

The Influence of Quizizz Media on Students' Learning Motivation in PAI Subjects at Vocational High School

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Abstract	
<p>The purpose of this study is to examine the impact of using Quizizz as a learning medium on students' motivation in vocational high schools. This research employs a quantitative approach with an experimental method using a pre-test and post-test design. Two tests were conducted on the students: one using conventional teaching methods and the other using Quizizz. To collect the necessary data, the study used a research instrument in the form of a questionnaire measured by a Likert scale. Data analysis was conducted using the SPSS application through an Independent Sample T-test. The study involved a sample of 13 students. The results of the analysis showed a significance value of 0.018. Since this value is less than 0.05, it can be concluded that the use of Quizizz has a significant effect on increasing students' learning motivation. In conclusion, Quizizz can be an effective tool to enhance student motivation in Islamic Religious Education subjects at the senior high school and vocational school levels.</p>	<p>Keywords: Islamic Religious Education; Learning Motivation; Learning Media.</p>

Abstrak	
<p>Tujuan dari penelitian ini adalah untuk mengetahui adanya pengaruh media <i>Quizizz</i> terhadap peningkatan motivasi belajar siswa SMK. Penelitian ini menggunakan pendekatan kuantitatif dengan metode eksperimen (<i>uji coba</i>) dengan menggunakan <i>pre-test and post-test design</i> yakni dengan melakukan dua kali test terhadap siswa dengan menggunakan metode konvensional dan menggunakan <i>quizizz</i>. Untuk mengumpulkan data yang diperlukan, dalam penelitian ini memakai instrument penelitian berupa kuesioner (angket) dengan pengukuran skala linkert. Sedangkan analisis data dilakukan dengan menggunakan aplikasi SPSS melalui uji <i>Independet sampel T-test</i>. Hasil penelitian dideskripsikan berdasarkan data yang didapat dari kuesioner dengan menggunakan sampel penelitian yang berjumlah 13 siswa. Dalam penelitian ini menunjukkan bahwa nilai signifikansi sebesar 0,018. Dan nilai signifikansi tersebut yakni 0,018 < 0,05, artinya penggunaan <i>quizizz</i> memiliki pengaruh terhadap peningkatan motivasi belajar siswa. kesimpulannya adalah bahwa <i>Quizizz</i> dapat di gunakan untuk meningkatkan motivasi belajar siswa pada matapelajaran PAI di</p>	<p>Kata Kunci: Pendidikan Agama Islam; Motivasi Belajar; Media Pembelajaran</p>



1. Introduction

Students' learning motivation can be enhanced when the learning process is conducted using engaging and enjoyable methods.(Lupiyoadi, 2014)(ZASTI, 2016) For instance, the use of interactive learning media such as Quizizz or Kahoot can increase students' enthusiasm in participating in lessons. Moreover, teachers who recognize students' efforts—either through praise or additional grades—can further boost their motivation to learn.(Sulastri Nengsih et al., 2023) A positive and communicative classroom environment also helps students feel more comfortable, encouraging them to learn and actively participate.Learning motivation needs to be maintained and improved, as it serves as the driving force that underlies and stimulates learning behavior. This aligns with the research conducted by Yogi Fernando, which emphasizes the importance of learning motivation in influencing students' academic performance. (Yogi Fernando et al., 2024)

The subject of Islamic Religious Education (PAI) is often perceived as less appealing, particularly by students at the upper secondary level, such as those in vocational high schools (SMK). It is commonly viewed as repetitive and unengaging. Despite this perception, PAI holds a vital role in nurturing students' character, moral development, and spiritual values. (Puspitasari et al., 2022) As such, there is a strong need for innovative teaching strategies to foster greater student interest and engagement with the subject matter. (Arifin, 2013)

As previously mentioned, instructional media plays a vital role as a bridge to enhance students' understanding and interest in learning(Wulandari et al., 2023), particularly in Islamic Religious Education (IRE). According to Hamid Abi et al. (Li, 2020). learning media acts as an intermediary in the educational process by stimulating students' thoughts, emotions, and attention, allowing them to participate actively in learning activities. One potential alternative is the use of interactive digital platforms based on quizzes, such as Quizizz. Quizizz is a learning platform that incorporates gamification principles, featuring real-time scoring, leaderboards, engaging visual themes, and automatic feedback on students' responses (Al Azmi et al., 2023) The integration of Quizizz into classroom instruction creates a more dynamic, competitive, and enjoyable learning experience. Rather than engaging passively, students become more actively involved as they enthusiastically respond to questions due to the sense of challenge and fun. Additionally, teachers can monitor students' performance and progress in real time through the platform's built-in analytics. This study adopts a quantitative approach using an experimental method with a one-group pre-test and post-test design. The research was conducted on a population of 54 students, from which 13 were selected as the sample. Each participant was given

two tests: one before and one after the implementation of Quizizz in the learning process. Data were collected using a questionnaire instrument and analyzed using the Independent Sample T-Test with SPSS version 17 for Windows. Given these considerations, the aim of this study is to examine the effect of using Quizizz on students' learning motivation in Islamic Religious Education at the vocational high school (SMK) level. Previous studies have supported the effectiveness of Quizizz in enhancing student motivation. For example, research conducted by Ahmad Nuril Falah (2022) found that Quizizz had a significant impact on the motivation of ninth-grade students at SMPN 13 Surabaya in learning IRE. Similarly, A. Muslim Rasyid's research revealed that Quizizz influenced 97% of students' learning interest in class X at SMAN 1 Pangkep, while the remaining 3% was influenced by other factors. (Muslim Rasyid, 2023).

Similarities and differences between this study and the previous studies mentioned above are presented in Table 1.1.

Table 1.1: Similarities and Differences with Previous Studies

No	Name & Title	Similarities	Differences
1	Ahmad Nuril Falah "Efektivitas Media Quizizz dalam Usaha Meningkatkan Motivasi Belajar Mata Pelajaran Pendidikan Agama Islam dan Budi Pekerti dan Peserta Didik di SMPN 13 Surabaya" 2022	All studies examine the influence of Quizizz on students' learning motivation in the Islamic Religious Education (IRE) subject.	The study conducted by A. Nuril Falah was carried out at the junior high school level (SMP), whereas the present study was conducted at the senior high school level. (SMA)
2	Muslim Rasyid, Ahmad "Pengaruh Penggunaan Media Aplikasi Quizizz Terhadap Minat Belajar Peserta Didik Pada Mata Pelajaran Pendidikan Agama Islam Kelas X Di SMAN 1 Pangkep" 2023	Both studies examine the influence of Quizizz and were conducted at the senior high school level	The study by Ahmad Muslim Rasyid employed a descriptive-analytical method through survey research with a correlational technique, whereas this study uses a quantitative research method with an experimental design in the form of a One Group Pretest-Posttest. Moreover, the present study focuses more specifically on students' learning motivation.
3	Ade Irma Febrianty "Pengaruh Penggunaan Quizizz Terhadap Motivasi Dan Hasil Belajar Peserta Didik Kelas 6 Sdn Semanan 08 Pagi Jakarta Barat Pembelajaran Jarak Jauh 2021" 2021 (Ilmu & Febrianty, 2021)	Both studies discuss the influence of Quizizz on students' motivation and learning outcomes, and both use a quantitative experimental method with a one-group pretest-posttest design.	The study conducted by Ade Irma F. examined both students' learning motivation and academic achievement, using the Wilcoxon test for hypothesis testing. In contrast, the present study focuses more specifically on learning motivation, applies the T-test for hypothesis testing, and is conducted at the senior

			high school level.
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This study holds significant urgency because its findings have the potential to make a positive contribution to the field of education, particularly in efforts to enhance students' learning motivation, especially in the subject of Islamic Religious Education.

2. Methods

Research methodology refers to the scientific procedures employed by researchers to collect data aimed at addressing the formulated research problems (Abdullah, 2015). This study utilizes a quantitative approach with an experimental method, employing a One Group Pre-test and Post-test Design. (Sugiyono, 2022) The research design is illustrated in Table 2.1. The primary objective of this study is to determine whether the use of the Quizizz media has an effect on the learning motivation of Islamic Religious Education (IRE) students at SMK Mambaul Ulum Pandaan.

Table 2.1 The research design used is illustrated in Table 1.2.

Design	Description:
$O_1 \times O_2$	O_1 = Pre-test (before the use of Quizizz media) X = Treatment (learning using Quizizz media) O_2 = Post-test (after the use of Quizizz media)

Based on this design, the study was conducted on a single sample group. Each respondent was given a learning motivation questionnaire twice: once before and once after the implementation of Quizizz media in IRE learning.

This research was carried out at SMK Mambaul Ulum Pandaan on October 22, 2024. The population of this study consisted of all students at SMK Mambaul Ulum Pandaan, totaling 54 students. The population used is presented in Table 2.2.

Table 2.2 Population Size of SMK Mambaul Ulum Pandaan

Class	Number Of Student
X	15 Student
XI	14 Student
XII	25 Student
Total	54 Student

The research sample consisted of 13 students selected using probability sampling with the simple random sampling method. This technique gives all members of the population an equal chance of being randomly chosen as samples, without considering strata within the population. There are two variables in this study: the independent variable (X), which is the use of Quizizz media in learning, and the dependent variable (Y), which is students' learning motivation in the Islamic Religious Education (IRE) subject.

Data were collected using a Likert scale questionnaire to measure students' learning motivation. The questionnaire was administered both before and after the learning process using the Quizizz media.

The steps of this research are as follows:

- 1) Conduct learning using the conventional method (lecture).
- 2) Administer the learning motivation questionnaire (pre-test) to the respondents.
- 3) Conduct learning using the digital Quizizz media.
- 4) Re-administer the learning motivation questionnaire (post-test) to the same respondents.

In this study, the data collected were analyzed using SPSS 17 for Windows with the Independent Sample T-Test technique. The criteria for hypothesis testing are as follows :

- 1) If the significance value (Sig.) < 0.05 , then H_a is accepted and H_0 is rejected, meaning there is a significant effect of using Quizizz media on students' learning motivation.
- 2) Conversely, if the Sig. value > 0.05 , then H_a is rejected and H_0 is accepted, meaning there is no significant effect from the use of the media.

3. Results and Discussion

The results of this study were obtained through the analysis of questionnaire data regarding students' learning motivation toward Islamic Religious Education (PAI) before and after the use of the Quizizz application. Data collected from 13 respondents were then processed using the SPSS software.

Table 3.1 shows an increase in the average score of students' learning motivation, from 33.92 before the use of Quizizz to 37.54 after its use. This increase indicates that the use of Quizizz has a positive impact on students' learning motivation

Table 3.1. Descriptive Statistics Before and After the Use of Quizizz

Statistic	before Quizizz	After Quizizz
N (Valid)	13	13
Mean	33.92	37.54
Std. Deviation	1.256	4.977
Minimum	30	31
Maximum	35	47

To test the significance of the difference, an Independent Sample T-test was conducted. Based on the results, a significance value of 0.018 ($p < 0.05$) was obtained, indicating that there is a significant difference in students' learning motivation before and after the use of Quizizz.

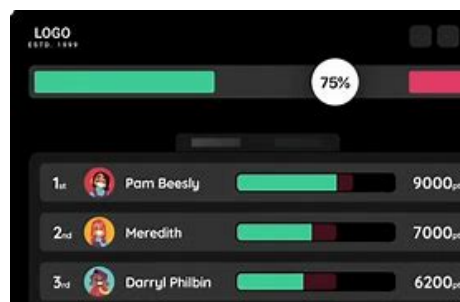
"Table 3.2 Results of the Independent Sample T-test"

Test	value
Sig. (2-tailed)	0.018

Test	value
Mean Difference	-3.615
Std. Error Difference	1.424
Confidence Interval	[-4 to -0.677]

These results support the hypothesis that the use of Quizizz has an effect on students' learning motivation. Quizizz offers features such as a leaderboard (as shown in Figure 3.1), interactive themes, background music, and a point system, all of which help create a competitive and enjoyable learning atmosphere. This, in turn, indirectly enhances students' enthusiasm for participating in lessons.

Figure 3.1. Quizizz Leaderboard Feature



This study demonstrates that the Quizizz application makes a significant contribution to enhancing students' motivation to learn Islamic Religious Education (PAI) at SMK Mambaul Ulum Pandaan. These findings are consistent with the theory of learning motivation, which states that an enjoyable and interactive learning environment can stimulate students' intrinsic drive to learn more effectively (Slameto, 2010)

These findings are also supported by the research of Ahmad Nuril Falah (2022), who concluded that the use of Quizizz increases students' motivation to learn Islamic Religious Education (PAI) at SMPN 13 Surabaya. Similarly, Muslim Rasyid (2023) found that 97% of students experienced an increase in learning interest after using Quizizz. Rizka Medianto (2023) also confirmed that this application has a significant effect on students' learning outcomes at SMPN 189 Jakarta. Moreover, conventional methods in teaching Islamic Religious Education (PAI) have often been perceived as boring and less engaging. Therefore, the implementation of gamification-based applications like Quizizz presents an innovative solution that introduces a fresh dynamic to the PAI learning process. Through this approach, students not only become more active but also feel appreciated for every achievement they attain in the quizzes.

In the context of Islamic Education, the increase in learning motivation through Quizizz not only impacts cognitive aspects but also helps shape attitudes of discipline, responsibility, and the spirit of competing in doing good deeds, in accordance with the principle of *fastabiqul khairat* in the Qur'an (QS. Al-Baqarah:

148). This demonstrates that digital learning media innovations can become an integral part of programs aimed at strengthening Islamic values in schools."

The novelty of this study lies in the integration of gamification-based technology with Islamic Religious Education (PAI) at the vocational high school (SMK) level, where the majority of students are male and tend to prefer visual and interactive approaches. Thus, Quizizz serves not only as a teaching aid but also as a more effective and contextual educational da'wah medium.

The implications of this program indicate that the use of digital media such as Quizizz in teaching Islamic Religious Education (PAI) can have a positive impact on students' learning enthusiasm and, indirectly, improve the quality of Islamic education in vocational school settings

4. Conclusion

Based on the results of quantitative data analysis using the Independent Sample T-test, this study proves that there is a significant effect of using Quizizz-based learning media on improving students' motivation to learn Islamic Religious Education (PAI) at SMK Mambaul Ulum Pandaan. This is evidenced by the significance value of $0.018 < 0.05$, which means the alternative hypothesis (H_a) is accepted and the null hypothesis (H_0) is rejected. Thus, these findings confirm the initial hypothesis that the use of Quizizz media can significantly enhance students' learning motivation. The novelty of this research lies in the application of gamification-based technology within the context of PAI instruction at the vocational education level, which theoretically strengthens both constructivist and behaviorist perspectives in contemporary Islamic education.

The theoretical contribution of this study enriches Islamic pedagogical discourse by introducing the use of game-based technology as a medium to reinforce religious motivation and students' enthusiasm for learning. This study also shows that the integration of interactive digital technology can play a strategic role in fostering learning interest in subjects traditionally perceived as theoretical and normative. Therefore, it is recommended that PAI educators consider the use of interactive media such as Quizizz in the teaching process, as a methodological adaptation to the characteristics of today's digital generation and to optimize both affective and cognitive learning outcomes.

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