ONLINE GAMING BAHAVIOR AMONG JUNIOR HIGH SCHOOL STUDENTS: THE ROLE OF PARENTAL CONTROL, FEAR OF MISSING OUT (FOMO), AND SELF-CONTROL

Bekti Amalia Faron*), Dwi Hastuti

Department of Family and Consumer Sciences, Faculty of Human Ecology, IPB University
Jl. Raya Darmaga Kampus IPB Darmaga, Bogor, 16680, Indonesia

*)E-mail: amaliafaronbekti@gmail.com

Abstract

This fast-paced digitalization era has made online gaming as one of internet content that often accessed by adolescent. This study aims to analyze the influence of parental control, FOMO, and self-control towards adolescents' online gaming behavior. For about 200 of 7th grade students from one of selected junior high school in Banyumas Regency were participated in this study. The location and sample of this study were chosen using purposive sampling technique by criteria students aged 12-14years and come from intact family. Data were collected by self-report through filling out a questionnaire. Majority of adolescents had parental control practice and self-control in moderate level, while FOMO and online gaming behavior were categorized in low level. Boys and girls were reported to have significant difference of self-control and online gaming behavior. Boys were discovered to have a higher level of self-control and online gaming behavior than girls. It also discovered that parental control and FOMO significantly influence the level of self-control. This self-control finally influences the level of adolescent's online gaming behavior. Parents should understand how important their role is to prevent online gaming addiction among adolescents.

Keywords: early adolescents, FOMO, online gaming behavior, parental control, self-control

Perilaku Bermain *Game Online* pada Siswa SMP: Peran Kontrol Orang Tua, *Fear of Missing Out* (FOMO), dan Kontrol Diri

Abstrak

Era digitalisasi yang serba cepat menjadikan *game online* sebagai salah satu konten internet yang sering diakses oleh remaja. Penelitian ini bertujuan untuk menganalisis pengaruh kontrol orang tua, FOMO dan kontrol diri terhadap perilaku bermain *game online* remaja. Sebanyak 200 siswa kelas 7 dari salah satu sekolah menengah pertama di Kabupaten Banyumas terlibat dalam penelitian ini. Pemilihan lokasi dan sampel menggunakan teknik *purposive sampling* dengan kriteria berusia 12-14 tahun dan memiliki orang tua yang masih lengkap Data dikumpulkan secara *self-report* melalui pengisian kuesioner. Mayoritas remaja mendapatkan kontrol orang tua dan kontrol diri dengan kategori sedang. Sementara itu, FOMO dan perilaku bermain *game online* pada remaja termasuk dalam kategori rendah. Remaja laki-laki dan perempuan memiliki perbedaan tingkat kontrol diri dan perilaku bermain *game online* yang signifikan. Remaja laki-laki ditemukan memiliki tingkat kontrol diri dan perilaku *game online* yang lebih tinggi daripada remaja perempuan. Hasil juga menemukan bahwa kontrol orang tua dan FOMO berpengaruh signifikan terhadap pembentukan kontrol diri remaja. Selanjutnya, kontrol diri tersebut menentukan tingkat perilaku bermain *game online* remaja secara signifikan. Orang tua perlu memahami peran pentingnya dalam mencegah kecanduan *game online* pada remaja.

Kata kunci: FOMO, kontrol diri, kontrol orang tua, perilaku bermain *game online*, remaja awal

INTRODUCTION

Nowadays, technology development has achieved 5.0 era which made internet becomes inseparable from everyone's life, and so does junior high school students who were currently in early adolescent stage. A study conducted by UNICEF (2020) showed that a large number of children aged 11-19 years old in Indonesia, Malaysia, Cambodia, and Thailand access the internet to play online games and social media. Furthermore, a research conducted by Siste et al. (2021) discovered in 2020-2021 there was a significant increase (59,5%) in the duration of playing online games among adolescents in Indonesia.

Parental control becomes one of fundamental factors in preventing online gaming addiction among adolescents. Structural-Functional

Theory stated that family forms a system in which there is an accommodation of roles and functions (Puspitawati, 2019). This theory emphasizes that the purpose of the system formed within a family is to achieve a balanced and harmonious condition. To achieve these conditions, it is necessary to has regulations by implementing parental control over children. Puspitawati (2019) explained the important role of rules within a family and assessed that families without rules will produce problematic children who are more likely to have negative behavior. Hastuti (2015) also added that the rules applied will help children to understand the way and the reason why do they need to behave properly. Thus, family as the closest environment for adolescents has an important role in the establishment of adolescent behavior.

The Theory of Social Determination that was proposed in 1985 revealed that the needs of autonomy, competence and relatedness influence the formation of human behavior (Ryan & Deci, 2020). Based on that theory, Przybylski et al. (2013) explained those needs produced the phenomenon named Fear of Missing Out (FOMO) which was defined as a condition when individuals are scared of being left behind by trends or others around them. As we know, online game has achieved its massive and rapid development, engaging with the swiftly growth of technology these days. This situation is thought to make adolescents feel left behind if they don't actively play online games. Previous research has proved about the increasing risk of online gaming addiction due to high levels of FOMO (Alt & Boniel-Nissim, 2018; Duman & Ozkara, 2021). Adolescents who experience FOMO can also lose self-control so they tend to behave impulsively to catch up with the people or environment around them (Li et al., 2021). Therefore, adolescents who experience FOMO will find it difficult to regulate themselves because of the decreasing level of their self-control.

Self-control is included as an internal control dimension in the Locus of Control Theory. Nowicki et al. (2021) explained that internal control describe as the individuals's perception that their outcomes of events in life is contingent upon their behavior. Therefore, self-control is one of the keys for preventing adolescents from being addicted to online games. This is also supported by the findings of Malihah & Alfiasari (2018), and who found that excellent self-control skills intervene problematic internet behavior such as cyberbullying and pornography addiction. Another study also

mentioned the same result by discovered about how self-control can be one of the preventive factor of problematic internet behavior (Hardani et al., 2018; Mills & Allen, 2020)

Lei et al. (2018) introduced online games through two aspects. From technical aspect, online games use most advance technology and realistic situation and from psychological aspect, it includes safety, sense of belonging and love, respect, and self-realization needs. One of the most popular online games played by adolescents nowadays is multi-player role-playing game (Qu, 2023). Even though playing online games is considered to be the source of entertainment for adolescents, however if it just being neglected without any supervision, indeed this can put adolescents in a risk of developing online game addiction. This conditions will not only affect physical condition but also psychological conditions, learning motivation, and interpersonal relationships (Jannah & Nirwana, 2015; Wang & Yan, 2015).

Prior research conducted by Li et al. (2015) discovered the affects of parental control on the level of self-control. In addition, Brand et al. (2019) also found how FOMO influenced the the level of self-control. Besides, self-control has an important role over the establishment of online gaming behavior (Servidio, 2019). Unlike previous studies, this study will explore the direct impact of parental control and FOMO on online gaming behavior and its indirect impact through adolescent's self-control. Therefore, the goals of this study aims to investigate the influences of parental control, FOMO, and self-control on online gaming behavior among adolescents. Firstly, it was hypothesized that parental control significantly affects adolescent's self-control (H1). Previous study has discovered that parental control had an impact on children's self-control (Li et al., 2019). Second hypothesis was FOMO influence self-control (H2). Adolescent with high level of FOMO will try to keep their relatedness to others by keep involving themselves to play online games (Li et al., 2021). Third hypothesis was parental control had an impact on online gaming behavior (H3). Parent's control over children by setting some rules had an important role to form adolescent's behavior. Fourth hypothesis was FOMO affects online gaming behavior (H4). A study had found that individual with FOMO had higher risk to experience online gaming addiction (Duman & Okzara, 2021). Fifth hypothesis was self-control influence the level of online gaming behavior significantly (H5). It was discovered that self-control

becomes one of preventive factor for problematic internet behavior (Liu et al., 2018).

METHODS

Design, Time, and Location

A quantitative approach was chosen for this research by using a cross-sectional research design. The research was conducted in May 2022 and located at one of Junior High Schools in the center of Wangon District, Banyumas Regency-Central Java, Indonesia. The selection this location was carried out purposively with a consideration schools who accredited as grade A (excellent). Kafaji (2020) discovered that accreditation status may affects student's performance both academically and mentally. The principal consideration for choosing Wangon District was because the areas traversed by a national road, namely "Jalur Pantai Selatan". Prawatya (2013) explained that the area traversed by this highway experienced quite rapid growth, specifically in economic aspect. This condition potentially gives impact on ecological conditions around children, such as changes in the type of work and family income which indirectly affect child rearing process within a family then as a result influence children's development (Roostin, 2018).

Population and Samples

The population of this study was all of 7th grade students in selected school. The sample used in this study amounted to 200 students who was taken using a purposive sampling technique with several criterias, namely aged 12-14 years and came from intact families.

Instruments

Parental control is an action taken by parents, both verbally and nonverbally, behaviorally and psychologically to control and drive children's behavior. The measurement of parental control used the instruments developed by Barber et al. (1994) and Rohner & Khaleque (2003) totaled 20 statements. This variable consist of two dimension, namely (1) behavior and (2) psychology. In behavior dimension, respondents were asked to rate their answer on a 4 point Likert-type for each statements (1: almost never, 2: sometimes, 3: rarely, and 4: always). Then in psychology dimension, respondents also need to answer by giving their rate on 3 point Likert-type scale (1: not like my parents, 2: somewhat like my parents, and 3: a lot like my parents). The Cronbach's alpha value for this instrument was 0,737.

Fear of Missing Out (FOMO) is a condition when individuals experience fear if they fall behind by trends or by others. The level of FOMO in adolescents was measured using an instrument developed by Przybylski et al. (2013) which amounted to 10 statements. For this variable, respondents need to rate their answer on 5 points Likert-type scale for each statements (1: not at all true of me, 2: slightly true of me, 3: moderately true of me, 4: very true of me, and 5: extremely true of me). The Cronbach's alpha value for FOMO instrument was 0,779.

Self-control is defined as an individual's ability to control impulses that come from within. Self-control was measured using an instrument totaling 12 statements compiled by Hardani et al. (2017). The original version of this instrument has 13 items in total. However, based on the result of questionnaire test, there were only 12 items to be selected as valid and reliable. Respondents were asked to rate their answer on 4 points Likert-type scale (1: strongly disagree, 2: disagree, 3: agree, 4: strongly agree). Cronbach's alpha value for this instrument was 0,816.

Online gaming behavior can be interpreted as actions or activities in playing games that are accessed through internet services. The instrument to measure this variable was developed from an instrument that compiled by Hastuti et al. (2019) which consists of 5 statements. In this variable, respondents were asked to rate their answer on 4 points Likert-type scale (1: very unsuitable, 2: unsuitable, 3: suitable, 4: very suitable). The Cronbach's alpha value for this instrument was 0,739.

Data Collection and Analysis

Data collection was carried out offline using a self-report technique by distributing questionnaire to be answered by respondents. Primary data was used in this study and the variables studied are adolescent characteristics (age and gender), family characteristics (parent's educational level), parental control, FOMO, self-control, and online gaming behavior. Nominal scale was used in data of gender. Ordinal scale was used for parent's education level. Meanwhile, adolescent's age size a ratio scale. Furthermore, questionnaire test also conducted by online to do validity and reliability test.
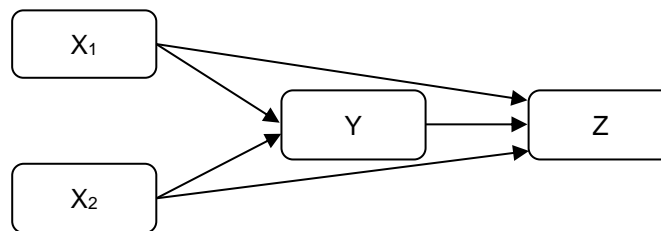
Figure 1 Multiple linier regression model (n=200). X_1= Parental control, X_2= FOMO, Y= Self-control, Z= Online gaming behavior

All scores for each variable then being transformed into an index and being classified into three categories, namely: low (0,0–59,9); medium (60,0–79,9); and high (80,0–100). Several processes are carried out after the data has been obtained. The data was processed through editing, coding, scoring, entry, cleaning, analyzing, and data interpretation. The data processing used Microsoft Office Excel software while the data analysis was carried out using the 25th version of the Statistical Package for Social Science (SPSS). The statistical analysis carried out in this study was a descriptive analysis and inferential analysis. A descriptive analysis consists of, the amount, percentage, average value, and standard deviation. Inferential analysis includes differences t-test and path analysis test by using multiple linier regression model (Figure 1) were conducted with the purpose to answer the research objectives. Classic assumption test was conducted before doing this analysis.

RESULTS

Adolescents and Family Characteristics

The results (Table 1) showed that the number of adolescents involved in this study was 80 boys (40%) and 120 girls (60%) and majority of them were aged 13 years old (74%). Within this study nearly half of fathers (42,5%) and mothers (34%) were able to complete their education up to senior high school level.

Parental Control

Generally, more than half of parents applied parental control in moderate level, both for boys (65%) and girls (64,2%) (Table 2). The results also showed that the average value of parental control for girls (66,6±12) was higher than boys (64,3±12,8). However, this study did not find any significant differences in parental control between boys and girls (*p-value* = 0.204).

Table 1 Descriptive statistic for respondents (n=200)

Demographic	n	Percentage (%)
Gender		
Boys	80	40
Girls	120	60
Age		
12	45	22,5
13	148	74
14	7	3,5
Father's Education		
Unschooled	0	0
Not finished elementary school	3	1,5
Finished elementary school	40	20
Finished junior high school	42	21
Finished senior high school	85	42,5
Associated degree	8	4
Undergraduate/Master/Doctoral degree	22	11
Mother's Education		
Unschooled	2	1
Not finished elementary school	8	4
Finished elementary school	40	20
Finished junior high school	42	23
Finished senior high school	68	34
Associated degree	12	6
Undergraduate/Master/Doctoral degree	24	12

Table 2 Respondent's distribution and different t-test of parental control, FOMO, self-control, and online gaming behavior (n=200; (1) boys, (2) girls)

Variables	Low (%)		Moderate (%)		High (%)		Average value		p-value
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	
Parental control	27,5	25,8	65	64,2	7,5	10	64,3±12,8	66,6±12	0,204
Behavior	18,8	13,3	55	51,7	26,2	35	31,7±4,5	32,7±3,9	0,088
Psychology	60	64,2	36,3	32,5	3,7	3,3	20,4±3.2	20,5±3.1	0,819
FOMO	95	95,8	5	4,2	0	0	27,3±15,4	30,3±15,7	0,181
Self-control	13,8	25	51,2	48,3	35	26,7	74,3±12	70,2±13,8	0,032
Online gaming behavior	92,5	98,3	7,5	1,7	0	0	36,6±12,7	21,8±16,4	0,000

Behavior. This dimension was concerned about the way parents control adolescents by giving instruction and explanation about how adolescent should behave. In Table 2, more than half of adolescents experienced behavior control in moderate level, whether for boys (55%) or girls (51,7%). The average value for boys (31,7±4,5) and girls (32,7±3,9) were quite similar (*p-value*=0,088). It means both boys and girls were controlled by their parents through giving instruction and explanation.

Psychology. This dimension was focused on parent's act that may become psychologically intimidating over children, such as silent treatment, abusive words, and threatening acts. The majority of boys (60%) and girls (64,2%) got psychological control in low category (Table 2). There was no significant difference in this dimension between boys (20,4±3,2) and girls (20,5±3,1). It is also found both boys and girls in this study did not experienced any psychological intimidating acts from their parents (*p-value*=0,819).

Fear of Missing Out (FOMO)

The results as mentioned in Table 2 showed that a large number of adolescents, both boys (95%) and girls (95,8%) had a low level of Fear of Missing Out (FOMO). The average FOMO score for girls (30,3±15,7) was known to be higher than boys (30,3±15,7). The results of the different t-tests proved that the level of FOMO among boys and girls was not significantly different (*p-value*=0,181). It means majority of adolescents were not worried about being left behind by events that were happening or by their friends.

Self-Control

The results (Table 2) illustrated that half of boys (51,2%) and girls (48,3%) had a moderate level of self-control. Furthermore, the average score of self-control for boys (74,3±12) was reported higher than girls (70,2±13,8). It was also found that there was a significant difference in the level of self-control between boys and girls (*p-value*= 0,032). This showed that boys had better competence to regulate their internal urges than girls.

Table 3 The results of multiple linier regression for model I and II (n=200)

Model	Coefficient	T	Sig	Tolerance	VIF	Durbin-Watson	R^2
Regression Model I (X$_1$ and X$_2$ to Y)							
X$_1$ (Y,PX_1)	0,230	3,422	0,001**	9,982	1,019	2,145	0,124
X$_2$ (Y,PX_2)	-0,299	-4,436	0,000**	0,982	1,019		
Regression Model II (X1,X2, and Y to Z)							
X1 (Z,PX1)	-0,199	-2,822	0,005**	0,927	1,079	1,904	0,093
X2 (Z,PX2)	0,036	0,506	0,614	0,892	1,121		
Y (Z,PY)	-0,190	-2,620	0,009**	0,876	1,141		
e$_1$	$\sqrt{1-0{,}124}=0{,}935$						
e$_2$	$\sqrt{1-0{,}093}=0{,}952$						

Note. X$_1$=Parental control , X$_2$=FOMO, Y=Self-control, Z=Online gaming behavior, e$_1$= Path coefficient model I, e$_2$= Path coefficient model II
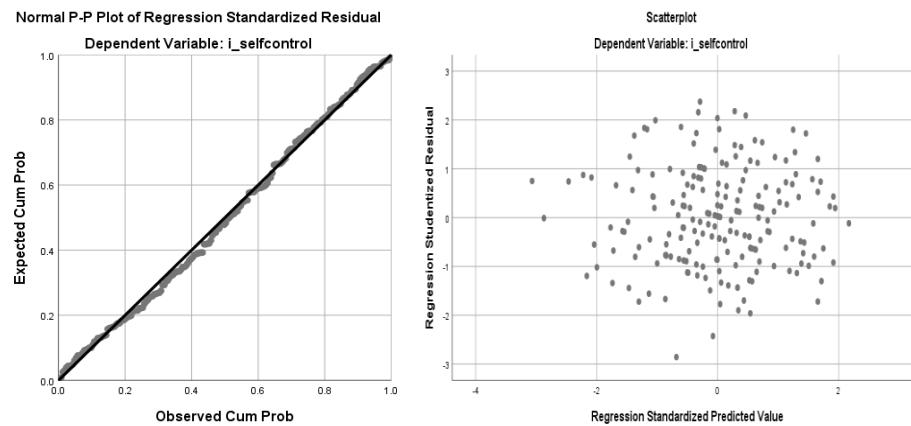
Figure 2 Normality and heteroscedasticity test for model I (n=200)

Online Gaming Behavior

In Table 2 showed that almost all adolescents, both for boys (92,5%) and girls (98,3%) had online gaming behavior in low category. The results also showed that the average score of online gaming behavior for boys (36,6±12,7) was higher than girls (30,3±15,7) and significantly different (*p-value*= 0,000). It means boys had higher tendency to play online games than girls.

Direct and Indirect Factors that Influence Online Gaming Behavior

Path analysis used multiple linear regression model and classic assumption test was carried out before conducting this analysis. The test included multicollinearity test with the tolerance value >0,1 and VIF value <10 and autocorrelation test with Durbin-Watson value for both regression models were up to or closely to 2 (Table 3) which means there were no multicollinerity and autocorrelation were detected. The normality test for model I (Figure

2) and model II (Figure 3) showed that he data spread along with diagonal line and based on heteroscesdasity test, the data spread under and above 0. It means the data spread normally.

The results of the regression model I (Table 3) showed parental control (X_1) with a path coefficient value of 0,230 then FOMO (X_2) with a path coefficient value of -0,299 had a significant effect on adolescent's self-control (Y) whose respective significance value of X_1= 0,001 and X_2= 0,000 (p<0.05). It means the increasing number in one point of parental control will significantly increase the level of adolescent self-control by 0,230 points. In contrast to FOMO, which increased by one point, so it will decrease adolescent's self-control significantly by 0,299 points. The R^2 value obtained for a model I was 0,124 which could be inferred that parental control (X_1) and FOMO (X_2) had a 12,4 percent influence on adolescent self-control (Y). The value of e_1 for the model I obtained from the value of R^2 was 0,935.
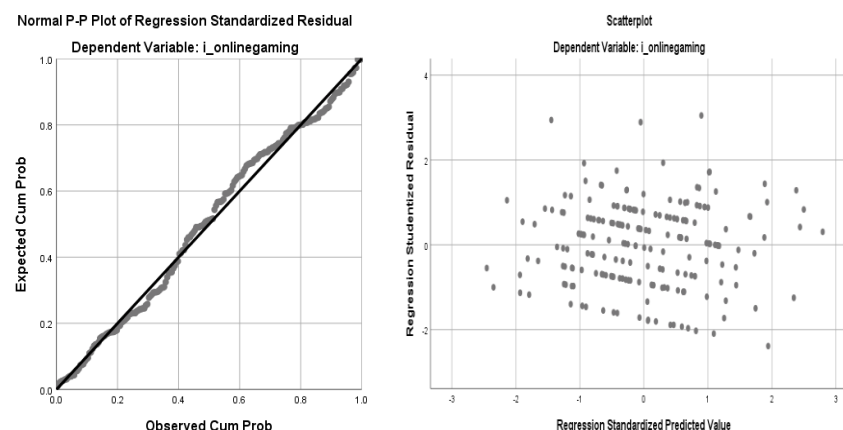

Figure 3 Normality and heteroscedasticity test for model II (n=200)

Table 4 Path coefficient value of direct and indirect effect on online gaming behavior (n=200)

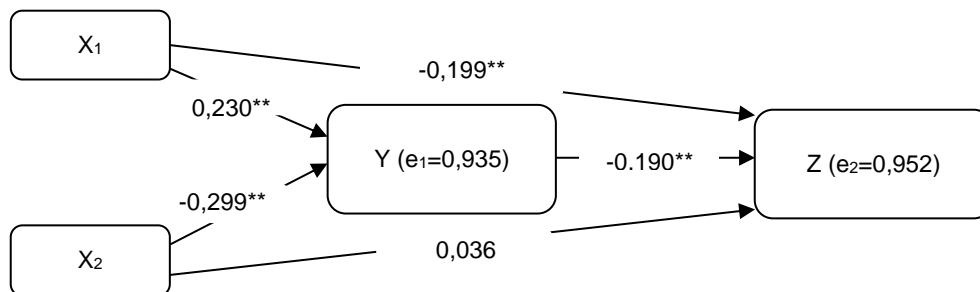| Variable	The Influence coefficient value towards Online Gaming Behavior (Z)		
	Direct	Indirect (Through Y)	Total
Parental control (X_1)	-0,199**	-0,043**	-0,242**
FOMO (X_2)	0,036	0,056**	0,092
Self-control (Y)	-0,190**		-0,190**

Figure 4 The result of multiple linier regression model (n=200). X_1= Parental control, X_2= FOMO, Y= Self-control, Z= Online gaming behavior, e_1= Path coefficient of model I, e_2=Path coefficient of model II

Furthermore, in the regression model II (Table 3), the results described that parental control (X_1) with path coefficient value of -0,199 and self-control (Y) with a path coefficient value of -0,190 had a significant and negative effect on online gaming behavior (Z) (Table 3). The significance values for parental control and self-control were X_1= 0,005 and Y= 0,009 (p<0.05). These results proved that if parental control and adolescent self-control increase by one point, the level of online gaming behavior will significantly decrease, namely 0,199 points for the influence of parental control and 0,190 points for the influence of adolescent self-control. Meanwhile, FOMO (X_2) with a path coefficient value of 0,036 had no significant direct effect on online gaming behavior because it has a significance value of X_2 = 0,614. However, it still showed that an increasing level by one point of FOMO will potentially increase online gaming behavior by 0,036 points. The R^2 value for model II was 0,093 which indicates that 9,3 percent of the influence on online gaming behavior came from parental control (X_1), FOMO (X_2), and self-control (Y) while the other 90,7 percent came from variables excluded in this research. Through the R^2 value, the e_2 value was 0,952. The results of multiple linier regression's calculations can be seen in Figure 4.

From Table 4, the direct effect of parental control (X_1) towards online gaming behavior (Z) was -0,199 while the indirect effect of parental control (X_1) through self-control (Y) on online gaming behavior (Z) was: 0,230 x -0,190 = -

0,043. The total effect of parental control on online gaming behavior was -0,242 so it can be inferred that parental control influenced online gaming behavior by 24,2 percent. Then, the results of path analysis to determine the effect of FOMO on online gaming behavior showed that the value of the direct effect of FOMO (X_2) towards online gaming behavior (Z) was 0,036 while the indirect effect of FOMO (X_2) through self-control (Y) was: -0,299 x -0,190 = 0,056. The total effect of FOMO on online gaming was 0,092, thus FOMO affected online gaming behavior by 9,2 percent.

DISCUSSION

Majority of adolescents in this study were aged 13 years old. This age according to Yusuf (2019) was a period when children were highly in risk to commit negative behavior. In addition, gender was also discovered has an impact on adolescent's behavior (Li et al., 2021). Hastuti (2015) explained parent's education level as one factor that influence how parenting being implemented. This parenting's practices finally affect adolescent's behavior (Yang et al., 2020).

This study did not find any significant differences in parental control variable. However, in summary, parental control over girls was found to be higher than boys. This result also found both in behavior and psychology dimension. It is consistent with the result discovered by Monique et al. (2016) that girls experienced higher parental control than boys. This discovery also proved that parents

have started to implement gender-responsive parenting while still providing equal supervision for both boys and girls

Based on the results of this study, even though there was no significant difference in the level of FOMO, it was found that FOMO level of girls was higher than boys. This condition was in line with previous study where girls tend to be more at risk of experiencing FOMO because they tend to have unstable emotions as a result of some changes during puberty (Stead & Bibby, 2017). This changes ultimately make early adolescents have more emotional instability, sensitive and reactive (Yusuf, 2019).

This study also found that self-control of boys was found to be higher than girls and significantly different. This finding was coherent with the study done by of Farhatilwardah et al. (2019), which declared that self-control among boys in junior high school tends to be higher than girls. During this period, girls generally experience puberty earlier than boys. This condition makes girls being riskier to have low level of self-control dialing with physical, biological, and psychological changes during puberty (Wang et al., 2017). The physical changes that occur in girls are commonly more visible when compared to boys, so it is not uncommon for these to make them feel less confident and interfere their interactions with peers. This was found in a research conducted by Siroj et al. (2019) that girls tend to experience conflicts more often with their peers than boys. Besides, Marsela & Supriatna (2019) explained that apart from internal factors, there are external factors that affect the level of adolescent self-control, one of which is the interaction with peers.

In this study, online gaming behavior among boys was discovered to be higher than girls and had significant difference. This result also found by Su, et al. (2020) that a large number of online game players are boys. Veltri et al. (2014) added that adolescents, specifically boy respondents in their study chose the desire for mastering techniques in playing online games as their biggest motivation to play online games. He stated that this condition became one of the factors that accelerate online gaming behavior. This happened considering the condition of adolescents who are at the stage of psychosocial development to find their own identity so that they will do a lot of exploration, one of which was by meeting the need to compete (Thahir, 2018).

The results of the path analysis found that increasing of parental control would significantly increases adolescent self-control (H1). These results were following the results discovered by Li et al. (2015) that higher parental control will increase the level of adolescents self-control. This has happened because the boundaries regulated by parents help adolescents to recognize things that could potentially harm them. The getting higher level of FOMO also found to significantly decrease the level of self-control (H2). It was happened because adolescents who had FOMO will experience impaired executive function (Kuss et al., 2017). The results showed that parental control has a significant direct effect to decrease the level of online gaming behavior (H3). The previous research done by Zhang et al., (2022) also found that parental control which is applied behavior in a firm, consistent manner, warm and ingenuous kind of ways may prevent addiction behaviors. This study did not find significant influence of FOMO on online gaming behavior (H4). This result consistent with the study of Wegmann et al. (2017) but contrary with the study of Duman & Okzara (2021). Self-control was discovered to had significant influence on online gaming behavior (H5). These result was relevant with a study conducted by Han et al. (2017). This condition occurred because adolescents who have good self-control will prevent themselves from carrying out negative actions, both detrimental to themselves and others around (Hu & Wang, 2022).

Based on the result of path analysis, there was only one indirect path was found, that is the influence of parental control on adolescent's online gaming behavior through adolescent's self-control. Parental control that significantly increase adolescent self-control will help adolescent manage their internal urges (Li et al., 2019). As a result, adolescent with good capability of self-control will prevent them to experience high level of online gaming behavior. This discovery strengthen the reason how crucial the parental control role to prevent negative behavior among adolescents (Harris-McKoy, 2016) and that the purpose of these rules are to form positive behavior and prevent negative behavior from each family member so that harmony and balance can be achieved (Puspitawati, 2019). Even though there was no significant contribution of FOMO on online gaming behavior, it was found adolescent with high level of FOMO will experience decreasing level of self-control. This deceleration in adolescent self-control can lead to impulsive behavior such as actively participating in playing online games to maintain their

relatedness with others as mentioned in social determination theory (Li et al*.,* 2021; Ryan & Deci, 2020).

There are several limitations within this research. The first one is that this study cannot be generalized due the selection of the this research's location that conducted only in accredited A school. The second one is the respondents of this research were limited only in range age of 12-14 years old. This might not fully represent the significant condition of online gaming behavior among adolescents. The third one is that the parental control practices in this study were considered that fathers and mothers apply the same parental controls. Therefore, for further research, online gaming behavior among adolescents still needs to be studied for a deeper understanding.

CONCLUSION AND SUGGESTION

Parental control applied by parents of adolescents in the study was in moderate level and there was no significant difference in parental control's practice between boys and girls. However, parental control over boys was found lower than girls. This study found that almost all adolescents in this study had low level of FOMO and there was no significant difference for boys and girls. More than half of adolescents in this study had moderate levels of self-control and there was significant difference in the levels of self-control between boys and girls. Boys was discovered to have higher level of self-control than girls. Nine out of ten boys and girls had online gaming behavior in low level and there was significant difference between boys and girls in this variable. Online gaming behavior among boys was known higher than girls. Parental control was discovered to have a significant effect to increase adolescent self-control, in contrary with FOMO which significantly reduces the level of self-control. Factors that known to have significant influences on online gaming behavior were parental control and adolescent self-control. Meanwhile, from path analysis found that parental control and FOMO influences adolescent's self-control. Then, this adolescent's self-control was discovered influence online gaming behavior significantly.

Therefore, it is important for parents to maximize parenting practices to prevent adolescents from having high level of online gaming behavior, specifically for boys. Because parental control towards boys was found lower than girls. Besides, boys have higher level of online gaming behavior than girls. Parents need to involve adolescents in the process of setting rules and it should be applied consistently, by giving those agreed consequences in every moment adolescents break those rules. In addition, parents are expected to carry on in providing warmth to adolescents, such as by praising them whenever they obey the rules and always be open to have discussion with them. For schools, specifically for school counselor, it is expected to provide parenting discussion about parental control that should be applied to adolescents. This is because the school becomes an environment that is often in contact with children and families. In addition, it is important for stakeholders and policymakers related to family and child development fields to hold integrative programs regarding with parental control practices in digital era. For future research, hopefully it will be able to examine more about the types of online gaming behavior, the influence of peers and school environment, and it is hoped that it can involve parents in process to measure parenting practices.

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