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TRADITIONAL GAMES AS ALTERNATIVE ACTIVITIES FOR CHILDREN STIMULATION

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ABSTRACT
In the span of one year, there has been an increasing number of complaints from parents and teachers about the adverse effects of gadgets. Complaints of the detrimental impacts of gadget addiction include children becoming lazy, irritable, lacking independence, irresponsible with schoolwork, and having shorter attention span compared to similar-aged children. The increasing number of complaints from parents and school teachers regarding the behaviour of students who are addicted to gadgets became the reason for the team to reintroduce traditional game play activities with friends and teachers in school. Several studies have shown that traditional games have numerous benefits, particularly to stimulate children's cognitive, social, and personality development. Therefore, the team strived to provide alternative games for students so as to help students reap the benefits of playing. The result of this activity indicates that traditional games could be alternative games to gadgets, which are beneficial for affective, cognitive, and motor development of children and act as the means to introduce children to the norms upheld in the society. To optimize the development of affective, cognitive, motor skills, and instill the norms in society, utilizing traditional games needs to be done by the school.

1. Introduction

According to Akbari (in Iswinarti, 2017), traditional games are games that have a history in certain regions or cultures which contain humanity values and are not the result of industrialization. Research conducted by Iswinarti (2017) on traditional games has proven that many benefits can be yielded by students when playing traditional games, such as increased students' social competence in the aspects of problem solving, self-control, empathy, and cooperation. Prastowo (2018) also explained that traditional games could foster students' ability to compete globally, namely the ability to think critically, foster communication skills, creativity, and cooperation or collaboration skills. Muthmainah and Ali (2018) added that traditional games could increase students' creativity. Urbach and Masnina (2018) also mentioned that playing the traditional game *engklek* are beneficial for students' social development.

When playing traditional games, students will reap many benefits for their development. Some of benefits include children learning to recognize positive values that are upheld in their environment, children learning to be acquainted with rules and practice socializing, children also training their physical form and the effects are the same as when children exercise, therefore traditional game play activities are deemed to be the right solution. Furthermore, traditional games could also help children practice optimizing their motor, affective, and cognitive development. Traditional games are games that have been passed down from one generation to another, where in traditional games there is historical content of the area. Traditional games have become a wealth and cultural identity (Iswinarti, 2017).

In line with with previous findings, Saputra and Ekawati (2017) stated that traditional games could also foster character values in children, such as religious, nationalist, independent, cooperation, and integrity values. Research conducted by Zafirah et al. (2018) found that there are nine character values

that can be embedded in traditional games, namely the values of honesty, discipline, hard work, creativity, curiosity, independence, communication, responsibility and achievement reward.

Traditional games could also be one of the Educational Game Tools (EGT) that can be used by teachers to stimulate or develop children's thinking abilities. Research by Lestari and Prima (2018) explained that the traditional game *congklak* could develop children's cognitive abilities such as arithmetic, develop symbolic thinking skills, and practice emotional stabilization of children. Congklak is a game which emphasizes the mastery of arithmetic. This game is also useful for practicing fine motor skills, training patience as children are waiting for their friends to play, training sportsmanship, and training the social competence of children (Umayah & Khotimah, 2015). Aside from *congklak*, other traditional games could also develop children's cognitive abilities and could be used as EGT, such as snakes and ladders games which can be used as children's learning recommendation to improve children's memory (Ningtyas, 2018). Traditional games such as *megoak-goakan* can improve locomotor and gross motor skills in children (Natalia, Parmiti, & Tirtayani, 2015; Sari, Ganing, & Tirtayani, 2017).

Some of the research results cited above have clearly proven that playing traditional games could have a positive impact on several aspects of student development, but unfortunately today a number of students are starting to abandon such games. Students preferred games that are on smartphones, or online games. The team conducted a preliminary study by interviewing 30 randomly chosen parents and qualitative data were obtained. The reasons why parents deliberately gave gadgets to children were so that children would not be angry, there were also those who claimed to give gadgets even though they already know the adverse effects of gadget addiction. Parents became powerless to hold or reject the wishes of children because they felt they needed time to complete domestic household work. There were some parents who claimed that parents have restricted the use of gadgets, but because the family lived with grandparents, the child finally got the gadget because the child whined and grandfather or grandmother could not bear to see the grandchildren crying, and then the grandfather or grandmother would give the gadget freely to the grandchild.

What was done then caused new problems. Parents, grandfathers and grandmothers then felt unable to handle the gadget addiction experienced by their children and grandchildren. The substantial impact felt was the unstable emotional state. During the interview session, parents complained that children often became angry at home and dared to argue with parents and grandparents for gadgets. Complaints about the adverse effects of students' routine use of gadgets also came from teachers who taught them. Through preliminary studies conducted by the research team at one of the private elementary schools in Bali, qualitative data were obtained which revealed an increasing number of complaints from teachers and parents about the adverse effects of gadget addiction. Initially there were only one or two students in a particular class, but within one year on average each class had students who became lazy, irresponsible for schoolwork, irritable and experienced shorter attention span compared to other students who were of the same age due to gadget addiction.

The data obtained by the research team were in line with what was stated by Al-Ayouby (2017) which showed the results that routine playing with gadgets made the concentration span of children shorter, language development and communication were hampered, ability to socialize were decreased, addiction, and children became aggresive. Playing with gadgets could hone analytical thinking skills, however interaction with friends would be minimum. Research conducted by Setianingsih (2018) has proven that gadget addiction could affect the development of a child's brain due to excessive dopamine hormone production interfering with the maturation of the prefrontal cortex function, namely emotional management, self control, responsibility, decision making, and other moral values. If the child spent more time with gadgets, the child's interaction with other people and peers would be affected, which will reduce the child's cooperative attitude (Erdiana, 2016). According to Goleman (in Kostelnik, Gregory, Soderman, & Whiren, 2012), if this pattern of interaction was allowed to continue, it would weaken the prospect of success in life in the future.

Based on the explanation of the benefits of traditional games from various references and preliminary study data, researcher felt the need to prove whether it was true that traditional games could bring benefits for the cognitive, effective and social skills of students in Bali?

2. Methods

This study used a mixed method. Quantitative data were obtained by using a pre-experiment one group pre-posttest design approach, which is an experiment carried out in one group, without a comparative group. Qualitative data were obtained from several open questions about the most liked and least liked games and their reasons. The measurement instrument used was the scale of emotions

presented in the form of emoticons with a range of emotions from very happy, happy, normal, sad and very sad. The instruction was that students were asked to fill in the emotional scale at the time before and after being given treatment or play (see Figure 1).

Figure 1.
Scale of Emotions

The games provided by the team were traditional games, such as *meong-meongan*, *megoak-goakan*, *engkeb-engkeban*, *tajog*, *dengkleng*, *dakonan* or *congklak*, folklore, and *gobag sodor*. The number of students involved in gameplay activities was 107 students who were then divided into 12 groups. From 12 groups they were split into 6 pairs of groups. Six pairs of groups will then take turns going to the provided game post. One post will only be played by a pair or 2 groups for 30 minutes.

There were three posts provided by the team. The first post was "Pos Seru," which provided *meong-meongan* game (a traditional game which is followed by eight or more people, where one person acts as a mouse, and another person acts as a cat that will catch mice. The remaining players are tasked with protecting mice from the cat by forming a circle), *megoak-goakan* (a traditional game played in groups, which were divided into two teams, each team consists of five to eleven people. One team act as a *goak* or crow, and the opposing team becomes prey. The leader of the *goak* team must try to catch the participant who is in the very back row of the prey team), and *engkeb-engkeban* (hide and seek).

The second post was "Pos Riang." This post provided the game *dengkleng* (a game which requires doing one-leg jump over numbered boxes with certain steps and rules. Each box must be skipped one by one by throwing stones or broken pieces of ceramics as markers), *bentengan* (traditional game played by two groups with the same number of people, each group chooses one place as its fortress, and each group must attack and take over the opponent's fortress by touching the pole or tree that becomes the opponent's fortress while shouting the word "Benteng!"), and *Gobag Sodor* (Game traditionally played by two teams of three to five people. Usually played using a 9x4 meter rectangular field divided into six sections. One team will be tasked with guarding, and the other team must head towards the rearmost line of the guard team, then the opponent must go back again through guard until he gets to the start line). The third post was "Pos Gembira" which provided *tajog* (*engrang*), *cingklak* (*congklak*), and folklore posts. Each post was guarded by the research team and teachers.

3. Findings and Discussion

There were 107 students who participated in the activity. From the total subject, there were 40 students who experienced emotional changes after being given treatment, 62 students did not experience emotional changes after being given treatment and there were 5 students whose changes were unknown due to not filling out the post-test sheet (see Figure 2). The emotional change experienced by students was in the form of an increase in emotions to be more positive in 24 students and a decrease in emotions in 16 students. Overall, as many as 21 people (20%) said they were experiencing emotional changes in the form of an increase in emotional scores by one point, such as from feeling happy to very happy. As many as 3 people (3%) experienced a two-point increase in emotional scores, for example normal feelings that turned into feeling very happy. In addition to experiencing changes in the form of increased emotional scores, some students also experienced a decrease in emotional scores. One-point reduction in emotional scores occurred in 14 people (13%), for example from feeling normal to feeling sad. A decrease in emotional scores by two points occurred in 2 people (2%), for example from feeling happy to be feeling sad.

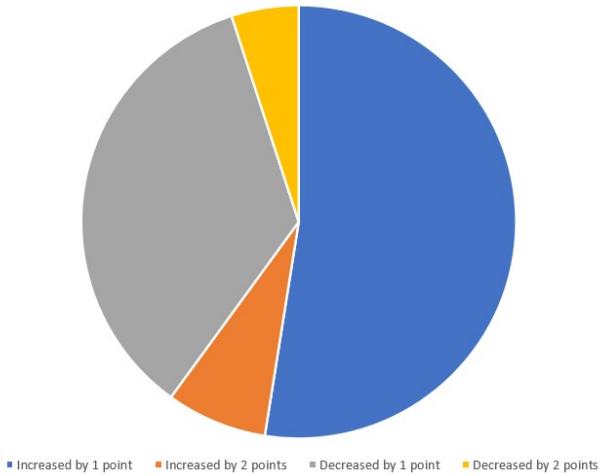

Figure 2.
Graph of Emotional Changes

There were several games liked by students (see Figure 3). Of the 107 students, the most popular games that students liked were *benteng-bentengan* (54 students), followed by *bakiak* (30 students), *meong-meongan* (7 students), *engkeb-engkeban* (5 students), *cingklak* (2 students), *engrang* (2 students) 1 student), and coconut shell *engrang* (1 student). There were also 2 students who liked all games, and 4 students who liked more than one game. Besides mentioning the game that they liked, the students also revealed what made them like the game.

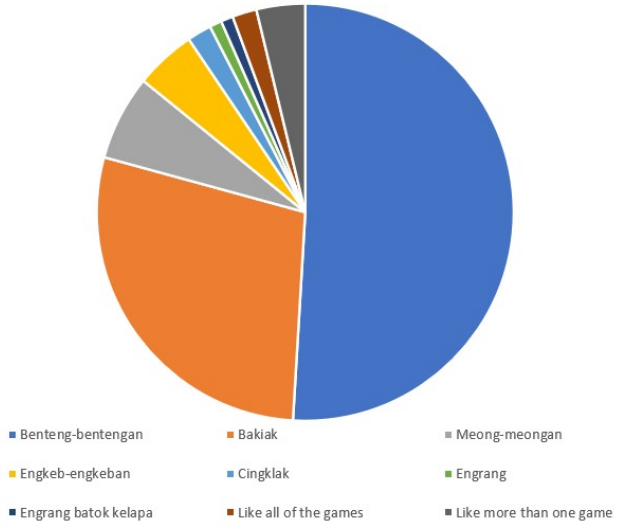

Figure 3.
The Graph of Students' Favourite Games

Various reasons were explained by students why the *benteng-bentengan* game became their favorite game. The majority mentioned it was because the game was fun to play. Another reason is that it could train teamwork, cohesiveness, agility, and concentration, or that the student's team won while playing, and the game was played fairly. There were also ones who reasoned that it was because they were always given the task of guarding, and there was also one who played for the first time.

A group of students listed *bakiak* as their favorite game because they felt *bakiak* was fun to play. Another reason was because it could train cohesiveness and balance. There were also some who listed their reason as their team won while playing, another reason written by students was that when playing *bakiak* they became excited when the team members shout to encourage the team representatives who were competing against the opposing team.

The game *meong-meongan* was fun for most students, and the reason was because this game requires the players to run. For the game *engkeb-engkeban*, some students said the game was exciting, others said that the game allowed students to chase after their opponents. There was also a student who mentioned it was because it is their first time playing *engrang*. *Engrang* game was liked because *engrang* game practiced balance and was challenging. For the *Cingklak* game, students said the game was fun to play.

In addition, there were some games disliked by students (see Figure 4). From 107 students, there are some games disliked, namely *benteng-bentengan* (31 persons), *meong-meongan* (18), *egrang* (16), *bakiak* (16), *engkeb-engkaban* (15), *engrang* with coconut shell (16), *cingklak* (1) and *mealih-alihan* (hide and seek, 1 person). Three students likes all games.

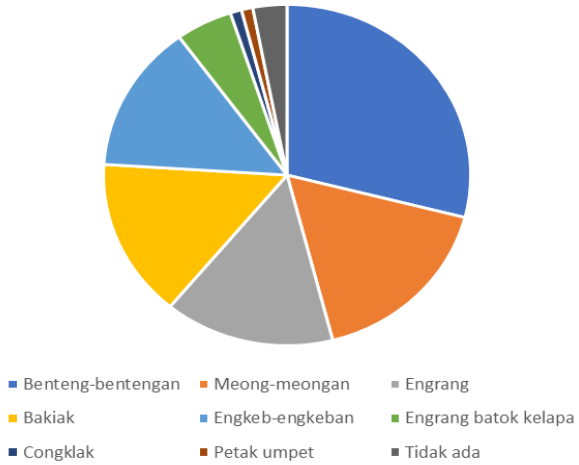

Figure 4.
Graph of Disliked Games

The reason students listed *benteng-bentengan* game as the most disliked game was because the game is difficult and they lost when playing, then there were also students who say that the game ran unfairly and rough. The *benteng-bentengan* game was also considered not fun, tiring because the need to run around, causing injury because the student had fallen while playing, and posing the risk of slipping. There were also students who mentioned that they were being kept in jail continuously, there were those who were always told by their friends and could not play. One student also rated the game as bad.

For *engrang* game, the majority of students said the game was difficult, caused pain to their legs, fell during play, and experienced difficulty maintaining balance. There were also students who mentioned that students felt they could not play, the game was not fun, and this game was considered unable to be played in groups. Coconut shell *engrang* was not liked because it made the students' legs cramped, there were also those who felt their legs hurt, and that it was not fun, but there were also those who did not like coconut shells *engrang* because the game was too easy.

The majority of students who choose *meong-meongan* game as their most disliked game was because *meong-meongan* game was deemed not fun. There were students who did not get a chance to play, felt the game is difficult, and did not understand how to play. One student claimed to have fallen while playing. There were students who said that this game required strategy, some were immediately caught once the game starts. The last reason was because only one person became *meong*.

In the game *bakiak*, some students said that they were difficult to play, others said that the *bakiak* that they used was heavy, then there were students who mentioned that the group was not cohesive when playing. One student said he did not like *bakiak* and caused several students to fall and be injured. Some students do not like the game *engkeb-engkeban* because they felt it was not exciting, felt they did not participate much when playing, and that it was difficult to play. There was also one who mentioned it was because they lost when playing, fell during playing, sweated a lot, and finally because of the itching they experienced when playing on grass. Then, the *Cingklak* game was disliked because students could not play, while the game of hide and seek was disliked because there were players who fell while playing.

All games used in this study are classified as games which require interaction with peers, so students were expected to be more skilled in socializing and were accustomed to conveying ideas to friends and accepting ideas from friends. In addition, students would also have the opportunity to learn taking turns and sharing play equipment with friends. These are all part of interpersonal intelligence,

which is shown by the ability of children to socialize with other people well, be easy to get along, be able to understand others, and be able to cooperate with others (Mulyasa, 2014; Suyadi, 2014). Traditional games have been proven to help improve interpersonal intelligence (Sahidun, 2018). The game offered also required strategy in playing it, so this would benefit students' cognitive development, especially in analytical thinking, problem solving skills, creativity and so forth. Students were expected to be familiar with the concept of winning and losing,

When playing, students would also be trained with the rules that each time they finish using a game equipment, students were responsible for returning the equipment or games they have used to their place. This rule of the game would familiarize students with responsibility and independence to return the game equipment that has been used. The number of game posts that can be chosen could help students to get used to being independent in determining their preferred game of choice. Of course, when playing, students would also move a lot. This would familiarize students with physical training, and the effects are the same as when they are exercising, that is, hence the body would also be healthy and fit. This aligns with research results from Kusumawati (2017) which showed that using traditional games can influence the basic movements of running, jumping, and throwing in students. Traditional games could also improve balance in students (Rahmawati, Dinangsit, & Muhtar, 2018). Specifically, there are values contained in the game of *Gobag Sodor*, including the values of honesty, sportsmanship, cooperation, strategy setting, and leadership (Nugrahastuti, Pupitaningtyas, Puspitasari, & Salimi, 2016). In *dengkleng* game, the values contained are discipline, agility, socialization, and health (Nugrahastuti et al., 2016).

Children spend a lot of energy playing, and play provides opportunities for children to acquire knowledge and skills that are important for their lives (Smith & Pellegrini, 2013; The Lego Foundation, 2018). From the data obtained, it was found that many participants realized that playing can improve themselves, which is why students listed reasons for liking certain games as training cohesiveness, teamwork, agility, and concentration. Play has been defined as any activity that is freely chosen by the individual, is carried out because it is intrinsically motivated, and directed personally (Goldstein, 2012). Play is considered a part that is outside the 'ordinary' life of an individual (Goldstein, 2012). Playing is not something serious, but at the same time it could absorb players intensely (Goldstein, 2012). Play also has no special purpose other than playing itself (Goldstein, 2012). Play is not only a pleasure for children, but also a need to be met (Andriani, 2012). Panksepp (in Goldstein, 2012) found that the game stimulates the production of proteins, 'neurotropic factors derived from the brain,' in the amygdala and prefrontal cortex, which are responsible for regulating, monitoring, and planning for the future. In one study conducted by Rosenzweig (in Goldstein, 2012), playing two hours a day with objects could produce changes in brain weight and efficiency in experimental subjects.

According to Piaget (in Santrock, 2011), children aged 12-13 years are at the formal operational stage. At this stage, children have been able to think and understand abstract concepts, master reasoning, and draw conclusions from existing information. The child can also see the reality is not always polarized (true-false, black and white) and also understand the existence of "gray area" between the two poles. This ability is important to help children through the transition from adolescence to adulthood. The development of cognition in children then allows children to play more complex games. According to Piaget (1962), children aged 12-13 years generally have understood and could play games with rules, therefore in this study the treatment given in the form of games such as *benteng-bentengan*, *congklak*, and *meong-meongan*. Although students generally have understood the rules of the game, there were also students who did not fully understand the applicable rules of the game. This was especially true in games that require understanding of rules such as *meong-meongan* and *benteng-bentengan*. Because they did not fully understand the rules of the game, some students then said they disliked the game because it was difficult to play, or they did not understand how to play it.

Games such as *benteng-bentengan*, *congklak*, and *bakiak* present competition and produce positive emotions in the group that won the game, and vice versa. A study by Hoogen, Poels, Ijsselsteijn, and De Kort (2012) concluded that positive emotions are responses to positive challenges by the game, and positive emotions decrease when individuals face too many defeats. The atmosphere of competition in the game helped children to get used to managing positive and negative emotions in a more adaptive manner.

Some of the games used in this study are a form of risky play. According to research from Sandsete, and different study from Stephenson (in Sandseter & Kennair, 2011), risky play is a thrilling and exciting form of play, which involves the risk of physical injury. Risky play is more often played outdoors and often become a challenging and adventurous physical activity for children (Sandseter & Kennair, 2011). Types of risky play include playing at high altitude, playing at high speed, playing near dangerous elements such as water or fire, playing with dangerous tools, Rough and Tumble games (e.g involving fighting in play), and games which have the potential to make participants to get lost (Brussoni et al., 2015).

Gobak sodor, *bentengan*, *meong-meongan* and *megoak-goakan* can be classified as games with high speed, because they require participants to run around in the game, so there is a risk of falling or colliding with other participants. *Engrang* is included in high altitude games, because it uses bamboo or wooden sticks that were high enough for the participants, and which pose a risk of falling off when used. To minimize the emergence of risks such as injuries, according to Hudson, Thompson, and Mack (in Brussoni, et al., 2015) in many Western countries, injury prevention strategies, including the creation of safety standards for play equipment and promotion for adults to supervise children. In this study, the injury prevention strategy used was to provide a first-aid kit, as well as involving teachers and research team members to oversee the gameplay in all posts. In addition, the research team members also helped the game run, for example for participants playing *engrang* for the first time, the research team member will help hold the stick so that participants would not fall.

Despite the risks involved in each game, several studies support the importance of risky play for children's development, learning process, mental health, and physical health, including physical activity and healthy weight (Brussoni, Olsen, Pike, & Sleet, 2012; Engelen et al., 2013; Sandseter & Kennair, 2011). Other studies revealed that risky play increased children's ability to detect risk and their self-esteem (Lavrysen et al., 2017). In addition, the experience of playing with risk during childhood is believed to help develop risk management strategies, and the ability to negotiate decisions about drug use, relationships with partners, and sexual behavior during adolescence (Gill, 2007; Ungar, 2007).

Seeing the results and references, the team assumed that it is true that traditional games could help introduce values or norms that are upheld in the society, as well as be beneficial for the affective and motor development, because there are a lot of movement is involved and the usage of cognition in setting strategies.

4. Conclusion

Traditional games could serve as an alternative activity to replace the games that children played in gadget. In addition, traditional games could also help introduce values or norms that are upheld in society, as well as be beneficial for the affective and motor development because it involves a lot of movement and uses cognition in managing strategy.

References

Al-Ayouby, M. H. (2017). Dampak penggunaan gadget pada anak usia dini (Studi di PAUD dan TK. Handayani Bandar Lampung). *Jurnal Fakultas Ilmu Sosial Dan Ilmu Politik Universitas Lampung*, *0*(01), 17–19.

Andriani, Tuti. (2012). Permainan tradisional dalam membentuk karakter anak usia dini. *Jurnal Sosial Budaya*, *9*(1), 121-136. doi:10.24014/sb.v9i1.376.

Brussoni, M., Gibbons, R., Gray, C., Ishikawa, T., Sandseter, E. B. H., Bienenstock, A., Chabot, G., Fuselli, P., Herrington, S., Janssen, I., Pickett, W., Power, M., Stanger, N., Sampson, M., & Tremblay, M. (2015). What is the relationship between risky outdoor play and health in children? A systematic review. *International Journal of Environmental Research and Public Health*, *12*(3). doi:10.3390/ijerph120606423.

Brussoni, M., Olsen, L. L., Pike, I., & Sleet, D. (2012). Risky play and children's safety: Balancing priorities for optimal child development. *International Journal of Environmental Research and Public Health*, *9*(9), 3134–3138. doi:10.3390/ijerph9093134.

Engelen, L., Bundy, A. C., Naughton, G., Simpson, J. M., Bauman, A., Ragen, J., Baur, L., Wyver, S., Tranter, P., Niehues, A., Schiller, W., Perry, G., Jessup, G., & van der Ploeg, H. P. (2013). Increasing physical activity in young primary school children—It's child's play: A cluster randomised controlled trial. *Preventive Medicine*, *56*(5), 319–325. doi:10.1016/j.ypmed.2013.02.007.

Erdiana, L. (2016). Pengaruh permainan tradisional gobak sodor terhadap perkembangan motorik kasar dan sikap kooperatif anak TK kelompok B di kecamatan Sidoarjo. *Jurnal Pedagogi*, *2*(3). Retrieved from http://journal.um-surabaya.ac.id/index.php/Pedagogi/article/download/534/869

Gill, T. (2007) *No fear: Growing up in a risk averse society*. London: Calouste Gulbenkian Foundation.

Goldstein, J. (2012). *Play in children's development, health and well-being*. Brussels: Toy Industries of Europe.

Hoogen, W.M., Poels, K., Ijsselsteijn, W. & De Kort, Y. (2012). Between challenge and defeat: Repeated player-death and game enjoyment. *Media Psychology*, *15*, 443-459. doi:10.1080/15213269.2012.723117.

Iswinarti, D. (2017). *Pedoman permainan tradisional gembatan dengan metode "BERLIAN" untuk meningkatkan kompetensi sosial anak*. Malang, Indonesia: Psychology Forum.

Iswinarti. (2017). *Permainan tradisional: Prosedur dan analisis manfaat psikologis (edisi 1)*. Malang: UMM Press.

Kostelnik, M. J, Gregory, K. M, Soderman, A. K & Whiren, A.P. (2012). *Guiding Children's Social Development and Learning 7th Edition*. USA: Wadsworth.

Kusumawati, O. (2017). Pengaruh permainan tradisional terhadap peningkatan kemampuan gerak dasar siswa sekolah dasar kelas bawah. *Jurnal Pendidikan dan Pembelajaran Dasar*, 4(2), 124–142. Retrieved from http://ejournal.radenintan.ac.id/index.php/terampil/article/view/2221

Lavrysen, A., Bertrands, E., Leyssen, L., Smets, L., Vanderspikken, A., & Graef, P. (2017). Risky-play at school. Facilitating risk perception and competence in young children. *European Early Childhood Education Research Journal*, *25*(1), 89-105. doi:10.1080/1350293X.2015.1102412.

Lestari, P. I. dan Prima, E. (2018). Permainan congklak dalam meningkatkan perkembangan kognitif anak usia 5-6 tahun. *Prosiding Sintesa*.

Mulyasa, H.E. (2014). *Manajemen PAUD*. Bandung: Remaja Rosdakarya.

Muthmainah, F., & Ali, M. (2018). Pengembangan kreativitas anak usia dini melalui permainan tradisional: Bermain lempung. *Discovery: Jurnal Ilmu Pengetahuan*, *3*(1). Retrieved from http://ejournal.unhasy.ac.id/index.php/discovery/article/view/241

Natalia, N. K. D., Parmiti, D. P., & Tirtayani, L. A. (2015). Penerapan metode pemberian tugas melalui permainan goak goakan untuk meningkatkan kemampuan motorik kasar anak. *e-Journal PG PAUD Universitas Pendidikan Ganesha*, *3*(1). doi:10.23887/paud.v3i1.5923.

Ningtyas, D. P. (2018). Peningkatan kemampuan memori anak pada konsep angka melalui permainan ular tangga. *AWLADY: Jurnal Pendidikan Anak*, *4*(2).

Nugrahastuti, E., Pupitaningtyas, E., Puspitasari, M., & Salimi, M. (2016). Nilai-nilai Karakter pada Permainan Tradisional. *Prosiding Seminar Nasional Inovasi Pendidikan*. Surakarta: Universitas Negeri Sebelas Maret.

Piaget, J. (1962). The stages of the intellectual development of the child. *Bulletin of the Menninger clinic*, 26(3), 120-128. Retrieved from https://psycnet.apa.org/record/1964-04060-001

Prastowo, A. (2018). Permainan tradisional Jawa sebagai strategi pembelajaran berbasis kearifan lokal untuk menumbuhkan keterampilan global di MI/SD. *JMIE: Journal of Madrasah Ibtidaiyah Education*, *2*(1), 1-28.

Rahmawati, S., Dinangsit, D., & Muhtar, T. (2018). Pengaruh permainan tradisional terhadap keseimbangan siswa dalam pendidiksan jasmani. *SpoRTIVE*, *1*(1), 551-560. Retrieved from https://ejournal.upi.edu/index.php/SpoRTIVE/article/view/13406

Sahidun. (2018). Peningkatan kecerdasan interpersonal anak usia dini melalui permainan tradisional. *Journal of Early Childhood Care & Education*, *1*(1), 13-17. ISSN:2615-1413.

Sandseter, E. B. H., & Kennair, L. E. O. (2011). Children's risky play from an evolutionary perspective: The anti-phobic effects of thrilling experiences. *Evolutionary Psychology*. doi:10.1177/147470491100900212.

Santrock, J. W. (2011). *Life-span development 13th edition*. New York: McGraw-Hill.

Saputra, N. E. dan Ekawati, Y. N. (2017). Permainan tradisional sebagai upaya meningkatkan kemampuan dasar anak. *Jurnal Psikologi Jambi*, *2*(2).

Sari, N. M. A. P., Ganing, N. N., & Tirtayani, L. A. (2017). Pengaruh permainan tradisional megoak-goakan terhadap perkembangan keterampilan lokomotor anak kelompok B di PAUD Gugus Jempiring. *e-*

Journal Pendidikan Anak Usia Dini Universitas Pendidikan Ganesha, *5*(1). doi:10.23887/paud.v5i1.11213.

Setianingsih, S. (2018). Dampak penggunaan gadget pada anak usia prasekolah dapat meningkatan resiko gangguan pemusatan perhatian dan hiperaktivitas, *Gaster*, *16*(2), 191-205. doi:10.30787/gaster.v16i2.297.

Smith, P. K. & Pellegrini, A. (2013). Learning through play. *Encyclopedia on Early Childhood Development*, 7-11. Retrieved from http://www.child-encyclopedia.com/sites/default/files/dossiers-complets/en/play.pdf

Suyadi. (2014). *Teori pembelajaran anak usia dini dalam kajian neurosains*. Bandung: Remaja Rosdakarya.

The Lego Foundation. (2018). *Learning through play*. New York: UNICEF

Umayah, U. & Khotimah, N. (2015). Peningkatan kemampuan kognitif anak melalui permainan congklak pada kelompok A. *Paud teratai*, *4*(2).

Ungar, M. (2007). *Too safe for their own good*. Toronto: McClelland & Stewart.

Urbach, H., & Masnina, R. (2018). Pengaruh permainan tradisional engklek terhadap perkembangan sosial pada anak usia prasekolah 4-5 tahun di TK Barunawati 3 Samarinda. *Digital Repository Universitas Muhammadyah Kalimantan Timur*. Retrieved from https://dspace.umkt.ac.id/bitstream/handle/463.2017/613/NASKAH%20PUBLIKASI.pdf?sequence=2&isAllowed=y

Zafirah, A., Agusti, F. A., Engkizar, Anwar, F., Alvi, A. F., & Ernawati. (2018). Penanaman nilai-nilai karakter terhadap peserta didik melalui permainan congkak sebagai media pembelajaran. *Jurnal Pendidikan Karakter*, 8(1).