The Influence of Parenting and Self-Control Influence toward Online Gaming among Adolescents

E-ISSN: 2460-2329

Anika Fatima^{1*)}, Dwi Hastuti², Yulina Eva Riany³

^{1,2,3}Department of Family and Consumer Sciences, Faculty of Human Ecology, IPB University, Bogor 16680, West Java, Indonesia

*) Corresponding author: anikafatima14@gmail.com

Abstract

Online gaming is an action of playing the game with multiple player using internet connection. This study aims to analyze parent's emotional parenting practice and adolescent self-control on online gaming behavior among adolescents. The population in this research are vocational high-school students in Bekasi City. The school used in this research is chosen purposively that is State Vocational High-school 2 in Bekasi City. After 204 adolescents chosen, non-proportional random sampling was conducted to 60 respondents as sample between 16 until 18 years old who enrolled in vocational high school in Bekasi city. Data were collected by questionnaire with self-report technique. Most of the male and female adolescent emotional parenting practices are in a low category. Most male adolescent self-control are in the low category and females are in the middle category. Female adolescent self-control is higher than male adolescent. Most of the respondents are in the low category of online gaming. Male adolescents have higher rate of online gaming than female adolescent. There's a negative correlation between age, sex difference, negative and self-control with online gaming. There are direct influence of self-control and positive indirect effect of emotional parenting practice through self-control to online gaming.

Keywords: adolescent, emotional parenting practices, online gaming, parent emotional awareness, self-control

Abstrak

Perilaku bermain *game online* adalah tindakan bermain *game* yang menggunakan koneksi internet dan memiliki jumlah pemain yang banyak. Penelitian ini bertujuan untuk menganalisis pengaruh pola asuh emosi orangtua dan kontrol diri remaja terhadap perilaku bermain *game online* pada remaja. Populasi pada penelitian ini adalah remaja SMK di Kota Bekasi, pemilihan sekolah dipilih secara *purposive* yaitu SMK Negeri di Kota Bekasi. Setelah terpilih 204 siswa dilakukan *non-proportional random sampling* sehingga terdapat 60 responden. Data dikumpulkan menggunakan teknik *self-report* terpimpin menggunakan kuesioner. Sebagian besar pola asuh emosi orangtua pada remaja laki-laki dan perempuan termasuk pada kategori rendah. Kontrol diri remaja laki-laki lebih dari separuh berada pada kategori rendah dan bagi perempuan sebagian pada kategori sedang. Kontrol diri remaja perempuan lebih tinggi dibandingkan remaja laki-laki. Sebagian besar contoh berada pada kategori bermain *game online* rendah. Remaja laki-laki memiliki rata-rata perilaku bermain game lebih tinggi dibandingkan remaja perempuan. Hasil uji korelasi menemukan adanya hubungan negatif antara usia remaja, jenis kelamin remaja, dan kontrol diri remaja, dengan perilaku bermain *game online* pada remaja. Terdapat pengaruh negatif secara langsung oleh kontrol diri remaja dan

pengaruh positif secara tidak langsung oleh pola asuh emosi melalui kontrol diri terhadap perilaku bermain *game online*.

Kata kunci: game online, kesadaran emosi orangtua, kontrol diri remaja, pola asuh emosi orangtua, remaja

Introduction

The internet has been a part of life and the development of technology. Gayatri et al. (2015) research on digital safety for children and adolescents in Indonesia found that 98 percent of children and adolescents are acquainted with the internet, and 79,5 percent of them are internet users. The number of adolescents in Indonesia is based on citizen population projection in 2015 (age 10-24 years old), reaching more than 66 million or 25 percent of Indonesian citizens of 255 million lives (BPS, 2013). Based on the survey in 2018 conducted by the Indonesian Association of Internet Service Providers or Asosiasi Penyelenggara Jasa Internet Indonesia (APJII), the penetration of internet usage from 2017 is 143 million lives, and in 2018 it reached 171 million lives. The penetration of internet users from the age group of 15-19 years old in Indonesia, 91 percent, is internet users.

Few of the most accessed content are movies or videos, online games, and music. In Indonesia, adolescents are on third place of the group that accessed the Internet (Kominfo, 2016). In 2018, WHO has stated that gaming disorder is a mental illness marked by the absence of control over repetitive gaming that will disturb daily life. Adolescence which is known with transitions and mood swings, makes adolescents an unstable stage (Santrock, 2011). According to Unayah et al. (2015), adolescents have an unstable, selfish character and prioritize pleasure over productive and positive actions thus, and juvenile delinquency is easy to do.

Gaming is also a means of compensation for insatiable needs and motivations in real life (Wan & Chiou, 2006). Schneider (2017) found that parents' gaming behavior impacted adolescent attitude toward gaming and gaming behavior. Parental supervision is also considered as a useful strategy in controlling adolescents while playing games (Smith, Gradisar, & King, 2015). According to Santrock (2011), internet usage still requires parents' supervision and rules even though adolescents use it. The quality of the relationship between parents and children has a negative relationship with problematic gaming behavior (Schneider, King, & Delfabro, 2017). Parents generally do not consider the type of game, the duration of playing games, and the dangers that can damage adolescents when exposed to the danger of online gaming addiction. Research by Tu, Lee, Chen, & Kao (2014) found that gender and parental education level can predict adolescent antisocial behavior. Based on research by Ko, Yen, Chen, Chen, & Yen (2005), in Taiwan, men have higher levels of playing online games than women who are more supervised by parents. Low parental regulation of adolescent activities and low self-control will lead to excessive online games (Smith et al., 2015; Teng Li & Liu, 2014; Mehroof & Griffiths, 2010).

Adolescence is a period of transition to an adulthood full of conflict. One way to overcome tension due to adolescents' problems is to use online games as an escape. Game addicts use online games as an escape from the real world and various problems that are difficult to overcome with practices that resemble drug addiction, and they used gaming to avoid stressful situations and unpleasant feelings (Young, 2009). The results of Sari, Ilyas, and Ifdil (2017) found that the overall rate of internet addiction

for early adolescents in public high schools in Padang was 4 percent in the very high category and 43 percent in the high category. According to research by Spekma, Konijn, Roelofsma, & Griffiths (2013), excessive gaming can be addictive similar to alcohol and other drugs. Besides, Teng et al. (2014) found that exposure to violent online games can increase adolescents' aggression. Some of the other bad effects of online game addiction include withdrawal from social life, damaging individual, interpersonal relationships, and lying about allocating time spent while playing games (Young, 2009).

Addiction might occur in individuals if they do not have the strength to resist the desire. Parents cannot always supervise adolescents, and adolescents are required to have good self-control to avoid problematic gaming behavior and online game addiction. Self-control is the internal aspect of an ability to resist the urge to do something that determines juvenile delinquency (Aroma & Suminar, 2012). Good individual self-control results from good parenting practice and secure attachment (Walsh & Hemmens, 2008). Ineffective parenting and low parental acceptance of children will result in low self-control for children (Vazsonyi, Jiskrova, Ksinan, & Blatny, 2016; Finkenauer, Engels, & Baumeister, 2005). According to Aroma & Suminar (2012), low self-control in adolescents will increase the tendency for negative behavior. Teng et al. (2014) found that self-control is a variable of personality that can control aggression and develop positive psychological characteristics. Adolescent self-control in previous studies showed low scores, which made it easy for adolescents to tend to delinquent behavior such as cyberbullying and accessing pornography (Malihah, 2017; Hardani, 2018; Aroma & Suminar, 2012). Juvenile delinquency are behaviors that cannot be accepted by society to criminal acts committed by adolescents (Santrock, 2011).

According to Santrock (2011), parents who cannot reduce antisocial behavior in their children and have difficulty developing adolescent skills have adolescents involved in delinquency. There are plenty of antisocial behaviors carried out by problematic teenagers, one of which is playing online games. Research by Kim et al. (2008) proved that self-control negatively correlates with addiction to playing online games. This proves that adolescents with high self-control can control unwanted behavior, one of which is online gaming behavior. Today, it is not uncommon for us to meet parents who give teenagers too much freedom over internet access to access social media and online games. Online games provide the opportunity for individuals to live in a virtual world and then engage more deeply with games (Young, 2009). This happens because various online games have worlds, currencies, and even characters that can be adjusted according to the game player's profile. Yee's research (2006) found that male gamers had a higher urge to play than a female gamer. In addition, research by Cheung and Cheung (2010) in China found that the self-control of females was higher than males.

One of parents' duties with adolescent children is to help adolescents manage their emotions (Hastuti, 2015). In accordance with Gottman's emotional coaching, parents are expected to provide emotional support and relieve adolescents' emotional turmoil in the adolescent phase. Taking care of adolescents and meeting their emotional needs is certainly different from caring for younger children. According to Hastuti (2015), parents with an emotional coaching style listen to adolescents, have empathy, and provide instructions to regulate emotions, and teach how to express emotions and problem-solving skills. Given that few studies related to emotional

parenting and self-control on online gaming behavior, this is very important for further research. The novelty in this research is analyzing emotional parenting practice relationship with online gaming behavior. Therefore, this research was conducted to analyze parental emotional parenting, adolescent self-control, and online gaming behavior in adolescents.

This research has several specific objectives:

- 1. Identifying family characteristics, adolescent characteristics, emotional parenting, self-control, and online gameplay behavior.
- 2. Identifying differences in self-control and online game play behavior among male and female adolescents.
- 3. Analyzing the relationship between family characteristics, adolescent characteristics, with parental emotional parenting, adolescent self-control, online gaming behavior in adolescents.
- 4. Analyzing the influence of parental emotional parenting, adolescent self-control, on online gaming behavior in adolescents.

Methods

Participants

This study used a cross-sectional study design. The research was conducted at SMKN 2 which is located in Bekasi City. The determination of the location was carried out intentionally considering choosing a vocational school in the Bekasi area that had an A for its accreditation. Another consideration for the selection of the school in this study was the suitability of the location with the research entitled "Role Parenting and Effectiveness of the Youth Information Center and Counseling Program (PIK-R).) in Tackling Negative Behavior in the Digital Age ". The research was conducted from October 2018 to May 2019, which included the preparation of research proposals, data collection, data processing, data analysis, report writing, and reporting of research results. The approach used in this research is quantitative. This study population was students aged 204 adolescents aged 16 to 18 years from selected State Vocational High Schools in Bekasi City. Sampling was carried out by non-proportional random sampling. The total population is 204 students, then 30 male students and 30 female students picked randomly so that the total respondents numbered 60.

Measurement

All measuring instruments used in this research are research measurement tools for collaboration between IPB and BKKBN with the title "The Role of Care and Effectiveness of the Youth Information and Counseling Center (PIK-R) Program in Tackling Adolescent Negative Behavior in the Digital Age" by the joined research team (Hastuti, Alfiasari, Hernawati, Oktriyanto, & Puspisari, 2019). The characteristic of adolescents that measured in this research are age and sex. The characteristics of family measured in this study are parents' age, latest education, occupations, and family size.

The instrument for measuring parents' emotional parenting is taken from the parenting practice instruments that parents apply to their children. From this questionnaire, only the emotional aspect is taken to see the emotional parenting practice. The number of questions on this instrument is 5 questions with a Likert scale of 1 (really doesn't describe my parents) to 4 (really describes my parents). The instrument

for measuring emotional parenting has a Cronbach's alpha value of 0.910.

The instrument for measuring adolescent self-control was measured using a measuring instrument from Hardani's (2017) study, and the instrument had a Cronbach's alpha value of 0.8. This measuring tool modifies the Self-Control Scale instrument by Tangney et al. (2004). This instrument is used to measure adolescent self-control. This instrument's number of questions is 13 questions with a Likert scale of 1 (very unsuitable) to 4 (very suitable). The self-control measurement instrument has a Cronbach's alpha value of 0.750.

The online gaming behavior measurement instrument is modified from the antisocial behavior instrument (Hastuti et al., 2019). The number of questions on this instrument is 4 questions with a Likert scale of 1 (very unsuitable) to 4 (very suitable). The instrument for measuring the online gaming behavior has a Cronbach's alpha value of 0.887.

Analysis

The analysis consisted of descriptive analysis and inferential analysis. Descriptive statistical analysis such as number, percentage, mean value, standard deviation, minimum value, and maximum value was used to identify adolescent characteristics, family characteristics, emotional parenting practice, self-control, and online gaming behavior. Inference analysis uses t-test difference test to see if there is a difference between the variables in male and female respondents, correlation test to test the relationship between variables both dependent and independent variables and see the direction of the relationship, multiple linear regression test is used to test the independent variable influence on online gaming behavior, and path analysis test. Further processing is the regression analysis for the sex of adolescents coded using a dummy, namely male to 0 and female to 1. Parental education is coded less than SMA to 0 and for SMA and above to 0. Parent occupation is coded to 0 for not working and 1 for working.

Path analysis is used to see the Structural Equation Modeling (SEM) model's path coefficient. It is carried out using the Smart PLS 3.0 application to determine which variables, directly and indirectly, affect online gaming behavior. In the PLS-SEM analysis evaluation phase, several stages were carried out to assess the outer model, namely convergent validity, discriminant validity, and composite reliability. Based on the results of the evaluation of convergent validity, discriminant validity, and composite reliability, it can be concluded that the indicators of measuring latent variables can be declared valid and reliable. The measurement of each dependent variable is done by adding the answers to a total score and then converting them into an index. Results are grouped according to predefined class intervals. Categorization in this study is that the score is converted into an index and categorized into 0-100 intervals, namely (1) low: 0-60, (2) moderate: 60-80, and high:> 80-100 (Khomsan, 2000).

Findings

Adolescent and Adolescent's Family Characteristic

The sample characteristics consisted of gender and age. This study involved 60 adolescents aged 16 to 18 years with an average age of 16.33 years, and 70 percent of the samples aged 16 years. The study results found that as many as 73.3 percent of the

sample studies had a father whose age was included in the middle adulthood category (41-60 years) with an overall father age of 44.47 years. The study found that 51.7 percent of samples had mothers in the middle adulthood category (41-60 years) with an overall mean age of 41.48 years. Most parents' education is high school graduate or equivalent, namely 51.7 percent of the fathers and 50 percent of the respondents' mothers. Most of the respondents' fathers worked with a steady income as much as 61 percent. Most of the respondent's mothers did not work by 65 percent. The family size is 60 percent of the families, according to BKKBN (2005), are included in small families (\leq 4 people).

Emotional Parenting Practice, Adolescent Self-Control, and Online Gaming Behavior

An emotional parenting practice is parents' ability to recognize and respond to emotions felt by adolescents. Based on the results of the research listed in Table 1, it is known that 63.3 percent of male adolescence's parents have emotional parenting in the low category, followed by the high category of 20 percent and the medium category of 16.7 percent.

Table 1 Distribution of adolescents based on minimum scores, maximum scores, the average, standard deviation of emotional parenting practice, self-control, and online gaming behavior

***	Male		Female		
Variable	n	%	n	%	
Emotional parenting practice					
Low	19	63,3	12	40	
Medium	5	16,7	11	36,7	
High	6	20	7	23,3	
Total	30	100	30	100	
Min-Max (index)	0-100		6,6-100		
Mean \pm Std (index)	$47,33 \pm 32,53$		$61,56 \pm 4,60$		
Total Mean		54,	44		
P-value		0,0	59		

Meanwhile, the female adolescent's parents were in a low category by 40 percent. The medium category was then followed by 36.7 percent and 23.3 percent for the high category. The results showed that the average index of emotional parenting practice for male adolescents parents was 47.33, while for females the average was 61.56. There was no statistically significant difference between the male and female's emotional parenting practice (p-value = 0.059).

The self-control results showed that as many as 66.7 percent of male respondents were in a low category and the remaining 33.3 percent were in the medium category. Half of the female respondents were in the medium category as much as 50 percent, and the rest were in a low category as much as 40 percent, then the high category was 10 percent. Self-control is categorized into low, medium, and high based on the average total index. The results in Table 1 show that the mean value of self-control is different, (p-value = 0.001) female adolescents self-control (64.01) are higher than male (53.5).

Table 1 Distribution of adolescents based on minimum scores, maximum scores, the average, standard deviation of emotional parenting practice, self-control, and online gaming behavior (cont.)

Variable	M	Male		Female	
	n	%	n	%	
Self-control					
Low	20	66,7	12	40	
Medium	10	33,3	15	50	
High	0	0	3	10	
Total	30	100	30	100	
Min-Max (index)	28,2-79,4		48,7-92,3		
Mean \pm Std (index)	$53,58 \pm 12,62$		$64,01 \pm 10,22$		
Total Mean		58,	80		
P-value	0,001**				
Online gaming					
Low	22	73,3	29	96,7	
Medium	3	10	1	3,3	
High	5	16,7	0	0	
Total	30	100	30	100	
Min-Max (index)	16,6	16,66-100		0-66,6	
Mean \pm Std (index)	$52,5 \pm 22,65$		$19,44 \pm 3,22$		
Total Mean		35,	97		
P-value		0,00	0**		

Note: **Significant at p<0,01

Online gaming behavior is the act of playing games using the internet connection and many players. Based on the results of the research listed in Table 1, it is known that most of the male and female are in the low category of playing online games with a percentage of 73.3 percent and 96.7 percent. There is a fairly large average difference between online gaming behavior for males and females. The average value of the online game index is different (p-value = 0.000) for a male with a value of 52.5 percent higher than females, namely 19.4 percent.

Based on Figure 1, the study results show that 50 percent of male adolescents have played online games and 46.7 percent of female. As much as 50 percent of male adolescents and 16.7 percent of females strongly agree that they have played online games. There are still some females who admit to never playing online games.

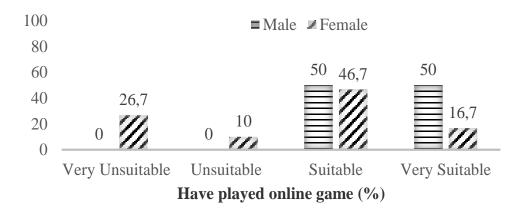


Figure 1 Distribution of adolescents who have played online game

Gamer is a term commonly used to describe people who often play games. This question item states the respondent's conformity to the statement, "I am a real gamer because I play online games for hours." The results showed that 20 percent of male adolescents strongly agree, and 30 percent of males agree that they felt that they were a real gamer who could play games for hours. There's 10 percent of the female who agrees they can play online games for hours (Figure 2).

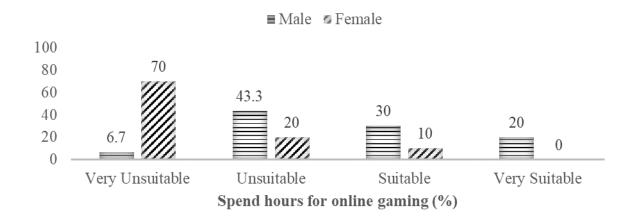


Figure 2 Distribution of adolescents that spend hours for online gaming

In this study, as many as 30 percent of male adolescents prefer to play online games at internet cafes. This was followed by 10 percent of male adolescents who strongly agreed that they prefer to play online games in internet cafes (Figure 3). All-female adolescents do not prefer to play online games at internet cafes.

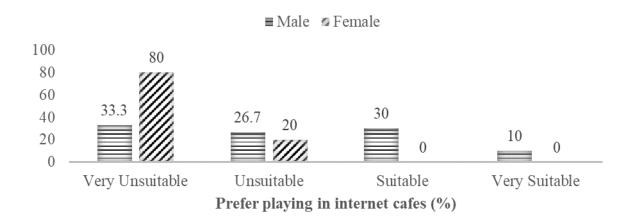


Figure 3 Distribution of adolescents who prefer playing in internet cafes

Several games have a comfortable environment that allows players to get to know each other. As many as 13.3 percent of males and 3.3 percent of females felt more comfortable making friends with friends in online gameplay. Meanwhile, 83.3 percent of females and 33.3 percent of males do not feel more comfortable making friends with friends in online gameplay (Figure 4.).

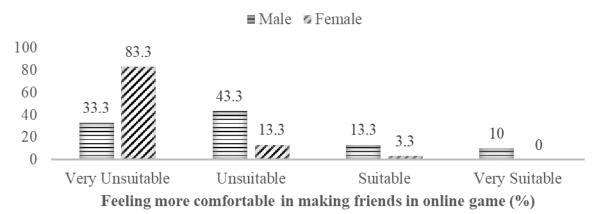


Figure 4 Distribution of adolescents who feeling more comfortable in making friends in online game

Correlation of Emotional Parenting Practice, Adolescent Self-Control, and Online Gaming Behavior

Characteristics of adolescents that indicate a correlation with online gaming behavior are age and gender. In table 2, there is a significant negative relationship between age and online gameplay behavior ($\alpha > 0.01$). This means that the higher the age of adolescence, the behavior of online gaming behavior decreases. Table 2 also shows that the gender difference has a very significant negative correlation with online gaming behavior ($\alpha > 0.01$). This means that male adolescents play online games higher than females. There is a very significant positive relationship between maternal education and online gaming behavior ($\alpha > 0.01$). This means that the higher the mother's education, the higher the online gaming behavior. Furthermore, there is a

significant positive relationship between family size and online game play behavior (α > 0.05) as seen in Table 2. This can be interpreted as family with more members having a higher rate of adolescents' online gaming behavior.

Table 2 Correlation coefficients of adolescents characteristic, family characteristic, and online gaming behavior

Variable	Online gaming behavior
Adolescent's age	-0,301**
Adolescent's sex	-0,673**
Father's age	0,157
Mother's age	0,005
Father's last education	0,192
Mother's last education	0,342**
Father's occupation	-0,070
Mother's occupation	0,069
Family size	0,236*

Note: *Significant at p<0,05; **Significant at p<0,01

Correlation of Emotional Parenting practice, Adolescent Self-Control, and Online Gaming Behavior

The correlation test results from the variable emotional parenting practice to the self-control variable significantly affect. The relationship test shows that emotional parenting practice has a significant positive relationship with self-control (α > 0.01). This shows that the better parental emotional parenting, the better self-control that is formed in adolescents. The self-control variable has a significant negative relationship with online gaming behavior (α > 0.05). This means that the lower the self-control that adolescents have, the higher their online gaming behavior.

Table 3 Correlation coefficients of emotional parenting practice, adolescent self-control, and online gaming behavior

Variable		Emotional parenting practice	Self-control Online gaming behavior		
Emotional practice	parenting	1			
Self-control		0,420**	1		
Online gaming	, behavior	-0,151	-0,306*	1	

Note: *Significant at p<0,05; **Significant at p<0,01

Direct and Indirect effect of Emotional Parenting practice, Adolescent Self-Control, with Online Gaming Behavior

Table 4 results revealed a direct and indirect effect of all independent variables on the dependent variable: online gaming behavior. The test results have shown that emotional parenting has a very significant positive correlation with the self-control variable (α > 0.01). Path analysis using the Smart PLS 3.0 application was carried out from all items of questions on emotional parenting practice and self-control towards online gaming behavior. In the self-control variable, several items have outer loading below 0.6, which then affects the online gaming behavior so that several items, namely 3, 4, 5, 6, 8, 9, 10, 12, are deleted from the initial model. Furthermore, further path

analysis is carried out using items from the remaining variables with the Smart PLS 3.0 application.

Table 4 Result of model parameter estimation

Path	Coefficient	T	Sig.	Adj R ²
Emotional parenting practice → Self-control	0,402	3,964	0,000**	0,076
Emotional parenting practice → Online gaming	0,043	0,346	0,703	0,018
Self-control → Online gaming	-0,480	4,346	0,000**	0,018
Emotional parenting practice → Self-control → Online gaming	-0,193	2,536	0,012*	0,018

Note: *Significant at p<0,05; **Significant at p<0,01

Table 4 shows that the variable that directly influences gaming behavior is the self-control variable of -0.480. Self-control has a significant negative effect on online games, which means that the higher self-control the lower online gaming behavior. Emotional parenting practice does not significantly affect online gaming behavior but significantly affects adolescent self-control. Emotional Parenting Practice (EPP) affects Self-Control (SC) by 0.402. In the path analysis, Figure 5 shows that Online Gaming Behavior (OGB) is indirectly influenced by the variable Emotional Parenting Practice (EPP). There is an indirect positive effect of emotional parenting practice (EPP) through Self-Control (SC) on the Online Gaming Behavior (OGB) of -0.193. This means that the increase in emotional parenting practice will increase adolescents' self-control. Self-control has a negative relation with online gaming behavior, and it means the increase in self-control results in a decrease in online gaming behavior. The illustration of the path analysis test, when described in full, is as follows:

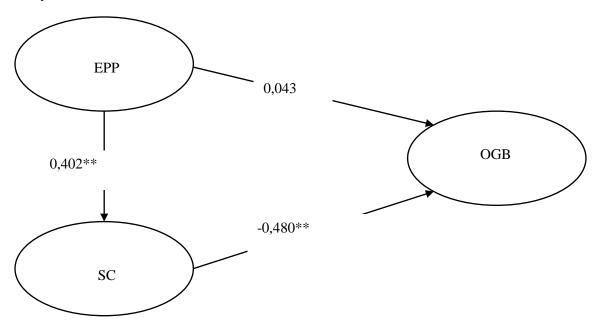


Figure 5. Path Analysis Result

Discussions

According to Erikson's psychosocial theory (Glassman & Hadad, 2008), there is an identity crisis during adolescence, namely identity versus role confusion, which makes it difficult for adolescents to determine their identity. Suppose adolescents do not overcome this crisis and find their identity. In that case, an identity crisis will occur, resulting in identity confusion. Online games are a threat to adolescents, and exposure to online games with violence can increase aggression in adolescents (Teng et al., 2014). The unstable nature of adolescents puts adolescents at risk of falling into destructive addictive behaviors and absorbing various bad behaviors through exposure to online games (Spekman et al., 2013; Teng et al., 2014).

In figure 2, some subjects admit playing the game for hours. This is a warning sign because one of the symptoms of adolescents having problematic gaming behavior is the duration of time playing games. According to Charlton and Danforth (2007), a male who showed problematic gaming behavior generally played games more than those who did not display this behavior. A study by Safarina and Halimah (2019) found that internet cafes' visitors usually played for at least 10 hours, even up to 24 hours a day. It usually triggered quarrels, especially with family members. Gamers usually irritated their family complaints about their game playing habit and realized that their relationship worsened due to this conflicts (Wong & Lam, 2016). In contrast to subsequent research, playing online games does not mean adolescents have an addiction to playing online games because there are various other benchmarks to measure addiction to online games (Spekman et al., 2013).

In this study, the average online gaming behavior index was different between male and female adolescents. Based on the research results, male adolescents have an average index of playing online games higher than females. This finding is similar to that of a number of studies in the literature suggesting that boys play more digital games than girls (Çakır, Ayas, & Horzum, 2011; Demirtas Zorbaz, Ulas, & Kizildag, 2015; Gentile, Choo, Liau, Sim, Li, Fung, & Khoo, 2011; Kweon & Park 2012; Ko et al., 2005; Müller et al., 2015; Ozgur, 2019; Toker & Baturay, 2016; Vadlin, Åslund, Hellström, & Nilsson, 2016). This result is in line with Ko et al. (2005) research in Taiwan that shows male adolescents have a higher level of playing online games because parents spend more time monitoring female adolescents' activities. There's also a general belief that technological efforts are male-specific jobs (Akça & Kaya, 2016; Ozgur, 2019). Meanwhile, this research is not in line with Kim et al. (2015), who found no significant difference between male and female adolescents. In a similar study conducted by Ozgur (2019), he implied that gender and technology socialization as a male-specific job has an important effect that leads to the finding in this study.

The inability of adolescents to express negative emotions or solve problems can make them use online games to run away from problems (Young 2009). In this study, emotional parenting practice was carried out by parents to meet the emotional needs of adolescents. Parents' ability to detect and deal with negative adolescent emotions can make adolescents' negative emotions as an opportunity to get closer to adolescents (Hastuti, 2015). The study results found that most of the parents' emotional parenting practice had a low index category. According to the answers' distribution, most of the respondents' parents can figure and understand adolescents' feelings and ask their feeling when they are upset. Most parents do not try to listen to adolescents when experiencing disappointed, upset, or angry and they also unable to calm the adolescents when feeling upset.

According to Tangney et al. (2004), individuals with good self-control also have

good interpersonal relationships. This relationship means that individuals raised in families with a positive family environment will have good self-regulation. The adolescents' average self-control in this study was 58.80, which is lower than the previous study by Nurani (2018), with adolescents' self-control the average of 78.43 in the vocational school. Previously, Hardani (2017) also carried out the research that stated that junior high school adolescents' average self-control was 62.9, which was higher than this study. In this study, there were significant differences in self-control based on adolescents' sex. The self-control possessed by male adolescents has a lower average index than female adolescents. This is not in line with Hardani (2017) research, which found no significant differences between male and female adolescents.

The correlation results show that adolescents' age and gender have a significant negative relationship and consistently influence online gaming behavior. Age has a significant negative relationship with online gaming behavior, according to Hardani's research (2017). As an individual grows older, the negative behavior will decrease because it increases responsibility and awareness of consequences. Gender has a relationship with the behavior of online gaming behavior, the results of research previously proved this by Tu et al. (2013) related to antisocial behavior. Male adolescents have a higher tendency to play online games than females. Mother's education level has a significant positive relationship with online gaming behavior. This is in line with previous research, which found that high maternal education can increase negative adolescent behavior, including negative behavior in accessing the Internet (Hardani, 2017; Laili, 2018). There is a significant positive relationship between family size and adolescent online gaming behavior. This can be because the more children there are, the more divided the parents' attention will be. The correlation results also show that emotional parenting practice has a significant positive relationship with self-control.

Adolescent self-control has remained in adolescent throughout the life (Goode, 2008). In contrast to children who are controlled by parents and rules, self-control helps adolescents control themselves from unwanted behavior. Self-control influences asocial behavior and juvenile delinquency (Aroma & Suminar, 2012; Malihah, 2018; Hardani, 2017). In this study, emotional parenting practice has a significant positive relationship with self-control. In general, ineffective parenting will result in children's low self-control (Vazsonyi et al., 2016). There's another finding that states excessive affection in the parent-child relationship leads to a more tolerant attitude toward the child, which leads to a permissive parenting style, so the adolescents in this household have a higher level of online gaming addiction (Ozgur, 2019). In fact

The path analysis results indicate that the self-control variable has a significant negative relationship with online gaming behavior. The higher the self-control, the unwanted behavior in this case online gaming behavior in adolescents will decrease. The previous studies also found a significant negative relationship with self-control to online gaming addiction (Kim et al., 2015; Safarina & Halimah, 2019). A study states that impaired ability to delay the rewards in was related to problematic patterns of online gaming involvement (Nuyens, ., Deleuze, Maurage, Griffiths, Kuss, & Billieux, 2016). In accordance with Gottfredson and Hirschi's theory, adolescents with weak self-control will have difficulty controlling themselves and tend juvenile delinquency (Goode, 2008; Aroma & Suminar, 2012;).

Previous research has shown that weak self-control results in adolescents conducting antisocial actions such as cyberbully and access of pornographic content (Malihah, 2017; Hardani, 2018). In Syahran's (2015) study, subjects were found skipping school to play

online games at internet cafes. Internet cafes were perceived as safe, comfortable, and ideal place where gamers can play games and socialize with their peers (Wong & Lam, 2016). In path analysis, online gaming behavior is influenced directly by self-control and indirectly by emotional parenting practice. Research by Kim et al. (2015), found that the severity of playing online games can be predicted through individuals' self-control. The path analysis results show that there is a significant indirect negative effect of emotional parenting practice on online gaming behavior through self-control. Several studies support these study findings that indicate adolescents who are not supported, involved, and interested in their family show more symptoms of game addiction (Bonnaire & Phan, 2017; Choo, Sim, Liau, Gentile, & Khoo, 2015; Lee & Morgan, 2018; Liau, Choo, Gentile, Sim, & Khoo, 2015; Toker & Baturay, 2016; Wang, Chan, Mak, Ho, Wong, & Ho, 2014).

This study's limitation is that the instrument in this study has no dimensions, so it is quite difficult to see a deeper analysis of relationships and influences. The questionnaire filled by self-report resulted in researchers being unable to explore more deeply related to games and habits of playing online games.

Conclusion and Recommendation

Conclusion

This study involved 30 male and 30 female who were in Vocational High School (SMK), with ages ranging from 16 to 18 years. More than half of the parenting styles are in the low category. Self-control for male adolescents is mostly in a low category and for women is mostly in the moderate category. The self-control of female adolescents was higher than that of the male. Most of the sample are in the low online gaming behavior category. A significant difference was found in online gaming behavior, male adolescents had higher online gaming behavior than female adolescents. The higher age of adolescents, higher education of mothers, and male adolescents are accompanied by higher online gaming behavior behavior. Adolescent self-control has a significant negative relationship with online gaming behavior, meaning that the higher the adolescent self-control, the lower the online gaming behavior. The path analysis results found that online gaming behavior is indirectly influenced by emotional parenting practice through self-control. This study shows that male adolescents, higher maternal education, self-control, and emotional parenting practice influence online gaming behavior.

Recommendation

A few suggestions for adolescents' parents should learn more about technology and the internet. This will help parents to understand and monitor adolescent behavior better. Parents should upgrade their understanding of ideal parenting practices and monitoring strategies suitable for adolescents. Moreover, Non-Governmental Organizations and the government, especially the Ministry of National Education and the Ministry of Social Welfare, in children and families, there's a necessity of programs and policies on increasing emotional parenting knowledge to improve children's emotional intelligence for parents and raise awareness for the dangers of online game addiction for children and adolescents. For further research, it is highly recommended to look at peer group influence, motivation to play online games, and attachment with peers or parents to online gaming behavior.

Acknowledgment

Thank you to the entire BKKBN 2018 Research Team chaired by Dr. Ir. Dwi Hastuti, M.Sc. for the opportunity to participate in this research.

References

- [APJII] Asosiasi Penyelenggara Jasa Internet Indonesia. (2018). Data penetration and profile of Indonesian internet user. Retrieved from http://apjii.or.id.
- Aroma, I. S., & Suminar, D. R. (2012). The relationship between the level of self-control and the tendency of juvenile delinquency behavior. *Jurnal Psikologi Pendidikan dan Perkembangan*, 1(2), 1-5. Retrieved from https://docplayer.info.
- [BKKBN] Badan Kependudukan dan Keluarga Berencana Nasional. (2005). Family planning and reproductive health. Jakarta: BKKBN. Retrieved from www.bkkbn.go.id.
- [BPS] Badan Pusat Statistik. (2013). Human resources and culture in 2013. Jakarta: Badan Pusat Statistik. Retrieved from http://www.bps.go.id.
- Bonnaire, C., & Phan, O. (2017). Relationships between parental attitudes, family functioning and Internet gaming disorder in adolescents attending school. *Psychiatry Research*, 255, 104–110. doi: 10.1016/j.psychres.2017.05.030.
- Bronfenbrenner U. (1981). *The Ecology of Human Development: Experiments By Nature and Design*, USA: Library of Congress Cataloging in Publication Data.
- Çakır, Ö., Ayas, T., & Horzum, M. B. (2011). An investigation of university students' internet and game addiction with respect to several variables. Ankara University, *Journal of Faculty of Educational Sciences*, 44(2), 95-117. doi: 10.1501/Egifak 0000001226.
- Charlton, J. P., & Danforth, I. D. W. (2007). Distinguishing addiction and high engagement in the context of online game playing, *Computers in Human Behavior*, 23, 1531–1548. https://doi.org/10.1016/j.chb.2005.07.002.
- Cheung, N. W. T., & Cheung, Y. W. (2008). Self-control, social factors, and delinquency: A test of the general theory of crime among adolescents in hongkong, *Journal of Youth and Adolescence*, 37(4), 412-430. http://dx.doi.org/10.1007/s10964-007-9218-y.
- Choo, H., Sim, T., Liau, A. K. F., Gentile, D. A., & Khoo, A. (2015). Parental influences on pathological symptoms of video-gaming among children and adolescents: A prospective study. *J. Child Fam. Stud.*, 24(5), 1429–1441. doi: 10.1007/s10826-014-9949-9.
- Demirtas Zorbaz, S., Ulas, O., & Kizildag, S. (2015). Relation between video game addiction and interfamily relationships on primary school students. *Educational Sciences: Theory & Practice*, 15(2), 489-497. doi: 0.12738/estp.2015.2.2601.
- Finkenauer, C., Engels, R. C. M. E., & Baumeister, R. F. (2005). Parenting behavior, adolescent behavior, and emotional problems: The role of self-control, *International Journal of Behavioural Development*, 29(1), 58–69. doi/10.1080/01650250444000333.
- Gayatri, G., Rusadi, U., Meiningsih, S., Dede, M., Sari, D., Kaustarina, Karman, Nugroho, A. C. (2015). Digital Citizenship Safety Among Children and Adolescents in Indonesia, *Jurnal Penelitian dan Pengembangan Komunikasi dan Informatika*, 6(1), 2087-0132.

- Gentile, D. A., Choo, H., Liau, A., Sim, T., Li, D., Fung, D., & Khoo, A. (2011). Pathological video game use among youths: A two-year longitudinal study. *Pediatrics*, 127(2), 319–329. doi: 10.1542/peds.2010-1353.
- Glassman, W. E., & Hadad, M. (2009). Approaches to Psychology: Fifth Edition. UK: McGraw-Hill Education.
- Hardani, R. (2017). The parent's attachment, teacher's attachment, peer's attachment and self-control on pornography behavior junior high school student (Thesis dissertation). Retrieved from repository.ipb.ac.id.
- Hastuti, D. (2015). Pengasuhan: Teori dan Prinsip serta Aplikasinya di Indonesia, Bogor (ID): IPB Press.
- Hastuti, D., Alfiasari, Hernawati N., Oktriyanto, Puspisari M. D. (2019). Effectiveness OF "PIK-R" Program As An Extracullicular for High/Vocational School Students In Preventing Negative Behaviors of Adolescents. *Cakrawala Pendidikan*, 38(1), 1-15. doi: 10.21831/cp.v38i1.22283.
- Hurlock, E. B. (2011). *Development Psychology a Life-Span Approach* 5th edition, Istiwidayati, translator; Sijabat, R. M., editor, Jakarta (ID): Penerbit Erlangga.
- Khomsan, A. (2000). Teknik Pengukuran Pengetahuan Gizi [diktat]. Bogor: Fakultas Ekologi Manusia Institut Pertanian Bogor.
- Kim, E. J., Namkoong, K., Ku, T., & Kim, S. J. (2008). The relationship between online *game* addiction and aggression, self control and narcissistic personality traits, *European Psychiatry*, 23, 212-218. doi: 10.1016/j.eurpsy.2007.10.010.
- Ko, C., Yen, J., Chen, C., Chen, S., Yen, C. (2005). Gender differences and related factors affecting online gaming addiction among taiwanese adolescents, *Journal of Nervous and Mental Disease*, 193(4), 273-277. doi:10.1007/s10964-007-9218-y.
- [Kominfo] Kementrian Komunikasi dan Informatika RI. (2016). Composition of internet users based on age in 2016, Jakarta (ID): Kominfo.
- Kweon, Y. R., & Park, M. S. (2012). Effects of school adjustment on higher grade elementary school students'internet game addiction: focused on gender difference. *Journal of Korean Academy of Psychiatric and Mental Health Nursing*, 21(2), 99–107. doi: 10.12934/jkpmhn.2012.21.2.99.
- Laili, M. M., Puspitawati, H., Yuliati, N. L. (2016). Influence of preventative communication of adolescent-parents, self-esteem, and internet usage against teen pornography (Thesis dissertation). Retrieved from repository.ipb.ac.id.
- Lee, G. L, & Morgan, H. (2018). Understanding children's attraction toward digital games and preventing their gaming addiction. *US-China Education Review*, 8(1), 11-17. doi: 10.17265/2161-623X/2018.01.002.
- Liau, A. K., Choo, H., Li, D., Gentile, D. A., Sim, T., & Khoo, A. (2015). Pathological video-gaming among youth: A prospective study examining dynamic protective factors. *Addiction Research and Theory*, 23(4), 301-308. doi: 10.3109/16066359.2014.987759.
- Malihah, Z., & Alfiasari. (2017). Perilaku cyberbulllying pada remaja dan kaitannya dengan kontrol diri dan komunikasi orangtua, *Jur. Ilm. Kel. & Kons*, 11(2), 145-156. https://doi.org/10.24156/jikk.2018.11.2.145.
- Mehroof, M., & Griffiths, M, D. (2010). Online gaming addiction: The role of sensation seeking, self-control, neuroticism, aggression, state anxiety, and trait anxiety. *Cyberpsychology, Behavior, and Social Networking*, 13(3), 313-316. doi: 10.1089/cyber.2009.0229.

- Müller, K. W., Janikian, M., Dreier, M., Wölfling, K., Beutel, M. E., Tzavara, C., ... Tsitsika, A. (2015). Regular gaming behavior and internet gaming disorder in European adolescents: Results from a cross-national representative survey of prevalence, predictors, and psychopathological correlates. *European Child Adolescent Psychiatry*, 24(5), 565–574. doi: 10.1007/s00787-014-0611-2.
- Nuyens, F., Deleuze, J., Maurage, P., Griffiths, M., Kuss, D., Billieux, J. 2016. Impulsivity in Multiplayer Online Battle Arena (MOBA) gamers: Preliminary results on experimental and self-report measures. *Journal of Behavioral Addictions*, 5(2), 351-356. doi: 10.1556/2006.5.2016.028.
- Santrock, J. W. (2011). Life-Span Development. Jakarta (ID): Penerbit Erlangga.
- Safarina, N., Halimah, L. 2019. Self-control and online game addiction in early adult gamers. *Journal of Physics: Conference Series*, Volume 1375. doi: 10.1088/1742-6596/1375/1/012094.
- Sari, A, P., Ilyas, A., & Ifdil, I. (2017). The level of Internet addiction in the early teens. *JPPI*, 3(2), 110-117. https://doi.org/10.29210/02018190.
- Schneider, L, A., King, D, L., & Delfabro, P, H. (2017). Family factors in adolescent problematic internet gaming: A systematic review. *Journal of Behavioral Addictions*, 6(3), 321–333. doi: 10.1556/2006.6.2017.035.
- Smith, L. J., Gradisar, M., & King, D. L. (2015). Parental influences on adolescent video *game* play: A study of accessibility, rules, limit setting, monitoring, and cybersafety, Cyberpsychology, *Behavior*, *and Social Networking*, 18(5), 1-7. doi: 10.1089/cyber.2014.0611.
- Spekman, M. L. C., Konijn, E. A, Roelofsma, P. H. M. P., & Griffiths, M. D. (2013). Gaming addiction, definition and measurement: A large-scale empirical study, *Computers in Human Behavior*, 29, 2150–2155. http://dx.doi.org/10.1016/j.chb.2013.05.015.
- Syahran, R. (2015). Ketergantungan online game dan penanganannya. *Jurnal Psikologi Pendidikan dan Konseling: Jurnal Kajian Psikologi Pendidikan dan Bimbingan Konseling*, *I*(1), 84-92. https://doi.org/10.26858/jpkk.v1i1.1537.
- Tangney, J. P., Baumeister, R. F., & Boone, A. L. (2004). High self-control predicts good adjustment, less pathology, better grades, and interpersonal success, *Journal of Personality*, 72(2), 271-322. doi: 10.1111/j.0022-3506.2004.00263.x.
- Teng, Z., Li, Y., & Liu, Y. (2014). Online gaming. Internet addiction, and aggression in Chinese male students: The mediating role of low self-control, *International Journal of Psychological Studies*, 6(2), 89-97. doi: 10.5539/ijps.v6n2p89.
- Toker, A., & Baturay, M. (2016). Antecedents and consequences of game addiction. *Computers in Human Behavior*, 55, 668–679. doi:10.1016/j.chb.2015.10.002.
- Tu, Y. C., Lee, H. C., Chen, H. Y., & Kao, T. F. (2014). A study on the relationships among psychological control, adolescent depression and antisocial behavior in Taiwan, *Procedia Social and Behavioral Sciences*, 122, 335–343. doi:10.1016/j.sbspro.2014.01.1349.
- Vadlin, S., Åslund, C., Hellström, C., & Nilsson, K. W. (2016). Associations between problematic gaming and psychiatric symptoms among adolescents in two samples. Addictive Behaviors, 61, 8–15. doi:10.1016/j.addbeh.2016.05.001.
- Vazsonyi, A. T., Jiskrova, G. K., Ksinan, A. J., & Blatny, M. (2016). An empirical test of self-control theory in Roma adolescents, *Journal of Criminal Justice*, 44, 66-76. https://doi.org/10.1016/j.jcrimjus.2015.12.004.

- Wan, C. S., Chiou, W. B. (2006). Why are adolescents addicted to online gaming, *CyberPsychology & Behavior*, 9(6), 762-766. doi: 10.1089/cpb.2006.9.762.
- Wang, C. W., Chan, C. L., Mak, K. K., Ho, S. Y., Wong, P. W., & Ho, R. T. (2014). Prevalence and correlates of video and internet gaming addiction among Hong Kong adolescents: A pilot study. *The Scientific World Journal*, 2014, 874648. doi: 10.1155/2014/874648.
- Wong, I. L. K., Lam, M. P. S. 2016. Gaming behavior and addiction among Hong Kong adolescents, *Asian Journal of Gambling Issues and Public Health* 6(1). doi: 10.1186/s40405-016-0016-x.
- Yee, N. (2006). Motivations for play in online *games*, *Cyberpsychology*, *Behavior*, *and Social Networking*, 9(6), 772-775. doi: 10.1089/cpb.2006.9.772.
- Young, K. (2009). Understanding online gaming addiction and treatment issues for adolescents, *The American Journal of Family Therapy*, 37, 355-3. https://doi.org/10.1080/01926180902942191.