The Effect of Online Games on Learning Motivation and Learning Achievement

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Abstract-Technological developments make online games increasingly known throughout the community as a means of entertainment and even as a sport. This study aims to determine the effect of online games on learning motivation and student achievement. The study results show that online games can be used as motivation to learn at a certain level, but at the level of addiction to online games, it is disconcerting for students in learning achievement.

Keywords: Online Games, Learning, motivation, learning achievement

Introduction

In the modern era, technology is developing rapidly. One of the technology products that are very real today is the Internet. We can access information quickly. Since the Internet is an authentic medium to get the latest information, there is a lot of entertainment such as Instagram, Email, movies, news, and online games. [1]. Online games are computer games that can be played by many players who use the Internet as a medium. Generally, games that can be

accessed directly through the system are provided by online service providers and are provided as additional services from online service providers or internet cafes (warnet). We don't only find internet cafes in urban areas, but now we can find many in rural areas as well as those who were not familiar with the Internet, but now many are using internet cafes to play games. Currently, playing online games not only in internet cafes but at home can also play, especially if you have a computer and Internet that supports users to play online games. Many players can access online games, where the Internet connects the machines used by players. When viewed from the number of activities carried out, this online game includes passive play or entertainment because the subject gets pleasure from activities carried out by others, namely the game maker, and the player only spends a little energy playing. Online games that are widely circulated in the market not only serve as entertainment but can also play a role in stimulating the imagination according to the nature of online games, namely showing problems and then thinking about the problem with the result of winning or losing. In addition, online games have only a few benefits and save more losses, namely a lot of wasted time obtained from the benefits received. Online games are multiplying, and the longer the game is getting more and more fun, starting from the display, playing style, game graphics, image resolution, etc. Variations in games such as war games, adventures, fights, and other online games make the game enjoyable. The more attractive a game is, the more people who play online games which dominate playing online games are students, starting at the elementary, junior high, high school, and college levels. This can be seen from the number of internet cafes and game centers in big cities and small towns that play online games in which students are students. Students who often play online games will cause children to become addicted. His addiction to online games will impact him, especially in terms of academics, because he is still of school age.

Online games are modern games that have become a trend for the present, and the fans start from children to adults. Online games easily influence school children because they still like to play, move, and like games that have rules and nuances of competition so that players will play continuously regardless of how long it takes. School-age usually likes group or team games. This game is very organized and has rules and nuances of intense competition [2]. History and Development of Online Games is a game or game played by many players, where an online network connects the machines used by players via the Internet, can use a PC (Personal Computer) or ordinary games (played offline) [3][4]. This study conducted interviews and

random tests on those who like online games. Testing the students' learning achievement and motivation shows that their learning achievement and learning motivation are still relatively low. Decreased learning motivation of students dependent on game activities will affect their learning achievement [5]. In the learning process, motivation is essential because someone who does not have motivation in learning will not be able to carry out learning activities [6]. Motivation is a condition in the form of encouragement within a person, either in the form of encouragement from within or outside, to do something to achieve specific goals in learning [7][8]. Achievement is defined as a desire to do something difficult as quickly and as well as possible. Thus, it can be said that achievement motivation is a driving force for students to do the tasks given even though it is difficult to achieve the predetermined achievement [8]. Difficult work will make students increase their efforts in order to be able to complete the task with maximum results. Humans learn from not knowing to know. When there is an order to read (learn), humans are automatically ordered to excel in learning [9]. With the high motivation to learn, humans will succeed in life. Where we know that motivation plays a very important role in learning, because someone who has high achievement motivation will try hard in learning, so as to achieve high results. [5][3]. Researchers conducted research in the hope of knowing whether online games affect learning motivation and student achievement which are considered not optimal.

Method

This type of research is ex post facto using an approach that is to determine the effect of one independent variable on two dependent variables. Ex post facto research is research that seeks relationships that are not manipulated or treated by researchers. Ex post facto research aims to trace back, what are the factors causing the influence of online games on the motivation and learning achievement of students at SMPN 1 Batang, Central Java. The design of this research is experimental research. Online games are intended as games that are played on a network (both LAN and the Internet). These games are usually played simultaneously with an unlimited number of players, which can be seen based on the online games being played (FF, PUBG, COC, MOBILE LEGEND). Learning motivation is an encouragement for students to make changes in behavior with motivation indicators, namely attention, relevance, confidence, and satisfaction [9]. Learning achievement is the result of a teaching and learning process that provides information about the extent to which students master the subject matter, not a mastery of

training results but changes in behavior that can be seen from their report cards, with the Minimum Provisions Criteria (KKM) of 75.

Results and Discussion

Online games are computer games that can be played by multiplayer using a computer network (LAN or Internet) as a medium. Currently, playing online games not only in internet cafes but at home is also commonly accessed using a smartphone connected to the Internet that supports users to play online games. And there are many types of online games, from those that use simple graphics to form a very good virtual world that can be played by many people in one game that makes users forget the time.

Table 1: Descriptive data of online game questionnaire

N	Valid	89
	Missing	0
Mean	92,03	
Median	89,54	
Mode	87	
Std. Deviation	10,90	
Variance	129.98	
Minimum	59	
Maximum	100	

The results of descriptive statistical analysis on the fondness of using online games for SMPN 1 Batang students are as follows, the average value (mean) obtained is 92.03 which is included in the high category with the maximum score of 100 which is in the very high category, while the minimum value is 59 which is included in the low category. The median of the data is 89.54, while the standard deviation value is 10.90, with a variance value of 129.98. So it can be concluded that based on the average value of 92.03 and the histogram shows that the intensity of students' enjoyment of using online games is in the high category. Learning motivation can be seen in students' achievement and from a cognitive perspective. Both elementary school and university students make a lot of differences in their motivation to learn. This has become a tendency that awareness of learning motivation is not only seen from age and educational status but also from the lifestyle of each individual, which is definitely different from one another.

Children who are dependent on game activities will affect their learning motivation thereby reducing learning time and time to socialize with peers.

Table 2 Descriptive Data on Learning Motivation Questionnaire Learning Motivation Statistics

N	Valid	89
	Missing	0
Mean	89.04	
Median	88.32	
Mode	83	
Std. Deviation	3.98	
Variance	17.76	
Minimum	83	
Maximum	98	

Individual learning achievement is the result of the interaction between various influencing factors, both within (internal factors) and from outside (external factors) individuals [10]. Learning achievement is an achievement produced by individuals in taking education. The learning achievement of each individual is different, and this is made possible by several factors from within and outside the individual. The level of success of students in learning can be known through their learning achievements based on the results of evaluations or exams. In order to improve and improve the quality of learning outcomes, it is necessary to study the factors that affect the learning outcomes of students who are addicted to online games. It is feared that it can affect the learning process, such as not doing homework and assignments related to school. [11].

The following is a description of the achievement of students' learning motivation obtained from the questionnaire instrument:

Table 3 Descriptive Data of Student Achievement

N	Valid	89
	Missing	0
Mean	83.78	
Median	82.48	
Mode	81	
Std. Deviation	2.98	
Variance	11.89	
Minimum	80	
Maximum	96	

The results of descriptive statistical analysis on student achievement are as follows, the average value (mean) obtained is 83.78 with a maximum value of 96, while the minimum value is 80. The median of the data is 82.48 with a mode of 81 as well, while the score the standard deviation is 2.98 with a variance value of 11.89. So it can be concluded that the value of student learning outcomes is in the very good category and achieves completeness above the KKM value (75).

Table 4 Partial t test results for learning motivation

Model	Under standardized Coefficients B	Std. Error	Standardized Coefficients Beta	T	Sig.
(Constant)	90.89	4.72		20.033	.000
Game Online	-.032	.051	-.102	-.820	.398

Based on the table, it can be explained that the first t-test was conducted to determine whether there was a positive effect of online games (X) on learning motivation (Y1). Based on the output table, it is known that the significance value of learning motivation is 0.389. Because of the value of Sig. 0.389 > 0.05, it can be concluded that H1 is rejected and H0 is accepted. This means that there is no positive effect of online games on students' learning motivation.

Table 6 Partial t-Test Results for Learning Achievement

Model	Under standardized Coefficients B	Std. Error	Standardized Coefficients Beta	T	Sig.
(Constant)	83.189	4.02		20.133	.000
Game Online	.023	.039	.067	.421	.512

Based on the table, the second t-test was conducted to determine whether there was a positive effect of Online Game (X) on student achievement (Y2). Based on the output table, it is known that the significance value of learning motivation is 0.512.

Because of the value of Sig. 0.512 > 0.05, it can be concluded that H1 is rejected and H0 is accepted. This means that there is no positive influence of online games on student achievement. One of the technology products that are very real today is the Internet. Lots of entertainment is offered on the Internet, such as Instagram, Email, movies, news, and online games [1]. In the past, the village did not know the Internet as well as online games, now, many use smartphones

to play games. Online games will reduce positive activities that should be carried out by children at their developmental age [8]. Children who are dependent on game activities will affect their learning motivation, thereby reducing learning time and time to socialize with peers. The problem with learning motivation in this digital era is very sad. And some are using it well, and some are using it badly, including addiction to playing online games, which is growing very rapidly in society, especially in Indonesia. Based on research that has been obtained on the intensity of playing games, students are included in the high category. On average, students play games for 4-6 hours per day. The games played are Mobile Legends, PUBG, AOV, and Free Fire, action games. Students at home play online games through their smartphones. Most students who play online games have problems with their learning motivation, for example, lazy in learning, not ready to take lessons, and lack of focus when the teacher explains. Children are affected by online games that are played because almost all children like this game and often play it. The existence of interesting and new things that are obtained in playing games causes students to often be complacent by what is their responsibility as students. The high intensity of using online games will cause students to become addicted to online games. Addiction is a condition where individuals feel dependent on something they enjoy due to a lack of control over their behavior. In learning activities, motivation can be said as the overall driving force in students that causes learning activities. This research has obtained the results that students' learning motivation is in the high category, but there is no positive effect of online games on learning motivation but a negative influence both from the social, psychological, and physical aspects. In addition to learning motivation, what needs to be considered is student achievement. Learning achievement is an achievement produced by individuals in taking education. The learning achievement of each individual is different. This is made possible by several factors from within and outside the individual. The level of success of students in learning can be known through their learning achievements based on the results of evaluations or exams. The complete value of student learning achievement at SMPN 1 Batang is 75. Documentation of the value taken in this study is the documentation of student report cards. These data indicate that all students are in the very good category and achieve completeness above the KKM score. However, the results of the hypothesis test show that there is no positive effect of games on student achievement. Students who often play an online game will cause them to become addicted. His addiction to playing online games will have an impact on him, especially in terms

of academics, because he is still at school age. This is supported by the many game centers in the surrounding environment that offer affordable prices for children and teenagers. Children who like to play video games are children who really like challenges. These children tend to dislike stimuli that are weak in appeal, monotonous, not challenging, and slow. This at least has an impact on the academic learning process. The atmosphere of the class seemed to be a prison for his soul. His body is in the classroom, but his mind, curiosity, and desires are in the video game. He seemed to be studying, but his mind was busy processing the shadows of the thrilling game. Sometimes children also become lazy to study or often skip school just to play games, so there is no positive effect of competition for students. In addition, each child's ability is different from one another, so to find out the effect of using online games not only look at the child's habits but also affects children who do have good abilities or achievements compared to other children in general.

Conclusion

The study results can be concluded that online games can affect students' learning motivation. Playing it excessively can have a destructive impact, which will reduce the sense of socialization towards others. Online games can affect student achievement. For students who play online games excessively, it will be difficult to concentrate in lessons at school. This is because his mind always wants to play games and is curious about the game. There is no positive influence in playing online games, but it only has a negative impact or negative impact on students who are addicted to playing online games. The adverse effects of online games cause students to be more active in thinking about how to advance to the next stage or beat their opponents without caring about the lessons at school. It is hoped that parents will pay more attention to their children when children spend their learning time playing online games that are less useful for academic achievement.

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