Increasing Learning Motivation through Kahoot as a Media Game Based Learning

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A B S T R A K

Motivasi belajar siswa sering kali menjadi kendala yang perlu diatasi. Faktor krusial seperti terbatasnya metode pembelajaran yang menarik dan masih menggunakan metode konvensional, kurangnya variasi dalam proses pembelajaran, dan kurangnya penggunaan media yang inovatif. Penelitian ini mengeksplorasi penggunaan media belajar kahoot dalam pembelajaran Bahasa Indonesia di Sekolah Dasar sebagai upaya untuk meningkatkan motivasi belajar peserta didik. Tujuan penelitian ini adalah untuk menganalisis keefektifan penggunaan Kahoot terhadap motivasi belajar peserta didik. Metode penelitian yang digunakan adalah penelitian kuantitatif dengan melibatkan peserta didik kelas V di SD Inpres 5/81 Bana. Desain eksperimen yang digunakan dalam penelitian ini adalah kuasi eksperimen dengan one group pretest posttest design. Teknik pengumpulan data yang dilakukan yakni tes. Data yang dikumpulkan dari tes akan dianalisis menggunakan perangkat lunak Microsoft Excel untuk mengetahui keefektifan media pembelajaran Kahoot dalam meningkatkan motivasi belajar peserta didik sebelumnya. Hasil penelitian ini menunjukkan bahwa hasil pretest 64,29% berada pada kategori kurang, 28,57% berada pada kategori sedang, dan 7,14% pada kategori baik. Sedangkan hasil posttest 28,57% peserta didik yang berada pada kategori kurang, 35,71% peserta didik berada pada kategori sedang, 21,43% peserta didik berada pada kategori baik, 14,29% peserta didik yang berada pada kategori sangat baik. Sehingga dapat disimpulkan bahwa penggunaan media pembelajaran kahoot sangat efektif dalam meningkatkan motivasi belajar peserta didik.

A B S T R A C T

Students' learning motivation is often a challenge that needs to be overcome. Crucial factors such as limited interesting teaching methods and still using conventional methods, lack of variety in the learning process, and lack of use of innovative media. This research explores the use of Kahoot learning media in learning Indonesian in elementary schools as an effort to increase students' learning motivation. The aim of this research is to analyze the effectiveness of using Kahoot on students' learning motivation. The research method used was quantitative research involving fifth grade students. The experimental design used in this research is a quasi-experiment with a one group pretest post-test design. The data collection technique used was a test. Data collected from the test will be analyzed using Microsoft Excel software to determine the effectiveness of Kahoot learning media in increasing students' previous learning motivation. The results of this study showed that 64.29% of the pretest results were in the poor category, 28.57% were in the moderate category, and 7.14% were in the good category. Meanwhile, the post-test results showed that 28.57% of students were in the poor category, 35.71% of students were in the medium category, 21.43% of students were in the good category, 14.29% of students were in the very good category. So, it can be concluded that the use of Kahoot learning media is very effective in increasing students' learning motivation.

1. INTRODUCTION

Currently, the world of education continues to develop, this can be caused by several factors. One of them is technology, technological developments cannot be avoided, especially in the world of education (Damayanti & Dewi, 2021; Nurillahwaty, 2022). Technological developments have led educational institutions to be able to create learning that is conducive and not boring (Fazriyah et al., 2020; Tumurang & Chandra, 2022). So that with the development of the times, communication tools have become increasingly sophisticated, useful and capable of being a solution for students and teachers in accessing everything, be it information or learning strategies without being limited by time and circumstances. Apart from that, it is also a solution in determining variations in teaching materials and evaluating learning. A good learning process can stimulate and motivate students to continue to be involved in learning that suits their interests (Damayanti & Dewi, 2021; Nurillahwaty, 2022). In the learning context, students' motivation and interest in learning play a crucial role in the success of the learning process. High motivation and strong interest in learning can have a positive impact on academic achievement and student development (Charlina & Septyanti, 2019; Rizkasari, 2022). In learning Indonesian, students' motivation and interest in learning also have a significant role. Therefore, increasing students' motivation and interest in learning

is a priority for educators. Improvements in student learning processes and outcomes must be properly monitored and measured.

Innovative and creative learning media and creating students who are active in learning which can stimulate critical thinking patterns, can be realized one way by using technology (Daryanes & Ririen, 2020; Seftiani et al., 2021). With advances in technology, teachers are required to adapt, master and have competence in using technological tools to support the learning process. It is recognized by those in the world of education that the existence of media as a tool for conveying material or teaching materials can help learning and teaching activities, so that they can achieve the learning objectives that have been designed by the educational unit (Akrim, 2018; Bahriah et al., 2017). Therefore, educators are needed who are creative, productive and professional, who are able to master teaching materials, use methods, media and learning resources, and manage enjoyable classes so that they can change the learning atmosphere to be conducive, challenging and enjoyable. Teachers are also required to be able to deliver learning in an interesting, innovative way and to be able to choose learning media according to the teaching materials that will be provided so that students have high motivation in learning (Albrecht & Karabenick, 2018; Halimah & Maulidya, 2021). Thus, technological developments require teachers to change conventional teaching media into digital media and be able to shape students to become independent, think critically, able to communicate, use technology and collaborate with other people. The choice of technology-based learning media must be two-way in order to create good communication between educators and students or what is called feedback (Hartanti, 2019; Inggriyani et al., 2020). Therefore, digital-based learning media is needed to improve student learning performance with attractive multimedia, both audio and visual. One of them is by using Kahoot which is an online page using the internet and is very educational because it provides features as an innovative media in the learning process activities as a game-based learning media (Irwan et al., 2019; Sakdah et al., 2022; Sholikah & Dwi, 2021). Game-based learning is a type of learning that can stimulate student participation in ongoing learning.

Kahoot as a game-based learning media has a quiz feature. Kahoot is a tool for delivering interactive learning material because it can be used in teaching activities such as practice questions, enrichment, as well as pretests and posttests (Mustikawati, 2019; Santoso & Widiyanti, 2022). The Kahoot application can be accessed on mobile phones, making it easier for students and teachers to use it in any condition. Therefore, teachers are required to have competence in both soft skills and hard skills in order to compete in the era of revolution 4.0, especially in the teaching and learning process. Research on the use of kahoots in learning was conducted by previous study stating that the use of kahoots makes the process easier for teachers because of its attractive appearance with image effects, sounds and types of questions. varied ones that make students feel that learning is fun, so that students' learning motivation increases (Alfansyur & Mariyani, 2019; Hidayat et al., 2023; Khoerunnisa et al., 2022). Apart from that, using Kahoot also makes students feel comfortable and more active in all the activities they carry out, which can achieve all the desired learning competencies.

Based on the results of observations of Indonesian language learning in class V of SD Inpres 5/81 Bana, Bone Regency, students' learning motivation is often a challenge that needs to be overcome. Crucial factors such as limited interesting teaching methods and still using conventional methods based on textbooks, lack of variety in the learning process, and lack of use of innovative media can affect the success of Indonesian language learning, while teachers are required to create active learning situations, effective and exciting where the learning does not escape the use of IT in the learning process. One effort to overcome this problem is the need for active and effective learning media through the use of Kahoot learning media as a game-based learning media in class V Indonesian language learning at SD Inpres 5/81 Bana, Bone Regency. This is in line with research conducted by previous studies which states that the Kahoot application learning media is able to build students' enthusiasm and enthusiasm for learning, create a sense of enjoyment in learning, help in sharpening the material that has been explained by the teacher, training students in managing time, training students to think quickly, and being able to make students more challenged and competitive with other friends in the learning process (Halimah & Maulidya, 2021; Hidayat et al., 2023; Iman et al., 2021). In other research, the Kahoot learning media is very interesting and fun for students, making students comfortable with the activities they participate in so that learning competency is achieved and students become more active. in learning (Bunyamin et al., 2020; Hartanti, 2019).

The formulation of the research problem is how effective Kahoot is as a game-based learning medium in increasing motivation to learn Indonesian in class V at SD Inpres 5/81 Bana, Bone Regency. This research aims to analyze the effectiveness of applying Kahoot media in fostering learning motivation in students so that it will influence learning outcomes. The novelty of this study focuses on the exploration of Kahoot, which despite being well-known as a game-based learning tool, has rarely been explored in depth in the context of continuously improving learning motivation at various levels of education. This study provides a new perspective on how gamification elements in Kahoot affect students' intrinsic and extrinsic motivation specifically.

2. METHOD

The research method used is quantitative research. The design of this research is experimental research. Experimental research is research that aims to find causal relationships between certain variables and other variables related to strictly controlled conditions (Abraham & Supriyati, 2022). The experimental design used in this research is a quasi-experiment with a one group pretest posttest design. This research does not use a comparison class, but uses a pretest first. So before learning begins the researcher gives an initial test regarding the material, the aim is to see the effect of implementing the Kahoot Game in the form of a quiz on students' learning motivation. The purpose of giving a pretest is to see the initial abilities of students before being given treatment. Then a final test will be given in the form of a posttest to see changes in students after receiving treatment. The purpose of giving tests at the beginning and at the end to students is to measure whether there is a significant effect on students after carrying out two different treatments. The research design can be seen in Table 1.

Table 1. Research Design

O_1	X	O_2

Information: O_1: Motivation to learn before using the Kahoot application; X: Treatment; O_2: Motivation to learn after using the Kahoot application

The research population selected for the application of Kahoot media was 14 class V students at SD Inpres 5/81 Bana, Bone Regency. This research sample uses the entire population. The data collection technique used to measure learning motivation was obtained through an instrument in the form of a questionnaire. The distribution of questionnaires was carried out twice, namely pre-test and post-test which were carried out individually. The instruments pre-test and post-test used were multiple choice questions. The data analysis technique in this research uses quantitative descriptive analysis techniques with percentages. The data obtained and analyzed in this research is quantitative data from the results of the learning motivation questionnaire. The qualification of learning motivation score is show in Table 2.

Table 2. Qualification of Learning Motivation Score Results

No	Score	Category
1	93 - 100	Very Good
2	84 – 92	Good
3	75 – 83	Currently
4	< 75	less

3. RESULT AND DISCUSSION

Result

The results obtained from the pretest given to class V students showed that there were still many students who got scores in the low category and did not meet the minimum completeness criteria set. This is one of the impacts of students' lack of motivation in participating in the Indonesian language learning process. This has an impact on students' absorption of the material they are studying, becoming less effective. Data on student pre-test results can be seen in Table 3.

Table 3. Pretest Results of Class V Students

No.	Score	Pre test		Category
		Frequency	Percentage	
1.	93 - 100	-	-	Very Good
2.	84 - 92	1	7.14%	Good
3.	75 - 83	4	28.57%	Currently
4.	< 75	9	64.29%	less

Based on Table 3, it can be seen that the initial condition of students in class V at SD Inpres 5/81 Bana. Of the 14 students, 9 students (64.29%) were in the poor category, 4 students (28.57%) were in the medium category, and 1 student (7.14%) was in the good category. In the initial conditions, student learning motivation is obtained through questionnaires distributed at the beginning of learning activities or before being given treatment.

Below is a graph comparing the average presentation of initial learning motivation results which are influenced by the six indicators contained in the questionnaire, which can be seen in Figure 1.
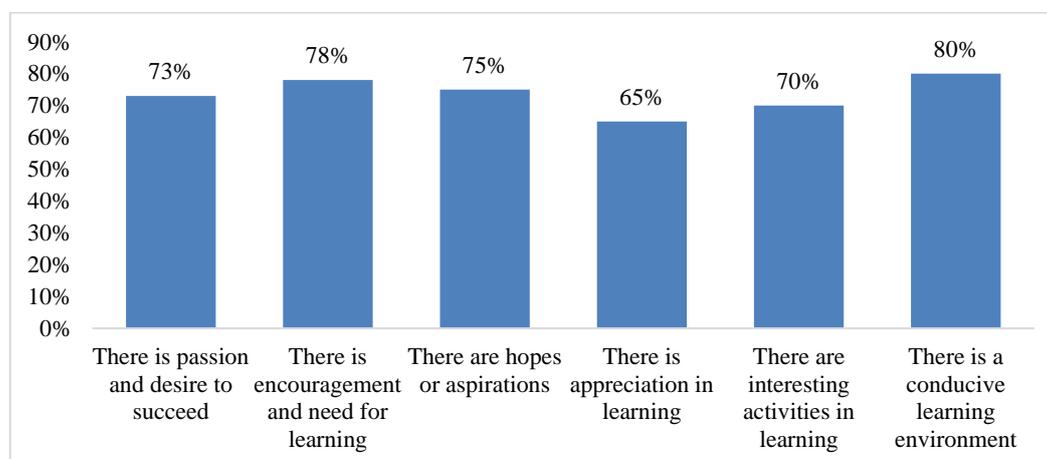

Figure 1. Percentage of Motivation Results for Initial Conditions

Base on Figure 1, Student learning motivation which is influenced by indicators of desire and desire to succeed consists of 3 sub-indicators, namely: (a) being present on time (b) not giving up quickly, (c) being responsive to questions asked. The initial motivation of students in the first indicator, namely the desire and desire, was successfully obtained by 73%. After the pretest was carried out at the initial stage, the researchers then applied the use of technology in the form of Kahoot, which is an interactive quiz platform on Synonyms and Antonyms material. Each student is given their own duties and responsibilities to be able to fill in the sections that have been distributed so that each student is active in this group discussion. Then, the researcher will state the highest score that appears on the Kahoot scoring board. During the implementation of this test, the teacher made observations regarding the students' responses during the learning process and the results were that the students were very enthusiastic and excited about taking part in the competition which took place on Kahoot. There were students who initially lacked motivation to learn and did not interact enough in class, but when this learning took place, these students seemed to participate and be active in implementing this learning activity. After studying with the group, the researchers again gave individual tests to students via Kahoot by identifying synonyms and antonyms of words. The posttest results show an increase from the pretest results or the students' initial abilities. The data obtained can be seen in Table 4.

Table 4. Posttest Results for Class V Students

No.	Score	Pre test		Category
		Frequency	Percentage	
1.	93 - 100	2	14.29%	Very Good
2.	84 - 92	3	21.43%	Good
3.	75 - 83	5	35.71%	Currently
4.	< 75	4	28.57%	less

Based on Table 4 the data obtained from the table and graph above, it can be seen that 4 (28.57%) students are in the poor category, 5 (35.71%) students are in the medium category, 3 (21.43%) students are students are in the good category, and there are 2 (14.29%) students who are in the very good category. In the table above, it can be seen that the number of students in the poor category decreased by 35.72%, in the medium category there was an increase of 7.14%, while in the good and very good categories there was an increase of 14.29% each. In the final condition, student learning motivation is obtained through a questionnaire which is distributed again at the end of the learning activity. Below is a graph comparing the average presentation of learning motivation results which are influenced by the six indicators contained in the questionnaire, which can be seen in the Figure 2.
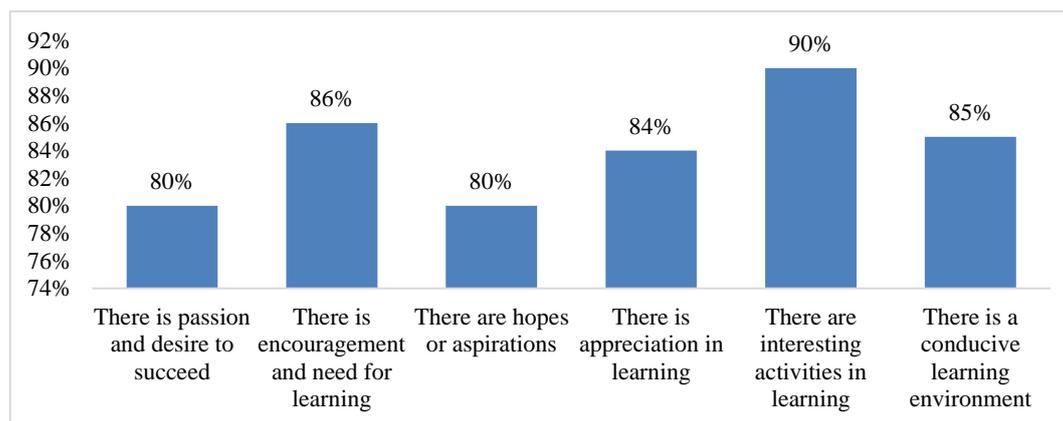
Figure 2. Percentage of Final Condition Motivation Results

Base on Figure 2, student learning motivation which is influenced by indicators of desire and desire to succeed consists of 3 sub-indicators, namely: (a) being present on time (b) not giving up quickly, (c) being responsive to questions asked. The initial motivation of students in the first indicator, namely the desire and desire, was successfully obtained at 80%. Student learning motivation which is influenced by indicators of encouragement and need for learning consists of 2 sub-indicators, namely: (a) discipline in learning stated and (b) willingness to learn. Students' initial motivation in the second indicator, namely the encouragement and need for learning, was successfully obtained at 86%.

Discussion

Student learning motivation which is influenced by indicators of encouragement and need for learning consists of 2 sub-indicators, namely: (a) desire to achieve and (b) persistence in learning. The initial motivation of students in the third indicator, namely the hope or aspirations for the future, was successfully achieved at 80%. Student learning motivation which is influenced by the indicator of rewards in learning consists of 2 sub-indicators, namely: (a) rewards and punishments listed and (b) receiving praise. Students' initial motivation in the fourth indicator, namely the presence of rewards in learning, was successfully obtained by 84% (Albrecht & Karabenick, 2018; Kumar & Nanda, 2019). Student learning motivation which is influenced by indicators of interesting activities in learning consists of 2 sub-indicators, namely: (a) creativity in delivering material and (b) interesting learning media. The initial motivation of students in the fifth indicator, namely the existence of interesting activities in learning, was successfully obtained by 90% (Anggraini et al., 2020; Brick et al., 2021). Student learning motivation which is influenced by indicators of a conducive learning environment consists of 2 sub-indicators, namely: (a) the atmosphere of the learning place and (b) class conditions. Students' initial motivation in the sixth indicator, namely the existence of a conducive learning environment, was successfully obtained at 85%.

From the implementation of learning using the Kahoot game, it turns out that it can not only influence students' final abilities, but also foster good motivation in students as evidenced by the students' posttest results which are also proven to have increased and can be seen from the final score after being given treatment using the game. kahoot education (Rafika Andari, 2020; Asniza et al., 2021). This is in line with research state that Kahoot learning media provides students with comfort and activity in learning (Sulistiawati et al., 2023; Wigati, 2019). Students are more enthusiastic during the learning process with Kahoot media, of course learning becomes more fun if it is supported by using Kahoot media to play quizzes. And finding from other research shows that through the Kahoot application, the evaluation process can be enjoyable because the Kahoot application is a game that appears on the learning platform used in educational institutions so it is very suitable for use in the era of the industrial revolution 4.0 which is the era of everything. Technology (R Andari, 2023; Rojabi et al., 2022).

During the learning activities in the experimental class, there was something that the students considered interesting about Kahoot, namely that all students took an active role in participating in the learning activities. There is a special pride for students when they are able to answer a quiz correctly. From observations during the research, in general Kahoot is effective in influencing dynamics and making the learning atmosphere more enjoyable. This is in line with research that Kahoot media will help achieve complete learning goals both cognitive, affective and psychomotor because of its attractive appearance with varied image, sound and question type effects which make students feel that learning is fun (Alfansyur & Mariyani, 2019; Licorish et al., 2018; Warsihna et al., 2019). The learning process using Kahoot is able to attract students' attention to focus on what is in front of the class. So the class atmosphere becomes easier to control.

Student learning motivation which is influenced by indicators of encouragement and need for learning consists of 2 sub-indicators, namely: (a) discipline in learning stated and (b) willingness to learn. Students' initial motivation in the second indicator, namely the encouragement and need for learning, was successfully obtained at 78%. Student learning motivation which is influenced by indicators of encouragement and need for learning consists of 2 sub-indicators, namely: (a) desire to achieve and (b) persistence in learning. The initial motivation of students in the third indicator, namely the hope or aspirations for the future, was successfully obtained by 75% (Li & Zheng, 2017; Saripudin et al., 2018). Student learning motivation which is influenced by the indicator of rewards in learning consists of 2 sub-indicators, namely: (a) rewards and punishments listed and (b) receiving praise. Students' initial motivation in the fourth indicator, namely the presence of rewards in learning, was successfully obtained by 65%. Student learning motivation which is influenced by indicators of interesting activities in learning consists of 2 sub-indicators, namely: (a) creativity in delivering material and (b) interesting learning media (Kusumawati et al., 2021; Pinem & Rahmawan, 2023). Students' initial motivation in the fifth indicator, namely the existence of interesting activities in learning, was successfully obtained at 70%. Student learning motivation which is influenced by indicators of a conducive learning environment consists of 2 sub-indicators, namely: (a) the atmosphere of the learning place and (b) class conditions. The initial motivation of students in the sixth indicator, namely the existence of a conducive learning environment, was successfully achieved at 80%.

The results of this study indicate that the use of Kahoot as a game-based learning media can increase students' learning motivation. This implies that teachers can utilize interactive technology such as Kahoot to create a more interesting and interactive learning environment. Thus, game-based learning methods can be an effective tool in maintaining students' interest and involvement in the learning process. This study may only involve a sample of students from one particular school or class, so the results may not necessarily be generalizable to a wider population. To obtain more representative results, further research needs to involve more and more varied subjects from various school backgrounds.

4. CONCLUSION

Based on the research results, it can be concluded that Kahoot media is an effective learning media that is able to improve student learning outcomes. So this research becomes an argument that can strengthen and support and prove that the use of Kahoot media can influence student learning motivation so that it will influence learning outcomes. Learners show a higher level of engagement during learning with Kahoot, as they engage in interactive quizzes and get immediate feedback. Using Kahoot learning media can increase students' motivation and interest in learning, by providing an interactive and interesting learning experience. The implication of this research is that the use of Kahoot learning media can be applied in the context of Indonesian language learning at SD Inpres 5/81 Bana and other schools to increase learning effectiveness and strengthen students' learning motivation. The suggestion from this research is that the use of technology, especially the Kahoot educational game in the learning process, can be used in other materials as learning media in learning evaluation and as educators in the modern era, they should be able to master all the competencies that educators must have and be able to master technology in learning.

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