Original Article

A POST HOC POWER AND EFFECT SIZE ANALYSIS OF MICRO-ENTERPRISE BEHAVIOR: A CONSTRUCT MEASUREMENT STUDY OF RURAL ASNAF'S ENTREPRENEURS (RAE) DEVELOPMENT IN PAHANG

Muhammad Syahrul Deen[1], Shofiyyah Moidin[1], Mohd Izzat Amsyar Mohd Arif[1], Faezy Adenan[1], Mohd Saleh Abbas[2], Albert Feisal Ismail[3], Khairunneezam Mohd Noor[4]

[1] Academy of Contemporary Islamic Study (ACIS), University Teknology MARA (UiTM) 40450 Shah Alam, Selangor.
[2] Universiti Malaysia Kelantan, Malaysia.
[3] Faculty of Technology Management and Technopreneurship, Universiti Teknikal Malaysia, Melaka, Malaysia.
[4] Faculty of Leadership and Management, Universiti Sains Islam Malaysia, Nilai, Negeri Sembilan, Malaysia.
E-mail: syahruldeen@uitm.edu.my[1]

DOI: 10.47750/pnr.2022.13.S09.670

Abstract

This study aims to identify the size of the impact and power required in the study of the behavior of SME entrepreneurs. Particularly it focuses on micro -entrepreneurs in remote areas in Pahang, to bridge the gap of research and look more broadly at the field of study. This study has a twostep approach, the first is to identify the constructs used by previous researchers in the study of entrepreneurship and training course and conducted a field survey of RAE through random sampling technic. The findings of this study were analyzed with validity and reliability of data values through alpha and R-squared value. After obtaining reliable validity and R-Square values, power analysis (1-β) and effect size (F2) were identified and analyzed with G*Power software. The findings of the study found that the high value of R-square caused sufficient power (1- β = 0.80) to be achieved at the 20th sampling (n = 20). The results of this study also support the findings of Connelly et al (2010) who suggested that power studies on entrepreneurial behavior are higher than expected. However, F2 of this study is lower than that proposed by Connelly et al (2010) for micro and medium enterprises at the rate of F2 = 0.9 only compared to 0.14 - 0.25. This initial study can be a benchmark to the value of impact size and power to subsequent studies in the field of entrepreneurship, however, it has limitations only on rural asnaf entrepreneurs. Further studies can be made of entrepreneurs in other fields, with more universal constructs as well as other theoretical frameworks.

Keywords: Effect size, Power, Construct measurement, Asnaf, Entrepreneurs.

Introduction

This study is in the form of exploration of construct measurement through power analysis in obtaining the overall effect size. Studies on power analysis and impact size in the field of entrepreneurship need to be done to identify the right rate in the field. In the aspect of quantitative research, the rate of effect size needs to be identified in obtaining the corresponding power value in determining the validity of the study population representation, especially when new studies want to be made in the field. All disciplines and fields have relatively similar impact sizes through exploration in field studies and recommendations from past research scholars (Cohen, 1988; Connelly et al., 2010). However, in the study of practical entrepreneurial disciplines, studies on impact size and

power are very poorly conducted, especially on micro-entrepreneurs in Malaysia. Therefore, this study will be one of the studies that explores the strength of statistical power specific to the field of micro-entrepreneurship and SME generally in Malaysia. This paper will identify the level of reliability through alpha value, assessing instrument validity through R-square and coefficient. Further post hoc power analysis will be performed with G*power software, by analyzing the exact F-square (F^2) value, as proposed by Faul et al., (2009).

Background

In quantitative studies, statistical strength, and measurement of the impact of empirical studies are important components for determining validity and methodological reliability. The study was to obtain the strength and measure of the potential impact on the statistical validity of the empirical study, and ignoring it could limit the ability to obtain the sought and accurate, in turn showing the population of the study subject. Statistical inference testing is the dominant and prevalent practice required and calculates the statistical strength and impact measures of field -specific empirical searches. Reviews of the strengths and measures of statistical impact have an important role in informing and developing several social science disciplines in various subdisciplines in management, including business, customer and consumer behavior. However, this measure, measures of strength and statistical impact associated with empirical entrepreneurship research are highly correlated. There is only one specific study related to statistical power and entrepreneurship used by Connelly et al., (2010) who suggested that studying statistical power in the field of entrepreneurship is necessary and reinforced by other field studies. He also stated that there are very strong reasons and justifications. The analysis needed, what comes first, This is carried out if it appears empirically characterized by high associated impact measures, scholars can take small size measurements that occur in a population can be significant with statistical strength (Thompson, 2006). Whereas in the world of academic disciplines, the color of statistical strength of use in this focal dimension domains to other domains in the social sciences. As academic disciplines seek to establish themselves as unique entities, it is important to demonstrate that researchers are held to the same methodological rigor as colleagues in related disciplines Statistical strength is a critical methodological dimension in which scholars who use tests use statistical inference tests (Cohen, 1988). The impact measurement tests that are in the entrepreneurial domain are very important because entrepreneurship is an applied discipline which has a direct impact on phenomena in society. Moreover, entrepreneurial research is often related to dependent variables that draw community interest in the social phenomena and events that occur, and they will respond in their behaviors and perceptions (Connelly et al., 2010). These include the phenomenon and impact of the covid 19 pandemic on entrepreneurs which has a very high impact on the entrepreneurial ecosystem.

While in Malaysia's post-independence initiatives, government and religious bodies namely *State* Islamic *Religious* Councils (*SIRC*) which were established for the social welfare under the jurisdiction of the state government have formulated and execute various rural development programs, including through urban and rural entrepreneurship empowerment through entrepreneurial activities. The income gap between rural and urban populations will be closed by generating additional income as well as creating new employment opportunities that stimulate the socio-economic growth of the country (Framework et al., 2020). In Malaysia, various initiatives undertaken by the government and zakat institutions to encourage entrepreneurs to venture into business, especially the *asnaf* who are poor group of beneficiaries in zakat aid.

In line with B40 entrepreneurs' development in Malaysia, *asnaf* is the type or group B40 that is entitled to receive zakat. The group determined by Quran who are eligible to receive zakat. Zakat cannot be divided by the authorities at their own discretion except those whom Allah has ordained in the Qur'an. Provision of business capital to the asnaf group is a new leap that has been made by SIRC in distributing zakat funds. By providing this business capital, the asnaf can take advantage of this business capital by venturing into it in business so that they are able to generate their own income without expecting zakat assistance in future (Azman et al., 2016).

This study are focused in rural Pahang as one of national SDG's focused in 2019. Many programs implemented by Pahang's SIRC namely Majlis Ugama Islam Pahang (MUIP) to provide business exposure to *asnaf* on a small scale and have not reached the level of the entrepreneur category. MUIP provides training assistance and provides opportunities to market their products at Pahang Darul Makmur Supermarket for free (MUIP, 2020). Until 2020,

it is estimated that a total of 80 asnafs who received equipment assistance to run a business as asnaf entrepreneurs (Interview: Mr. Abdul Rahman bin Talib, Assistant Officer of Islamic Affairs (Asnaf Development), at the MUIP Office, on 27 February 2020).

This study found that 80% of those involved in the asnaf entrepreneurship program are women in their 40s, which is a total of 64 people. Meanwhile, 16 male asnaf participants with a percentage of 20%. The products produced are in the form of food and cakes such as cakes, bread, crackers and so on (MUIP, 2019). Equipment assistance provided to qualified asnafs to assist in efforts to increase income in addition to the livelihood assistance applied for. Assistance to generate income for small businesses to increase income to meet the needs of the family can in turn lift them out of poverty. Among the assistance received were sewing machine equipment, fishing equipment, stall equipment, three -wheeled motorcycles and so on. In the period of 4 years 2015 to 2018 MUIP has spent a total of RM 1,225.552 million as capital assistance and equipment involving a total of 549 people. Jengka district is the highest with 101 people involved in the capital assistance program with capital assistance of RM199,500.00. Then followed by Kuantan district as many as 92 people who were involved with the capital assistance program of RM 236, 792.00. Then followed by Pekan district with 84 people.

The post-interview session with elective informant found that the participation between urban and rural there were very significant differences. In Jerantut district in 2015 and 2016 only 2 people were involved in the capital and equipment assistance program. Even for 2017 and 2018, no participants were involved. Similarly, in the Lipis district from 2016 until 2018, no asnaf participants were involved. Similarly, in the Cameron Highlands area. Several things need to be looked at in detail the factors of lack of interest among asnaf in rural areas or in rural areas involved with the MUIP entrepreneurship program. However, the total number of participants receiving capital assistance and equipment increased every year from 80 people in 2015, but in 2018 increased to 201 people for all districts in the state of Pahang. In 2020, a total of 105 recipients of equipment capital assistance were given to the asnaf. Meanwhile, a total of 69 asnafs participated in the course organized by MUIP. The same situation occurred in 2020, the number of asnaf who attended courses organized by MUIP is very small in rural areas compared to urban areas such as Kuantan and Pekan. The three largest recipients of equipment capital assistance are Chenor, Jengka, Kuantan and Pekan.

Methodology

This study will use the random sampling method as proposed by Jamil et al (2020) to obtain broad data coverage of a case and characteristics that vary in all study populations. Random sampling is also suitable in obtaining coefficient values represent the entire population (Jamil et al., 2020). All factor items will be coded and will be analyzed with three stages namely validation through Cronbach alpha (α), R-square accuracy analysis, and P-value path coefficient analysis to obtain factor significance rate. After obtaining the three validations, this paper will obtain the total effect size and power value through G*Power software (Faul et al., 2009). By obtaining the effect size value, this allows the researcher to subsequently identify the appropriate effect size to conduct a priori power analysis in the future. This study will also be able to identify similarities with the recommendations from the meta-analysis of Connelly et al., (2010) that suggest the effect size value of of small & medium enterprise study is at 0.14 (small) to 0.27 (high).

Sampling

In terms of population and sampling, this study focuses on rural entrepreneurs in Pahang state by random sampling as many as 51 courses trained rural entrepreneurs (RAE) in selected area, as shown on table 1.0 below:

Table 1.0 : purposive sampling list

	Frequency	Percent	Valid Percent	Cumulative Percent
Bera	2	3.9	3.9	3.9
Kuantan	17	33.3	33.3	37.3
Maran	9	17.6	17.6	54.9
Pekan	16	31.4	31.4	86.3
Raub	1	2	2	88.2
Rompin	5	9.8	9.8	98
Temerloh	1	2	2	100
Total	51	100	100	

The specific geographical context was selected based on characteristics of the desired population, that is, those who have been and are undergoing training under the management of SIRC MUIP. Data and information of RAE are obtained from the State Islamic Religious Council (SIRC) from 2019 until 2020 RAE registration years. The sampling technique is based on a convenience sampling technique where some areas in the state will be distributed survey forms by google form. Convenience sampling techniques are suitable for use with patterns of respondents from different geographies, and low cost. there is a total of 51 respondents (n = 51) who have filled in the survey form. Power analysis will be conducted in identifying strength and adequacy of the population by using G* Power engine with post hoc approach.

Coding of factorial items

As the objective of this study is to identify the effect size on the entrepreneurship survey study, then attitude will be placed as the first latent factor, and contains five observed variables namely; 1.Self-awareness, 2.Self-esteem, 3. Intensity, 4. Innovation, and 5. Risk taking. All these observed variables were obtained from previous studies (Kourilsky et al., 1998;Eniola, 2017; Soegoto; 2018; Usai, 2018; Liguori et al., 2020). While the aspect of financial assistance and training courses provided by the MUIP became the second latent factor with five observed factors namely, 1.Awareness, 2. Perceive usefulness, 3. Perceive impact, 4. Frequency of attending, 5.Recommending to others. All these observed variables are elements taken from previous studies that examine the course effectiveness and its impact towards entrepreneurs (Rahim, 2015; Lafortune, 2018).

Table 2.0: Factorial items coding

Dimension	**Code**	**Elements of item**	**Hypothesis (H)**
Attitude	**A1**	Self-awareness	H1: Attitude => CO
	A2	Self-esteem	
	A3	Intensity	
	A4	Innovation	
	A5	Risk taking	

Financing & Training by SIRC MUIP	**FT1**	Awareness	H2: FT =>CO
	FT2	Perceive usefulness	
	FT3	Perceive impact	
	FT4	Frequency of attending	
	FT5	Recommending to others	
Performance	**CO**	Performance	

Analysis

The alpha coefficient for the eleven items is .790, suggesting that the items have relatively high internal consistency. A reliability coefficient of .70 or higher is considered "acceptable" in most social science research situations (Santos, 1999). With a satisfactory alpha rate, this study was able to analyze the path coefficient and R-Square accurately and reliably, as shown in table 3.0 below:

Table 3.0: Croncach's alpha

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.790	.815	11

In term of reliability, the R^2 can measures the variance, which is explained in each of the endogenous constructs. The R^2 is also referred to as in-sample predictive power (Hair et al., 2011). Cohen (1988) classified three categories of R^2, 0.02 weak, 0.13 moderate and 0.26 substantial, thus based on the R-squared of this present study, attitude and FT variable is found to be substantial with $R^2 = 0.474$. This indicates that as many as 47.4% of attitude and FT factors will be represented on RAE factorial performance in this study, as shown in table 4.0 below:

Table 4.0: R^2 value.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.688[a]	.474	.342	.704

a. Predictors: (Constant), FT5, A3, A5, FT1, A1, A2, A4, FT3, FT4, FT2

With a substantial rate of R2 = .474 as well as α = 790, this indicates that the developed construct has sufficient reliability in terms of data validity and accuracy. Next, post-hoc power analysis will be conducted with the value of F2 = R2/R2-1 = 0.9011407 (Cohen, 1988).

Results of post hoc power analysis

Post hoc power is the retrospective power of an observed effect based on the sample size and parameter estimates derived from a finding data set (Faul et al., 2009).Power is the conditional probability that one will reject the null hypothesis given that the null hypothesis is really a false by a specified amount and given certain other specifications, such as sample size and criterion of statistical significance (alpha). Power analysis can be calculated and reported for completed statistical research of survey to obtain a possible confidence in the conclusions drawn from the study results (Erdfelder et al., 2009) . It can also be used as a tool to estimate the number of observations or sample sizes needed to detect effects in survey and experiments. Power analysis can evade a waste of resources with the justification that resource saving is one of the research ethics. It's provides accurate sampling values with effect size estimation, the strength of the correlation relationship between one variable with another, as well as obtaining significant sampling results (Wassertheil & Cohen, 1970).

Statistical strength is the probability of detecting an effect on an effect that the effect exists. In particular, the strength of statistics is the researcher's ability to differentiate hypotheses and not err. Researchers often use statistical power to avoid Type II (β) error rates. Because β is the probability of accepting a null hypothesis being rejected, because for Cohen's principle, accepting a null hypothesis is four times error instead of rejecting a true hypothesis. Then the power set is 1-β. The statistical strength of hypothesis testing is the probability of detecting an effect, if there is a true effect and correlation to be detected . Power analysis can be calculated and reported for completed statistical research of survey to obtain a possible confidence in the conclusions drawn from the study results. It can also be used as a tool to estimate the number of observations or sample sizes needed to detect effects in survey and experiments. Power analysis can evade a waste of resources with the justification that resource saving is one of the research ethics. It's provides accurate sampling values with effect size estimation, the strength of the correlation relationship between one variable with another, as well as obtaining significant sampling results. The generally accepted minimum power level is 0.80 (Cohen, 1988). This minimum is based on the idea that with a significance criterion of 0.05 the ratio of Type 2 error (1-power) to Type 1 error is 0.20 or some expert suggested .05, then here Cohen (1988) concludes there is an effect when no effect on the population is considered four times more serious from a point of view of error, rather than concluding there is no effect when there is an effect on the population. Hence, this study will set the minimum power of 0.8 suggested by Cohen (1988), as shown in graph 1.0 below:

Graph 1.0: Post Hoc power graph by G* Power.

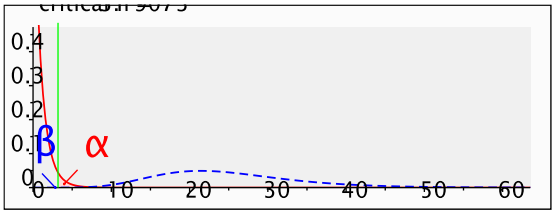


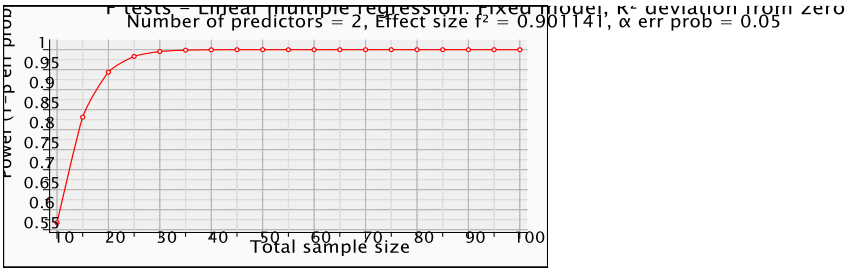
Figure 1.0: Detail of statistical power protocol by G* Power

[1] -- *Saturday, May 08, 2021 -- 18:16:42*
F tests – Linear multiple regression: Fixed model, R^2 deviation from zero

Analysis:	Post hoc: Compute achieved power		
Input:	Effect size f^2	=	0.9011407
	α err prob	=	0.05
	Total sample size	=	51
	Number of predictors	=	2
Output:	Noncentrality parameter λ	=	45.9581757
	Critical F	=	3.1907273
	Numerator df	=	2
	Denominator df	=	48
	Power (1−β err prob)	=	0.9999886

Figure 1.0 shows the power protocol that has been created using G * Power 3.2.9.4 software. This study uses the F test measurement method. through the regression method, G*Power does not require the researcher to determine the effect measure for bivariate linear regression. Instead, the slope for the alternative hypothesis must be selected, in addition to the slope for the null hypothesis which is from value of 0 and the standard deviation for the independent and dependent variables. The effect size used by G * Power for multiple linear regression is f^2, while the effect size is calculated from the rate of R^2= 474 of this study which is: F^2 = 0.9011407. Then the power obtained is 0.9, statistically excellent over a minimum level of 0.8, as suggested by Cohen (1988). Similarly, with the value of R^2 obtained = 0.474, this study will be able to obtain a relatively sufficient power on the 20th sample (n = 20) par with 0.8 minimum power. As shown in the graph 2.0 below:

Graph 2.0: Power (1-β err prob) with total sample size curve valued with F test by G* Power.



The average statistical power level becomes higher than the expected average. Our findings also support Connelly et al., (2009) that suggest there are situations where scholars can loosen the power of statistical criteria in research of entrepreneurship behavioral survey, such as the other study of the entrepreneurial use of perception data. However, the findings in this study found that the effect size rate is not as high as suggested by Connelly et al., (2009) which is only at F2 = 0.9, which does not reach the rate recommended for small and medium enterprises which is at 0.14 (low) to 0.27 (high). Yet this may be caused the circumstances, subjective norms and perceptions of RAE are quite different from other SMEs, which require to further study in future.

Conclusion

The results of this study also support the findings of Connelly et al (2010) who suggested that the strength study of entrepreneurial behavior was higher than expected. However, the F^2 of this study was lower than that suggested by Connelly et al (2010) for micro and medium enterprises at the rate of F2 = 0.9 only, compared to 0.14 - 0.25 as suggested. this may be because RAE has certain characteristics, which necessitate further in-depth study. This preliminary study can serve as a benchmark to measure the value of effect size and statistical power for further study in the field of entrepreneurship, especially in Malaysia. Statistical strength analysis through the method of Cohen (1988) and Faul et al (2009) can make research lower cost, avoid wastage of resources as required in research ethics, while meeting the required power and reliability. However, this paper only has limitations for rural asnaf's micro-business. Further studies can be made on entrepreneurs in other fields, with other variables and more advanced theories.

Acknowledgements

This study is funded by a research grant with title "Mekanisma Adopsi Rantaian Bekalan Bersepadu Digital Cdsc Dalam Pembangunan Prestasi Usahawan PKS Pedalaman RSME Kuala Tahan Sinergi Platform Teknologi Kewangan (600-RMC/LESTARI SDG-T 5/3 (010/2021) We would like to extend our heartfelt appreciation to the Universiti Teknologi MARA (UiTM) for allocating funds for this research project.

References

1. Abd, M., Fatoni, W., & Balwi, M. (2008). Mobilisasi zakat dalam pewujudan usahawan B40: satu tinjauan. *Jurnal Syariah*, *16*, 567–584.
2. Alwi, A., Nordin, M.N.B. (2022). Applying Information Technology-Based Knowledge Management (KM) Simulation in the Airline Industry. *International Journal of Mechanical Engineering*, 2022, 7(1), pp. 1249–1252
3. Azman A. R, Mohamad Yazis Ali Basah, Mohammad Noorizzuddin Nooh, Mahdir ABdullah, A. A. M. F. & M. F. A. B. (2016). Jurnal Pengurusan dan Penyelidikan Fatwa, Vol. 7 2016 eISSN: 0127- 8886. *Pengurusan, Jurnal Fatwa, Penyelidikan*, *7*, 29–38.
4. Bin Nordin, M.N., Rajoo, M., Maidin, S.S., Sulaiman, M.S.S., Mosbiran, N.F. (2022). Competencies On Implementations Of 21st Century Technology on Teaching, Learning and Assessment**.** *Res Militaris, 2022, 12(2), pp. 7320–7331*
5. Bin Nordin, M.N., Rajoo, M., Maidin, S.S., Sulaiman, M.S.S., Mosbiran, N.F. (2022). Competencies On Implementations Of 21st Century Technology on Teaching, Learning and Assessment. *Res Militaris*, 2022, 12(2), pp. 7320–7331
6. Bin Shafie, A.S., Binti Rubani, S.N.K., Nordin, M.N., Ibrahim, E., Talip, S. (2022). Micro-Pits Effectiveness for Controlling Friction In Planestrain Extrusion. *International Journal of Mechanical Engineering*, 2022, 7(1), pp. 1270–1280
7. Connelly, B. L., Ireland, R. D., Reutzel, C. R., & Coombs, J. E. (2010). The power and effects of entrepreneurship research. *Entrepreneurship Theory and Practice*, *34*(1), 131-149.
8. Eniola, A. A., & Entebang, H. (2017). SME managers and financial literacy. *Global Business Review*, *18*(3), 559-576.
9. Erdfelder, E., FAul, F., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, *41*(4), 1149–1160. https://doi.org/10.3758/BRM.41.4.1149
10. Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G* Power 3.1: Tests for correlation and regression analyses. *Behavior research methods*, *41*(4), 1149-1160.
11. Ismail, I. A., Md Hussain, M. N., & Hamed, A. B. (2020). Strategi Teraju Ekonomi B40 Sdn Bhd (Teras) sebagai Pemangkin Kejayaan Usahawan B40 di Selangor. *International Journal of Zakat and Islamic Philanthropy*, *2*(1), 145–156. http://journal.zakatkedah.com.my/wp-content/uploads/2020/03/Vol2_1_15_20.pdf
12. Jamil, K. H. B. (2020). Metodologi Penyelidikan Dalam Pendidikan: Amalan dan Analisis Kajian. By Ghazali Darusalam & Sufean Hussin. Kuala Lumpur: Penerbit Universiti Malaya, 2019, pp. 630. ISBN: 978-967-488-0095. *Intellectual Discourse*, *28*(1).
13. Jaya, S., Zaharudin, R., Hashim, S.N.A., Mapjabil, J., Nordin, M.N. (2021). Employing Design and Development Research (DDR) Approach in Designing Next Generation Learning Spaces (NGLS) In Teachers' Pedagogy and Technology Tools. *Review of International Geographical Education Online*, 2021, 11(7), pp. 1237–1246
14. Kourilsky, M. L., & Walstad, W. B. (1998). Entrepreneurship and female youth: Knowledge, attitudes, gender differences, and educational practices. *Journal of Business venturing*, *13*(1), 77-88.
15. Lafortune, J., Riutort, J., & Tessada, J. (2018). Role models or individual consulting: The impact of personalizing micro-entrepreneurship training. *American Economic Journal: Applied Economics*, *10*(4), 222-45.
16. Liguori, E., Winkler, C., Vanevenhoven, J., Winkel, D., & James, M. (2020). Entrepreneurship as a career choice: intentions, attitudes, and outcome expectations. *Journal of Small Business & Entrepreneurship*, *32*(4), 311-331.
17. Mahmood, T. M. A. T., Al Mamun, A., Bin Ahmad, G., & Ibrahim, M. D. (2019). Predicting entrepreneurial intentions and pre-start-up behaviour among B40 millennials. *Sustainability (Switzerland)*, *11*(18), 1–26. https://doi.org/10.3390/su11184939

18. Matt, M., Management, V. S.-J. of I. E., & 2018, undefined. (n.d.). Building entrepreneurial ecosystems conducive to student entrepreneurship: New challenges for universities. *Cairn.Info*. Retrieved November 26, 2020, from https://www.cairn.info/revue-journal-of-innovation-economics-2018-1-page-9.htm
19. Mizan, M.Z., Lada, S., Hamzah, A.A., Esam, A., Nordin, M.N. (2021). Movement Control Order (MCO): An Syar'iyyah Political Approach. *Review of International Geographical Education Online*, 2021, 11(7), pp. 1225–1230
20. Mosbiran, N, F, B, M.; Mustafa, M, Z, B.; and Nordin, M, N, B. (2021) Special Elements and Values Needed in Leadership for Special Education. *Review of International Geographical Education (RIGEO), 11(4), 712-722. doi: 10.33403/rigeo. 8006784*
21. Mosbiran, N.F., Mustafa, M.Z., Nordin, M.N., Abenoh, N.A., Saimy, I.S. (2021). Analysis of the Study of Individual Education Plans in Special Education. *Review of International Geographical Education Online*, 2021, 11(7), pp. 1231–1236
22. Norazmi, N., Zaid, M. & Abdul Rasid, A. R. (2019). The Practice of Headmasters' Leadership and Its Effect on Job Satisfaction of Special Education Integration Program (PPKI) Teachers in Johor, Malaysia. *Universal Journal of Educational Research* 7.9 (2019): 2008-2014. DOI: 10.13189/ujer.2019.070923.
23. Norazmi, N., Zaid, M. & Abdul Rasid, A. R. (2020). Relationship between Headmasters' Leadership, Task Load on Special Education Integration Programme Teachers' Job Satisfaction. *Universal Journal of Educational Research 8(8):3398-3405*
24. Nordin, M.N., Alwi, A. (2022). Digital Video Broadcasting Implementation in WSN Environments. International Journal of Mechanical Engineering, 2022, 7(1), pp. 1256–1259
25. Nordin, M.N., Alwi, A. (2022). Knowledge Management Model Implementation in Electronic Devices. *International Journal of Mechanical Engineering*, 2022, 7(1), pp. 1253–1255
26. Nordin, M.N.B., Maidin, S.S., Rajoo, M., Magiman, M.M., Mosbiran, N.F. (2022). International Frameworks For 21st Century Competences: Comparative Education. *Res Militaris, 2022, 12(2), pp. 7332–7344*
27. Othman, N. H., Othman, N., & Juhdi, N. H. (2020). Entrepreneurship education and business opportunity exploitation: Positive emotion as mediator. *Cakrawala Pendidikan*, *39*(2), 370–381. https://doi.org/10.21831/cp.v39i2.30102
28. Othman, S. H. Bin, Ismon, A. B. M., & Fahurruzi, M. F. (2020). The Study on The Development of B40 fisabilillah by The Islamic Religious Council of Malacca. *International Journal of Academic Research in Business and Social Sciences*, *10*(2), 294–302. https://doi.org/10.6007/ijarbss/v10-i2/6929
29. Rahim, H. L., Kadir, M. A. B. A., Abidin, Z. Z., Junid, J., Kamaruddin, L. M., Lajin, N. F. M., ... & Bakri, A. A. (2015). Entrepreneurship education in Malaysia: A critical review. *Journal of Technology Management and Business*, *2*(2).
30. Ramli, R., Ahmad, S., Wahid, H., & Harun, F. (2011). Understanding B40 Attitude: Malaysia's Experience in Quest for an Effective Zakat Distribution Programme. *International Zakat Conference*, 18. http://www.ukm.my/hairun/kertas kerja/Paper Raudha et al.pdf
31. Rosnee Ahad, Mohamad Zaid Mustafa, Suhaimi Mohamad, Nur Hanim Saadah Abdullah, Mohd Norazmi Nordin (2021). Work Attitude, Organizational Commitment and Emotional Intelligence of Malaysian Vocational College Teachers. Journal of Technical Education and Training Vol. 13 No. 1 (2021): 15-21.
32. Roundy, P., Brockman, B., Venturing, M. B.-J. of B., & 2017, undefined. (n.d.). The resilience of entrepreneurial ecosystems. *Elsevier*. Retrieved November 30, 2020, from https://www.sciencedirect.com/science/article/pii/S2352673417300641
33. S, S.M., Yusoff, M.Y.M., Rahmat, R., Yassin, Y.N.H.M., Nordin, M.N. (2021). Asset Tokenization: A Simulation Study. *Review of International Geographical Education Online*, 2021, 11(7), pp. 1219–1224
34. Santos, J. R. A. (1999). Cronbach's alpha: A tool for assessing the reliability of scales. *Journal of extension*, *37*(2), 1-5.
35. Soegoto, E. S. (2018). Effective Enterprise Communication and Learning Attitude in Business Performance: A Case Study on SMEs. *European Research Studies*, *21*(4), 55-68.
36. Wassertheil, S., & Cohen, J. (1970). Statistical Power Analysis for the Behavioral Sciences. In *Biometrics* (Vol. 26, Issue 3, p. 588). https://doi.org/10.2307/2529115
37. Zaid, M., Norazmi, N. & Abdul Rasid, A. R. (2020). Regression between Headmaster Leadership, Task Load and Job Satisfaction of Special Education Integration Program Teacher. Universal Journal of Educational Research 8.4 (2020) 1356 - 1362. Doi: 10.13189/ujer.2020.080428.
38. Zaid, M., Norazmi, N. & Abdul Rasid, A. R. (2020). Structural Equation Modelling Using AMOS: Confirmatory Factor Analysis for Taskload of Special Education Integration Program Teachers. Universal Journal of Educational Research, Vol 8 (Jan, 2020) No 1: 127-133. DOI: 10.13189/ujer.2020.080115.
39. Zakaria, M. S., Sahid, S., & Othman, N. (2021). Tahap Budaya Keusahawanan dan Kepimpinan Keusahawanan serta Hubungannya dengan Minda Keusahawanan Anak-Anak Golongan B40. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, *6*(3), 104–119. https://doi.org/10.47405/mjssh.v6i3.697