDUSTRIAL REVOLUTION ERA

The distinct system and process of industry in The Industrial Revolution 4.0 bring a number of existing digital industrial technologies into an integrated system. This system covers the Internet of Things, Blockchain, Autonomous robots, Driverless vehicle, Autonomous vehicles, Artificial intelligence, Cloud computing, Big Data, 3D Printing, and Augmented Reality. All these available system, tools and media can be utilized for enhancing productivity in all aspects of our life, particularly in education. Labour, capital, and productivity are key factor in creating excellent growth of economy and education of a nation. However, in the Fourth Industrial Revolution, it is productivity which so far has triggered the growth of these two fields. The benefits of the Fourth Industrial Revolution technology adoption for manufacturing, economy and education, will be widespread, with smarter supply chains, smarter production and smarter products.

The Industrial Revolution 4.0 encourages us to live and work smarter, not harder. This reality can be observed from daily situation. For example, the merging of information and communication technology (ICT), together with the technology being applied, support almost all possibilities of automation that could speed up transportation, massive process improvements, fast enhancement and massive productivity. The innovation produces also alternative revenue sources, all of which have their foundations in information and services. Not only will manufacturing become more productive, it will also become more flexible, as smarter products could be resulted from smarter process of production, smarter transportation, and smarter supply chain. The innovation as the result of these advantages, however, could eventually lead to the disruption of existing business model, information availability and high-quality services, as well as system of education.

One of the main characteristics of the challenge in the Fourth Industrial Revolution era is that our world is now so complex, interconnected, and is dramatically changed from time to time. The appearance of phenomena of modernization, globalization and digi-

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talization, have shaped this world without border. The demand from the world without border is skills required for excellent communication, direct or indirect, real or virtual, by empowering people in technology, whether technology in general, or information and communication technology. The flow of information, which is so tremendous in globalized world, requires skills for selecting and classifying data and information to draw precise and accurate conclusion. All information obtained should be analyzed and synthesized carefully to make it meaningful for the advancement of science and the preparation in facing complex and complicated daily problems.

The development of skills required for facing the problems in the Fourth Industrial Revolution Era need some materials which contain interdisciplinary themes including global awareness, financial literacy, civic literacy, and environment literacy. Toh & Kaur (2016) indicated that to fulfil these literacies, there are some skills needed: (1) Skills of Learning and Innovation, (2) Information and Media/Technology Skills, (3) The skills for Life and Carier.

In facing this changing world, we require skills which should be developed. These skills consist of critical thinking, creative thinking, problem solving, communication, representation, and connection ability. On the other hand, nowadays, the development of quality of human resources through education, which can enhance the student achievement, is triggered by the development of technology. The advancement of science and technology has fostered the easiness of information access and shortened the required time to gain information. This easiness should minimize the problems in education, and particularly in mathematics education.

The existence of science and technology has provided students with broad access of information relevant to the need and demand; opportunities for doing exploration and self finding in mathematical concepts in the given computer program. This can trigger the empowerment of student skills optimally, so it can be expected that their critical thinking in mathematics can also be enhanced.

2 THINKING ABILITIES UNDER THE CURRICULUM 2013

Under the implemented national education system, Indonesia has high expectation of having high qualified, independent, creative, professional and productive community. These targets need serious efforts which should be developed by enhancing the quality of teaching-learning process and exploring the end-

less information, where thinking skills are the main focus.

Tracing and implementing the endless information require skills in accessing information sources, selecting and compiling the type of information, together with analyzing and drawing conclusion. This kind of abilities can be obtained through the development of critical, logical, systematic, analytical, creative, and productive thinking abilities.

The enhancement of critical and creative thinking abilities in formal education gained in high schools is developed by mathematics teaching, emphasized on system, structure, concepts, principle and the strong connections between one element and the others. These efforts require deductive thinking patterns in logic, as its application is required in daily activities. The concepts of mathematical logic can clearly explain and simplify a situation by abstraction and generalization.

Under the construction of Curriculum 2013 for high schools in Indonesia, there are a number of implications of different changes in mathematics education. The emphasis of this curriculum consists of (1) competency required for solving any problems related to mathematics; (2) competency of using mathematics as communication tools; and (3) competency of using mathematics as tools for reasoning in any situation, such as critical, logical, systematic, objective thinking and self-discipline in facing and solving problems. These abilities are extremely useful in attending higher education, constructing good communication in society, and preparing required skills for possible jobs.

The high expectation in the new curriculum cannot be handled by merely implementing conventional methods and approaches. To reach these mathematical competencies, some abilities in selecting materials on mathematics are required based on the structure of knowledge, the depth of materials, the characteristics of materials and their applications in real world. In addition, there should be a few methods and approaches that should be applied to accommodate all demands mentioned above. These new approaches which should be formulated, require optimization of student motivation; enhance student self-regulated learning; enhance the process of students' learning effectively; and counterbalance (keep up) the speed of science and technology development. One of the appropriate solutions considered as a good effort to realize these goals, is the application of information and communication technology as media in teaching mathematics, which give opportunities to students in learning mathematics independently through interactive programmed teaching materials.

3 COMPUTER AS DEVICES IN MULTIMEDIA-BASED TEACHING

Computer technology has been developed since the beginning of 1950s (Molenda et al., 1996) and since then computers have been contributing extraordinary advantages for community life. The greatest contribution ever in education area has been admitted long time ago, although the use of computers in schools was limited in word processing or worksheet only.

The use of computer software for teaching activities is not limited (Fey and Heid, 1984), and the potency of computer technology as media in mathematics teaching is so huge (Fletcher, 1983). There is so much real contribution delivered by computers for the advancement of education, particularly for mathematics teaching. Computer can be used for overcoming student individual differences; teaching concepts; carrying out calculation; and stimulating student learning (Glass, 1984). Students can manage their own learning, based on their level of skills. They can repeat many times until they really understand the concepts they learn. This is ideal for students who find difficulties in attending mathematics teaching, particularly for students who could be classified as slow learner. For students in fast learner category, they can be given enrichment to make them challenged and have special opportunity in exploring concepts deeply. Computers can guide students, starting from easy and simple concepts to complicated ones. By the help of its program, computer can give access to the students in analyzing and exploring some concepts of mathematics, so they gain better understanding in the concepts they learn.

Computer has unique advantages which do not belong to other media; for example, computer can give repetitive assistance; presenting material in much more interesting format and design, having good and interesting graphic animation and audio, and serving individual differences. As expressed by Wilson (Wilson, 1988), computers with good software design can present repetitive and dynamic presentation, a characteristic which can hardly found in any other media.

Some of computer advantages which are appropriate for mathematics teaching is its endless patience; can motivate students with designed reward; give opportunities to do experimentation without being anxious of possible damage; serve students undiscriminatively; give students valued skill for their future, speed up their computation process which cannot be handled manually, or requires long time solution. The research by carried out by Kulik, Bangert-Drowns (Kulik et al., 2004) showed that compared to conventional teaching, interactive computer-based teaching has some advantages. Among all advantages are as follows: the use of computer can strengthen students' ability in mathematics; students' speed in understanding the concepts will be even higher than their previous achievement, and the students' positive attitude towards mathematics will be much better.

As media for teaching, computer is not merely a tool which can carry out new situation, but also plays a positive role in developing students' talent and interest toward mathematics. This new situation, integrated in alternative teaching, can construct certain interest for students, so they will be motivated in attending the lesson, although the materials may be difficult to understand. In Indonesia, computer-assisted teaching is relatively new, so it can trigger students in learning mathematics, who might think that mathematics is a "dry" lesson, uninteresting, and difficult to understand.

4 INFORMATION AND COMMUNICATION BASED MATHEMATICS TEACHING

In interactive mathematics teaching, teaching materials are specially designed, so the interaction between students and computer go dynamically in stimulus-response type. Computers give students opportunity to enter input while computers give a response or vice versa. In the following process, the response can be a new stimulus so it triggers some other following responses which can strengthen student retention in the presented concepts. In stimulus-response type, program input can be constructed in various forms, so that it converges into the goals of teaching. When a student does a mistake, computer has to present explanation which guides them to the correct solution.

To construct computer software which can motivate students in such a way that they are interested in analyzing and exploring the concepts is certainly not simple. Software programmers have to design a program based on the students' mental development; they also have to understand pedagogical aspects, so the material presentation can be understood by the students properly. Kaput (Kaput, 1992) revealed that computer program-based teaching is not only based on assumptions as a guide, but it has also to be based on the expertise of the experts in implementing those assumptions in presenting the software, and relevant to the characteristics of the software and hardware they use.

The use of computers in schools can be classified in three models: the application of computer as tutor,

tool, and tutee. As tutor, computer assists students in understanding concepts, from the theory, theorem, until proofing, and exercises. As a tool, computer can be used by students for solving mathematical problems. Students can run special computer application programs relevant to the concepts they learn. By using this program students are enabled to analyze the characteristics of a notion (idea); for example, how to write a formula of a function when the formula is modified by manipulating its variable or constant. Through this pattern, students do exercises to analyze functions and find the relation between the graphics and their formula, so they can identify the characteristic of the function they observe.

As a tutee, computers act as an object which can implement all students' instruction, so computers follow all students' control. In this situation, computers do any given tasks.

5 INTERACTIVE MATHEMATICAL COURSEWARE IN THE IMPLEMENTATION OF E-LEARNING

After the invention of microcomputers with graphic interface, followed by the easiness of their operation and managed by consistent menu, the development of courseware-based education is a developed phenomenon which grows rapidly. This comprises Computer-Aided Instruction (CAI), Computer-Assisted Learning (CAL), Computer-based Training (CBT), Computer Conference, Electronic Mail (e-mail), Website, and Multimedia Computers.

Computer-based teaching materials can be considered as a set of techniques, software, and accompanying materials designed to be used in computer-based teaching, training, seminars/ workshops, or in any other education activities. Hatfield (**?**) indicates that computer-based instruction is basically an execution of computer programs for instructional purposes. In CAI, students are assisted step by step in understanding a topic. Students are given examples, exercises, questions, and tutorials. A computer program which is designed to make the students interested in the topic they learn can make the students reach the previous designated goals. Animation techniques, which are usually used in these programs, can motivate students extrinsically, as well as strengthen their interest.

Students can do distance discussion via computer conference, which can be held between remote schools. Students can pose their ideas and communicate to each other without limitation of distance. Although these activities are usually conducted, computer conference, however, so far is considered as expensive option, and is not considered as an efficient mode of learning.

Web site can be used as media in mathematics teaching, although the teaching-learning process does not depend on the existence of website. Teachers can give tasks via website and provide the answers in the same media. This option of learning type can be integrated into e-mail use, so the teachers can communicate (in two-way traffic communication) to students, as well as between a student and the others, who can do discussion via this media. This type of learning is appropriate to be developed, particularly for distance learning, which enables students and teachers to have discussion without face-to-face meeting.

Teachers can explain concepts via multimedia computers, particularly concepts which contain motion, change, animation, or repetitive explanation, equipped by audio-video facility. Students get information via these media, whether in CD ROM, DVD ROM format, or even in common discs only. Teachers as a facilitator only need to operate these media whenever they need.

There are a number of computer-based teaching models, consisting of drill and practice, tutorial, game, simulation, discovery, and problem solving (Glass, 1984). In more details, there are several types of computer-based teaching interaction can be used, as follows: (1) Drill and Practice, (2) Tutorial, (3) Simulation, (4) Interactive discovery, (5) Games, (6) Presentation/Demon-stration, (7) Test, (8) Communication, and (9) Information Sources.

6 DEVELOPING SOFTWARE FOR MATHEMATICS TEACHING

By identifying the characteristics of software mathematics teaching, together with its advantages, we can start developing interactive teaching materials by observing the has-to-be-followed steps. Some priorities which should be taken into account in dealing with software development for teaching are as follows: (a) Identifying the demands in learning outcomes, stipulated in the curriculum, (2) Evaluating all available software, (3) Enhancing the quality of the existing software, and (4) Developing new software.

In designing, developing, and implementing computer-based teaching materials, there are some steps that should be considered. Development phases which are required for designing high quality interactive teaching materials needs several phases. The first

phase is Analysis of Demand/Need. In this phase, it is required to analyze what topic needs presentation via computer-based teaching materials, how important it is, and what kind of difficulties usually found in conventional teaching. The other important aspect which should be put into account is the cost for designing the material by computer programs.

The topic designed in details should be done in the first phase to find out the content of teaching materials which will be designed, and what competency can be obtained from computer program to be adapted into instructional objectives, prerequisites, and animations to present the program more interesting and presented in well structure.

In the second phase, program design is started by setting the sequence or hierarchy of material presentation which is basically divided into input, process, and output sections. From each section, subsections of program which are interrelated can be designed.

The process of design is followed by program evaluation step, which tests whether the design is already feasible viewed from program requirement, such as system parameter and specification. In addition, it has to be ensured that viewed from pedagogical aspect, the presentation is already adequate based on student mental development, the sequence of concepts based on the prerequisite, accuracy in writing sentences, language aspects, including symbolic writing in formula and theorem. Program animation is not allowed to convert the concept and standard structure in a rigorous concept. This phase is often called as "test-belt stage".

The third phase: Development and Implementation Phase. In this phase, the computer program which consists of several modules/ subroutines are constructed based on the design of formulated flowchart. Each subroutine has to be analyzed by using various inputs, after which the subroutine is integrated into the main program or other subroutines. It may happen that a subroutine can be run when it does not involve any other subroutines, or it gets stuck when it is integrated with other subroutines or when repetition is implemented.

After the program have been integrated, in terms of variable (local variable and global variable) and the declaration of each subroutine, the whole program has to be run, and then analyses and evaluation step should be implemented, to see if there are some errors, by testing the output of the program and its results and display on the screen of computer.

To be successful, a program needs to be tested in a phase called as "piloting stage". In this phase, teaching material is tried out to a number of students, who have learned that material. A couple of problems arise when piloting stage is implemented. However, these problems have to be identified and recorded, for the sake of the program refinement. Before a program is launched, improvement should be carried out based on the materials contained and the characteristics of the type of the program.

To obtain high quality teaching materials, we should select people who are involved in constructing materials for teaching in the form of computer programs. Their experience and knowledge of teaching will be really important as contribution to the high-quality design of teaching materials.

To assist education experts in designing teaching materials, system analysts are required for analyzing the system. However, some programmers are also required to help, in translating the basic ideas of teaching materials into structured computer programs.

To construct beautiful and interesting presentation, artists are required, provided that they are experts in audio-video programs. Their expertise in integrating the animation of audio and video, motion in graphic representation and animation, and any other aesthetic aspects will contribute to the excellent interactive teaching materials which can motivate student learning.

Apart from the abovementioned information, there should be also some editors and reviewers who are able to see the advantages and the weaknesses of the produced programs for refinement purposes. They consist of experts on pedagogy and experts in computer programming.

7 THE IMPLEMENTATION OF MATHEMA-TICS TEACHING ACTIVITIES

In conducting interactive teaching materials in schools, we should be aware of misleading in its implementation. It should be realized that computer is not a "panacea" which can cure all types of students' learning difficulties. Computer, however, is only a machine which is created by human being, but will not be able to replace the role of teachers. Computer, in its application, has to be integrated fully based on its potency and advantages in any stratum of education, as a tool as well as media in teaching.

As a matter of fact, the implementation of computer program in mathematics teaching cannot be always realized as the impact of difficulties in constructing computer programs, and computer program construction is time consuming. There are also some experts who think that teachers can be trapped in

designing and developing computer programs rather than analyzing and exploring concepts. Camp and Marchionini (Camp and Marchionini, 1984) even revealed that computer programming has potency of distracting the process of learning mathematics as it is time consuming and teachers focus their attention more on the program rather than the concepts of mathematics itself.

It is not easy for computer programmers to be skilful in designing instructional computer programs. This situation is easily understood as in designing and developing interactive teaching materials, a programmer not only has to understand a computer language but he/she also needs to understand instructional design, and of course, the concepts of mathematics. They have to direct their constructed programs for achieving the goals of teaching. Without all these things, computer-based instruction will be only the conversion of text from a book into a screen of computer, a failed effort.

8 FACING SOME CHALLENGES AND REQUIRED ACTIONS

To face the challenge of the new curriculum we need to prepare all strategies, approaches, and models of teaching, so that we can achieve the stipulated goals. Problem solving and reasoning skills require the help of computer media which can assist teachers in their teaching. Sufficient preparations are required to welcome the content and its resulted change, particularly the change paradigm from the teacher-centered paradigm to the student-centered paradigm.

To ensure that we are not left behind by many other countries, we need to take some efforts to be in the same level as the teachers in other countries. A number of Asian countries, including China, Thailand, and the Philippine have seriously implemented computer-based teaching by conducting some workshops and seminars on these matters, together with program evaluation. Singapore, Malaysia, and also Japan are developing computer programs devoting for the advancement of teachers and prospective teachers, particularly science and mathematics teachers (Calumpit, 2000). The question is: are we walking in the same place or will we move to follow other countries in shaping our beautiful and promising future?

REFERENCES

Calumpit, P. R. (2000). *Technological Innovations in Courseware Development at the Collegiate Level in The Learning Society of the Future: Reconciling Education, Values and Technology for Social Transformation*. Proceeding of the 6th SEAMEO INNOTECH International Conference.

Camp, J. S. and Marchionini, G. (1984). *Programming and Learning: Implications for Mathematics Education in Computers in Mathematics Education (Year Book)*. Hansen, Reston, Virginia.

Fey, J. and Heid, M. K. (1984). Imperatives and possibilities for new curricula in secondary school mathematics. *Computers in mathematics education. NCTM, Reston*, pages 20–29.

Fletcher, T. J. (1983). *Microcomputers and Mathematics in Schools. A Discussion Paper*. ERIC.

Glass, E. M. (1984). Computers: challenge and opportunity. *NCTM. Computers in mathematics education. Virgínia: NTCM*.

Kaput, J. (1992). Technology and mathematics education. *Handbook of research on mathematics teaching and learning*, pages 515–556.

Kulik, J. A., Kulik, C. C., and Bangert-Drowns, R. L. (2004). *Effectiveness of Computer- Based Education in Elementary Schools [Online]*. Available: http://www.nwrel.org/ scpd/sirs/5/cu10.html [29.

Molenda, H., Russell, J., Smaldino, S., and Heinich, R. (1996). Instructional media and technologies for learning.

Wilson, B. (1988). Making sense of the future. a position paper on the role of technology in science, mathematics, and computing education.

The Role of Social Media on Intercultural Communication Competences

Winda Monika[1], Arbi Haza Nasution[2], Salhazan Nasution[3]

[1]*Department of Library Information, Universitas Lancang Kuning, Pekanbaru, Riau, Indonesia*
[2]*Department of Informatics Engineering, Universitas Islam Riau, Pekanbaru, Riau, Indonesia*
[3]*Department of Informatics, Universitas Riau, Pekanbaru, Riau, Indonesia*
windamonika@unilak.ac.id, arbi@eng.uir.ac.id, salhazan@lecturer.unri.ac.id

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Abstract: Social media is hitting mainstream lately. Since the advancement of technology, it brings people to interact with multi cultures users. Regardless most of social media have all of communication features on their applications, a study figures out that people tend to use more than one social media for different needs. Social media is a powerful online tool that allows people to communicate, interact, get connected, share, express idea and thought and many more functionalities to carry out. In this study, we examine the role of five widely used social media on intercultural communication competences. We conducted a survey on international students of Kyoto University and Tsukuba University, Japan. We try to figure out the motivation of the people using each social media on intercultural communication. The result shows that most of the participants are on Facebook with a motivation to get to know more about their international friends and most of their International friends are already on Facebook. It also shows that participants use social media with the following motivation: supporting social interaction, profiling, information sharing, and communication tools. Social media enhance participants communication competence in a way that communication among international friends goes effective, they adapt faster where social media assist them to get along very well with a strong tie, and finally, social media enhances their English reading skill.

1 INTRODUCTION

Since the upcoming of Internet, every aspect in human life changes pertaining the way of people communicate one another. These days, distance is not a matter. As long as someone has access to Internet, interaction and communication among people over continent is possible to be happened. A channel that facilitates the user's interaction and communication is called social media. Social media makes world seemingly borderless. Huge active users are increasing every time, estimated nearly one in four people worldwide is using social media. Over million active social media users exist (Metev and Veiko, 2013) and the number keeps increasing steadily, thus various social media are continuously invented and enhanced.

People use social media for various purposes. Most of people use social media because of the need to connect and interact with others; to gain knowledge and learn about different opinions and perspective of issues, topics, and events; and to socialize (Metev and Veiko, 2013). Moreover, some factors such as age somehow reflects the usage behavior of the tools as

well. Mostly generation Y uses social media for contributing, sharing, searching for, and consuming content, plus working and playing (Bolton et al., 2013). This shows that people have motive behind the usage of the tools. The need to stay connected with others and gain information are an instance of the user and the usage behavior.

Undeniably, people who come from different background, continents, countries, races, and so forth, are currently on social media. Social media has brought people from different cultures together in the "global village" (Metev and Veiko, 2013). Which means interaction among the social media users is not limited to the same culture only but also for intercultural communication. Moreover, prior study (Breckling, 2012) states that "social media are changing the way that information is passed across societies and around the world". It comes into questions whether the existing social media applications support their users adequately for intercultural communication or vice versa. Then, what kind of social media functionalities that helps to encourage intercultural communication. To do so, five most used social media were

selected to be further analyzed their features such as Line, WhatsApp, Slack, Facebook and Twitter. We examined the user's motivation on using the social media for intercultural communication. Later on, we analyzed to what extent social media features which mostly used for intercultural communication enhance intercultural communication competences.

2 LITERATURE STUDY

2.1 Social Media Application

Social media is a channel that is provided by social media platform which offers advanced features as well as functions which support social networking such as sharing ideas, information, knowledge, and so forth over network. Some social media is used for chatting and/or making phone call, for instance, Line, WhatsApp, Slack. Other social media are typical microblogging which allows user to post, exchange, share the small content such as sentences, small post, photos, videos, etc., and is also completed by some communication features such as instant messaging, phone call, video calls, for instance, Facebook and Twitter. Five popular social media and networking site used mostly for intercultural communication are Facebook, Line, Twitter, WhatsApp, and Slack.

Facebook website was launched on February 2004 (Padhye et al., 1999) and it has been gaining huge popularity since then. News portal online (Committee et al., 1999) reveals that "Facebook attracted over 130 million unique visitors in May 2010, an increase of 8.6 million people". There are over 800 million users in the world with a population of 6.9 billion, which means that about 1 out 12 people has a Facebook account (Metev and Veiko, 2013).

Line is a regular instant messenger apps with additional services such as games, money sending, e-commerce, as well as various number of emojis. It was launched in Japan in 2012 [1]. Line is immensely famous in Japan, Thailand, Taiwan, and Indonesia [2]. According to news states that "Line became Japan's largest social network in 2013, Japan: 54 million registered users" [3]. In March 2019, report said that Line is more popular than Facebook [4]

Slack was launched in August 2013 [5]. Before it was launched to public, it was used as a com-munication tool among internal employee. Unlike any other social media apps, this app is integrated with a large number of third-party services and supports community-built integrations, such as Google Drive, Dropbox, Box, GitHub, and so on. In 2015, Slack passed more than a million daily active users [6]. There're more than half a million Slack users in London and Tokyo [7].

Twitter is being used by over 328 million users [8]. It is a type microblogging which allows users to post and broadcast short information over the network. Therefore, it has influenced intercultural dialogue because many people worldwide are focused on the individual life of others and have desire for connection and knowledge of events (Sawyer and Chen, 2012).

WhatsApp Messenger is a messaging app for smartphones created in 2009 [9]. It offers features similar to SMS. This app has big number of users as well. WhatsApp now has 1.5 billion users and sees 60 billion messages sent per day [10]. It is mostly used by users due to its simplistic functionality.

2.2 Social Media Features

Social media is a powerful online tool that allows people to communicate, interact, get connected, share, express idea and thought and many more functionalities to carry out. People can easily access social media through an electronic devices such as web-based technologies on desktops (PC or laptops), or download services by using mobile devices (e.g., smartphones and tablets).

To support the needs of users, social media has been continuously inventing new features on it. Basically, social media is used for the communication purposes such as frequently used to support verbal (e.g., making a video call and phone call) and non-verbal (e.g., chatting) communication. Nowadays, social media is used to archiving memories, building reputations, marketing products, searching for job, shaping friendship, acquiring knowledge, exploring information as well as sharing thought and ideas by creating podcasts, blogs and so on. Therefore, features such as text posts or comments, digital photos or videos, create user profiles are embedded in the features.

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[1] https://www.techinasia.com/

[2] http://www.businessofapps.com

[3] https://www.techinasia.com/

[4] https://www.nippon.com/

[5] https://venturebeat.com

[6] https://www.theverge.com/

[7] https://techcrunch.com/

[8] https://www.thebalance.com/

[9] http://www.businessofapps.com/

[10] https://techcrunch.com

2.3 Uses And Gratifications On Intercultural Communication

Uses and gratifications theory (U&G) is a renowned theory in media research. Gratification can be defined as "feeling of satisfaction" of the use of something. Basically, the objectives of this theory are to describe and figure out the psychological needs that shape people's motive behind their engagement to utilize certain media for gratifications that fulfill their inherent needs (Rubin, 1981).

People in social media are coming from multi-cultures, thus having different personality and behavior in using social media. Regardless most of social media have all of communication features on their applications, a study figures out that people tend to use more than one social media. A study concluded that different social media fulfill different user needs (Correa et al., 2010). Many factors effect the use of social media. Young adults have been found to depend heavily on the Internet for entertainment and information. Further, it reveals that the reason of using social-networking sites by young adults are "to experience selective, efficient, and immediate connection with others for their (mediated) interpersonal communication satisfaction and as an ongoing way to seek the approval and support of other people" (Urista et al., 2009). That means age influence the use of the social media.

A study defined that the reason of use and what gratification will people get from social media are for social interaction, information seeking, pass time, entertainment, relaxation, communicatory utility, convenience utility, expression of opinion, information sharing, and surveillance/knowledge about others (Whiting and Williams, 2013). They may also use the Internet to "connect and maintain social relationships" (Stevens and Morris, 2007). Other study categorized social media gratification into content and process. Content is driven from acquiring information and knowledge, where process occurs from web browsing or creating content for the website (Kayahara and Wellman, 2007).

There are several researches that have been conducted to examine use and gratification on using social media. However, less study discussing on the motive for choosing a certain kind of social media specially used for intercultural communication.

2.4 Intercultural Communication Competences

Intercultural communication competences (ICC) are generally defined as abilities of people to communicate and interact with people from multi-cultures. The study about ICC had been conducted in the past 50 years (Arasaratnam and Doerfel, 2005) and still ongoing. in this 21st century, ICC encounters a unique research field due to the changes of the social interaction and communication in society. It used to limit the scope on face to face communication. But later on, due to the advancement of technology, the study is expanded to measure the implication of the various media used for communication toward intercultural communication process and competences.

A concept of new media such as social media would bring a gap as well as challenge in order to attain a successful communication. A study states that "new media has brought human interaction and society to a highly interconnected and complex level, but at the same time challenges the very existence of intercultural communication in its traditional sense"(Chen, 2012). Social media which primarily relies on information technology bring the users in different level of information technology literacy. People must be able to use and manage their social media properly. Moreover, to successfully communicate with people from different cultures, the ability of global communication competence is a must (Chen et al., 1998).

Variable of competences was defined varied by researchers in this filed. Brian H. Spitzberg (1991) presents a model of interpersonal competence which consists of motivation, knowledge, and skill in interaction (Spitzberg, 1991). These three skills are crucial to develop intercultural communication skills. To look into detail, Martin and Hammer (1989) examined social skills perspective which focus on communicative function behaviors, verbal and non-verbal behaviors and conversational management behaviors. Based on these models, in this study we pick up several variables of ICC to be further examined. Those are communication effectiveness, language competences and empathy.

3 METHODOLOGY

Survey had been conducted in two public universities in Japan whose provide international program delivered in English. Those are University of Tsukuba and Kyoto University. The target were international students who come from various countries that have different educational backgrounds, academic standing as well as cultures. Although, they were taking classes given in English which means their English proficiency is already fair, nevertheless English is not their mother-language. Therefore, we selected

this environment as a sample to examine intercultural communication vibes among them.

There were 55 respondents from two universities submitted the feedback. The survey is divided into three parts – Part A, Part B, and Part C. Part A collected the demographic information of the respondents including e.g., university, gender, nationality, age, academic standing and social media used.

Part B analyzed the motivation behind the usage of each selected social media i.e., Facebook, Line, Twitter, WhatsApp, and Slack. We chose those social media due to its popularity among the international students in Japan. Despite the type of social media, we observed some aspect such as strengthen connection with international friend, feature embedded, and functions of the social media which influence the reason. We examined user's motivation on intercultural communication by using U&G theory (Whiting and Williams, 2013) as a based line, futhermore we developed our own questioners to analyze further the reason of users for choosing those kinds of social media on intercultural communication. There were 10 question items asked and students were allowed to choose more than one social media that they use on the daily basis. The motivation items questionnaire was utilized from and we added some additional question items in accordance with social media usage on intercultural communication.

Part C examined to what extent of the social media usage and motivation of the users influence intercultural communication competence. There were two variables in this part. The usage as a variable one includes instant messaging and resource sharing. To look over each social media as well as the reason of using those media are covered by part B. The respondents were asked to choose what kind of social media that they are using for each usage or purpose. The data of the variable one was collected in part B. Variable two examines the intercultural communication competences including four aspects, those are communication effectiveness, adaptation, language competence, and empathy. There were 25 questions for the total. The participants were asked to rate the scale using Likert scale 1 to 5 scale ("5. Strongly agree"; "3. Neither"; "1. Strongly disagree").

4 RESULT

4.1 Demographic Information

Demographic information e.g., age, nationality, academic standing and social media usage of the 55 students is shown in Table 1. It shows that out of 55

total responses conducted in University of Tsukuba (UoT) and Kyoto University (KU), 66.7% were in the range of age 20 – 29 years old. Most of the participant are dominated by Indonesian students (32%). Most of participant are graduate school students; PhD students as (40%) and Master students (37%). In addition, we found that nearly 96% students were on Facebook. Male students use Facebook more than female student. In contrast, others social media for instance Line, Twitter, WhatsApp, and Slack were used dominantly by female student. According to Table 1, most of the participants use more than one social media.

4.2 Social Media That Motivate Users on Intercultural Communication

Results show that about 8 of 10 questionnaire items, Facebook is dominantly chosen by the participants as the most used social media. According to Figure 1, most of the participants are on Facebook with the following motivations: get to know more about their international friends; most of their International friends are on Facebook; find international friends with mutual interest; broaden networking with their international friends; help them to keep in touch with their international friends; their International friends suggest them to use it; utilize it as a resource sharing; and the last one is for chatting. The percentage are 91%, 91%, 89%, 89%, 87%, 75%, 74%, and 62% respectively. Other results show that Line was chosen as the 2nd most used by the participants due to its functionality in creating enclosed group and making a phone call.

4.3 Intercultural Communication Competences

Table 2 through Table 5 describe the items and the average score of each item which measure intercultural communication competence variable. We analyzed the scale's internal reliability by calculating its Cronbach's α coefficients. As a result, the coefficients of the four scales were .767, .754, .818, and .607 respectively.

We examined intercultural communication competence of the participants by asking 23 questionnaire items. We look thoroughly four (4) aspects of intercultural communication competence; communication effectiveness, adaptation, language competence, and empathy.

As shown in Table 2, on communication effectiveness aspect, most of the participants agreed that there were not any communication barriers with their international friends (IF) when using chatting as "they do

Table 1: Demographic Information

Demographic	UoT (n = 33 (58.2%))		KU (n = 22 (41.8%))		Total
	Male (n=13)	Female (n=20)	Male (n=17)	Female (n=5)	55
Age					
20–29 years old	10.52%	24.6%	22.8%	8.77%	66.7%
30–39 years old	12.28%	7.02%	7.02%	1.75%	29.8%
40–49 years old	1.75%	1.75%	-	-	3.5%
Nationality					
Indonesian	7	13	10	2	32 (56%)
Chinese	-	-	1	-	1 (2%)
Taiwanese	-	-	-	1	1 (2%)
Thailand	3	-	1	1	5 (9%)
Lebanon	-	-	-	1	1 (2%)
Indian	-	1	-	-	1 (2%)
Sri Lankan	-	1	-	-	1 (2%)
American	3	2	4	-	9 (16%)
Norway	-	-	1	-	1 (2%)
Nepali	-	1	-	-	1 (2%)
Moroccon	-	1	-	-	1 (2%)
Academic Standing					
Undergraduate	1	3	-	-	4 (7%)
Master student	3	8	8	3	21 (37%)
P.hD student	6	8	7	2	23 (40%)
ExchanceStudent	1	-	-	-	1 (2%)
ResearchStudent	2	1	2	-	5 (9%)
Social Media	Male		Female		n
Facebook (FB)	30		25		52 (96%)
Line	20		24		44 (77%)
Twitter	7		10		17 (30%)
WhatsApp (WA)	5		10		15 (26%)
Slack	9		12		21 (37%)

Table 2: Communication Effectiveness

Items	Mean	Std Dev
I don't find any difficulty communicating with my IF on phone call	3.49	1.14
I don't find any difficulty communicating with my IF on chatting	4.11	0.93
I understand with the context of information shared by my IF	3.92	0.87
I don't mind making mistake (such as typo, grammar-error, so on) while chatting on social media with my IF	4.02	0.95

α = .767

Table 3: Adaptation

Items	Mean	Std Dev
I don't judge my IF during communicating or interacting with me through social media	3.54	1.09
Social media makes me can get along very well with my IF	3.68	1.01
Social media helps me bonding or having a close relationship with my IF	3.54	0.88
My IF helps me to survive in the university through social media	3.07	1.14
My IF help me to settle in Japan through social media	2.98	1.07
I rely a lot on my IF through social media	3.81	1.01

α = .754

not find any difficulty communicating with my IF on chatting" was selected with mean 4.11.

The second aspect examined is language competence. As shown in Table 4, due to all participants are fluent in English where English is as their second language, therefore "they easily understand or relate to what is being discussed with their international friends on social media" is fairly chosen with mean 3.65. In addition, it seems that social media is fairly enhancing the participant's English reading,

writing, speaking and listening skills with mean 3.54, 3.47, 3.14, and 3.08 respectively. Moreover, it seems that most of the participants preferred to communicate through chat (mean 3.63) over phone-call (3.54).

The third aspect analyzed is empathy. As shown in Table 5, most of the participants agreed to show
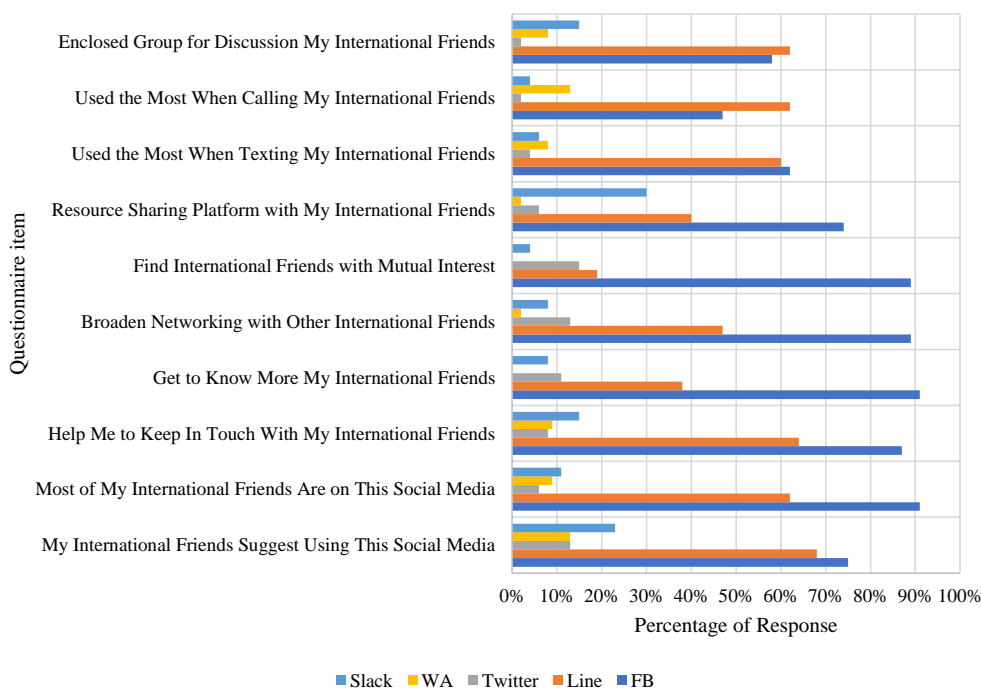
Figure 1: Motivation on Intercultural Communication Using Social Media.

Table 4: Language Competence

Items	Mean	Std Dev
I am confident with my English writing skill when chatting with my IF through social media	3.63	1.14
I am confident with my English-speaking skill when communicating with my IF through social media	3.54	1.16
I easily understand or relate to what is being discussed with my IF on social media	3.65	0.96
I feel social media helps me to enhance my English writing skill	3.47	1.28
I feel social media helps me to enhance my English-speaking skill	3.14	1.22
I feel social media helps me to enhance my English reading skill	3.54	1.20
I feel social media helps me to enhance my English listening skill	3.08	1.27

α = .818

their empathy toward other international friends by "always trying to make their international friends feel comfortable communicating with them on social media". This item has a mean 3.95. Moreover, most of the participants agreed that "if they don't understand during the chatting and the context of the information being discussed, they would not hesitate to reconfirm and ask their International Friends" with mean 3.87 and 2.17 respectively. In addition, for phone call was chosen fairly with mean 3.02.

5 DISCUSSION

5.1 Survey Respondents - Gender Ratio, Age, Nationality, Academic Standing, Social Media Usage

Previous study (Ye and Murota, 2014) mentioned that the younger student with higher level of English language ability would like to communicate with foreigner more. Therefore, to confirm the factor, we analyzed age toward intercultural communication com-

Table 5: Empathy

Items	Mean	Std Dev
If I don't understand during chatting, I will reconfirm with my IF	3.87	0.76
If I don't understand during the enclosed group discussion on social media, I don't mind to re-explain several times.	2.17	0.73
If I don't understand during making phone call, I ask my other friend to help me instead	3.02	1.00
I don't avoid communicating on social media with whom I don't understand well his/her English (English native speaker)	3.72	1.08
I don't avoid communicating on social media with whom I don't understand well his/her English (English nonnative speaker)	3.64	1.13
I always try to make my international friends feel comfortable communicating with me on social media	3.95	0.93

α = .607

petence by conducting regression analysis. We did not analyze the English language ability of the students because we assumed that their English level is already high since they enroll to the English program. Fig. 1 shows age (β=-.13, p<.05) where the result apparently was similar to the previous study.

In this study, the participant are students who utilize social media to communicate both with their same country and international friends frequently. Table 1 shows that mostly the participants are dominated by young generation or commonly called generation Y. Generation Y are the first generation to spend their entire lives in digital environment; information technology profoundly affects how they live and work (Mayfield, 2008). Generation Y actively contributes, shares, searches for and consumes content – plus works and plays- on social media (Chen, 2012). In addition, participants are mostly well educated which have a good level of academic standing. No wonder that most of them are already being a digital native. Nevertheless, there is no significant relationship between the number of social media used with the level of academic standing of the participants (p>.05).

As Table 1 mentioned that mostly the participants use more than one social media. Users do not embrace a single form social media but, tend to employ a range of tools for communication (Quan-Haase et al., 2002). As shown in the Table 1, one participant at least utilizes two social media tools for communication. Findings show that Facebook and Line are used mostly by the participants as a communication tool. Social media as a communication tool has basic features such as texting and making phone call. For these basic functions, Line is used for phone call while Facebook is for texting. In addition, social networking such as finding more international friends, resource sharing, broaden networking and so on, Facebook is chosen

the most.

Facebook is a complete and huge social media platform. It is used not only as a communication tool but also micro-blogging which allow user to share their and others thought through posted information, videos and pictures on the wall. It helps disseminating information goes faster through out the connected friends. In addition, Facebook is utilized with emoticon on the chat box, although Line is also having emoticon, but Facebook's is chosen more preferable by the participants. Moreover, Facebook registers personal information of the users and that information is accessed openly so that people may use it for profiling. General information such as school, working place, address, current location, hobbies and so forth are easily bringing user to get connected and find mutual international friends with the same interest. Above all functions, Facebook and Line are subsequently creating, developing and deepening social engagement and physiological attachment among the users. Which later on effect dependencies toward this channel.

5.2 Use and Gratification of Social Media for Intercultural Communication

Results show that participants use social media for various motives or reasons. Here are some motives which reflect the gratification they get from using such kind of the social media features.

- *Supporting Social Interaction.* According to findings as shown in Figure 1, several motives behind the usage of social media in intercultural communication are revealed such as for 'finding international friends with mutual interest", 'getting to know more about their international

friends","helping them to keep in touch with their international friends", "broadening the networking with their international friends". Therefore, it reveals that social media firmly supports creating, maintaining the strong tie as well as expanding network.

- *Profiling*. Features of social media that provide personal information openly to public allow users doing profiling toward stranger. As profiling is very crucial in social media, this kind of features enable users to analyze someone's bahaviour and personalities that is reflected from their post and information shared on their social media.

- *Information Sharing*. Feature of social media that enable users to share information in multi-format (e.g., as text, image, code, etc) is needed. Since the participants are university students, this kind of feature is commonly and actively used in their daily basis.

- *Communication tools*. According to finding in Figure 1, social media used as a communication tool is voted as the last place after support social interaction and information sharing. Most of the participants use social media for texting and calling. Findings also show that participants prefer use social media for making phone call over texting.

5.3 Intercultural Communication Competence Enhancement

As shown in Table 2, even though most of the students are not English native speaker and in Japan, English is considered not even as a second language, communication among international friends goes effective where most of them agree that they do not find any difficulty communicating one another whether by chatting or phone call.

According to Table 3, most of participants agree that social media helps them to adapt with their new international friends. Social media support their adaptation faster where social media assists them to get along very well and bond the relationship to be strong tie. As mentioned by (Mayfield, 2008) there is a significant relationship between ISs' communication media usage and adaptation situations. Nevertheless, there is no high dependency toward their international friends via social media.

As shown in Table 4, majority of the participants agree that social media helps them to enhance their English reading skill. Social media is updating its content every second, thus in order to keep informed makes users have to read the latest news on social me-

dia. In addition, the findings show that most of participants already have good empathy. it is shown from majority of the participants agree that they always try to make their international friends feel comfortable during communication with them on social media.

6 CONCLUSIONS

Social media is a powerful online tool that allows people to communicate, interact, get connected, share, express idea and thought and many more functionalities to carry out. We examined the role of five widely used social media, i.e., Facebook, Line, Twitter, WhatsApp, and Slack on intercultural communication competences. We conducted a survey on 55 international students of Kyoto University and Tsukuba University, Japan. The result shows that most of the participants are on Facebook with a motivation to get to know more about their international friends and most of their International friends are already on Facebook. It also shows that participants use social media with the following motivation: supporting social interaction, profiling, information sharing, and communication tools. Social media enhance participants communication competence in a way that communication among international friends goes effective, they adapt faster where social media assist them to get along very well with a strong tie, and finally, social media enhances their English reading skill.

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REFERENCES

Arasaratnam, L. A. and Doerfel, M. L. (2005). Intercultural communication competence: Identifying key components from multicultural perspectives. *International Journal of Intercultural Relations*, 29(2):137–163.

Bolton, R. N., Parasuraman, A., Hoefnagels, A., Migchels, N., Kabadayi, S., Gruber, T., Komarova Loureiro, Y., and Solnet, D. (2013). Understanding generation y and their use of social media: a review and research agenda. *Journal of service management*, 24(3):245–267.

Breckling, J. (2012). *The analysis of directional time series: applications to wind speed and direction*, volume 61. Springer Science & Business Media.

Chen, G.-M. (2012). The impact of new media on intercultural communication in global context.

Chen, G.-M., Starosta, W. J., Lin, D., and You, Z. (1998). *Foundations of intercultural communication*. Allyn and Bacon Boston, MA.

Committee, I. C. S. L. M. S. et al. (1999). Wireless lan medium access control (mac) and physical layer (phy) specifications. *ANSI/IEEE Std. 802.11-1999*.

Correa, T., Hinsley, A. W., and De Zuniga, H. G. (2010). Who interacts on the web?: The intersection of users' personality and social media use. *Computers in human behavior*, 26(2):247–253.

Kayahara, J. and Wellman, B. (2007). Searching for culture—high and low. *Journal of Computer-Mediated Communication*, 12(3):824–845.

Mayfield, A. (2008). What is social media.

Metev, S. M. and Veiko, V. P. (2013). *Laser-assisted microtechnology*, volume 19. Springer Science & Business Media.

Padhye, J., Firoiu, V., and Towsley, D. (1999). A stochastic model of tcp reno congestion avoidance and control.

Quan-Haase, A., Wellman, B., Witte, J. C., and Hampton, K. N. (2002). Capitalizing on the net: Social contact, civic engagement, and sense of community. *The Internet in everyday life*, pages 291–324.

Rubin, A. M. (1981). An examination of television viewing motivations. *Communication Research*, 8(2):141–165.

Sawyer, R. and Chen, G.-M. (2012). The impact of social media on intercultural adaptation.

Spitzberg, B. H. (1991). An examination of trait measures of interpersonal competence. *Communication Reports*, 4(1):22–29.

Stevens, S. B. and Morris, T. L. (2007). College dating and social anxiety: Using the internet as a means of connecting to others. *CyberPsychology & Behavior*, 10(5):680–688.

Urista, M. A., Dong, Q., and Day, K. D. (2009). Explaining why young adults use myspace and facebook through uses and gratifications theory. *Human Communication*, 12(2):215–229.

Whiting, A. and Williams, D. (2013). Why people use social media: a uses and gratifications approach. *Qualitative Market Research: An International Journal*, 16(4):362–369.

Ye, S. and Murota, M. (2014). International students' perception of media literacy in japan: Focusing on cell phones and smartphones. In *EdMedia+ Innovate Learning*, pages 692–701. Association for the Advancement of Computing in Education (AACE).

Achievement Goal for Indonesian Students of Mathematics Education Program: Issues of Gender and Academic Yeal Level

Riyan Hidayat[1], Sharifah Norul Akmar Syed Zamri[1], Hutkemri Zulnaidi[1], Putri Yuanita[2]

[1]*University of Malaya, Malaysia*
[2]*Riau University, Pekanbaru, Indonesia*
riyan160989@gmail.com, {snorul, hutkemri}@um.edu.my, putri.yuanita@lecturer.unri.ac.id

Keywords: Academic Year, Achievement Goal, Cross-Cultural Affect, Gender.

Abstract: Previous study has suggested that a consensus might exist regarding the academic year level and gender distinction in the achievement goals in higher education. The current study examines the level of the goals of achievement for students of mathematics education program in Indonesia. In addition, we analyse gender and academic year level as factors that might influence students' achievement goals. The research adheres a survey research design to probe the differences in the achievement goals for mathematics education program students. Participants involve 538 mathematics education program students. The statistical program SPSS is employed for computing correlation matrix, mean values, and standard deviations and one-way MANOVA for making comparison. Indonesian students of the mathematics education program apply other-avoidance and self-approach goals. No significant distinction was noticed between male and female pupils in all goal of achievement sub-dimensions. However, significant disparities were noted based on academic year levels, particularly in relation to self-avoidance and other-approach goals.

1 INTRODUCTION

Recently, complex arrangements of achievement goals have been evidenced to gauge students' goals in pursuing their academic aims. For example, (Elliot and McGregor, 2001) developed a new framework of achievement goals that involve task-, self- and other-based competences. To date, numerous studies have confirmed that goals of achievement are progressively recognized as having a important role in academic results (Lower and Turner, 2016; Mascret et al., 2017; Wynne, 2014), especially for resolving complicated problems (Maretasani et al.,). Endorsing students' task- and self-based competences rather than their other-based competence is pivotal because these competences are connected to positive learning results (Pahljina-Reinić and Kolić-Vehovec, 2017). However, prior studies have discovered that Indonesian pupils tend to utilize performance goal orientation or other-based competence and mastery-avoidance goals (Liem and Nie, 2008). In terms of gender, the differences of achievement goal levels between female and male students found in extant literature are also highly questionable (Musa et al., 2016; Rashidi and Javanmardi, 2012; Remedios et al., 2008; Wang et al., 2008; Wu,

2012). Interestingly, previous investigations have also recommended that a consensus might exist regarding the academic year difference in achievement goals (Alrakaf et al., 2014; Lieberman and Remedios, 2007; Remedios et al., 2008) although similar education levels have been studied.

To our knowledge, the level of achievement goals in higher education in Indonesia involves the latest framework suggested by Elliot et al. (2011), and analysis based on gender and academic year level has not been conducted. Accordingly, the study aims to assign the nature of the goals of achievement for a mathematics education program students in Indonesia with attention to the gap pertaining to gender and academic year level. The research questions guiding the study are as follows:

- What is the nature of the goals of achievement across a mathematics education program students in Indonesia?

- Is there any gender-based difference in achievement goals amongst mathematics education program students in Indonesia?

- Is there any difference in the achievement goals amongst mathematics education program students in Indonesia based on their academic year levels?

2 LITERATURE REVIEW

2.1 Achievement Goals

As mentioned, goals of achievement cover the aims (Ames, 1992). Ames (1992) argued that a goal of achievement contains the aims of achievement behaviour. Likewise, goal of achievement concentrates on the kinds of goal aim or reason (Ames, 1992; Maehr and Zusho, 2009; Pintrich, 1999) dictating achievement-connected behaviour. Achievement goal deciphers the idea of pupils' adaptive and maladaptive reactions to performance defiance (Dweck, 1986; Nicholls, 1984). Adaptive reactions are emphasized to promote the formation, preservation and performance of privately challenging and personally appreciated goals of performance. Maladaptive reactions are truly associated with the default to generate plausible, appreciated aims, keep potent fighting towards those aims or attain appreciated goals that are potentially within one's scope (Dweck, 1986). The main objective of achievement goal theory has been categorized into two distinct attentions, namely, mastery goal orientation and performance goal orientation (Dweck, 1986; Nicholls, 1984). Mastery goal orientation (adaptive) are reflected by defiance-seeking and great, potent persistence in the face of barriers. Students who indicate this scheme usually savor undertaking effort in the chase of problem mastery. Conversely, performance goal orientation (maladaptive) are categorized by defiance avoidance and minimal persistence in the face of adversities. Pupils with performance goal orientation are more likely to depict negative effect (like discomfort) and negative self-cognitions when facing hurdles.

(Elliot and McGregor, 2001) suggested the recent model of achievement goal, which is the 3 × 2 achievement goal model. The suggested model is evolved from the 2 × 2 mastery–performance design, distributing from the mastery–performance distinction. Under the 3 × 2 model, for example, mastery-approach and -avoidance goals focus on the accomplishment of task–based competence or self-based competence and incompetence, successively. By contrast, performance-approach and -avoidance goals concentrate on the accomplishment of other-based competence and incompetence, respectively. The inquiry of interest is whether task- and self-based abilities have same or distinct goal dimensions. Therefore, a 3 × 2 goals of achievement model (Elliot et al., 2011) is the latest model employed in the present work.

(Elliot and McGregor, 2001) asserted that task- and self-based goals have been regarded as falling under a sole construct where both have an evaluative criteria, such as mastery goal orientation. It is clearly accurately interconnected between the task-based goal of understanding new subject material and the self-based goal of broadening one's insight base. Nevertheless, (Elliot and McGregor, 2001) also depicted that task- and self-based competences are not corresponding for all conditions; moreover, dividing them into two entities is occasionally important depending on particular surroundings. Many real-world samples are connected to task- and self-based competences. Pupils who work on a crossword puzzle (i.e., task-based goal) may simply be fighting to discover all of the words in the puzzle while not caring about improving their logic capabilities (i.e., self-based goal; Elliot et al., 2011). Conversely, other-based goals are direct analogues of performance goals. Competency in mastery and performance is conceptualized as approach or evasion. Mastery goals (i.e., mastery goal orientation and performance goal orientation) are connected to positive academic outcomes; meanwhile, avoidance goals (i.e., mastery- and performance-avoidance goals) often affect negative results (Liu et al., 2017).

2.2 Academic Year and Gender Factor in Achievement Goals

Prior works have suggested that Indonesian students hold social-oriented performance and performance-approach orientation and mastery-avoidance goals orientation (Liem and Nie, 2008). Moreover, they are prone to follow values underlining conformity and togetherness. They also perceive safety from attaining the academic goals decided by parents or teachers. Interestingly, (Go, 2017) examined students' personal achievement goal orientation in relation to the National Exam in Indonesia. The results indicated no significant distinctions between the exam and non-exam groups in the achievement goals involving personal mastery and performance-approach goal orientations. Qualitative analysis confirms that pre-service teachers in Indonesia who enrolled at secondary science and mathematics education have diverse goals of achievement in diverse circumstances based on vital factors, including ability, course regulation, educators, subject and community (Aziz et al., 2017). For instance, they are more inclined to hold other-avoidance goal orientation in terms of the subjects, have task-avoidance goal in terms of completing high stakes coursework or taking

non-preferable courses, and indicate self-approach goals in terms of scoring greater than the classroom average value in the initial exam.

Moreover, in a comparison of students according to academic year level, several international studies have revealed differences in the achievement goals amongst higher education students. Alrakaf, Sainsbury, Rose, and Smith (2014) found that third-year students were oriented less strongly towards performance and mastery goals than their first-year counterparts. Interestingly, the research also confirmed that performance-goal-oriented students obtained higher scores in their course than their fellow students who adopted any other type of achievement goals. First-year students in psychology and nursing departments were less likely to want to dominate their courses than students in years 2, 3 and 4 (Lieberman and Remedios, 2007). The study also found that students in years 2, 3 and 4 were focused on grades and their enjoyment towards subjects substantially decreased. Similarly, Remedios, Kiseleva and Elliott (2008) indicated that Russian students' degrees of mastery were substantially lower after semesters 1 and 2. Therefore, we hypothesized that amongst mathematics education program students significant differences exist for achievement goal sub-dimensions.

Females apply masculine gender roles and males apply feminine gender roles; thus, they probably possess different goal orientations. (Remedios et al., 2008) found similar results for students in the sport field. In comparison with male students, female students indicated lower ego orientation and were less likely to declare that they engaged in an ego-oriented environment. Conversely, males were less likely to feel a task- oriented environment than the females. Meanwhile, (Wu, 2012) examined gender differences across cultures in achievement goals in Taiwan. Chi-square tests revealed that no gender distinctions were present in the pattern of achievement goals for junior high school and elementary students. Similarly, at a higher education level, no significant differences were found in achievement goals between male and female students (Wang et al., 2008). To our knowledge, however, no extant research has concentrated on the differences of achievement goal sub-constructs among students in a mathematics education program.

3   RESEARCH METHODOLOGY

The present study follows a survey design (Creswell, 2012). The population of the present study was a mathematics education program in Indonesia. (Fraenkel and Wallen, 2009) indicated that cluster random sampling was selected since this work selected groups rather than individuals. The research participants were 538 students of a mathematics education program in Riau Province, Indonesia. 483 (89.8%) of participants were woman participants were , whereas 55 (10.2%) of participants were man participants. Targeted participants involved those from the first until the fourth year during AY 2017– 2018. Nevertheless, this work only included the first-year participants, second-year participants and third-year participants, because the fourth-year participants were conducting their teaching training sessions. To measure goal of achievement, we employed The 3×2 Achievement Goal Questionnaire (Elliot et al., 2011). It consisted of six sub-dimensions; task-approach goal, task-avoidance goal, self-approach goal and self-avoidance goal, other-approach goal and other-avoidance goal. Cronbach's alpha score was discovered to be .95 for all the sub-constructs.

3.1   Data Analysis

The SPSS 24.0 software was employed in the current research for descriptive analysis. The MANOVA factorial analysis was employed to gauge the distinction in pupils' achievement goal. Cronbach's alpha coefficients are computed to assign the questionnaire reliability (total and sub- constructs). As for Hair et al., (2010), alpha scores of 0.60 to 0.70 in exploratory research are satisfactory.

4   RESULTS

4.1   Analysis of Descriptive Statistics

To present foremost insights into the data, we computed correlation matrix, mean values, and standard deviations for all measures employing SPSS (Table 1).

Table 1 provides the mean values for goals of achievement, which varied between sub-constructs (M = 4.87 and SD = 1.16 for task-approach goal; M = 5.46 and SD = 1.26 for task-avoidance goal; M = 5.57 and SD = 1.09 for self-approach goal; M = 5.20 and SD = 1.17 for self-avoidance goal; M = 5.14 for and SD = 1.29 for other-approach goal; and M = 5.58 and SD = 1.07 for other-avoidance).

Table 1: Correlation Matrix, Mean and Standard Deviation

Variable	1	2	3	4	5	6
1. Task-approach goal	1	.54**	.51**	.47**	58**	.48**
2. Self-approach goal		1	.55**	.59**	.57**	.55**
3. Task-avoidance goal			1	.59**	.52**	.56**
4. Self-avoidance goal				1	.51**	.51**
5. Other-approach goal					1	.56**
6. Other-avoidance goal						1
Skewness	-.15	-1.07	-.98	-.90	-.60	-1.05
Kurtosis	-.07	1.49	.80	1.24	.09	1.23
M	4.87	5.57	5.46	5.20	5.14	5.58
SD	1.16	1.09	1.26	1.17	1.29	1.07

4.2 Differences in Achievement Goal Sub-constructs based on Gender

One-way MANOVA analysis was calculated to assign the distinction in the achievement goals between male and female participants. Prior to the one-way MANOVA test, the variance homogeneity test was calculated employing Levene's test of equality of error variances, which exhibited the variances of the variables scattered equally with the F value = 1.47 and sig = .075 ($p > .05$). This outcome revealed that one-way MANOVA could be computed to determine the differences in the students' achievement goals. Table 2 depicts the mean and standard deviation of pupils' achievement goals based on gender.

Table 2: Mean and Standard Deviation of Students' Achievement Goals Based on Gender

Dependent Variable	Male	Female
Task-approach goal	4.94 ± 1.23	4.86 ± .93
Self-approach goal	5.53 ± 1.28	5.61 ± .94
Task-avoidance goal	5.33 ± 1.26	5.43 ± 1.00
Self-avoidance goal	5.22 ± 1.32	5.29 ± 1.03
Other-approach goal	5.03 ± 1.34	5.08 ± 1.07
Other-avoidance goal	5.71 ± 1.20	5.58 ± .90

Table 2 reveals that females had higher achievement goals compared with males. By contrast, males had higher other-avoidance goals (M = 5.71 and SD = 1.20) than females (M = 5.58 and SD = .90). Females had higher self-approach goals (M = 5.61 and SD = .94) than males (M = 5.53 and SD = 1.28). The lowest mean values were for the task-approach goal (males: M = 4.94 and SD = 1.23, females: M = 4.86 and SD = .93). Table 3 lists the results of the one-way MANOVA of gender in achievement goals.

Table 3 lists the findings of the one-way

Table 3: One-Way Manova Results on the Difference in Students' Achievement Goals Based on Gender

Dependent	Variable	df	Mean Square	F	Sig.	Partial Eta Squared
Task-approach goal	.333	1	.333	.354	.552	.001
Self-approach goal	.297	1	.297	.305	.581	.001
Task-avoidance goal	.482	1	.482	.454	.501	.001
Self-avoidance goal	.270	1	.270	.238	.626	.000
Other-approach goal	.140	1	.140	.114	.735	.000
Other-avoidance goal	.816	1	.816	.923	.337	.002

MANOVA analyses on gender. Overall, no significant difference was found between male and female students' task-approach goal (F= .354, p= .552), self-approach goal (F= .305, p= .581), task-avoidance goal (F= .454, p= .501), self-avoidance goal (F= .238, p= .626), other-approach goal (F= .114, p= .735) and other-avoidance goal (F= .923, p= .337).

4.3 Differences in Achievement Goal Sub-constructs based on Academic Year Level

Table 4 reveals the mean and standard deviation of students' achievement goals based on academic year level.

Table 4: Mean and Standard Deviation of Students' Achievement Goals Based on Academic Year Level

Dependent Variable	Year 1	Year 2	Year 3
Task-approach goal	4.94 ± .98	4.89 ± 1.02	4.78 ± .88
Self-approach goal	5.78 ± .87	5.56 ± 1.03	5.52 ± .99
Task-avoidance goal	5.46 ± 1.01	5.43 ± 1.09	5.39 ± .95
Self-avoidance goal	5.51 ± .97	5.25 ± 1.09	5.17 ± 1.06
Other-approach goal	5.29 ± 1.06	4.99 ± 1.20	5.02 ± .98
Other-avoidance goal	5.76 ± .82	5.52 ± .97	5.57 ± .96

Table 4 reveals that first-year (M = 5.78 and SD = .87) and second-year (M = 5.56 and SD = 1.03) students had the highest self-approach goals. Third-year students had the highest other-avoidance goal (M = 5.57 and SD = .96). The lowest mean value was for the task-approach goal of third-year (M = 4.78 and SD = .88), second-year (M = 4.89 and SD = 1.02), and first-year (M = 4.94 and SD = .98)

students. Overall, first-year students had higher task-approach goal, task-avoidance goal, self-approach goal, self-avoidance goal and performance goals (including other-approach goal and other-avoidance goal) than second- and third-year students. Table 5 shows the results of the one-way MANOVA of academic year in achievement goals.

Table 5: One-Way Manova Results on The Difference in Students' Achievement Goals Based on Academic Year Level

Dependent Variable	Type-III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Task-approach goal	2.142	2	1.071	1.140	.321	.004
Self-approach goal	5.944	2	2.972	3.078	.051	.011
Task-avoidance goal	.441	2	.221	.207	.813	.001
Self-avoidance goal	9.649	2	4.825	4.323	.014	.016
Other-approach goal	8.112	2	4.056	3.350	.036	.012
Other-avoidance goal	5.042	2	2.521	2.871	.057	.011

Table 5 reveals the findings of the one-way MANOVA analyses of achievement goals based on academic year level. Overall, significant univariate main effects for academic year level were obtained for the percentage of self-avoidance goal [F= 4.323, (p= .014, $p < .05$)] and other-approach goal [F= 3.350, (p= .036, $p < .05$)]. To identify the difference in the students' achievement goals, the post-hoc Scheffe test was also evaluated. The analysis was conducted to examine the difference in the achievement goals based on academic year level (i.e., first-year students, second-year students and third-year students. The outputs of the post-hoc Scheffe test are indicated in Table 6.

Table 6: Post-Hoc Scheffe Test Results on The Differences in Achievement Goals Based on Academic Year Level

Dependent Variable	Mean Difference			
	Academic Year	Year 1	Year 2	Year 3
Self-avoidance goal	Year 1	-	.26	.34*
	Year 2	-.26	-	.08
	Year 3	-.34*	-.08	-
Other-approach goal	Year 1	-	.30*	.26
	Year 2	-.30*	-	-.03
	Year 3	-.26	.03	-

Table 6 indicates significant difference in the level of self-avoidance goals between first- and third-year students, with mean difference of .34 $p < .05$). The mean score reveals that first-year students had higher self-avoidance goal than third-year students. Moreover, a significant difference was found in the other-approach goals of first- and second-year students, with mean difference of .30 ($p < .05$). The mean score reveals that first-year students had higher self-avoidance goal than second-year students. Findings also indicate that no significant difference existed in the task-approach, self-approach, task-avoidance and other-avoidance goals among all groups.

5 DISCUSSION

The study aims to assign the nature of the goals of achievement across mathematics education program students in Indonesia. Our findings reveal that the mathematics education program learners in Indonesia appreciate generally in terms of their other-avoidance goals and self-approach goals. Interestingly, learners in Indonesia report higher degrees of self-based goals and other-based goals than task-based goals. The Indonesian students of the mathematics education program tend to use other-avoidance and self-approach goals for their competency. Evasion-based goals are based on default or avoiding from this negative likelihood, whilst approach-based goals are based on success and preserving a positive likelihood. Therefore, pupils who have other-avoidance goals evade making worse than their counterparts, whilst those holding self-approach goals also focused on the attainment of self-based competence (i.e., making better than previous). Likewise, the findings of the present study appear to be corresponding with previous studies (David, 2012; Liem and Nie, 2008), which indicate that Indonesian pupils are more likely to apply social-oriented achievement and performance-approach orientation and mastery-avoidance goal orientation. This outcome can be attributed to social views, social affiliation and social agreement mediating goals of achievement (Bernardo and Ismail, 2010). The findings spotlight the interest of maintaining goals of achievement for students of the mathematics education program in Indonesia in terms of enlarging their achievements by promoting task-based goal orientation and self- based goal orientation orientation rather than other- based goal orientation.

In terms of gender comparison, analysis of one-way MANOVA indicate no significant distinctions between man and woman in goals of achievement. The findings of the current research are consistent with several previous studies (Musa et al., 2016; Rashidi and Javanmardi, 2012; Wang et al., 2008; Wu, 2012) that revealed no gender

distinctions in the pattern of achievement goals in higher education levels. Social goals cause this non- significant differences of achievement goal sub- constructs. (Bernardo and Ismail, 2010) stated that social goals constitute a contributing factor that affects the achievement goals adopted in higher education. Moreover, aside from encouraging competition based on ability and effort, the higher education system in Indonesia have also concentrated intensely on examinations to fulfil particular requirements for upcoming semesters. Hence, obtaining the best result and fulfilling the expectations of lecturers are the main contributing factors towards the same social goals between genders. This circumstance significantly influences the students' achievement goals in higher education.

The present study also confirms that a significant difference exists in achievement goals, particularly the self-avoidance and other-approach goals based on academic year level. First-year students tend to adopt higher self-avoidance goals than third-year students, and they also hold greater other-approach goals than second-year students. We may infer that first-year students often approach success by doing better that their counterparts while they define success as avoiding failure or doing worse than they have achieved before. Our findings appear to corroborate with those from previous studies (Alrakaf et al., 2014; Lieberman and Remedios, 2007; Remedios et al., 2008), which indicate that first-year students are more strongly oriented towards performance and mastery goals. One possible reason for this outcome was explained by Alrakaf, Sainsbury, Rose, and Smith (2014) as arising from the competitive secondary school milieus from which freshmen recently emerged. They contend that such environment is the main reason why first- year students adopt greater performance-approach goals compared to second- or third-year students.

6 CONCLUSION AND RECOMMENDATIONS

The present study shows that mathematics education program students in Indonesia hold various achievement goals, namely other-avoidance and self-approach goals. Surprisingly, no significant distinction was found between man and woman learners in all achievement goal sub-dimensions. However, significant disparities were confirmed based on academic year levels for the self-avoidance and other-approach goals. Freshmen tend to apply greater self-avoidance goals than third-year

students and have higher other-approach goals than second-year students. An important limitation of the present study involves its small sample size. As a result, we cannot compare differences in achievement goal sub-constructs between male and female students in every academic year level. Therefore, future research should explore the effect of the interaction between gender and academic year level towards goals of achievement. Further investigation of other factors, like socioeconomic background or levels of accomplishment, is also necessary.

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REFERENCES

Alrakaf, S., Sainsbury, E., Rose, G., and Smith, L. (2014). Identifying achievement goals and their relationship to academic achievement in undergraduate pharmacy students. *American Journal of Pharmaceutical Education*, 78(7).

Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology*, 84(3).

Aziz, T. A., Purnomo, Y. W., and Pramudiani, P. (2017). Indonesian pre-service teachers learning motivations and goal achievements: A qualitative study. In Kusumawardani, C., Abadi, A. M., Suyanto, S., and Wilujeng, I., editors, *The 4th International Conference on Research, Implementation, and Education of Mathematics and Science (4th ICRIEMS)*. Universitas Negeri Yogyakarta, Yogyakarta.

Bernardo, A. B. I. and Ismail, R. (2010). Social perceptions of achieving students and achievement goals of students in Malaysia and the Philippines. *Social Psychology of Education*, 13.

Creswell, J. W. (2012). Educational research: Planning, conducting, and evaluating quantitative and qualitative research. *Educational Research (Vol.*

David, A. (2012). Structural validation of the 3 X 2 achievement goal model. *Educational Measurement and Evaluation Review*, 103(3).

Dweck, C. S. (1986). Motivational processes affecting learning. *American Psychologist*, 41(10).

Elliot, A. J. and McGregor, H. A. (2001). A 2 x 2 achievement goal framework. *Journal of Personality and Social Psychology*, 80(3).

Elliot, A. J., Murayama, K., and Pekrun, R. (2011). A 3×2 achievement goal model. *Journal of educational psychology*, 103(3):632.

Fraenkel, J. R. and Wallen, N. E. (2009). *How to Design and Evaluate Research in Education*. New York: McGraw-Hill.

Go, A. M. (2017). *Student's motivational goal orientation in facing national exam in Indonesia*. University of Oulu.

Lieberman, D. A. and Remedios, R. (2007). *Do undergraduates' motives for studying change as they progress through their degrees? British Journal of Educational Psychology, 77(2)*. 379–395.

Liem, A. D. and Nie, Y. (2008). Values, achievement goals, and individual-oriented and social-oriented achievement motivations among Chinese and Indonesian secondary school students. *International Journal of Psychology*, 43(5).

Liu, J., Xiang, P., and Lee, J. (2017). Developing physically literacy in K-12 physical education through achievement goal theory. *Journal of Teaching in Physical Education*, 36.

Lower, L. M. and Turner, B. A. (2016). Examination of the 3x2 achievement goal model in collegiate recreation: Comparison across sport programs. *Journal of Amateur Sport*, 2(2):75–102.

Maehr, M. L. and Zusho, A. (2009). *Achievement goal theory: The past, present, and future*. Handbook of Motivation at School, 77–104.

Maretasani, L. D., Masrukan, and Dwijanto. *(2016)*. International Conference on Mathematics, Science, and Education 2016 (ICMSE 2016) Problem, Semarang.

Mascret, N., Elliot, A. J., and Cury, F. (2017). The 3×2 achievement goal questionnaire for teachers. *Educational psychology*, 37(3):346–361.

Musa, A. K. J., Dauda, B., and Umar, M. A. (2016). Gender differences in achievement goals and performances in English language and mathematics of senior secondary schools students in Borno state. *Nigeria. Journal of Education and Practices*, 7(27).

Nicholls, J. G. (1984). Achievement motivation: Conceptions of ability, subjective experience, task choice, and performance. *Psychological Review*, 91(3).

Pahljina-Reinić, R. and Kolić-Vehovec, S. (2017). Average personal goal pursuit profile and contextual achievement goals: Effects on students' motivation, achievement emotions, and achievement. *Learning and Individual Differences*, 56:167–174.

Pintrich, P. (1999). An achievement goal theory perspective on issues in motivation terminology, theory, and research. *Contemporary Educational Psychology*, 25(1).

Rashidi, N. and Javanmardi, F. (2012). The relationship between Iranian EFL students' achievement goal orientations and their gender. *Education*, 2(1).

Remedios, R., Kiseleva, Z., and Elliott, J. (2008). *Goal orientations in Russian university students: From mastery to performance? Educational Psychology, 28(6)*. 677–691.

Wang, C. K., Lim, B. S., Aplin, N. G., Chia, Y. H. M., McNeill, M., and Tan, W. K. (2008). Students' attitudes and perceived purposes of physical education in Singapore: Perspectives from a 2 x 2 achievement goal framework. *European Physical Education Review*, 14(1).

Wu, C.-C. (2012). The cross-cultural examination of 3×2 achievement goal model in taiwan. *Procedia-Social and Behavioral Sciences*, 69:422–427.

Wynne, H. M. (2014). *Integrating the demonstration orientation and standards-based models of achievement goal theory*. Fordham University.

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