

The Effect of Online Gaming Addiction on Violent Behavior of High School Students in Sorong City

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ABSTRACT

Background: Online games are one of game that is connected via a network, can be played anytime, anywhere, can be played in groups anywhere (Bobby Bodenheimer, 1999). According to research by Jap et al (2013), as many as 10.5% or 150 of the total 1477 students combined from SMP and SMA in 4 cities in Indonesia (Manado, Medan, Pontianak, and Yogyakarta) have found addiction to online games. According to the results of an interview at one of the best high schools, there are about 1 in 4 students often playing Online Games. If a quick calculation from 2175 students in 3 high schools, there are about 271 students who often play online games.

Research Objectives: The purpose of this study was to analyze the relationship between online game addiction and violent behavior in high school students in Sorong City in 2018.

Method: This type of research is an analytical study with a cross sectional approach. A sample of 73 students was taken using the Simple Random Sampling technique. Data were analyzed using Linear Regression.

Results: The results showed that there was a significant between online game addiction and violent behavior (significant value 0.002 <0.05) with a weak correlation (R = 0.357). The results of this study suggest that specialist nurses can provide Behavior Therapy to high school students who are addicted to online games, while parents and teachers should provide tighter supervision of the habits of playing games for their children or students.

Keywords: Online Games, Addictive Behavior, Violent Behavior.

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INTRODUCTION

Online games a game program that is connected via a network that can be played anytime, anywhere and can be played in groups anywhere. (Bobby Bodenheimer, 1999 in Ciberlife 2001). The term online game comes from the term MMORPG (Massively Multiplayer Online Role-Playing Online Game), which is an extension of the type of Role-Playing game that has multiplayer facilities, where a player can connect a computer to a server and can play simultaneously with thousands of players around the world. MMORPG ¹The online game initially is an application made with the aim of reducing the level of stress or level of anxiety due to activities or routine activities carried out by humankind every day. However, in the end, what happens online games, does not reduce the burden on the human mind but adds to the problem for humans themselves. Based on preliminary data obtained from several drinking and eating places in Sorong City, it is stated that the wifi facilities provided to incoming customers are mostly used to play online games, the majority access legendary mobile games. These games will affect the psychology of adolescents if they are continually accessed and ultimately make they addicted to online games. One example of an online game that is currently in demand by teenagers and adults is Mobile Legend, which has been downloaded 50,000,000 times by Google Playstore users around the world. If students in one class play this online game, at least 10 students are required to be involved in the Mobile Legend online game. If this is allowed to continue, it can lead to addictive online game behavior in a teenager.

According to the Indonesian Dictionary (KBBI), addictive is addictive in nature or causes dependence on the wearer. For some people, playing games was initially considered recreation, but over time it can turn into an addiction if you can't control yourself. Video game designers make their

games more interesting and the people who play them never want to stop ². Adolescents who have experienced internet addiction can interfere with academic achievement, family relationships, and emotional development³). The results of research conducted by ⁴ in Banyuwangi about the Influence of Online Games on Youth shows that the time required for gamers (online game players) is 5-6 hours a day. Meanwhile, the factor that causes online games to be preferred is that online games are more interesting than lessons in school. However, the effect on adolescent achievement is decreased learning achievement.

Based on research results⁵, the time needed to play online games is ± 25 hours a week. Adolescents who like to play online games can be seen from several symptoms that seem, one of which is that they play online games all day long and often play for long periods of time (more than three hours). The results of other studies explain that usually within one week teenagers can spend about 20-30 hours ⁶

Based on data obtained from the Sorong City Education Office in August 2018, there are 24 SMA (Senior High School) registered in Sorong City for the 2016/2017 academic year, consisting of 4 public high schools and 20 private high schools (2 of which are Madrasah Aliyah and 1 Extraordinary High School). The total number of students in all SMA Kota Sorong in the 2016/2017 academic year was 6,649 students, consisting of 3,068 boys and 3,581 girls. The list of 3 best SMAs in 2017 are SMA Negeri 3, SMA YPPK Agustinus, and SMA Averos. The number of students in SMA Negeri 3 for the 2016/2017 academic year was 1294, the number of SMA YPPK Agustinus was 615 and SMA Averos was 266. According to the results of an interview at one of the best high schools, there are about 1 in 4 students often playing Online Games. If a quick calculation is made from 2175 students in 3 high

schools, there are about 271 students who often play online games. Cao & Su's research results in 7 students who experience Korean gamedi internet addiction show that students with internet addiction are easily influenced by feelings of emotional unstable, imaginative, deep in thought, independent, experimenting, and preferring their own decisions. Unstable emotional feelings and irritability are symptoms experienced by a teenager when he is addicted (addiction) to playing online games. Anger is a form of communication and the process of delivering messages from individual ⁸ A person's anger response varies depending on each individual's self-control. When anger is manifested in maladaptive behavior, then violent behavior occurs.

METHODS

Research Design and Methodology

Research methods used is correlation analytic, namely study the relationship between two or more variables, the relationship between variations in one variable and variations in other variables⁹. In this study is to analyze the influence of online game addiction behavior with violent behavior in high school students in Sorong City.

Population and Sample

The population in this study was all high school students in Sorong City who experienced online game behavior addiction in the City of Sorong in 2018, namely 271 students. The appearance of the sample in this study is to use Simple Random Sampling. Based on the formula, a sample of 75 respondents.

Inclusion Criteria

This research sample is a high school student who has addictive online game behavior in Sorong City, which has the following inclusion criteria:

1. High school students in class X, XI, XII with active school status
2. High school students who often play online games
3. High school students who are willing to be respondents

Data analysis

Univariate analysis was conducted to describe each variable measured in the study. The characteristics of the first respondent include age, gender, major, grade level, types of online games, and length of time playing online games. Apart from characteristics, univariate analysis was also used to describe the level of student addiction and forms of student violence behavior.

Bivariate analysis was conducted to prove the research hypothesis, namely, to see the effect of addictive behavior on the violent behavior of high school students in Sorong City. The data analysis used is the regression analysis using computerized (SPSS). Linear Regression for measuring the closeness of the relationship or correlation between two variables, namely the addictive behavior variable and the violent behavior variable.

RESULT

The results of research on the effect of addictive behavior playing online games on violent behavior in high school students in Sorong City in 2018 which were conducted from October to November 2018 with 75 respondents according to the inclusion criteria. The 75 respondents were students from 5 high schools in Sorong City. Each SMA consists of 15 respondents. The results of this study consist of two parts which will be described as follows:

Table 1.
Distribution of characteristic respondents in high school students in Sorong City in 2018

Characteristics	Frequency	
	n	%
1. Gender		
a. Male	53	70.7
b. Women	22	29.3
TOTAL	75	100
2. Age (Years)		
a. 14	2	2.7
b. 15	29	38.7
c. 16	24	32.0
d. 17	18	24.0
e. 18	2	2.7
TOTAL	75	
3. Department		
a. IPA	54	72.0
b. IPS	13	17.3
c. Language	8	10.7
TOTAL	75	100
4. Class		
a. X	23	30.7
b. XI	35	46.7
c. XI	17	22.7
I	75	100
TOTAL		

Table 1. shows that of the 75 respondents, most of them were male, as many as 53 (70.7%), most of them were 15 years old as many as 29 (38.7%), most of them came from

the science the department, amounting to 54 (72 %), most of them sit in class XI as much as 35 (46.7%).

Table 2. Distribution respondents based on the type of game and length of playing games for high school students in Sorong City in 2018

Characteristics	Frequency	
	n	%
1. Type of game		
a. Clans of clans	6	8.0
b. Mobile Legend	14	18.7
c. Game Mix	42	56.0
d. Pugh	10	13.3
e. FF	3	4.0
TOTAL	75	100
2. The duration		
a. 0 - 12 months	29	38.7
b. 12 years old	12	16.0
c. 3 - 4 years	12	16.0
d. More than 4 years	22	29.3
TOTAL	75	100

The results of the analysis table 2 shows that of the 75 respondents, most of them like to play Mix Games (several types of games alternately) as many as 42 (56%) and most

of them have played games for 0-12 months, amounting to 29 (38.7%)

Table 3. Distribution of Respondents Based on Addictive Behavior Playing Online Games for High School Students in Sorong City in 2018

Behavior	Frequency	
	n	%
1. Addictive Behavior		
a. Light	28	37.3
b. Medium	37	49.3
c. Weigh	10	13.3
TOTAL	75	100
2. Violent Behaviour		
a. Assertive	40	53.3
b. Frustration	33	44.0
c. Passive	2	2.7
TOTAL	75	100

The results of the analysis in table 3 shows that of the 75 respondents most of them had a moderate level of

addictive behavior as much as 37 (49.3%). And most of them have assertive behavior as much as 40 (53.3%).

Table 4. Correlation Analysis of Addictive Behavior and Violent Behavior of High School Students in Sorong City in 2018

		Addictive Behavior	Violent Behavior	R	R Square
Perason Correlation	Additive Behavior	1.000	.357	.357a	.127
	Violent Behavior	.357	1.000		
Sig (1-tailed)	Additive Behavior	.	.001		
	Violent Behavior	.001	.		

a. Predictors: (Constant), Violent Behavior

The results of the analysis in table 4. show that R is 0.357. This value can be interpreted that the relationship between the Independent variable (addictive behavior) and the dependent variable (violent behavior) is weak.

Through table 4.5 also obtained the R Square value of 0.127 or the Coefficient of Determination (KD) of 12.7%. This data can be interpreted that addictive behavior has a contribution of 12.7% to violent behavior.

Table 5. Regression Analysis of Addictive Behavior and Violent Behavior of High School Students in Sorong City in 2018

Model	Sum Of Square	Df	Mean Square	F	Sig
Regression	4.291	1	4.291	10.660	.002a
Residual	29.389	74	.403		
Total	33.680	75			

- a. Predictors (constant), Violent Behavior
 b. Dependent variable: Addictive Behavior

Based on the results of linear regression analysis, a significant value of 0.002 was obtained, namely <0.05 . It can be concluded that the regression equation model based on the research data is significant. This means that there is a significant influence of addictive behavior on violent behavior of high school students in Sorong City in 2018.

DISCUSSION

The frequency distribution table 1 shows that more male students like to play online games than girls. This is in line with research conducted by Amanda, R (2016) with the title Influence of Online Games on Changes in Adolescent Aggressive Behavior In Samarinda, where 68 male respondents (67.33%) were more than women by 33 (32.67%) from 101 respondents. The results of the analysis of table 2 shows that of the 75 respondents, most of them like to play Mix Games (several types of games alternately) as many as 42 (56%) and most of them have played games for 0-12 months, amounting to 29 (38.7%) Game interpreted as a game (in the Indonesian Dictionary). Games (word press, 2011) are complex activities in which there are rules, play, and culture. Online games are actually important for brain development, especially humans of productive ages such as high school students. In addition, online games are also important to improve concentration and train someone to solve problems quickly and accurately. However, if playing online games has become addictive behavior, then this is something that is not quite right.

Many choices are offered by online game sellers. However, in this study, most of the respondents (56%) chose to play Mix Games, both Clans of Clans, Mobile Legend, and other types of games. Based on the results of the research above, data obtained that most respondents have played online games for 0-12 months (38.7%) and the rest (61.3%) have played between 2-3 years, 3-4 years, and more than 4 years. According to the Diagnostic and Statistical Guidelines - IV (DSM-IV) it is explained that addiction (addiction) is a maladaptive pattern of substance use, leading to clinically significant distress or distress as characterized by the three (or more) criteria below. this happened in the same 12-month period. This means that 61.3% of respondents can be classified as students who experience addiction to online games.

The results of the analysis of table 3 and table 4 show that of the 75 respondents most of them had moderate addictive behavior level as much as 37 (49.3%) and had assertive behavior as much as 40 (53.3%). This study is different from the research results (Amanda, 2016 and Anggraini Y, 2016) Amanda's research results showed that 61.38% of respondents stated that when there was an online game match, respondents experienced nervousness, fear and anxiety, they were afraid of losing when playing online games. Meanwhile, Anggraini stated that 66.3% of respondents said they were angry because

of their defeat in playing online games. This condition is one of the strongest risk factors for online game addiction disorder that comes from individual factors, namely the psychopathological condition ADHD (attention deficit and hyperactivity), and anxiety depression.¹² This is what causes students who are playing online games to have a fear of losing which will result in brands expressing their anger in an assertive manner.

The results of the analysis in table 5 show that R is 0.357. This value can be interpreted that the relationship between addictive behavior and violent behavior is weak. Through table 4.5 also obtained the R Square value of 0.127 or the Coefficient of Determination (KD) of 12.7%. This data can be interpreted that addictive behavior has a contribution of 12.7% to violent behavior. This means that there are 87.3% of other factors that influence violent behavior apart from addictive behavior. According to¹³, The predisposing factors for violent behavior include biological, psychological, and socio-cultural factors. Biological factors for example are gender, age, neurotransmitters. Some of the neurotransmitters that affect the aggressiveness response are serotonin (5-HT), dopamine, norepinephrine, acetylcholine, and GABA (Gamma Amino-Butyric Acid) (Yusuf, Ah, Fitriyasaki, Rizki, PK, & Nihayati, 2015). If this substance increases or decreases, it can result in a change in reaction including a change into violent behavior.

The second factor after biological factors is psychological factors. Aggression behavior is a person's learning since childhood which then becomes a pattern of behavior (learned behavior). A person's pattern of response to aggression requires a stimulus (impulse) in the form of social and environmental conditions (psychosocial factors) to bring about aggressive behavior. This is in line with research conducted by¹⁵ who identified children who played violent games showed greater aggression than children who played regular video games, but the same form of stimulus did not always lead to the same aggression behavior in everyone. When the balance between self-control ability and the amount of stimulus is disturbed, it will generate aggressive behavior (Keliat, 1996 in¹⁷

Another factor is the socio-cultural factor. Socio-cultural factors according to (Yusuf, Ah, Fitriyasaki, Rizki, PK, & Nihayati, 2015), is a controlling factor for violent behavior consisting of assertive norms and culture in society. Another sociocultural factor is cultural norms that can help interpret the meaning of angry expressions. Predisposing factors include the culture and family of high school students in Sorong city who accept violent behavior as a way of solving problems. Based on the results of linear regression analysis, a significant value of 0.002 was obtained, namely <0.05 . This means that there is a significant effect of addictive behavior on violent behavior of high school students in Sorong City in 2018. The results of this study are different from the results of research

conducted by¹⁸about "Online Games and Middle School Aggressiveness in Sidoarjo. Tanjung's research results state that online games do not affect children's aggressiveness.

CONCLUSION

1. Of the 75 respondents, most of them had moderate addictive behavior as much as 37 (49.3%) and most of them had assertive behavior as much as 40 (53.3%).
2. There is a significant influence between addictive behavior on violent behavior (significant value $0.002 < 0.05$) with a weak correlation ($R = 0.357$).

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