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THE EFFECTIVENESS OF THE GAMIFICATION-BASED JOYFUL LEARNING APPROACH IN IMPROVING *ASMAUL HUSNA* UNDERSTANDING

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Abstract: This study aimed to analyze the effectiveness of gamification-based Joyful Learning in improving the understanding of *Asmaul Husna*. This study used a quantitative approach with a quasi-experimental design of the non-equivalent control group type. The subjects of the study were 62 grade VII students at one of the Deli Serdang State Junior High Schools which were divided into experimental and control classes. Data were obtained through comprehension tests (pre-test and post-test), motivation questionnaires, and observations. The results showed that the average post-test score of the experimental class (82.3; SD = 6.4) was higher than the control class (74.1; SD = 7.1). The motivation score of students in the experimental class (M = 46.3) was also higher than that of the control class (M = 42.2). Independent t-tests showed significant differences ($p < 0.05$). These findings proved that gamification-based Joyful Learning was effective in increasing students' understanding and learning motivation. Although limited in the number of samples and time, this study opened up opportunities for the development of gamification in islamic religious education learning.

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INTRODUCTION

Understanding *Asmaul Husna* is one of the important goals in Islamic Religious Education (IRE) at the junior high school level (Hasfiana, 2025; Siregar et al., 2025). *Asmaul Husna* not only serves as memorized theological material, but also as a source of moral and spiritual values that play a role in the formation of students' character, such as honesty, compassion, responsibility, and justice (Doris M. & Brennan, 2025). Therefore, *Asmaul Husna's* learning is ideally able to develop an understanding of meaning and internalize values in students' daily lives (Luo, 2021; Othman et al., 2024).

However, various findings in the field showed that students' understanding of *Asmaul Husna* is still relatively low. Learning tended to be oriented towards memorizing the names of *Asmaul Husna* without being accompanied by a deepening of their meaning and contextual relevance. As a result, students were less able to associate *Asmaul Husna's* values with real behavior, and their motivation to study this material also tends to decrease. This condition was a serious challenge amid the need for contextual, fun, and adaptive religious learning in the digital era.

One of the factors that caused this condition is the dominance of the use of conventional methods, such as lectures and memorization, in the learning of *Asmaul Husna*. This approach was relatively effective for information mastery, but it did not encourage active student involvement and does not support the process of internalizing values in depth. In addition, the less varied learning approach made the learning process monotonous and less in accordance with the characteristics of the current digital generation.

The Joyful Learning approach offered learning alternatives that emphasized a fun, participatory, and student-centered learning atmosphere (Habibi et al., 2025; Rosmani et al., 2022). When combined with gamification through the use of game elements such as points, challenges, and rewards this approach had the potential to increase student motivation, student engagement, and memory of learning materials (Çınar et al., 2022; Feriyanto & Anjariyah, 2024; Tursunbayevich, 2022). The combination of Joyful Learning and gamification is considered relevant to answer the challenges of IRE learning in the digital era.

A number of previous studies have shown that Joyful Learning and gamification are effective in improving student motivation and learning outcomes (Hellín et al., 2023; Triantafyllou et al., 2025; Yu, 2022; Aisyah et al., 2025). However, most of these studies still focused on general subjects or IRE material in general. Studies from Ashari et al. (2023); Hishamuddin et al. (2024) & Neoh (2022) that specifically examined the effectiveness of gamification-based Joyful Learning in *Asmaul Husna's* learning, especially at the junior high school level, are still very limited.

Based on these gaps, this study had an urgency to test a learning approach that not only improved cognitive aspects, but also supports contextual understanding of *Asmaul Husna's* values. The novelty of this research lied in the application of gamification-based Joyful Learning specifically in *Asmaul Husna's* material in the context of IRE at the junior high school level, which has not been studied empirically so far. Accordingly, this study aimed to analyze the effectiveness of the gamification-based Joyful Learning approach in improving the understanding of *Asmaul Husna* in junior high school students. The focus of the research was directed at increasing students' understanding of the meaning of *Asmaul Husna* as the foundation for the formation of religious attitudes and behaviors in daily life.

RESEARCH METHOD

The type of research used was quantitative with a quasi-experimental design, precisely the Non-Equivalent Control Group Design model. This study involved two classes, namely Grade VII-A and VII-B, at SMP Negeri 4 Lubuk Pakam, Deli Serdang Regency, with a total of 62 students. A purposive sampling technique was employed in selecting the classes. Therefore, Grade VII-A was designated as the experimental group taught using a gamification-based Joyful Learning approach, while Grade VII-B served as the control group and was taught using conventional methods. The research data was sourced from the results of the student understanding test of *Asmaul Husna*, the learning motivation questionnaire, and the results of observations of student involvement during the learning process.

Based on the research objectives and the quasi-experimental design employed in this study, the hypotheses were formulated as follows:

H_0 (Null Hypothesis): There is no significant difference in students' understanding of *Asmaul Husna* between students taught using the gamification-based Joyful Learning approach and those taught using conventional methods.

H_1 (Alternative Hypothesis): There is a significant difference in students' understanding of *Asmaul Husna* between students taught using the gamification-based Joyful Learning approach and those taught using conventional methods.

H_2 (Alternative Hypothesis): Students taught using the gamification-based Joyful Learning approach demonstrate significantly higher learning motivation than those taught using conventional methods.

Data collection techniques were carried out through pre-tests to measure initial knowledge, post-tests to measure comprehension after learning, questionnaires to determine the level of student motivation to learn, and observation to observe student involvement in the learning process. The data obtained was analyzed with two approaches. First, descriptive analysis is used to describe the average, standard deviation, percentage, and score trends of each variable, including learning motivation and student engagement. Second, inferential analysis was used to test the research hypothesis, including normality and homogeneity tests, paired sample t-tests to measure the increase in pre-test and post-test scores in each group, and independent sample t-test to compare results between the experimental group and the control group. With these two approaches, the results of the analysis can provide a comprehensive picture while testing the effectiveness of gamification-based Joyful Learning on students' understanding of *Asmaul Husna*.

RESULT AND DISCUSSION

Result

Description of Student Comprehension Data

This descriptive analysis was conducted to describe students' initial and final levels of understanding of *Asmaul Husna* in both the experimental and control groups prior to hypothesis testing.

Table 1. Descriptive Statistics of Asmaul Husna's Comprehension

Group	N	Range	Min	Max	Mean	Std. Deviation
Control – Pre-test	31	40	35	75	52.6	11.2
Control – Post-test	31	45	40	85	62.3	12.4
Experiment – Pre-test	31	70	30	100	66.8	20.6
Experiment – Post-test	31	65	40	100	87.4	17.4

Source: The jamovi project (2024). jamovi. (Version 2.6) [Computer Software]

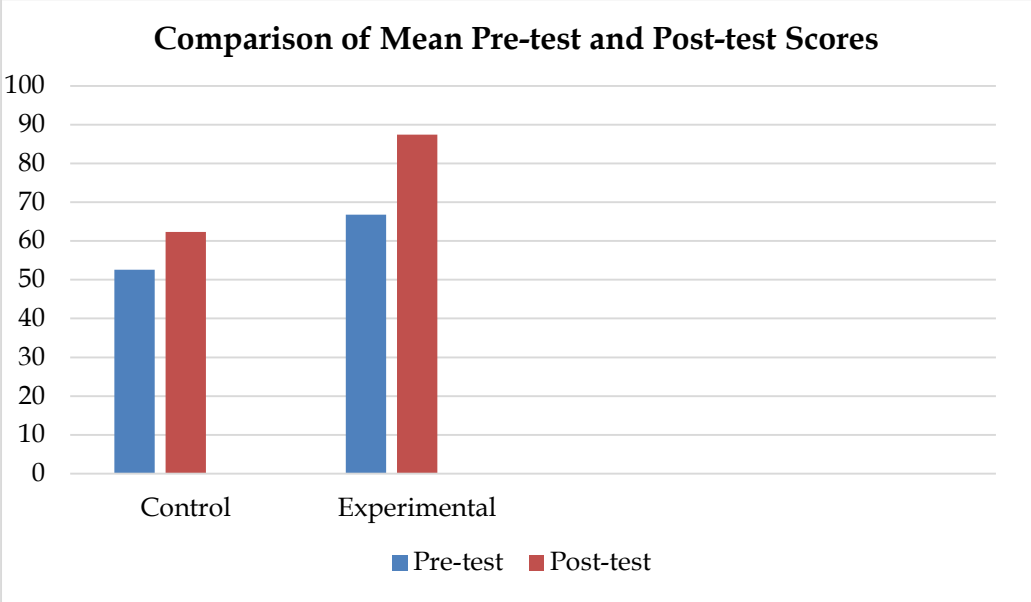

Figure 1. Comparison of Mean Pre-test and Post-test Scores

The data in Table 1 showed that the control group experienced an increase in the mean score from the pre-test (M = 52.6; SD = 11.2) to the post-test (M = 62.3; SD = 12.4). However, the increase in the standard deviation indicated that students' learning outcomes were uneven, suggesting that the conventional teaching method benefited only some students.

In contrast, the experimental group demonstrated a more substantial improvement. The mean pre-test score increased from 66.8 (SD = 20.6) to 87.4 (SD = 17.4) in the post-test. The decrease in standard deviation indicated a more even distribution of learning outcomes, suggesting that the gamification-based Joyful Learning approach benefited most students rather than only a few individuals.

Analysis Prerequisites Test

This test was conducted to ensure that the data met the assumptions required for parametric statistical analysis.

Table 2. Results of Normality and Homogeneity Tests

Test Type	*Group / Variable*	*Sig. (p-value)*	*Conclusion*
Shapiro–Wilk	Control Group	0.186	Normally distributed
	Experimental Group	0.207	Normally distributed
Levene's Test	Post-test scores	0.237	Homogeneous variance

The Shapiro–Wilk normality test showed that the data from both the control group (p = 0.186) and the experimental group (p = 0.207) were normally distributed. Furthermore, Levene's homogeneity test produced a significance value of 0.237 (p > 0.05), indicating that the variances between the two groups were homogeneous. Therefore, parametric statistical tests were appropriate for further analysis.

Learning Effectiveness in Each Group

A paired-sample t-test was conducted to examine whether there were significant differences between pre-test and post-test scores within each group.

Table 3. Paired Sample T-Test Results

Group	T	Df	Sig. (2-tailed)
Control	-2.15	30	0.039
Experiment	-5.99	30	<0.001

Source: The jamovi project (2024). jamovi. (Version 2.6) [Computer Software].

The results showed that the control group experienced a significant improvement in comprehension scores (t = -2.15; p = 0.039). This indicated that conventional teaching methods contributed to students' understanding, although the improvement was relatively limited. Meanwhile, the experimental group showed a much stronger improvement (t = -5.99; p < 0.001). This finding demonstrated that the gamification-based Joyful Learning approach was more effective in enhancing students' understanding of *Asmaul Husna*.

Comparison of Effectiveness Between Groups

An independent-sample t-test was conducted to compare the post-test scores of the experimental and control groups.

Table 4. Independent Sample T-Test Test Results (Post-test)

Variable	Levene's Test (F	Sig.)	t	Df	Sig.(2 tailed)
Post-test	1.43	0.237	1.25	60	0.216

Source: The jamovi project (2024). jamovi. (Version 2.6) [Computer Software].

The results indicated that the experimental group achieved a higher mean post-test score (M = 87.4) compared to the control group (M = 62.3). Statistically, this difference was not significant (t = 1.25; p = 0.216). However, the magnitude of improvement observed in the experimental group suggested meaningful

practical benefits of the gamification-based Joyful Learning approach in educational settings.

Student Learning Motivation

This analysis aimed to describe differences in students' learning motivation between the experimental and control groups after the instructional intervention.

Table 5. Descriptive Statistics of Students' Learning Motivation

Group	N	Mean	Median	Min	Max	Std. Deviation
Control	31	42.2	40.0	36	50	S 3.55
Experiment	31	46.3	48.0	38	50	4.19

Source: The jamovi project (2024). jamovi. (Version 2.6) [Computer Software].

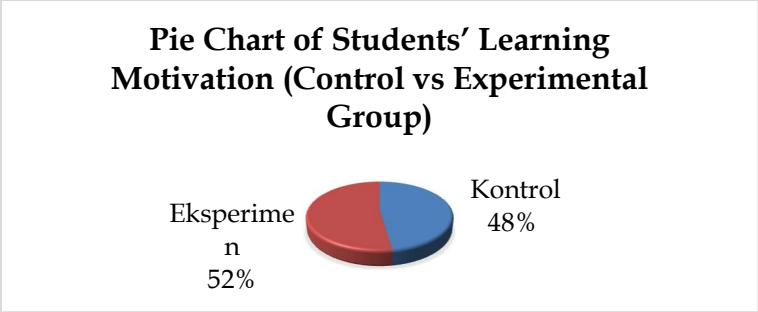

Figure 2. Pie Chart of Students' Learning Motivation (Control vs Experimental Group)

The experimental group obtained a higher mean motivation score (M = 46.3) compared to the control group (M = 42.2). Most students in the experimental group were categorized as having high learning motivation, whereas several students in the control group were classified as having moderate motivation. These results indicated that the gamification-based Joyful Learning approach was more effective in fostering students' learning motivation.

Discussion

This discussion analyzed the relationship between the research findings and the research questions. Based on relevant literature, this study showed that both conventional learning and gamification-based Joyful Learning can both increase students' understanding of *Asmaul Husna*. However, the improvement in the experimental group was much more significant, with the average post-test reaching 87.4 compared to the control group which was only 62.3. In addition, the distribution of student scores in the experimental group was more even, shown by a decrease in standard deviation after treatment. This meant that innovative learning models not only improve individual understanding, but also help to equalize learning outcomes among students. The learning motivation questionnaire also showed that the experimental group obtained a higher motivation score (46.3) than the control group (42.2). So it can be concluded that gamification has a double effect: improving students' cognitive understanding as well as affective motivation.

This difference in results was closely related to the learning method used. In the control class, teachers still used a conventional approach that emphasizes memorization and lectures. This pattern led to low student engagement, and students become passive recipients of knowledge. In contrast, experimental classes with gamification-based Joyful Learning engaged students in challenging gaming activities, rewards, and social interactions (Aljamaan et al., 2025; Parua, 2023; Shatila et al., 2024). Gameplay elements such as points, leaderboards, and badges provided immediate feedback that fosters a sense of accomplishment and intrinsic motivation (Paľová & Vejačka, 2022; Siu- et al., 2022; Yasid, 2025). Psychologically, this was in line with the theory of Self-Determination, where the need for competence, autonomy, and connectedness can be met through an enjoyable learning experience (Andayanie et al., 2025; B & Zourmpakis, 2023). Thus, the main cause of the increased understanding and motivation of students in the experimental group was that this learning model provided a learning experience that is relevant to the characteristics of today's digital generation.

The findings of this study were in line with various previous studies. For example, gamification increased the learning motivation of high school students (Coelho et al., 2025; Jaramillo-Mediavilla et al., 2024), while Jeet & Pant (2023), showed a significant increased in learning outcomes through game-based digital media. Research by Aliwy & Alhusseini (2022) & No et al. (2023), It also emphasized that gamification can increase intrinsic motivation and knowledge retention when designed with the right game elements (Rahmi et al., 2025). However, this research made a new contribution, especially in the context of Islamic Religious Education. While previous research has focused more on exact subjects, this study proved that gamification can also strengthen spiritual understanding and internalization of values. Thus, this study expanded the discourse on the application of gamification, not only in the academic cognitive realm, but also in the affective realm and religiosity of students.

This is evidenced by the lower standard deviation in the experimental group post-treatment, indicating that gamification had the potential to level the playing field among students, reducing disparities in learning performance. Furthermore, the higher motivation score in the experimental group supports the argument that gamification fostered greater student engagement, which likely drived the cognitive and affective improvements observed. Therefore, the causality between gamification and the observed gained in both understanding and motivation was evident, reinforcing the effectiveness of this learning model in achieving holistic student development.

The implications of this finding were quite broad, both pedagogically and spiritually. From a pedagogical perspective, the gamification-based Joyful Learning approach allowed teachers to present more participatory and fun learning. So that students can more easily understand the meaning of *Asmaul Husna* and are not burdened by mere memorization. From the spiritual side, the motivation that grew in the learning process allows *Asmaul Husna's* values to be not only understood cognitively, but also internalized into daily attitudes and behaviors. Thus, this model contributed to the achievement of the main goal of

Islamic Religious Education, which was to form a complete religious personality. Another consequence that can be observed was the equal distribution of learning outcomes, where students with low abilities were able to follow the learning process well because they are helped by an adaptive game system. This gave meaning to transformation: religious education was no longer seen as something boring, but as a fun space for the exploration of divine values.

CONCLUSION

This study demonstrated that the gamification-based Joyful Learning approach is more effective than conventional methods in improving junior high school students' understanding of *Asmaul Husna* and enhancing their learning motivation. The findings suggested that meaningful and enjoyable learning experiences not only strengthen students' conceptual understanding but also support the internalization of spiritual values, indicating that Islamic Religious Education should move beyond rote memorization toward more engaging and student-centered approaches. Scientifically, this study contributed to the growing body of literature on gamification by extending its application to the context of religious education, particularly in fostering both cognitive and affective learning outcomes. Practically, the results implied that IRE teachers were encouraged to adopt creative, technology-enhanced instructional strategies to create more participatory and motivating learning environments. Despite these contributions, this study was limited by its relatively small sample size, the focus on a single school, and the short duration of the intervention, which may affect the generalizability of the findings. Therefore, future research was recommended to involve larger and more diverse samples, longer intervention periods, and different educational levels to further examine the effectiveness of gamification-based Joyful Learning in Islamic Religious Education.

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