

ASPECTS OF WELLNESS IN A TRADITIONAL LEISURE TIME GAME: AN INTEGRATED APPROACH FOR TEACHING INNOVATION.

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ABSTRACT

Malaysia and ASEAN society are rich with a variety of traditional games and usually played during leisure time. 'Tossing the Stones' or Batu Seremban was chosen in this survey. Using a purposive sampling technique, respondents from Malaysia, Philippines, Indonesia and Thailand went through the game intervention and answered the questionnaires provided. The goal was to understand how they perceived wellness while playing this game, after identifying the frequency of Traditional Games engagement. Results showed that Batu Seremban gave high wellness scores such as; $M=4.16$, $SD=.722$. The physical, intellectual, social and emotional elements identified in 'Tossing the Stones' showed that strong educational elements identified in the traditional leisure game can also be used to teach children and young adults through integration in the curriculum. Suggestions on how the game can be used in classrooms were made based on the findings.

KEYWORDS: *Batu Seremban, Curriculum, Innovation, Leisure, Traditional game, Wellness*

INTRODUCTION

Leisure time can be seen as a time spent free of obligation and necessity where people are free to do their activities. Leisure time is important to build up personalities and important for physical and mental health (OECD Organization, 2009). Activities done depends on the preferences of individuals and cultural background that shape ones lifestyles. The benefits gained by the person also affects others such as work & personal relationships, family interaction and other social networks. Spending positive leisure time is important for youth development including instilling positive values, developing social skills and to help curb anti social attitudes (Rahim et al. 2011). Leisure time gives opportunity to young people for recreation, social interaction, self-expression, self-control and relaxation.

Any activity that uses the energy can be categorized as physical activity. The frequency of involvement and choice of preferences depend on many factors. For instance, research on Malaysian youth has indicated that home maker, self-employed, white-collar workers and students participated moderately in physical activity. However, professionals of both sexes and unemployed women participated at low level in physical activity (Marwa & Mawarni, 2017), which suggested much needed important motivation for young adults especially students to be involved in more physical activity. Unfortunately many youth & young adults liked activities such as playing video games, chatting with friends, and being online are among the popular leisure activities. Traditional physical activities are missing out as technology has taken place despite the fact that many traditional games are fun, fulfilling, easy to play and can be physically immersive. In fact, some of the most popular traditional games cut across gender and cultural divides. In this research, Batu Seremban is chosen as a traditional game, which is a form of light physical activity during leisure time.

Traditional games are generally handed down from one generation to another. As a game form it involves some challenges, skills and goals, although it is not as formal or organized as more energetic sports but it is competitive and has rules to be adhered to. For children, play is a time of almost priceless happiness. Good games offer children success for it is important to help them learn and grow in a way that makes them feel good. It also helps them develop their social capacity and at the same time self-confidence within themselves. But traditional games are not just for children as adults and older generations play to fill their leisure time as well.

The historical background may seem same as the traditional games often being played during free time after earlier generations of people came back from working at sea or the farm. Culture and games are among the greatest unifying factors in the people of Southeast Asian nations. Of course it helps all that traditional games are inexpensive and are easy to play. The materials required to play the games are generally acquired from the close environment or are recycled objects (Gipit @ Charles et al., 2017). However, traditional games have become less popular because of the dramatic development of technology. Children, young adults and adolescents spend hours of their time with social media, connecting with others and playing games online. For instance, Social media use has become the most popular daily activity for adults (18–29 years old) in the U.S. where 90% of adults use social media every day (Perrin, 2015) and 24% of adolescents (13–17 years old) use it “almost constantly” (Lenhart, 2015). People in Southeast Asia spend the most time in the world accessing the internet through mobile devices, according to a new study conducted by Google. The report titled, “e-Conomy SEA, 2019” highlighted that Thais use mobile internet more than five hours a day, compared with more than four hours in Indonesia, the Philippines, and Malaysia, and three hours as the global average (Nguyen, 2019).

Traditional games can be played by all generations, races and cultures. One of the most famous traditional games is Batu Seremban or Tossing the stones. Batu Seremban is a traditional game that requires a player to toss the stones. It can be played by 2 or more people at one time and need 5 objects that come from a variety materials such as small sacks of nuts, small stones and rubber seeds. There are seven levels in playing *Batu Seremban* and to get point(s), a player must toss all stones and catch them. Here are the steps for every level:

Level one

Throw all five stones down, pick one stone and throw it into the air. While it is still in the air, pick up one stone before catching the stone in the air. Continue until pick up all the stones.

Level two

Same step as level one except the player must pick up two stones during toss the stone in the air. Continue for next two stones on the floor.

Level three

Same step as level 1 except player must pick up one stone first during toss the stone and follow by three stones for next toss.

Level four

Same step as level 1 except player must collect all four stones while toss the stone.

Level five

Similar to level four but when all stones in one hand, player must toss one stone and follow by placing the remaining four stones on the floor. Then, grab the one tossed in the air.

Level six

With two stones in one hand, one stone will be tossed on the air. While the stone is still on the air, one stone in the hand must be replaced by one on the floor. Repeat until all stones are being replaced.

Level seven

Take two stones and toss both stones, grab one stone on the floor before catching the initial stones on the air. One stone in each hand at one time. Repeat for all the stones on the floor.

Point

After finishing all the levels, place all stones on palm and toss all the stones. Stones must on the back of the palm, toss again and catch the stones to collect points. 1 stone = 2 points.

(The National Department For Culture and Arts)

This traditional game is also known in Indonesia, Thailand and the Philippines. In Indonesia, it is known as 'Bola Bekel' (Mainan Tradisional Indonesia, 2013). Meanwhile in Thailand is known as Ei-Keb (Onjivit, 2005) and Jackstone for Philippines (Ako, 2011). The concept is almost similar by tossing the stones but with slightly different rules and materials.

Due to its simplicity, batu seremban can be played anywhere and carried around easily and so can be used as a teaching aid to increase interest in learning. However, how often do we actually spend playing traditional games nowadays? and also how much efforts have been made to include traditional game in teaching and learning? Therefore the goals of this research were to investigate the frequency of playing traditional games among ASEAN youth and to examine the educational elements found in Batu Seremban game. Suggestions for integrated curriculum using Batu seremban is also made for teaching and learning.

LITERATURE REVIEW

Leisure time and youth are strongly connected to each other because youth generally have more time to spend on leisure activity compared to adults. Larson & Verma (1999) studied how many hours adolescents spent per week on leisure activities: in the US it was 6.5 to 8 hours, 5.5 to 7 hours in Europe and 4 to 5 hours in East Asia. This shows that adolescents in Asia only have one-third of free time compared to adolescents in North America and Europe.

Leisure time physical activity (LTPA) refers to exercise, sports or recreation that is not related to regular work, housework or transport activities. Busch, Thille, Barber,

Schachter, Bidonde & Collacott (2008); and Howley (2001) categorized Leisure Time Physical Activity (LTPA) into three categories which are recreational physical activity (RPA), Exercise Training (ET) and Competitive Sports. Traditional games are associated with leisure activities and normally played for competition, which gives the benefits for physical activity, exercise training and competitive sport, depending on the nature of game. More LTPA was associated with longer life expectancy across a range of activity levels and Body Mass Index (BMI) group (Moore, Patel, Matthews, Gonzalez, Park, et al., 2012). Being physically active boosts both physical and mental health (Kremers, Dijkman, Meij, Jurg & Brug, 2008). Furthermore, leisure activities increase social interaction, create excitement and reduce stress among young people, it also increased cognitive performance among adults and young children (Po Wen et al., 2012; Ihle, et al., 2015). However, the present day has made traditional games now almost forgotten and the younger generations do not play these traditional games anymore due to rapid technological development (Ismail, 2016).

As mentioned earlier, although youth has more free time FOR LEISURE, their choice for involvement in physical activities has also evolved over time. Where television and other mass media are widely accessible, passive activities, such as watching TV, listening to music, and internet surfing, video games, and online chatting are among the most popular leisure activities among adolescents (Pavlova & Silbereisen, 2015). A survey done among 395 youth in a state in Malaysia has shown that participation in passive leisure is higher than active leisure, with overall mean score of $M=3.49$ for passive leisure, with listening to music as preferred activity and $M=2.85$ for active participation, with sports and exercise for choice of frequent engagements (Mawarni, M. 2013).

Due to the lack of physical activities, with lesser involvement in traditional games and more time on electronic devices, studies have found a negative association between technology use and sleep duration. It has consistently been reported that increased time using technology is associated with an elevated risk of shorter sleep duration and other sleep problems among children and adolescents (Bartel, Gradisar, & Williamson, 2015; Hale & Guan, 2015). Therefore, a less rigorous, using readily available materials like Batu Seremban game was chosen to highlight its wellness dimension as perceived by young people. From the results gained, creative learning activities can be developed.

Learning Taxonomy and Physical Activity

To describe the learning taxonomy and physical activity involvement in this study, three domains were highlighted in Batu Seremban games, which include Affective, Psychomotor and Wellness. The affective domain comprised of the manner in which learner has to deal with things emotionally, like attitudes, values, enthusiasms, appreciation, and feelings (Krathwohl et al. 1973; Hansen, 2008). Affective domain is learning which directs the learner's feelings toward learning experience and are related to human movement in physical education context (Holt & Hannon, 2006). The physical activities also provide a wide variety of opportunities to youngsters to learn about cooperation, teamwork, and winning and losing. The participation in physical activities developed the values from time to time as well as achieved the higher affective level which is characterization. However, affective domain is always been ignored in physical education program (Hansen, 2008) but recently, this domain has been recognized as equally important with cognitive and psychomotor domain development. National Association for Sport and Physical Education (NASPE, 2004), which set two standards related to affective domain; Exhibit responsible personal and social behaviour that respects self and others in physical activity settings and

values physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.

The psychomotor domain is a skill based that consists of physical movement, coordination and use of the motor-skill area where learner requires practices and measured in terms of speed, precision, distance, procedures, or techniques in execution (Hansen, 2008). Any kind of activities that are related with the physical movement is considered as psychomotor development such as outdoor play, dance, athletic performance and leisure time activity. For young kids, outdoor play activities are importance to promote agility, power, flexibility, and cardiovascular fitness in order to increase the child's desire to be active (Clement, 2004). It is not only for development of the physical growth as there was a positive relation between physical activity and cognitive function by developing specific skills and abilities which are significance to prevent learning difficulties (Costa et al. 2015).

The wellness dimension is the focus for this research since the association with teaching and leaning requires cognitive aspect. Wellness focuses on the physical condition of human body as well as the mental and socia variables (Kenedy et al., 2017). Dr. Bill Hettler, a co-founder of National Wellness Institute (NWI) of the USA developed interdependent model of wellness known as six dimensions of wellness which are Emotional, Spiritual, Occupational, Physical, Social and Intellectual. According to Hettler (1976), emotional wellness is the recognition and acceptance of one's feelings that include positive feelings and enthusiastic about self and life. The intellectual wellness stimulates the mental activity and recognizes the creativity (Hettler, 1976). A person with good intellectual wellness is able to think critically, give reason impartially, make responsible decisions, and explore new ideas.

Integrated Curriculum: Using Traditional Games and Activities in Physical Education

Integrating physical activity into other subjects within the school curriculum teach students about lifestyle physical activity in a variety of contexts and integration can be considered in many different forms. Several models have been introduced, for examples, Models for Intedisciplinary Teaching PE which include Connected Models, Shared Models and Partnership Model that integrate other subjects, themes, and topics in the teaching of physical education. The disciplines may be related to through a central theme, issue, problem or experience (Jacobs, 1989). For example, connecting Culture or Art with Physical Education. Integrating knowledge and skills from different disciplines are able to create a meaningful learning experience and there is evidence in other subject areas to substantiate the benefits linked to student learning.

“Integrated learning offers a means of enriching the teaching and learning process, by allowing students to use knowledge and skills in different settings and ways” (Humphries, Bidner, & Edwards 2011).

A selected traditional activity, namely Batu Seremban (Tossing the Stones) that can either be performed as games or leisure activities will be discussed.

METHOD

A quantitative approach was primarily used with the aim of describing leisure time spent for traditional games and wellnes aspect found in the game. A cluster sampling procedure has been utilized and then, a simple random sample of clusters were selected from

the population. The sample size for this study involved 180 youths from ASEAN countries namely Malaysia, Thailand, Indonesia and Philippine. The subjects chosen were required to play Batu Seremban as intervention and answer the questionnaire given. The instrument used in this study were adapted from Wellness Self-Assessment by Princeton University. The questions represented different elements in wellness which consist of emotional, intellectual, physical and social as shown in Table 1.

Table 1. Wellness Self Assesment

<i>I feel excited when I play Batu Seremban (Emotional)</i>
<i>I learn new things when I Play Batu Seremban (Intellectual)</i>
<i>I believe this game can improve my hand-eye coordination (Physical)</i>
<i>I believe this game can improve my hand dexterity (Physical)</i>
<i>I believe this game can improve my reaction time (Physical)</i>
<i>I make new friends while playing Batu Seremban (Social)</i>

Descriptive analysis has been used in calculating the frequency and percentage of respondents' demographic profile. Mean and Standard deviation were used to determine the involvement of ASEAN youth in any traditional game, as well as their perceptions on wellness aspects in Batu Seremban.

RESULTS AND DISCUSSIONS

Discussions are based on the results from the involvement in traditional games and wellness aspects as perceived by ASEAN youth before discussions and suggestions on integrated curriculum with other subjects coincide with batu Seremban is presented.

Table 2. Demographic profile of respondents

Demographic variable	Frequency (n=180)	Percent (%)
Age		
<16	36	20.0
17-20	48	26.7
21-24	72	40.0
25-28	19	10.6
>29	5	2.8
TOTAL	180	100
Gender		
Male	72	40.0
Female	108	60.0
TOTAL	180	100
Nationality		
Malaysia	56	55.6
Indonesia	44	24.4
Thailand	40	22.2
Philippine	40	22.2
TOTAL	180	100

Table 2 describes the demographic profile of 180 respondents who came from four ASEAN countries, Malaysia, Indonesia, Thailand and Philippine.

Table 3: Involvement in traditional games during leisure time among ASEAN youth

ASEAN Countries	Mean	Std. Deviation
Malaysia	1.94	1.197
Indonesia	1.90	.772
Thailand	2.45	1.376
Philippine	2.75	1.372
TOTAL	2.22	1.236

Range: 1-Hardly ever or never, 2-About once a month

Table 3 presents the involvement in traditional games during free time among ASEAN youth. Overall finding showed that ASEAN youth engagement in traditional games during leisure time is about once a month (M=2.22, SD=1.236). Malaysian youth scored was M=1.94, SD=1.197, Indonesian was M=1.90, SD=.772, Thailand was M=2.45, SD=1.376, and Filipino youth was M=2.75, SD=1.372. This showed that ASEAN youth involvement in traditional game is rather low. There are many reasons that can be discovered why today's youth are less engaging in traditional games. In the context of Batu Seremban, many respondents were not familiar or never heard of this traditional game before, with only a few who identified some similarities in the game with what they have in their own country.

Table 4. Wellness Aspect in Batu Seremban

Educational Aspect		Mean	Std. Deviation
Wellness	Emotional	4.10	.7481
	Intellectual	4.11	.7494
	Physical (coordination)	4.18	.7533
	Physical (hand dexterity)	4.15	.7754
	Physical (reaction time)	4.18	.7583
	Social	4.20	.7888
	Total	4.16	.7622

Range: 3 – Neutral, 4 – Agree

Table 4 showed the overall score of wellness aspects among ASEAN youth. All participants agreed that wellness elements were found in Batu seremban game with all aspects showed mean score from M=4.10 to M=4.20.

Table 5. Wellness Aspect Perceived by ASEAN youth in Batu Seremban

Nationality	N	Mean	Std. Deviation
Malaysia	56	4.14	.7746
Indonesia	44	3.89	.7602
Thailand	40	4.12	.7503
Philippine	40	4.49	.6030
TOTAL	180	4.16	.7220

Table 5 shows the results of overall wellness aspects found in Batu Seremban as perceived by ASEAN youth. The Philippines scored the highest with $M=4.49$, $SD=.6030$, followed by Malaysia ($M=4.14$, $SD=.7746$), Thailand ($M=4.12$, $SD=.7503$) and Indonesia ($M=3.897$, $SD=.7602$) respectively. The total mean score is $M=4.16$, $SD=.7220$ which indicates that ASEAN youth perceived Batu Seremban as a game with wellness elements in it.

It is not uncommon that Phillipines scored the highest as due to its diversity of culture and tradition, traditional games have been part of their past time and they play traditional games for amusements whenever suitable opportunities arise (Barboza, 2003). Buanet et al. (2010) stated that Filipino games had been a part of the Filipino pastime especially for the children, who are famous for their lively personality despite odd condition. However, despite the advancement of technology and preferences in playing online games, the unique aspect of traditional games bring many positive elements that can be used to create a variation in learning, thus relevant to be embedded in the teaching of other skills and concepts.

That is why the researcher is inspired to investigate Batu Seremban, because of its nature, can be played for fun, self-testing with some competitive structure, and it is suitable for various range of age. This game is also almost similar to the ones from Indonesia, Thailand and Philippines, with difference from the materials used and rules applied, thus make it universal and applicable for teaching and learning.

SUGGESTIONS

Some suggestions on teaching innovations from the wellness items are presented below to indicate how other subjects/topics or themes can be integrated from playing Batu Seremban. Discussions are based on questions from the wellness aspects:

1. **Intellectual : “I learn new things when I Play Batu Seremban”**

Mathematic concepts such as Additon, Substraction, Division, Multipication, Grouping, Height and Shapes can be taught while playing Batu Seremban. Some examples of questions on Mathematics include:

- a) *How many stones were used to play the game?*
- b) *How many stones left after you toss?*
- c) *Where were the stones thrown?*
- d) *How high were the stones thrown?*

The questions asked vary from different level to another, age group and knowledge. Early stage questions can be used to guide younger learners through investigations while stimulating their mathematical thinking.

Apart from that, some elements of science concepts can be integrated while playing batu Seremban. These will include Gravity, Living and Non-living things, Parts of the body, Texture and Colour. For examples:

- a) *What are the texture of the stone? Do they have colours?*
- b) *Did the stones go up forever?*
- c) *What made the stones drop down?*
- d) *Which parts of the body were used while playing the game?*
- e) *Are stones living or non-living things? Give reasons.*

(Bose and Seetso, 2016)

Other suitable questions relevant to the students' curriculum can help empower themselves with knowledge and skills of learning science and mathematics concepts through play. Questions can also be developed using categorised questions according to the level of thinking, using a hierarchy such as 6 levels of thinking in Bloom's taxonomy (Bloom, 1956).

2. Physical:

a) "I believe this game can improve my hand-eye coordination"

Hand-eye coordination is the skill that enables the eyes to guide the hands in accurate movement; for example, grasping objects, catching and throwing. Tossing a beanbag or ball into the air and catching again is a good hand-eye coordination exercise. This can be a good start to get students' interest towards learning physical education and helping them moving to more difficult skills in games. Good eye-hand coordination can help students in so many different areas of life. For young adults or children, good hand-eye coordination can help to catch a ball and hit a ball and then move or progress to more intense sporting demands in sport. Since batu Seremban requires hand-eye coordination, regular practice improves physical ability of players.

Furthermore, visual-motor integration, which is a vital base for handwriting, grows out of this coordination skill. The eyes need to guide the hand in forming the letters and making sure they stay within the lines, which a good practise for handwriting. Batu Seremban also involves eye tracking skills, which are vital for reading. Introduction to reading class can be developed through games and activities used for hand eye coordination.

b) "I believe this game can improve my hand dexterity"

Fine motor skill (or dexterity) is the coordination of small muscles, in movements, usually involving the synchronization of hands and fingers with the eyes. Hand dexterity is critical to the normal range of motion to perform various daily activities. So, since respondents claimed batu Seremban can improve hand-dexterity after intervention, the game can be used as a practice and warming-up sessions for enhancing some movement in art-class as art involves physical and manipulative activities. All manipulative movements involved in Batu Seremban help develop hand and finger muscles to hold and use pencils and brush.

c) "I believe this game can improve my reaction time"

Reaction time is the amount of time it takes to move once a player realizes the need to act. People with good reaction time are able to make fast starts in activities, for example to start running after a gun shot. So, in teaching science and physical activity, through mini game of Batu Seremban, a teacher can ask questions like:

“Is the reaction time between boys and girls different?”

“Can you improve your reaction time? How?”

Apart from the physical aspects found in Batu Seremban, the game can be used as an early practise or intervention for more rigorous and complex movements for students. For example, Ting-Ting game or Hops Scotch (another traditional dame) can be later integrated as the game involves eye-coordination, hand-dexterity and reaction-time, but with more intensity and movement of lower body.

3. Social: *“I make new friends while playing Batu Seremban”*

By referring to the socio-cultural theory of Vygotsky, he stressed that the children are active seekers of knowledge and not solitary agents, and their collaboration with the social environment moulds cognition in culturally adaptive ways through social agents such as parents, teachers and peers and through other materials. He also emphasised that play promotes abstract thought that allow children to reach beyond their actual development in their cognition and self-regulation and achieve a mental representation of social roles. Similarly, play is also as important for adults as for kids. “We don’t lose the need for novelty and pleasure as we grow up,” according to Scott G. Eberle, Ph.D, vice president for play studies at The Strong and editor of the American Journal of Play. Play brings joy. And it’s vital for problem solving, creativity and relationships. Play can give joy and amusement and can increase the level of learning. So, the reasons why young people are motivated to participate in physical activity are because of various reasons, and skill development, friendship, achievement and fun seem dominant motivations across multiple studies (Zahariadis & Biddle, 2000)

Since Batu Seremban requires 2 people or more to play, each player is connected and need to stay in focus to monitor any wrong movements of the opponents, or even to provide ideas for choosing a correct stone to toss, thus any actions initiate conversation, and conversation involves interactions between people. Thus, socialization, can take place as a result of contact with numerous groups or individuals.

CONCLUSION

The results showed high mean score in wellness aspect (mean=4.16, SD=.7622) indicate that Batu Seremban helps engaging the mind, for intellectual aspect and enhancing skills for physical aspect. A person with a good social wellness is taking part actively in initiating good communication with the surrounding. Wellness aspect also encouraged physical development where the respondents believed Batu Seremban helped to improve hand-eye coordination, hand dexterity and reaction time. Furthermore, Batu Seremban is a Malaysian traditional game that is nearly forgotten by youth. Batu Seremban can enhance values, improve motor skills, and social development because it is a fun physical activity that can be played during leisure time, as perceived by respondents. Teachers or educators can encourage students to practice Batu Seremban game to improve locomotor and fine motor skills at various levels considering the benefits gained from it. The game itself requires good

coordination, speed and concentration. It is a popular traditional game that cut across gender and cultural divides, simply fun and at their best Batu Seremban game can be recommended as a learning tool for educational activity. More innovative teaching and learning can take part by introducing more traditional games so not only for the educational benefits but also helps preserving the games.

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