

## THE EFFECT OF ONLINE GAME ACTIVITIES ON STUDENT LEARNING MOTIVATION

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### ABSTRACT

The activity of playing an online game in a person will affect the value of student learning motivation. This study was aimed to know the effect of student activity on the online game to student learning activity in class X SMAN 1 Silangkitang. The research was used a quantitative method with the sample were 140 students by a total sampling technique. The instrument of this research used an online game activity and a student learning questioner. The data analysis technique used a simple correlation. The result showed that the online game frequency was 74.5%, the time of playing an online game was 68.2%, playing a popular game online was 72.9%, and playing a game online 48%. The total resulted in  $R = 0.349$  with the total  $t\text{-total} > t\text{-table}$  was  $4.373 > 0.159$  with a total significant 5%, which means that there was an effect on student learning motivation.

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## INTRODUCTION

Education is a number of experiences to understand something that was not previously understood through interaction with the environment, causing a process of change to product development for the life of a person or group in their environment ([Vivin, 2019](#)). Education is a patient effort to grow the potential of human resources by encouraging and facilitating teaching and learning activities to achieve intelligent and quality human progress. However, along with the development of the technological era, games have become a separate culture for their fans, especially teenagers. Students still need satisfaction with technology so that it becomes a problem and a different obstacle for educators.

The development of technology in the form of the internet provides enormous benefits for progress in all areas of life. Every day the internet presents many exciting offers. The internet can be used to complete schoolwork or work. However, in reality, many students abuse technology. For example, technology is used to play online games ([Nirwanda & Ediaty, 2016](#)).

According to [Padli \(2018\)](#), Children understand better and still like to play, move, and like games with rules and nuances of competition so that the game will be continuous regardless of how long it takes. School-age children usually like group or team games that are highly organized, have rules and have a competitive feel. At first, only a few children played online games, but the number of children playing increased over time.

Even children spend time in front of the computer and do not seem to pay attention to the "future." Online games are often a problem for dropping out of school, early marriage, to the proliferation of introverts or introverts among teenagers. The use of the internet must be wise in order to avoid the negative impacts it causes. The development of a technology that is appropriately misused will undoubtedly lead to a decline in the quality of education because it is used to play online games ([Limianto, 2019](#)).

[Kustiawan & Utomo \(2019\)](#) refers to computer games played by multiplayer over the internet, usually provided in addition to the services of an online service provider or accessed directly from a company specializing in providing games. The phenomenon of online games has emerged since the 2000s. Counter strike games in the early 2000s were very booming, but over time, online games switched to a game called Point Blank or better known as PB.

Online games that are widely circulated in the market not only serve as entertainment but can also play a role in stimulating the imagination of fantasy, by the nature of online games, namely displaying problems and then thinking about the problem with the result of winning or losing ([Athoillah, 2016](#)). So that online playing games will reduce the positive activities that children should carry out at their developmental age. Children dependent on game activities will affect learning motivation, thereby reducing learning time and time to socialize with their peers. If this continues for a long time, it is estimated that students will withdraw from social interactions, are not sensitive to the environment, and can even form a social personality, where students cannot adapt to their particular environment ([Angela, 2013](#)).

According to [Slameto \(2017\)](#) motivation is seen as a mental drive that moves and directs human behavior, including learning behavior. The learning motivation in question is intrinsic and extrinsic. The reinforcement of the learning motivation is in the hands of the teachers/educators and other community members. Teachers as educators are tasked with strengthening learning motivation for nine years at the age of 9 years of compulsory education.

SMAN 1 Silangkitang is a school that is quite popular in the South Labuhanbatu area. Based on the initial observations, the authors say that the daily score and monthly grades from the Biology Study Teacher XI students decreased at the end of the semester. First, 60% of Biology subject scores obtained by students below the specified Minimum Completeness Criteria (KKM), which is 80. Then based on observations in class, there is a decline in their grades and learning motivation due to the tendency of students to hold cellphones during the teaching and learning process, with the reason used to study. However, some students use their cellphone to play games. In addition, there are problems from outside, namely the existence of game cafes or PlayStation stalls outside the school environment, so that after class ends, they do not go straight home but play games and hang out with friends.

Based on the description above, the researcher feels the need to conduct a study entitled online game playing activities on students' learning motivation. This study aims to determine the effect of online game playing activities on the learning motivation of class X students at SMAN 1 Silangkitang.

## RESEACH METHOD

This type of research is quantitative research. Therefore, the population of this study was all students of class X SMA Negeri 1 Silangkitang, while the research sample was all students of class X MIA 1 to X MIA 4 SMA Negeri 1 Silangkitang with a sampling technique of 140 students total sampling.

In this study, researchers tried to find the effect of online games on the learning motivation of class X students of SMA Negeri 1 Silangkitang. This research was conducted at SMA Negeri 1 Silangkitang, South Labuhanbatu Regency, North Sumatra Province.

The initial preparation stage is observing the school that will be used as the research location. Then the next stage is making a grid of motivational instruments and online game instruments, followed by making the questionnaire. Finally, validation of motivational questionnaires and online games were also carried out to expert validators.

At the implementation stage, the researcher goes directly to the field. First, the implementation stage is carried out, namely, selecting research samples, observing learning methods that teachers often teach, conventional methods and question

and answer methods in class X MIA 1 to X MIA, and giving online game questionnaires and motivation study.

To measure the influence of online games and students' motivation to learn biology using a questionnaire instrument with a total of 30 statements for the online game questionnaire and 43 statements for the motivation questionnaire with a Likert scale score of 4 (strongly agree), score 3 (agree), 2 (disagree) and 1 (strongly disagree).

Data were analyzed using a questionnaire/questionnaire, observation, and documentation. The data were analyzed using descriptive analysis and statistical analysis with the help of SPSS 20.0 for Windows.

## RESULT AND DISCUSSION

From the results of the study, data show whether there is an effect between the independent variable X (online game) and the dependent variable Y (motivation) using simple correlation analysis, as shown in Table 1. Furthermore, the summary determinant coefficient of variable x against y is presented in Table 2. Results Simple correlation significant test is presented in Table 3.

Table 1. Correlation Test

		Game Online (X)	Motivasi Belajar (Y)
Gameonline (X)	Pearson Correlation	1	.349**
	Sig. (2-tailed)		.000
	N	140	140
motivasi belajar (Y)	Pearson Correlation	.349**	1
	Sig. (2-tailed)	.000	
	N	140	140

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Tabel 2. Determination Coefficient Summary Variable X to Y

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.349 <sup>a</sup>	.122	.115	5.144

a. Predictors: (Constant), motivasi belajar (Y)

Tabel 3. Uji Signifikan Korelasi Sederhana

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients		
1	(Constant)	58.387	3.488		16.740	.000
	motivasi belajar (Y)	.142	.033	.349	4.373	.000

a. Dependent Variable: Gameonline (X)

From the results in table 1 and table 2, the value of  $R = 0.349$  shows that the independent variable affects the dependent variable. Based on a simple correlation test, an approach method for modeling to see the effect of one variable X and variable Y (the influence of online game activities on students' motivation to learn biology). Calculation of this analysis data using SPSS version 20.0 program. Table 3 shows the product-moment results obtained  $t\text{-count} > t\text{-table}$ , which is  $4.373 > 0.159$  then, the results of the hypothesis are  $H_a$  accepted, and  $H_0$  rejected with a significant value of 5%, meaning that there is an influence of online game activities on learning motivation in class X SMAN 1 Silangkitang.

This research is in line with [Akbar & Ahmad \(2020\)](#). The results of Angela's research (2013) show that the influence of online games on student learning motivation is indicated by the correlation coefficient of 0.539, the significant t-test of  $8.753 > t\text{-table}$  of 1.665. The R-value of 0.291 explains that the influence of online gaming variables on motivation student learning amounted to 29.1%, while the rest was caused by other factors that were not studied. To measure online gaming activity using a questionnaire with four aspects that provide color in online game research, namely the frequency of online games, time to play online games, favorite online games, and places to play online games.

#### Frequency of Playing Online Games

The influence of online game activities on learning motivation obtained by researchers is  $R\text{ Square} = 0.349$  with a significant level of 0.00 in the sense that the contribution of online game activities is 34.9% on the motivation to learn Biology in class X at SMAN 1 Silangkitang. This research supports the statement of [Limianto \(2019\)](#) that someone who plays online games provides benefits for users. Unfortunately, nowadays many people have become heavy addicts to the game, so they abuse it. Especially for teenagers, online games that are played

excessively can be very detrimental. In accordance with the data listed on online gaming activities, the frequency of playing online games is 74.50% with details of the level of pleasure or hobby of 34.80% and the intensity of playing online games of 39.70%.

#### Playtime Opportunity

The free time to play online games is 68.20%. The data shows the amount of free time playing games rather than studying to reduce the level of student learning motivation. In line with the opinion of [Al-Munajjid, \(2016\)](#) the Online game has gone beyond just a casual activity for many who play it, including adults and young people, to the level of addiction. This is a phenomenon that has many harmful effects, as scientific studies around the world have shown. This has prompted doctors, educators, guardians, and even politicians to raise their voices to warn and raise awareness.

#### Permainan game online yang digemari

Based on the results of research on online games that are popular with class X students at SMAN 1 Silangkitang, data obtained is 72.90% with a sub-indicator (type of game that is favored) by 26%, games that train intelligence 40.20% and games that train violence 6,70%..

Online games, which are now growing rapidly along with technological developments, have been widely encountered in our environment ([Putra, 2017](#)). In the 21st century, the phenomenon of online games is not foreign to young people and even adults. With the reason that humans must be "literate" in technology ([GenioFam, 2010](#)), then this word is an easy target for online game users so that negative impacts are deliberately erased from their minds. Not to mention the thoughts and experiences of friends of online game addicts who state that playing games can reduce stress, get tired, and feel happy ([Al-Munajjid, 2016](#)).

According to [Kustiawan & Utomo \(2019\)](#), online games can improve concentration skills because each game has a different level of

difficulty or level. Online games will train players to be able to win games quickly, efficiently and generate more points. The concentration of players, online games will increase because they must complete several tasks, look for gaps that might be passed, and monitor the course of the game. The more complicated a game is, the more it requires a high level of concentration.

[Al-Munajjid \(2016\)](#) Added that children who prefer games that practice violence will be aggressive towards other people who disturb them. As observed in a child playing an online game and someone tries to stop it, the child will get into trouble with his siblings. He would argue over matters that were none of his business and would be aggressive and even hit his brother for no reason.

So based on the opinion above, online games have many advantages and disadvantages for users. If the game's goal is to increase concentration for the player, then it is acceptable to use it with certain corridor limits. However, if the game is in the form of violence, then use of the game should be stopped so that there is no change in nature in a wrong direction.

#### Where to Play Online Games

Based on the study results, the public internet (Warnet) became the primary place for teenagers to play online games by 38% after 18% at school. This is supported by [Pitaloka \(2013\)](#), that playing games on the public internet also makes it easier for parents to monitor or at least reduce worries if their children come home late. For example, when a child comes home late and does not say goodbye, the parents can predict the child's whereabouts. This is the reason why parents do not forbid their children to play online games in internet cafes. Some internet cafes are generally filled with students who always come to spend their time playing online games, and sometimes they are willing to not go to school (skip) to play online games. It is not uncommon to find teenagers and even children who are playing online games in internet cafes. Of the various internet cafes found around Jakarta, almost the majority are from 07.00 WIB to 12.00 WIB, filled with children in school uniforms who are playing online games.

#### The Influence of Online Game Activities on Biology Learning Motivation

Based on the research results, the researchers obtained the following values:  $R = 0.349$ . Then according to the criteria obtained, the independent variable (online game) affects the dependent variable (learning motivation). So

basically, addiction to online game activities will significantly affect their learning motivation. Furthermore, if the gameplay is gradual, the teaching-learning process does not go well, then the results and student achievement will also decrease.

The effect of game activity on learning motivation is influenced by one of the mental strengths of a student ([Dimiyati & Mudjiono, 2013](#)). Mental strength is in the form of desire, attention, will, or ideals. Mental strength can be classified as low or high. For example, in motivation, a desire activates, moves, distributes and directs learning attitudes and behavior.

The growth of learning motivation in students is due to the desire of students to know something and will direct students' interest in learning so that they will be serious in learning and will motivate them to achieve good learning achievement. study ([Nisrinafatin, 2020](#)).

In line with Skinner's opinion ([Triatmojo, 2019](#)) one of the things that make students motivated to learn the importance of learning is providing reinforcement. Reinforcement is the provision of reinforcement to a child who has decreased his motivational power, hoping that students will consciously respond with a positive attitude and eagerness to learn after giving reinforcement.

#### CONCLUSION

Based on the study results, the following values were obtained:  $R = 0.349$ . Then according to the criteria obtained, it shows that the independent variable affects the dependent variable. Then based on a simple correlation test, it shows the production results obtained  $t\text{-count} > t\text{-table}$ , which is  $4.373 > 0.159$ . Then, the results of the hypothesis are  $H_a$  accepted, and  $H_0$  rejected with a significant value of 5%, meaning that there is an influence of online game activity on learning motivation in class X SMAN 1 Silangkitang.

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