



The Role of Educational Games in Increasing Student Motivation and Engagement

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ABSTRACT

Education is the learning of knowledge, skills, and habits of a group of people passed down from one generation to the next through teaching, research, and training, therefore an education must require a forum to achieve these goals. One example of a place to develop student education is a school, in a school there is a person who acts as a teacher or educator whose job is to develop the potential of students so that they can become an intelligent person. The purpose of this research is to find out a more in-depth discussion about the role of educational games in increasing student motivation and involvement in the learning process. This research was conducted to understand the role of the game given by an educator to students, whether the game in learning motivates students or not. The method used in this study uses a quantitative method that aims to examine the role of educational games through statistical techniques by collecting research variables using google form media and then imported and processed into the SPSS application and tested using the One Way Anova method. Based on the data obtained, it shows that the role of educational games in increasing student motivation and involvement is very influential, which is a good learning strategy that can have an effect in the teaching and learning process so that the role of the game can foster enthusiasm or motivation and student involvement in learning so that students become excited about learning and are not easily bored. The conclusion in this study explains that applying educational games as a learning medium is very important in the world of education, where the use of educational games in increasing student motivation and involvement can help increase student knowledge. So it can be concluded that games in education are very useful for students in the teaching and learning process to eliminate boredom and to motivate students in learning.

Keywords: Education, Motivation, Students

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INTRODUCTION

Nowadays, the world has become more sophisticated with the development of science and technology which has slowly begun to touch all aspects of life, including the

world of education which has utilized technology for the benefit of its institutions (Suarini et al., 2021). Today's technological advances cannot be separated from the world of education because education is the basic key to gaining knowledge (Anggraeny et al., 2020). With these technological advances, there are many developing play applications that can be used in the classroom for the teaching and learning process or can be called educational games (Aula et al., 2020). Although there are many educational games that can be used by educators to support successful learning, there are also many educators who cannot make the best use of the technology so that students do not have the opportunity to play these educational games due to lack of access (Sulistiyowati et al., 2022). Then their motivation and engagement can be disrupted.

It is better for an educator to explore again or learn more as much as possible about technology so that educators do not feel left behind about the sophistication of technology, especially now that everything must be done online (Frenkel et al., 2018,). In the world of education, technology is very much needed, especially to help students increase their motivation and involvement in learning (Harahap et al., 2021; Satria & Kusumah, 2019). Therefore, it is very necessary for this educational game for students, because this educational game not only has a role to motivate students but also plays an important role in developing the cognitive, physical, social, and emotional abilities of students (Abdul Azis & Rosli, 2021; Tatminingsih, 2019). In formal education, games can also be used as an alternative teaching method that is fun and interesting (Irianto et al., 2020; Sofyan et al., 2022). Games can be used as a tool to explain difficult concepts, increase learning motivation, and reduce boredom in the classroom. However, games in education also need to be well directed to remain effective and in line with learning objectives.

Teachers need to choose games that are relevant to the learning material and provide clear directions to students. In addition, learning through games also needs to provide space for students to reflect and relate the concepts learned to real situations or contexts (Fajar et al., 2019). Thus, games have a very important role in education. By using games as a learning method, students can learn more effectively, have fun, and be actively involved in the learning process (Dewi et al., 2021; Putra & Yuniarti, 2022). So, motivating students in the learning process by using educational games is an easy problem to solve if the role of games in education can help students develop the skills and knowledge needed to succeed in life (Fong et al., 2019; Howard et al., 2021). When playing in groups, students learn to cooperate, compromise and interact effectively with others. They also learn to appreciate differences and resolve conflicts in a good way (Bozic et al., 2020). In addition, games can also help in students' cognitive development. Games often involve problem solving, strategy, and logic, allowing students to exercise critical, analytical, and creative thinking skills.

The role of educational games in education is very beneficial, therefore it is very important to explore the role of educational games in increasing student motivation and engagement (Al Irsyadi et al., 2019). Because this educational game helps students not to be bored when learning in the classroom, usually students will get bored easily when the teacher explains if there are limited learning technology and media, if the teacher only relies on lectures without using technological facilities and interesting learning media, students can feel bored, the use of relevant technology and media can help make learning more interesting and interactive (Rahmanto et al., 2020). Therefore, other variations are

needed to attract students' interest in learning such as utilizing educational games as well as possible so that they can attract students' interest in learning so that students are motivated and actively involved in learning (Niu et al., 2020; Zhuang et al., 2021). When the role of the teacher and technology are combined when learning, it can create a conducive classroom atmosphere and there is no awkwardness in it, so students will be motivated in learning.

The role of educational games in improving student motivation and engagement has some issues that need to be considered, one of the issues is dependency, if educational games are not properly supervised, users who are mainly children and teenagers can become too dependent on the game. They may feel lazy if an educator does not use games in education because they are used to methods such as playing while learning. Therefore, the most appropriate way to overcome this problem is to set a time limit, limiting the time that students can spend playing educational games (Canale et al., 2021; Goh et al., 2019). Set time limits and ensure students also have time to learn through other methods, and further provide effective feedback after students have played the game, provide feedback related to their learning. Discuss their results and give suggestions for further improvement.

This article aims to provide more comprehensive and in-depth information about this research. To know how to overcome the problems of this study, the researcher must know whether the game can motivate students or not (Boer et al., 2020; Juvet et al., 2021). Through this article, it can provide additional knowledge to researchers regarding the role of educational games in increasing student motivation and involvement, so that in making this article the researcher poured out the results of the research that had been obtained so that it could be utilized (Koenka, 2020; Leitão et al., 2022). The writing of this article also aims to provide a different and updated perspective on the role of educational games.

The method used to deal with the problem of dependent students by using educational games in education to increase student learning motivation is to use games as a complement to learning, not as the only method. Combine games with other learning methods such as discussions, group work or presentations (Das & Mahanwar, 2020). This will help students develop various learning skills. And in addition to educational games, provide other learning alternatives such as learning videos, reading materials, or hands-on experiments (Agus et al., 2019). This will help students to stay engaged in learning without relying on games alone.

Based on the explanation above, overcoming existing problems can be done by teachers who provide opportunities for students to play while learning so that students can be motivated and active in learning. This research aims to find out a more in-depth discussion and find out how important the role of educational games is in increasing student motivation and involvement. The role of educational games can be applied from the level of children's schools to universities. This study uses quantitative methods by using questionnaires as a data collection technique and using the correlation method on SPSS by conducting reliability testing involving school students at the high school level. To future researchers who get the same discussion in order to be more accurate in conducting research and get more relevant results.

RESEARCH METHODOLOGY

Research Design

This research uses a quantitative approach which is part of the meteorology in this study which can be done by distributing questionnaire questionnaires online (Castro & Tumibay, 2021; Cutri & Mena, 2020). The use of this quantitative method aims to examine and explore the role of educational games in increasing student motivation and engagement. There are several factors that can make researchers use a quantitative approach method in this study, namely the first, this quantitative method was chosen because it allows researchers to collect numerical data which can be done with reliability testing on SPSS. Second, by using this method the researcher can test the hypothesis of the relationship between two variables, such as the more agreeing answers from the questionnaire about the role of educational games in increasing learning motivation and student involvement, the more the use of educational games for student learning increases. In addition, this method can be utilized for further researchers so that it can be a broader understanding of the role of games for the world of education today.

This Quantitative method is carried out with a mathematical model, starting from the data collection process to its interpretation. This type of research using quantitative methods is more burdensome on causes that have certain characteristics in human life called variables. This method has a specific, clear, detailed, and fixed nature. The flow of quantitative research itself has been planned from the start and cannot be changed again. So the quantitative approach is the relationship or relationship between variables that will be analyzed objectively (Hasibuan et al., 2020; Sanusi & Aziez, 2021). Researchers in researching use two sources, namely primary data sources and secondary data sources. Researchers collect data from various existing sources such as distributing questionnaires that researchers share with students in tertiary institutions, and the answers to the questionnaires will be recapitulated by researchers and then input into the SPSS tool, so that researchers and readers can find out the results of this study by reading the percentages in the tables or diagrams in this article. Therefore, the results in the table or diagram are accurate and relevant results.

Research Setting and Subjects

Researchers in researching using techniques by collecting data using survey methods and distributing questionnaires to respondents, namely to students at the senior high school education level. In distributing this questionnaire, researchers used the publication method through social media. In this study, there are two choices of respondents who will be analyzed or who will be tested by researchers, the first is respondents who agree with the role of educational games in increasing learning motivation and the second is respondents who disagree with the role of educational games in increasing learning motivation (Budiarti et al., 2022). The sample in this study were high school students. The students were asked questions through a google form questionnaire about the theory of the role of educational games for students. In this study, the data collected were analyzed using the correlation method (Sari et al., 2022). The correlation method is a statistical method, which involves measuring two or more variables expressed in the form of coefficients and correlations. The correlation method can be used in SPSS, the data will be analyzed by conducting reliability testing and involving high school students.

Data Collection Technique

In this data collection, researchers can use the SPSS tool to assist researchers in using the results of this study. In using SPSS, the researcher will first enter the data to be analyzed into SPSS, where the data can be in the form of files and others. The next step is to select the variables to be tested, the variables inputted are independent variables. After the researcher chooses the variable, the next step is to calculate the correlation coefficient which can be calculated using the analyze-correlete-bivariate menu. After the researcher calculates the coefficient, the author will read the results of the analysis which will be displayed in the form of a correlation table. This correlation table will display the frequency, percentage and relationship contained in the variable. The use of SPSS software can make it easy for researchers to analyze data.

Researchers obtained the results of answers from questionnaires that researchers had distributed to respondents via google form online, the data that researchers got from the questionnaire was recapitulated and transferred to the SPSS software to conduct further research. Data on students who agree and disagree about the role of educational games in increasing student motivation and engagement will be processed and analyzed in the SPSS tool. After that, the data will be analyzed using the correlation method used in SPSS by conducting reliability testing and involving high school students.

Table 1

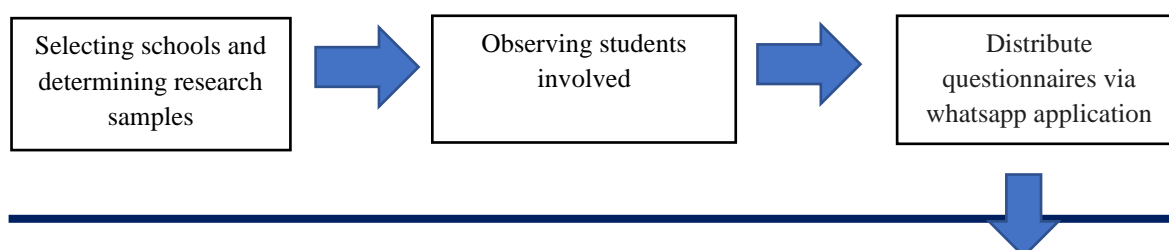
Learner agreement categories regarding the role of educational games in increasing student motivation and engagement.

NO	Gain category	Education Level	Value Interval
1.	Yes	Senior High School	>60%
2.	Maybe	Senior High School	30-50%
3.	No	Senior High School	10-20%
			Total = 100%

Related to table 1, in the research on the role of educational games in increasing student motivation and engagement, the researcher made statements totaling 11 questionnaire items. In each statement, the researcher sets 3 answer options that students can later choose as answers to the questionnaires that researchers distribute online to students in high schools. In each answer has a different percentage, as seen from table 1, the Yes option gets a percentage of more than 60%, the Maybe option gets a percentage of 30-50%, and the No option gets a percentage of 10-20%.

Figure 1

Flow of data collection, processing and analysis.



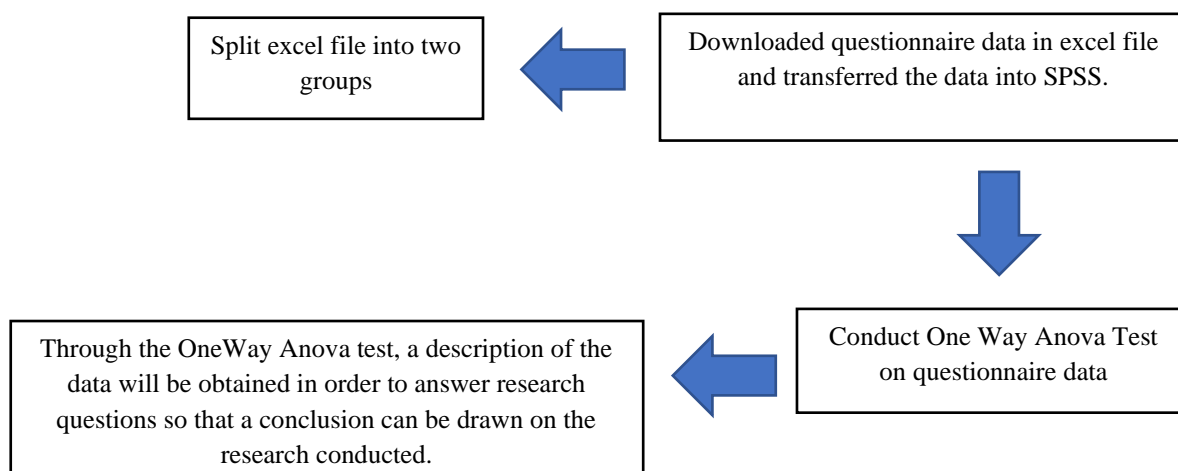


Figure 1 is a sequence flow in data collection and processing that researchers do when collecting answers from respondents to the questionnaire that has been given. There are several stages that researchers do, first, researchers determine the school and determine the research sample. Second, researchers made observations to the students involved. And third, researchers distributed questionnaires through the WhatsApp application. Fourth, Downloading questionnaire data in the form of excel files and moving the data into SPSS. Fifth, divide the excel file into two groups. Sixth, conduct a One Way Anova test on the questionnaire data. And finally, through the One Way Anova test, a description of the data will be obtained in order to answer research questions so that a conclusion can be drawn on the research conducted.

RESULT AND DISCUSSION

The role of educational games in increasing student motivation and engagement

When viewed from the results of the questionnaire respondents who have been distributed, the role of educational games can increase student motivation and involvement in the learning process which can make the learning process effective and efficient. The highest statement was found in question 11 yes, have you ever used educational games in the learning process? 92.3% of respondents said that they had used educational games in learning, then still in the same percentage in question no 4 whether learning by using educational games can make students not bored? 92.3% of respondents said that the use of educational game applications can make students not bored in the teaching and learning process. So, the role of games in increasing student motivation and engagement is very beneficial for students.

The results of distributing questionnaires and interviews show that the role of educational games in increasing student motivation and involvement is very important in increasing student motivation and involvement in the teaching and learning process, because a fun learning process will make learning effective and efficient. From the results of questionnaires that have been given to students in high schools say that educational games can increase student motivation in learning activities. Can be seen below are the

results of the questionnaire respondents that the researchers have distributed in the whatsapp group.

Percentage of Learner Agreement Regarding Cognitive Learning Theory

NO	Statement	Percentage	Yes	No	May
1	Can educational games in learning increase learning motivation?	100%	69,2%	15,4%	15,4%
2	are teachers required to be able to use play applications for learning?	100%	46,2%	7,7%	46,2%
3	Does learning by using games run effectively?	100%	69,2%	7,7%	23,1%
4	Can learning by using educational games make students not bored?	100%	92,3%	0%	7,7%
5	will students feel bored if the learning is by explaining the material only without any games in it?	100%	76,9%	7,7%	15,4%
6	Can games in learning develop students' knowledge?	100%	69,2%	7,7%	23,1%
7	will students using play applications in learning make students lazy in learning?	100%	30,8%	46,2%	23,1%
8	Can games in learning make students actively involved in the teaching and learning process?	100%	76,9%	0%	23,1%
9	Do educational games improve your problem solving skills?	100%	61,5%	15,4%	23,1%
10	Do educational games make learning materials more interesting and fun?	100%	84,6%	0%	15,4%
11	Have you ever used educational games in the learning process?	100%	92,3%	7,7%	0%

			769,10%	115,50%	200,20%
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In this study there is a total score of each Yes statement 769.10%, No statement 115.50%, Maybe statement 200.20%. In each statement, the researcher sets a value to be able to calculate the percentage or score on the statement, namely on the statement strongly agree the researcher sets a score of 3, the Yes statement 3, the No statement 2 and the Maybe statement 1. In general, it can show that students at the senior high school level strongly agree with statements related to the role of educational games in increasing student motivation and involvement.

Table 2

Based on the results of the questionnaire obtained according to the respondents' answers.

From the table, it can be concluded that in the first statement, with the question whether the existence of educational games in learning can increase learning motivation? 69.2% said yes that the role of this game increased student motivation in learning, 15.4% said no and 15.4% said maybe. Furthermore, in the second statement with the question, does learning by using games run effectively? 69.2% said yes because with motivated students in learning, this learning can run effectively, 7.7% said no because some respondents were not effective in learning using educational games and 46.2% said maybe. Furthermore, the statement about whether learning by using educational games can make students not bored? 92.3% said yes because learning by playing can make students not easily bored in learning so that students are actively involved in the learning process, 0% said no and 7.7% said maybe. Furthermore, the statement whether students will feel bored if the learning is by explaining the material only without any games in it? 76.9% said yes, if the teacher only explains by means of the lecture method, students will get bored quickly and learning will not run effectively, therefore educational games are used as a side learning method, 7.7% said no and 15.4% said maybe. The next is a statement about whether games in learning can develop student knowledge? 69.2% said yes because educational games in learning can also develop student knowledge in learning, 7.7% said no because some respondents most likely did not develop their knowledge by using educational games and 21.7% said maybe student knowledge would develop by using educational game learning methods.

Furthermore, the statement whether students using play applications in learning will make students lazy in learning? 46.2% said no because this educational game will not make students lazy but with the educational game it will make students more motivated in learning. Furthermore, the statement whether games in learning can make students actively involved in the teaching and learning process? 76.9% who said yes, because the educational game is a method that students really like, therefore they will be active in the learning process. In the next statement, do educational games improve your problem-solving skills? 61.5% said yes because indeed this educational game can improve problem solving skills for students, 15.4% of respondents said educational games cannot improve

problem solving skills for students, 21.3% of respondents said maybe educational games cannot improve problem solving skills for students.

The next statement is whether educational games make learning materials more interesting and fun? 84.6% said yes, because this learning method is very fun for students because this method is not boring, 0% of respondents said that educational games did not make learning materials more interesting and fun and 15.4% of respondents said educational games made learning materials more interesting and fun. The last statement is have you ever used educational games in the learning process? 92.3% said yes because some students did use this educational game application as a learning medium, 7.7% said that some students never used play applications in learning and 0% said maybe.

From the observations that the researchers have summarized into a table above, the researchers found in statement no. 7 about whether students using the play application in learning will make students lazy in learning? 100% of the respondents who filled out the questionnaire were obtained, many of the respondents answered no, namely with a percentage of 46.2% and those who answered yes were only 30.8%, while those who answered maybe 23.1%. This may be due to the following issues: First, the lack of challenges in educational games. If an educational game is too easy or unchallenging for students, they may feel bored and unmotivated to learn more. They may feel that they have reached the limit of their abilities in the game and there is nothing more they can learn. Next, unclear expectations or goals. If students do not have a clear understanding of what is expected of them in an educational game, they may lose motivation to continue learning. They may not know what they have to achieve or how to measure their success in the game. And then there is the distraction of the game element. Educational games that focus too much on game features such as attractive visuals, sounds and special effects can distract students from the learning process itself. They may be too fixated on the gaming aspect rather than understanding and applying the concepts being taught. And after that, incompatibility with students' learning styles. Every student has a different learning style, and not all students are suitable for learning methods in the form of educational games. Some students may prefer to learn through more traditional methods such as reading, writing, or listening to lessons. Next is the lack of supervision or control. If students are left alone to use educational games without supervision or control, they may be tempted to play the game carelessly without focusing on the learning that should be happening. This can reduce the positive impact of the learning method. Another drawback is the limitation of the material taught. If educational games only revolve around limited topics or concepts, students may feel limited in terms of learning. They may lose interest and motivation as they feel that they are not learning anything new or in-depth. And lastly, there is a lack of variety and rigidity in learning methods. If educational games are the only learning method used consistently, students may feel trapped in routine and monotony. They may need a variety of different methods or approaches to stay engaged in the learning process.

From the explanation above, the researcher has briefly explained the results of the questionnaire that the researcher has distributed and the researcher has presented the data

that the researcher can get from the respondent's answers in a concise, precise and careful manner so that it can be easily understood about the role of educational games in increasing student motivation and involvement. The data that researchers get is also very accurate data, from the questionnaires that researchers have made and distributed to respondents via the WhatsApp application, and the results obtained as the researchers have explained.

Table 3
One way anova test of grade 10 and grade 11

		ANOVA				
		Sum of Squares	Df	Mean Square	F	Sig.
X1	Class 10	4.731	7	.676	1.352	.383
	Class 11	2.500	5	.500		
	Total	7.231	12			
X2	Class 10	5.500	7	.786	.604	.737
	Class 11	6.500	5	1.300		
	Total	12.000	12			
X3	Class 10	4.731	7	.676	.751	.648
	Class 11	4.500	5	.900		
	Total	9.231	12			
X4	Class 10	.923	7	.132	.	.
	Class 11	.000	5	.000		
	Total	.923	12			
X5	Class 10	3.077	7	.440	.549	.772
	Class 11	4.000	5	.800		
	Total	7.077	12			
X6	Class 10	7.231	7	1.033	2.582	.157
	Class 11	2.000	5	.400		
	Total	9.231	12			
X7	Class 10	3.192	7	.456	.507	.800
	Class 11	4.500	5	.900		
	Total	7.692	12			
x8	Class 10	5.231	7	.747	.934	.550
	Class 11	4.000	5	.800		
	Total	9.231	12			
X9	Class 10	8.577	7	1.225	12.253	.007
	Class 11	.500	5	.100		
	Total	9.077	12			
X10	Class 10	6.769	7	.967	.	.
	Kelas 11	.000	5	.000		
	Total	6.769	12			

X11	Class 10	.423	7	.060	.604	.737
	Class 11	.500	5	.100		
	Total	.923	12			

After the researcher collected data as many as 11 questions related to the role of educational games in increasing student motivation and involvement, the next step taken by the researcher was to collect data and input the data obtained on the google form questionnaire. Then the data was downloaded to excel and then edited based on data processing in the SPSS application, then placed on the data analyzed by uni one way anova.

Related to the role of educational games in increasing student motivation and involvement can be influential in the teaching and learning process. With these benefits students can be motivated in learning, although there are still more negative sides of the role of games in this education.

Discussion

The role of educational games in increasing student motivation and engagement

Educational games are learning methods that use game elements, such as rules, goals, challenges and rewards, to increase students' motivation to learn. In educational games, students not only learn formally through books or lectures, but also through play experiences. This research suggests that in educational games, students can motivate themselves to learn and be actively involved in the learning process, interesting educational games can increase students' motivation to learn. By conducting research, it can be known what factors make educational games attractive to students (Juliana & Arifin, 2019; Mumpuni, 2019). This research can help game developers to improve factors that can increase learning motivation. Furthermore, by conducting research, it can be seen to what extent the educational game is effective in helping students learn and understand the material (Effendy et al., 2021). This research can provide clues for game developers to improve game features and design to better suit learning needs. In accordance with the questionnaire that the researchers distributed, 80% said yes to the statements that the researchers had made.

In addition, researchers also found that learning by using games is effective, there are many students who say that learning will be effective by using educational games in learning because, if students use games as learning media, students will not feel bored when they are in the classroom during the learning process, therefore learning will be effective. This view can be proven by the percentage of questionnaire answers from students at the high school level, where more than 60% of students state or argue that learning by using educational games can make learning effective (Anandar, 2022; Putri & Mahyudin, 2019). In addition, previous studies also state that learning by using educational games will be effective because students can play while learning so that students are not bored in the teaching and learning process. This can be known by reading and understanding the results and discussions of previous researchers.

Comparison of Literature Related to the role of educational games in increasing student motivation and engagement.

Related to the relationship between students and the role of educational games in increasing student motivation and involvement has a very close relationship. Which is where the application of learning methods using educational games in an educational level such as levels in high school can provide very significant benefits to students and educators in the teaching and learning process (Harahap et al., 2021). In relation to the teaching and learning process, researchers found that in the teaching method using educational games in increasing student motivation and engagement, learners at the senior high school level perceive that the learning process involves changes in learning.

In addition, researchers can also find that learning by using games runs effectively, which the opinion can be put forward by researchers from the results of the answers to the questionnaire of students at the senior high school level view that learning can run effectively. learning by using games runs effectively because students are very happy with the learning process that involves educational games in the teaching and learning process. learning by using games runs effectively a learning process in which students can understand or capture learning quickly. This process is important to ensure that individuals understand basic concepts and skills before learning more complex concepts and skills.

In addition, researchers also argued that games in learning can make students actively involved in the teaching and learning process, because students with games in the learning process, students can become more active and involved in learning. This is important in helping students understand and master the material taught effectively. Therefore, it is also important for teachers to use learning methods using this educational game, because it is very beneficial for students.

Based on the discussion above, it can be seen that the role of educational games in increasing student motivation and engagement can include aspects of statements from questionnaires distributed by getting various answers from respondents or students at the high school level that learning is an active process that can involve changes in the way of thinking and understanding something, learning with this educational game emphasizes the learning process rather than the results (Satria & Kusumah, 2019). In the role of educational games, there are also several factors that can affect the learning process, namely internal factors such as motivation, the level of individual motivation to learn and participate in educational games can affect the extent to which the game is effective. High motivation can increase engagement and learning success in the game. While in terms of external factors include facilitators or teachers (Illahi et al., 2023). The role of facilitators or teachers in educational games is very important. A trained and skilled facilitator can guide learners well, provide constructive feedback, and motivate them to continue participating and learning from the game.

Although educational games have many advantages in increasing student motivation and engagement, there are some drawbacks that can be obtained from the role of these games (Syachtiyani & Trisnawati, 2021). Some of these drawbacks include: the first is that they are dependent on technology: Many educational games are conducted online or

by using technological devices. This can be a drawback if students do not have access to such devices, or if internet access is limited. This can limit student participation and engagement. The second is the lack of personal connection: Educational games are often conducted individually or with competition between students. This can reduce social interaction between students and reduce opportunities for collaboration and shared learning. This limited social interaction can affect the development of students' social skills. Third, the focus on outcomes rather than the learning process: Educational games often have goals and scores that can be measured. This can make students focus more on achieving high scores and getting good results rather than truly understanding and mastering the learning material. Full understanding of the material and deep problem solving may be under-emphasized. Fourth, the possibility of dependency: The use of educational games too often or in an inappropriate manner may cause students to become overly dependent on the games for learning. This may reduce students' intrinsic motivation to learn and master the material without the use of games. Finally, the gap in ability: During the use of educational games, students with higher abilities may have an advantage over students with lower abilities. Slower or less academically able students may feel left behind and less motivated as they struggle to keep up or achieve high scores.

In implementing educational games, it is important to consider these shortcomings and adjust the use of games to remain effective and efficient in increasing student motivation and engagement.

The following are some efforts in addressing the shortcomings of the role of educational games in increasing student motivation and engagement: First, the game with the skill level of students, educational games should be adapted to the level of ability and interest of students. If the game is too easy or too difficult for students, they may lose interest and motivation. Second, involving students in game planning, students can be involved in designing their own educational games. This can increase their sense of ownership of the game and increase their motivation and engagement. Third, using a variety of games, using different types of games (such as board games, group games, or online games) can help keep students' interest high and stay engaged in learning. Fourth, providing constructive feedback: Positive and constructive feedback is essential in increasing student motivation and engagement. Teachers should provide feedback on students' progress and provide the necessary support to overcome obstacles or mistakes. Fifth, making the game relevant to real life, linking the game to real life and providing relevant context can help increase students' interest and motivation in learning. Sixth, encouraging collaboration and healthy competition, using elements of collaboration and competition in educational games can increase student engagement. Collaboration can stimulate social interaction and team motivation, while healthy competition can provide additional impetus to achieve learning objectives.

Integrating technology, using technology in educational games can make learning more interesting and interactive for students. For example, using app-based games or online learning platforms (Guy et al., 2023). Next, provide a challenging challenge: Educational games should present challenging challenges to students. These challenges

should be appropriate for students' skill levels and provide opportunities for them to develop and grow. After that, monitoring students' progress: Teachers should continuously monitor students' progress in educational games and provide additional assistance if needed. This will help students stay motivated and engaged in learning. And finally, using rewards and recognition, providing rewards and recognition to students who achieve goals in educational games can increase their motivation. These rewards can be in the form of praise, certificates or other incentives appropriate to the situation.

By applying these efforts, it is hoped that the role of educational games in increasing student motivation and engagement can be more effective and optimal. In researching the role of educational games in increasing student motivation and involvement, researchers experience limitations, some of the limitations experienced and can be some factors that can be considered for future researchers to further refine their research because this research itself certainly has shortcomings that need to be improved in future studies. Some of the limitations in the study include, among others, the small number of respondents, of course, is still insufficient to describe the actual situation. Furthermore, the object of research is only focused on social media. And finally, in the process of collecting data, the information provided by respondents through questionnaires sometimes does not show the actual opinions of respondents, this happens because sometimes there are different thoughts, assumptions and understandings of each respondent, as well as other factors such as honesty in filling out respondents' opinions in their questionnaires.

CONCLUSION

The role of educational games in increasing student motivation and engagement provides a broad view of learning using educational game learning media for students. The role of this game is not only focused on playing but also focused on learning which can improve students' memory in learning. In this study, researchers used quantitative methods, this study used a questionnaire as a data collection technique using the correlation method used in SPSS by conducting reliability testing and involving school students at the high school level.

Researchers in examining the role of educational games in increasing student motivation and involvement can conclude that educational games provide many benefits in the teaching and learning process of students, such as one of the prominent benefits of increasing student motivation and involvement in learning, educational games can make learning more fun and interesting for students, so they are more motivated to learn and learning runs effectively and efficiently. In addition, educational games involve interactivity and active participation of students, allowing them to be directly involved in the learning process. Thus, educational games can help students develop a better understanding of the learning material and improve their learning achievement.

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