International Journal of Engineering & Technology, 7 (3.5) (2018) 109-111

International Journal of Engineering & Technology

Website: www.sciencepubco.com/index.php/IJET

Research paperr

Intensity Differences in Playing Online Games Against Child Aggression

Yufiarti[1]*, Qorina[1], Ahmad Syukri Sitorus[2]

[1]Department of Early Childhood Education, Universitas Negeri Jakarta, Jakarta, Indonesia
[2]Department of Early Childhood Islamic Education, Universitas Islam Negeri Sumatera Utara, Medan, Indonesia
**Corresponding author E-mail:yufiarti@yahoo.co.id*

Abstract

This study aims to examine differences in the intensity of playing online games on children's aggressive behavior. The sample consisted of 120 children aged 8 years in Jakarta through survey research. The results of the study concluded that the difference between the intensity of playing online games against children's aggressiveness. The higher the intensity of playing online games will have an impact on the high level of aggressive children, so the role of parents is very necessary.

Keywords: *Online Games, Aggressiveness.*

1. Introduction

Aggressive behavior can be done by children both at home, school, and even in the wider community. Children behave aggressively not solely based on their own desires, but also because of the many events experienced from outside themselves. The environment and people around children certainly contribute to the formation of behavior. The knowledge and experience that children receive can be realized through their behavior.

Aggression is a variety of behaviors that are carried out with the intention to harm others where it is known to avoid the danger. The definition is broad enough to capture the range of terms of aggressive behavior, and the term is flexible to be an activity that can 'hurt' someone where the person voluntarily accepted it. This further clarifies the similarity of meaning between aggression and aggressive behavior. The only difference lies in their use. Aggressive behavior is the opposite of prosocial behavior.

Aggression is learned behavior acquired through interaction with the environment and under decisive influence [1]. The term aggression is generally used extensively and flexibly to refer to one or all actions: physical attacks on colleagues, other people, or family members, with varying levels of cruelty; verbal threats and statements of hostility; threatening gestures; rampage; and damage objects. Furthermore, confusion comes from the use of various other terms from 'aggression' to refer to more or less the same form of behavior (eg violence, extreme negativism, opposing and attacking behavior). Other terms are used to refer to self-observable statements that cannot be observed (eg anger, resentment, excessive impulse or stimulation, and lack of impulse control). This shows that the meaning of aggression is the same as aggressive behavior, namely actions that are accompanied by intentions, intentions, and imposing threats or attacks as a form of impingement of self discomfort, destructive, dangerous, hostile and often caused by frustration [2].

The child's aggressive behavior shows difficulties and disappointments, and is often difficult to calm down. Child's uncontrolled aggressive behavior can cause problems later on. Children who behave aggressively can also be difficult for others. In addition, it can interfere with the process of learning, hurting, intimidating, and scaring other children.

Aggressive children: (a) often fail to encode all relevant environmental cues, (b) can give unfriendly rights to their social partners, (c) produce fewer and less effective solutions to problematic situations, (d) pursue inappropriate social goals, (e) experience deficits in the application of many social behaviors, and (f) can display the degree of egocentrism in evaluating social environmental responses to their behavior [3].

The tendency of children today has a different activity from children in ancient times. Modernization makes children choose to play with equipment related to technology like a video game or to gather in a game center and be able to last a long time in that place. Now, finding children involved in a game directly begins to decrease, and conversely the intensity of children playing games becomes more.

Though playing is a natural, free, purposeless activity, but feels motivated to do it. Playing involves imagination in it, can do exploration, is nature and gives rise to excitement, can depict children's experiences, and help children express ideas, thoughts, know themselves, others, and the environment.

Regarding the previous exposure, intensity is strong or extraordinary something to give effect or effect to something or someone. Playing is an activity activity that is natural and has no purpose, but is fun and contributes to children's development. So, the intensity of playing is strong or extraordinary playing activities performed by children to be able to form, control, and even change behavior in children.

The assumption that playing does not contribute anything to children needs to be eliminated. In this era, the socialization of the importance of playing needs to be improved so that adults understand what important things are generated from playing activities. Playing can be said as an exercise for children to get new experiences from the outside world. Children can satisfy their curiosity with play.

Play is claimed to have benefits for children including physical development and influencing children's emotions. Playing is im-

Copyright © 2018 Authors. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

portant for development and can help children achieve skills and competencies from an early age. In addition, playing is said to be important for the health of the soul, body, and is a process in optimizing learning

Intensity is a force or something strong, great, extreme, or extraordinary. Intensity is also interpreted as something that is measurable, and can provide certain strong effects. The use of the word intensity can be placed widely in various disciplines. In addition, intensity information can be used for certain subjects or objects.

Good behavior that reflects a positive character for a child needs to be nurtured to be consistent in him. However, many factors cause children not to behave well. Over time, external factors will play a role in causing children to behave. External factors are factors that come from outside, and consist of various causes. Poor behavior if often carried out by children invisible can erode the positive character in him. One of the causes of the lack of development of good behavior in children, namely online game

Online game is one of the most sought after forms of digital entertainment, and is currently a lifestyle that is loved by all people, including children. Nowadays, there are many new online games that have attracted many people, especially those who are interested in trying to play them.

Teconology is growing along with the times. On the same side, the development of online games is increasingly varied and innovative. This is increasingly inviting players to be willing to be in front of the screen for a long time. The difference in age of children is believed to have rules regarding the time limit for the duration of screen exposure related to technology.

The thing that is highlighted is how long the time limit is said to be excessive in using the device when accessing a game or application. Sigman recommends the ideal screen exposure limit for children aged 7 to 12 years is 1 hour to 1 hour 30 minutes, or a maximum of 2 hours per day, but until now there are still more than the specified time limit.

This indirectly shows there are still cases of adults who give more time for children to be exposed to electronic media. This shows that there are still early childhood children who are given access to technology more than the specified time. Therefore, adults need to determine clear rules in determining the time of media use for early childhood. The American Academy of Pediatrics has stated the policy that pediatrics needs to recommend to parents that the total screen exposure time limit for children is less than one to 2 hours per day.

Based on this exposure, Based on the previous statement, the duration of screen exposure for early childhood has a maximum limit of two hours per day. Determination of the deadline applies both to exposure to video games, television, DVDs, computers, and electronic media with various types of devices. Related to this research, a maximum duration of two hours per day is said to be the ideal intensity of playing online games for children in playing online games. Children who play online games for less than two hours per day are categorized as children who are not intensively playing online games. On the other hand, children who play online games more than two hours per day are categorized as children who are playing online games intensively.

Playing games have a significant impact on the dimensions of aspects of the child's life, starting the development of student morale [4], child leadership [5] and children's emotional regulation [6]. In addition to having an impact on children's development, online mobile game addicts have a significant positive relationship with the loyalty of online mobile games and the purchase of applications in mobile games [7].

The purpose of this study was to see the difference in the intensity of playing online games on children's aggressive behavior.

2. Method

The sample consisted of 120 children who were randomly selected for 8-year-old children in Jakarta through survey research. Intensity of Playing Online Games: Scores are obtained through a questionnaire given to see how many days children play online games for one week. There are three choices given: 1 day, 2 to 3 days and more than 3 days. For the intensity of 1 day, 18 children were chosen, intensity of 2 to 3 days was chosen by 82 children, and more than 3 days were chosen by 20 children.

Children's Creativity. Scores were obtained through questionnaires with 18 instruments with dimensions of physical violence (damaging or destroying objects around them, attacking others, injuring others), verbal violence (insinuating others, saying harsh words to others, threatening others and relational violence (influencing others to do certain things with them, forming groups to bring down others).

3. Result and Discussion

In table 1, the following description will be presented.

Table 1. Means, and S.D. Intensity of Playing Online Games and Children's Aggression

Variable	S.D.	Mean
1 day	3.63	20.16
2-3 days	4.83	24.34
More than 3 days	5.83	34.75
Total	6.54	25.45

To assess the differences between the intensity of playing online games on children's aggressiveness, the level of difference has been presented in table 2. As observed, there is a difference in the intensity of playing online games against children's aggressiveness between 1 day and 2-3 days with significance values 0.004. Furthermore, there are differences in the intensity of playing online games on children's aggressiveness between 1 day and more than 3 days with a significance value of 0.000. Then there are differences in the intensity of playing online games against children's aggressiveness between 2-3 days with more than 3 days with a significance value of 0.000.

Table 2. Differences between the intensity of playing online games on children's aggressiveness

(I) The intensity of Playing Online Games	**(J)** The intensity of Playing Online Games	**Sig**
1 day	2-3 days	0.004
	More than 3 days	0.000
2-3 days	1 day	0.004
	More than 3 days	0.000
More than 3 days	1 day	0.000
	2-3 days	0.000

To assess differences in the level of aggressive children related to the intensity of playing online games has been presented in table 3. As observed, there are differences in the aggressiveness of children who play online games 1 day per week with a value of 20.16. Furthermore, there are differences in aggressive children who play online games 2-3- days per week with a value of 24.34. Then there are differences in aggressive children who play online games more than 3 days per week with a value of 34.75.

Table 3. Different aggressiveness of children with intensity of playing online games

The intensity of Playing Online Games	**N**	**Subset for alpha = 0.05**		
		1	2	3
1 day	18	20.1667		
2-3 days	82		24.3415	
More than 3 days	20			34.7500
Sig.		1.000	1.000	1.000

There is a clear difference in children's aggressiveness when viewed from the intensity of children playing online games.

The intensity of playing online games can be related to health. The World Health Organization (WHO) states that intensity refers to the level at which the activity is being carried out or the amount of

effort needed to carry out an activity or exercise. The definition states that intensity is a level that can have a strong effect, has a level of seriousness, and is done with great effort when using something.

The highlight is how long the time limit is said to be excessive in using the device when accessing a game or application. Sigman recommends that the ideal screen exposure limit for children aged 7 to 12 years is 1 hour to 1 hour 30 minutes, or a maximum of 2 hours per day. The statement shows that the ideal tolerable screen exposure time limit is a maximum of 2 hours.

Adults need to determine clear rules in determining the time of media use for early childhood, which is less than one to 2 hours per day. This further emphasizes that the maximum total screen exposure allowed for early childhood is two hours per day. This is recommended to help with the negative impacts that can be caused.

Playing is fun, but can produce something for someone. This explains that playing can be an activity that has no purpose, but actually has an important role and is done with excitement. This statement is also in line with Vygotsky's opinion that playing can help children have certain mastery. Playing is an activity that is natural, involves imagination, and has a purpose so that children can understand their world.

The tendency of children today has a different activity from children in ancient times. Modernization makes children choose to play with equipment related to technology like a video game or to gather in a game center and be able to last a long time in that place. Now, finding children involved in a game directly begins to decrease, and conversely the intensity of children playing games becomes more.

The definition of online games is further explained more broadly. The Video Game Appraisal System that applies in a number of countries on the European continent explains that "online games are defined as digital games that require active networks to be played. Not only are games played on the internet, but also those played online through consoles, on cellphones or through networks of friends to friends". The quote complements several previous quotes explaining that online games are digital games that require active networks that can not only be played on the internet, but can be through consoles, cellphones, and networks between friends.

Aggressive behavior is the opposite of prosocial behavior. According to Kostelnik et al., Aggressive behavior is an antisocial behavior that damages or destroys objects or things that produce physical or emotional injury. Based on this statement, aggressive behavior is a destructive behavior, both around and around others that can cause injury to one's body or feelings.

Aggressive behavior implies intent to hurt others, this means instrumental or proactive, where the aggressor (perpetrator or attacker) views coercion and violence as an effective way to get what they want. They act intentionally, not out of anger. Conversely, a child who accidentally bumps into another child then encourages with anger, assuming that another child who bumps into him with a specific purpose, this is called hostile or reactive aggression. The statement explains that instrumental aggression is carried out without anger to get what is desired. Hostile aggression is carried out with anger based on the opinion of the aggressor.

This statement means that physical aggression is an action that can potentially cause injury to the body. For example, hitting, pushing, fighting, or using weapons. Relational aggression is an action that can affect friendship and other interpersonal relationships in a bad sense. For example calling names, spreading unpleasant news, and isolating peers from social groups. Based on the explanation along with the meaning of the statement, aggressive behavior has a certain form with the actions of the aggressor.

Other causes of aggressive behavior are due to stimuli from electronic media. Evidenced by the many references and studies that mention examples of several media that contribute to the causes of aggressive behavior of children.

Suggestions for parents to provide supervision for children, because the role of parents in supervising children playing online games [11] is very necessary, or to provide different game content such as educational or didactic games, because of educational games [8], and didactic games [9] has a good impact on child behavior and child communication [10]. Therefore, the existence of educational games has a good effect on children's behavior and communication.

4. Conclusion

The level of aggressive children is influenced by the intensity of children playing online games. The intensity of playing high online games influences children's aggression and vice versa.

References

[1] B. T. Emil Stan, "Education and Aggression," *Educ. Philos. Theory*, vol. 2, no. 1, pp. 37–52, 1970.

[2] L. Azimi and L. Kashani, "Relationship between Maternal Parenting Style and Child ' s Aggressive Behavior," *Procedia - Soc. Behav. Sci.*, vol. 69, no. Iceepsy, pp. 1276–1281, 2012.

[3] N. Akhtar and E. J. Bradley, "Social information processing deficits of aggressive children: Present findings and implications for social skills training," *Clin. Psychol. Rev.*, vol. 11, no. 5, pp. 621–644, 1991.

[4] Z. Teng, Q. Nie, C. Guo, and Y. Liu, "Violent video game exposure and moral disengagement in early adolescence: The moderating effect of moral identity," *Comput. Human Behav.*, vol. 77, pp. 54–62, 2017.

[5] M. J. Sousa and Á. Rocha, "Leadership styles and skills developed through game-based learning," *J. Bus. Res.*, no. January, pp. 0–1, 2018.

[6] D. Pacella and B. López-Pérez, "Assessing children's interpersonal emotion regulation with virtual agents: The serious game Emodiscovery," *Comput. Educ.*, vol. 123, pp. 1–12, 2018.

[7] J. Balakrishnan and M. D. Griffiths, "Loyalty towards online games, gaming addiction, and purchase intention towards online mobile in-game features," *Comput. Human Behav.*, vol. 87, pp. 238–246, 2018.

[8] N. Kidi, B. Kanigoro, A. G. Salman, Y. L. Prasetio, I. Lokaadinugroho, and A. A. Sukmandhani, "Android Based Indonesian Information Culture Education Game," *Procedia Comput. Sci.*, vol. 116, pp. 99–106, 2017.

[9] V. F. Gabdulkhakov, "A Didactic Game Technology," *Procedia - Soc. Behav. Sci.*, vol. 233, no. May, pp. 170–174, 2016.

[10] C. L. Bloju, "The Importance of the Didactic Game in Acquiring and Consolidating the Notions of Communication Building in Primary Education," *Procedia - Soc. Behav. Sci.*, vol. 180, no. November 2014, pp. 241–247, 2015.

[11] M. Nouwen and B. Zaman, "Redefining the role of parents in young children's online interactions. A value-sensitive design case study," *Int. J. Child-Computer Interact.*, 2018.