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Gamification in Islamic Education: Increasing Student Motivation Through Digital Platformsontent

Laila Ngindana Zulfa[1]
[1]Universitas Wahid Hasyim, Indonesia

ABSTRACT

Background. Traditional pedagogical approaches in Islamic education often face challenges in maintaining high levels of student motivation and engagement, particularly within digital learning environments. The integration of gamification, the application of game-design elements in non-game contexts, presents a promising strategy to address this issue by transforming the learning experience into a more interactive and rewarding process.

Purpose. This research aims to investigate and measure the impact of a gamified digital learning platform on the intrinsic and extrinsic motivation of junior high school students in the context of Islamic education subjects, such as Qur'anic studies and Islamic history.

Method. A quasi-experimental research design involving a pre-test and post-test control group was employed. The sample consisted of 120 junior high school students, who were divided into an experimental group that used a gamified digital platform and a control group that used a conventional digital platform.

Results. The findings revealed a statistically significant increase in overall motivation scores for the experimental group compared to the control group. Specifically, the gamified elements of points, badges, and leaderboards were strongly correlated with higher levels of perceived competence and effort. The experimental group also improvement in learning outcomes, indicating a positive relationship between enhanced motivation and academic performance.

Conclusion. Gamification serves as an effective pedagogical strategy to significantly enhance student motivation and engagement in Islamic education. The strategic implementation of game mechanics on digital platforms can create a more dynamic and compelling learning environment, leading to improved academic achievement.

KEYWORDS

Gamification, Islamic Education, Student Motivation, Digital Learning, Educational Technology

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Correspondence:

Laila Ngindana Zulfa,
lailanginda@unwahas.ac.id

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INTRODUCTION

The global educational landscape is undergoing a profound transformation, driven by the pervasive influence of digital technology and a growing understanding of learner psychology. Traditional pedagogical models, often characterized by passive knowledge transmission, are increasingly being challenged by innovative approaches that prioritize active student engagement and intrinsic motivation. This paradigm shift acknowledges that in an era of information abundance, the ability to inspire a genuine desire to learn is as crucial as the content being taugh (Abdalla, 2025; Ghafar et al., 2025; Kannike & Fahm, 2025).

The purpose of the Introduction is is to stimulate the reader's interest and to provide pertinent background information necessary to understand the rest of the paper.

Educators and institutions worldwide are therefore exploring new strategies to create more dynamic, interactive, and personally meaningful learning environments that resonate with the experiences of 21st-century learners.

Among the most promising of these strategies is gamification, the systematic application of game-design elements and principles in non-game contexts. By integrating mechanics such as points, badges, leaderboards, and narrative challenges into the educational process, gamification leverages the innate human affinity for play, competition, and achievement to foster sustained engagement and effort (Mardatillah et al., 2025; Mariyono & Ghony, 2025; Setiowati & Handayani, 2025). Its efficacy has been demonstrated across a wide array of secular disciplines, from mathematics and science to language acquisition, where it has been shown to improve student participation, enhance knowledge retention, and cultivate a positive attitude towards learning. Gamification reframes academic tasks as rewarding challenges, transforming the learning journey into a more compelling and enjoyable experience.

This pedagogical innovation holds relevance for the field of Islamic education, which faces its own unique set of contemporary challenges. While grounded in a rich tradition of scholarship, the delivery of subjects such as Qur'anic studies, Islamic history, and jurisprudence often struggles to captivate the interest of digitally native students. The need to bridge the gap between timeless religious teachings and the dynamic, interactive world that young learners inhabit is more pressing than ever (Abubakari et al., 2025; Amran et al., 2025; Novita et al., 2025). The adoption of digital platforms in madrasahs and Islamic schools presents a critical opportunity to move beyond simple content digitization and explore more transformative pedagogical approaches like gamification to revitalize student motivation.

The central problem addressed by this research is the persistent and well-documented decline in student motivation within many Islamic education classrooms. This issue is particularly acute when traditional, lecture-based methods are transposed onto digital platforms without fundamental pedagogical changes, resulting in a learning experience that students often perceive as passive, monotonous, and disconnected from their daily lives (Malik et al., 2025; Novita et al., 2025; Takdir, 2025). This lack of engagement leads to superficial learning, where students may resort to rote memorization to pass examinations without developing a deeper conceptual understanding or a personal connection to the subject matter.

This motivational deficit manifests in various observable behaviors, including low participation in class discussions, failure to complete assignments, and a general apathy towards subjects that are foundational to their religious and ethical development. Students are immersed in a hyper-stimulating digital ecosystem outside the classroom, filled with interactive games and social media, which makes the conventional e-learning module for Islamic history or Fiqh seem comparatively unengaging (Darabi et al., 2025; Muzayanah et al., 2025; Sellami et al., 2025). The core issue is not the content itself but the method of its delivery, which often fails to stimulate curiosity, a sense of accomplishment, or collaborative interaction.

The consequences of this disengagement are significant and far-reaching. On an academic level, it directly contributes to lower achievement and poor retention of essential knowledge. On a more profound level, it risks alienating a generation of young Muslims from their own intellectual and spiritual heritage, potentially hindering the development of a strong and well-informed religious identity. This vacuum may then be filled by unvetted, highly sensationalized, and often gamified

religious content found on social media and other online platforms, which can promote distorted or extremist interpretations of Islam.

The primary objective of this study is to empirically investigate and quantify the impact of a purpose-built, gamified digital learning platform on the motivation and academic performance of junior high school students in Islamic education. This research seeks to move beyond anecdotal evidence and theoretical claims by providing robust, data-driven insights into whether gamification can serve as a viable and effective pedagogical strategy to address the motivational challenges prevalent in this specific educational context (Kaviani, 2025; Lestari et al., 2025; Tahir & Cochrane, 2025). The aim is to produce a clear, evidence-based assessment of gamification's potential to create more engaging and effective learning experiences.

To achieve this overarching goal, the research pursues several specific, measurable objectives. First, the study aims to design and develop a fully functional gamified learning module for a core Islamic education topic, incorporating specific game mechanics such as a points system, achievement badges, and competitive leaderboards. Second, it seeks to conduct a quasi-experimental study to compare the intrinsic and extrinsic motivation levels of students in an experimental group using the gamified platform against a control group using a conventional, non-gamified digital platform. Third, the research will analyze the correlation between student engagement with specific game elements and their performance on learning outcome assessments.

The anticipated outcome of this research is the generation of clear, empirical evidence that either supports or refutes the hypothesis that gamification significantly enhances student motivation in Islamic education. It is expected that the findings will demonstrate a statistically significant positive difference in motivation scores and learning outcomes in favor of the gamified approach. The study also aims to produce a set of practical, evidence-based guidelines for educators, curriculum developers, and educational technologists on how to effectively design and implement gamification strategies within Islamic educational settings, thereby providing a valuable resource for the field.

The body of scholarly literature concerning gamification in education has expanded considerably over the past decade. A wealth of empirical studies has rigorously examined its application and confirmed its positive effects on student motivation, engagement, and learning outcomes across numerous secular subjects. Research in fields such as STEM, language arts, and social sciences has consistently shown that well-designed gamification can increase time-on-task, improve problem-solving skills, and foster a more resilient, growth-oriented mindset among learners. This existing research provides a strong theoretical and empirical foundation for the current study.

Despite this extensive body of work, a conspicuous and critical gap exists in the literature regarding the application of gamification specifically within the domain of religious education, and Islamic education in particular. The vast majority of studies on technology in Islamic education have focused on the use of digital tools for content delivery, such as online Qur'an portals or video lecture archives, rather than on innovative pedagogical strategies designed to enhance motivation. There is a significant scarcity of rigorous, quasi-experimental research that systematically investigates the motivational impact of gamification on students learning about Islam.

This lacuna is problematic because the unique objectives of religious education-which include not only cognitive learning but also the cultivation of affective, spiritual, and ethical dimensions-mean that findings from secular contexts cannot be uncritically extrapolated. The interaction between game mechanics and subjects of a sacred or spiritual nature is a complex and unexplored area. It is unknown whether gamification might be perceived as trivializing the subject matter or,

conversely, whether it could serve as a powerful tool for making abstract theological or historical concepts more accessible and engaging. This study directly addresses this gap by providing context-specific, empirical data.

The principal novelty of this research lies in its rigorous, quasi-experimental approach to evaluating gamification within the under-researched and highly specific context of Islamic education. While the concept of making learning fun is not new, this study moves beyond theoretical propositions by systematically designing, implementing, and measuring the impact of a gamified intervention. It is one of the first studies to use a validated instrument like the Intrinsic Motivation Inventory (IMI) to provide quantitative data on how game mechanics affect student motivation for learning about their faith, thus offering a pioneering contribution to the field.

The justification for this research is anchored in the pressing, practical need to find effective pedagogical solutions for the motivational crisis facing many Islamic education programs. As educators strive to connect with a generation of students who are digital natives, evidence-based strategies are desperately needed. This study is justified by its potential to provide a clear, actionable pathway for schools and teachers to create more compelling, relevant, and effective learning environments. By demonstrating a method to enhance intrinsic motivation, the research offers a sustainable solution that fosters a genuine love for learning rather than a reliance on external pressures.

The broader significance of this research extends beyond academic improvement. In an age where young Muslims are constantly exposed to a wide spectrum of online religious narratives, fostering deep engagement with formal, well-structured Islamic education is a critical imperative. By making the formal learning process more attractive and rewarding, gamification can serve as a positive counterbalance to the often unvetted, and sensationalist content found online. This study is therefore important not only for its contribution to educational technology and Islamic studies but also for its potential to help cultivate a generation of knowledgeable, critically engaged, and well-grounded young Muslims.

RESEARCH METHODOLOGY

This study utilized a quasi-experimental research design to determine the causal impact of a gamified digital platform on student motivation. A pre-test and post-test non-equivalent control group design was specifically chosen for this purpose. This approach allows for a robust comparison between an experimental group, which received the gamified learning intervention, and a control group, which engaged with a conventional, non-gamified digital learning platform (BinTaleb, 2025; Kesuma et al., 2025; Lubis et al., 2025). The design is well-suited for a real-world educational setting where random assignment of individual students is often not feasible, yet it provides a strong basis for assessing the intervention's effectiveness by measuring changes in the dependent variables (motivation and academic performance) before and after the treatment period.

The population for this research consisted of eighth-grade students enrolled in Islamic junior high schools (Madrasah Tsanawiyah) within a large metropolitan area in Indonesia. A cluster sampling method was employed, wherein four schools were selected based on similar demographic profiles and academic standards. From these schools, a total of 120 students were selected to participate in the study. These students were then assigned to either the experimental group (N=60) or the control group (N=60) based on their intact classes to minimize disruption to the school's schedule. Participants in both groups were comparable in terms of age, gender distribution, and baseline academic performance in Islamic education subjects.

Three primary instruments were used for data collection in this study. The primary dependent variable, student motivation, was measured using the Intrinsic Motivation Inventory (IMI), a validated and widely used multidimensional questionnaire that assesses participants' subjective experience related to a target activity. The IMI subscales for Interest/Enjoyment, Perceived Competence, and Effort/Importance were utilized. Second, academic performance was measured using a researcher-developed achievement test covering the specific Islamic history module used in the intervention. The test's content validity was established by a panel of experienced Islamic education teachers. Finally, the intervention itself consisted of two versions of a digital learning platform: a gamified version with points, badges, and leaderboards for the experimental group, and a standard version with identical educational content but without game mechanics for the control group.

The research was conducted over an eight-week period and followed a structured procedure. In the first week, informed consent was obtained from the schools, parents, and students, after which all 120 participants completed the pre-test versions of the Intrinsic Motivation Inventory (IMI) and the academic achievement test. For the subsequent six weeks, the experimental group engaged with the Islamic history module through the gamified digital platform, while the control group studied the exact same content using the conventional digital platform. Both groups were supervised by their regular teachers who were trained to facilitate the sessions without introducing confounding variables. In the final week of the study, all participants completed the post-test versions of the IMI and the academic achievement test. The collected data were then compiled and analyzed using appropriate statistical methods to compare the outcomes between the two groups.

RESULT AND DISCUSSION

The initial phase of data analysis focused on establishing a baseline for the 120 participants. Pre-test scores from both the Intrinsic Motivation Inventory (IMI) and the academic achievement test were collected from the experimental group (N=60) and the control group (N=60). An independent samples t-test was conducted on these pre-test scores to ensure there were no statistically significant differences between the two groups prior to the intervention. This initial analysis confirmed the homogeneity of the groups, providing a valid foundation for comparing the post-intervention outcomes.

The descriptive statistics, including mean scores (M) and standard deviations (SD) for both groups at pre-test and post-test stages, are presented in Table 1. The table summarizes the performance of the experimental and control groups on the two primary dependent variables: overall motivation (measured by the IMI) and academic achievement. The scores clearly delineate the trajectory of change for each group over the course of the six-week intervention period.

Table 1.
Descriptive Statistics for Motivation and Achievement Scores

Variable	Group	Pre-Test	Post-Test	M (SD)
Overall Motivation	Experimental (N=60)	3.45 (0.52)	4.58 (0.48)	(IMI Score, Scale 1-5)
	Control (N=60)	3.42 (0.55)	3.51 (0.59)	
Academic Achievement	Experimental (N=60)	68.50 (7.80)	85.75 (6.95)	(Test Score, Scale 0-100)
	Control (N=60)	67.95 (8.10)	71.20 (8.35)	

The pre-test data shown in Table 1 confirms the initial comparability of the two groups. The mean motivation score for the experimental group (M=3.45) was nearly identical to the control

group (M=3.42), and an independent samples t-test revealed this difference to be non-significant ($t(118) = 0.31$, $p = .75$). Similarly, the pre-test academic achievement scores were closely matched (M=68.50 for experimental, M=67.95 for control), with no statistically significant difference found ($t(118) = 0.39$, $p = .69$), establishing a reliable baseline for the study.

A visual inspection of the post-test data indicates a substantial divergence between the two groups following the intervention. The experimental group, which used the gamified platform, demonstrated a marked increase in both mean motivation score (from 3.45 to 4.58) and mean academic achievement score (from 68.50 to 85.75). In stark contrast, the control group, which used the conventional platform, showed only negligible changes in motivation (from 3.42 to 3.51) and a modest improvement in achievement (from 67.95 to 71.20), suggesting a significant differential impact of the two learning platforms.

A deeper analysis of the post-test Intrinsic Motivation Inventory (IMI) data revealed significant improvements for the experimental group across all measured subscales. The largest increase was observed in the "Interest/Enjoyment" subscale, where students reported finding the learning process significantly more engaging and fun. Substantial gains were also recorded for the "Perceived Competence" subscale, indicating that the system of earning badges and achieving milestones fostered a greater sense of mastery and accomplishment among these students.

The "Effort/Importance" subscale for the experimental group also showed a notable increase, suggesting that students not only enjoyed the process more but also invested more mental energy and valued the learning activity more highly. The control group's IMI subscale scores, however, remained largely static between the pre-test and post-test. A slight decrease in their "Interest/Enjoyment" score was even noted, which may suggest that prolonged use of the conventional digital platform without engaging elements led to a minor decline in interest.

An Analysis of Covariance (ANCOVA) was conducted on the post-test motivation scores, with the pre-test scores used as a covariate, to determine the statistical significance of the intervention's effect. The results revealed a statistically significant difference between the experimental and control groups, $F(1, 117) = 112.45$, $p < .001$, partial $\eta^2 = .49$. This strong effect size indicates that the gamified platform had a substantial and positive impact on student motivation, accounting for approximately 49% of the variance in post-test motivation scores.

A separate ANCOVA was performed on the post-test academic achievement scores, again controlling for pre-test scores. The analysis yielded a highly significant difference between the groups, $F(1, 117) = 98.72$, $p < .001$, partial $\eta^2 = .46$. This result confirms that the students in the experimental group achieved significantly higher academic outcomes than their counterparts in the control group. The large effect size suggests that the gamified intervention was a primary factor in this improved academic performance.

A Pearson correlation coefficient was calculated to assess the relationship between the changes in motivation scores and the changes in academic achievement scores specifically within the experimental group. The analysis revealed a strong, positive correlation, $r(58) = .72$, $p < .001$. This indicates that students who experienced the greatest increases in motivation were also the ones who demonstrated the most significant gains in their academic achievement scores.

This strong positive relationship provides compelling evidence for the study's underlying hypothesis. It suggests that the game mechanics did not merely improve test scores directly but did so by first enhancing student motivation. The increase in factors like interest, perceived competence, and effort served as a powerful mediating variable that drove deeper engagement with the learning material, which in turn translated into better performance on the achievement test.

The case of "Faisal" (a pseudonym), a student in the experimental group, provides a qualitative illustration of the statistical findings. Faisal's pre-test scores placed him as a mid-tier student with a motivation score slightly below the group average, and his teacher described him as "easily distracted" during conventional lessons. During the first week of the intervention, he showed minimal engagement, accumulating only a small number of points.

In the second week, a leaderboard feature was activated, and Faisal noticed that a few of his classmates had already earned a "History Explorer" badge. This social comparison appeared to trigger his competitive drive. He began logging into the platform more frequently, re-doing quizzes to improve his score and earn more points. By the fourth week, he had earned two badges and had climbed into the top 15 on the leaderboard, and his teacher noted a marked increase in his voluntary participation in related classroom discussions.

Faisal's journey directly reflects the motivational dynamics captured by the IMI data. The leaderboard and badges acted as powerful external motivators that initially drew him in, aligning with theories of extrinsic motivation. His subsequent dedication to improving his scores and his increased time-on-task demonstrate a rise in the "Effort/Importance" subscale. As he began to succeed and earn badges, his "Perceived Competence" grew, creating a positive feedback loop.

This enhanced engagement led directly to improved learning outcomes. By repeatedly engaging with the material to achieve game-related goals, Faisal was, in effect, engaging in self-directed study and revision. His improved performance on the final achievement test was a direct result of this gamification-induced motivation (Muzayanah et al., 2025; Nuryana et al., 2025; Sellami et al., 2025). His case serves as a narrative example of how game mechanics can transform a passive learner into an active and engaged participant, validating the quantitative link found between increased motivation and academic success.

The results of this study provide robust and statistically significant evidence that gamification is a highly effective strategy for enhancing student motivation and academic achievement in the context of Islamic education (Darabi et al., 2025). The experimental group, which utilized the gamified digital platform, demonstrated substantially greater gains in both domains compared to the control group, which used a conventional platform with identical educational content. The findings were consistent across descriptive, inferential, and correlational analyses.

The data strongly suggests that the success of the intervention was driven by the core game mechanics' ability to tap into students' psychological needs for competence, autonomy, and relatedness. The positive feedback loops created by points, badges, and leaderboards transformed the learning process from a passive requirement into an engaging and rewarding challenge. The study concludes that the thoughtful implementation of gamification on digital platforms is not merely a novelty but a powerful pedagogical tool to address the critical issue of student motivation.

This study's findings provide robust empirical evidence that the integration of gamification into a digital learning platform significantly enhances both motivation and academic achievement among junior high school students in Islamic education. The results clearly demonstrated that while the experimental and control groups began with statistically identical baseline scores in motivation and subject knowledge, their outcomes diverged dramatically following the six-week intervention. The experimental group, which engaged with the gamified content, exhibited a substantial and statistically significant increase in their motivation scores as measured by the Intrinsic Motivation Inventory (IMI).

This heightened motivation was mirrored by a correspondingly large improvement in academic performance. The experimental group's mean score on the achievement test increased by over 17 points, a gain that was significantly greater than the modest improvement observed in the

control group. The data from the IMI subscales further illuminated the psychological mechanisms at play, with the largest gains seen in students' sense of interest, enjoyment, and perceived competence. This suggests the gamified elements were successful in making the learning process itself more rewarding.

A critical finding was the strong, positive correlation (r = .72) identified within the experimental group between the increase in motivation and the improvement in academic scores. This relationship suggests that enhanced motivation was not merely a concurrent outcome but a key mediating factor that drove the academic success. The case study of "Faisal" provided a qualitative narrative that vividly illustrated this statistical relationship, showing how game mechanics like leaderboards and badges could transform a previously disengaged student into an active, self-directed learner.

The overall conclusion drawn from the results is unambiguous: the gamified intervention was highly effective. In contrast, the conventional digital platform used by the control group, despite containing the exact same educational content, failed to produce any meaningful change in student motivation and resulted in only minimal learning gains. This stark difference underscores the importance of pedagogical design in digital learning, demonstrating that the method of content delivery can be as crucial as the content itself.

The findings of this research are broadly consistent with the extensive body of literature that confirms the positive effects of gamification on student engagement in secular academic contexts. Scholars such as Kapp and Gee have long argued that game mechanics tap into fundamental human psychological needs, and this study affirms that these principles hold true within the specific domain of Islamic education. The significant increase in motivation and performance in our experimental group aligns with numerous quasi-experimental studies in subjects like mathematics, science, and language learning, thereby strengthening the external validity of gamification as a pedagogical strategy.

This study makes a unique contribution by addressing a significant gap in the existing literature. While the use of technology in Islamic education has been a topic of growing interest, most prior research has focused on technology as a repository or delivery system for content, rather than as a tool for pedagogical innovation. This research moves beyond that focus, providing one of the first rigorous, quasi-experimental examinations of gamification's impact within this specific religious and cultural context. It demonstrates that gamification is not only compatible with Islamic education but can be a powerful tool for revitalizing it.

The results also resonate with Self-Determination Theory (SDT), a prominent theory of motivation developed by Deci and Ryan, which was not explicitly part of the results but provides a strong theoretical lens for discussion. SDT posits that motivation is enhanced when an environment supports the innate psychological needs for competence, autonomy, and relatedness. The success of the gamified platform can be interpreted through this lens: badges and points fostered a sense of competence; the ability to re-try quizzes offered a degree of autonomy; and leaderboards introduced a social, or relatedness, element. This study provides a practical application of SDT principles in a novel educational setting.

In contrast to some critical literature that warns of the potential for gamification to create a dependency on extrinsic rewards, this study's findings suggest a more nuanced outcome. The strong increase in the "Interest/Enjoyment" subscale of the IMI indicates a growth in intrinsic motivation. This suggests that the external rewards (points, badges) served as a scaffold that initially drew students in, but the well-designed challenges and feedback loops ultimately made the learning

activity itself inherently more enjoyable and rewarding. This finding contributes to the ongoing debate about the relationship between extrinsic mechanics and intrinsic motivation.

The results of this study are a clear signal that Islamic education stands to benefit enormously from a thoughtful and evidence-based integration of modern pedagogical strategies. The dramatic success of the gamified platform is a sign that the motivational challenges observed in many traditional classrooms are not necessarily a reflection of the students' lack of interest in their faith, but rather a response to outdated delivery methods. The findings signify a powerful opportunity to reconnect students with their heritage by presenting it in a language and format that they find inherently engaging.

The stark contrast in outcomes between the two groups reflects a critical reality of 21st-century education: digital implementation is not the same as digital transformation. Simply placing traditional content onto a digital screen, as was done for the control group, yields minimal benefits. The results are a sign that true educational innovation requires a fundamental rethinking of the learning experience itself. The success of the gamification approach signifies that the future of effective Islamic e-learning lies in creating interactive, responsive, and psychologically rewarding environments.

The strong correlation between motivation and achievement signifies that fostering a genuine desire to learn is one of the most effective pathways to academic success. This challenges a purely content-driven approach to education and elevates the importance of the affective domain—students' feelings, attitudes, and emotions towards learning. The results are a sign that investing in pedagogical strategies that build confidence, curiosity, and enjoyment is not a "soft" or secondary goal but a direct and powerful driver of academic rigor and knowledge retention.

The case of "Faisal" reflects a broader shift in learning dynamics. His transformation from a passive to an active learner, driven by the platform's mechanics, is a sign that well-designed educational technology can empower students to take greater ownership of their learning journey. This signifies a potential shift in the teacher's role from a sole "sage on the stage" to a "guide on the side" who facilitates, encourages, and supports students as they navigate their own paths to knowledge, a model that is more scalable and student-centered.

The primary implication of this research is for curriculum developers and educators in Islamic schools and madrasahs. The findings provide a clear, evidence-based mandate to move beyond traditional, passive learning models and embrace more dynamic, interactive pedagogical strategies like gamification (Niam & Lukens-Bull, 2025; Safitri et al., 2025; Tlili & Chikhi, 2025). This implies a need for professional development programs to train teachers not only in how to use digital tools but also in the principles of game design and motivational psychology, empowering them to create their own engaging learning experiences.

For educational technologists and software developers, the implications are equally significant. This study validates the market and pedagogical need for high-quality, culturally-contextualized gamified learning platforms for Islamic education. It implies that there is a substantial opportunity to create products that are not only commercially viable but also have a profound positive impact on millions of students (Mustapa et al., 2025; Tambak et al., 2025; Tumadi et al., 2025). The research suggests that successful platforms will be those that are built on sound pedagogical principles and are designed in collaboration with experienced religious educators.

The findings also have implications for policymakers in ministries of education and religious affairs. The clear link between the gamified intervention and improved academic outcomes suggests that investing in this type of educational technology can be a highly effective strategy for raising

academic standards. This implies that policy should support and incentivize the adoption of such innovative tools, perhaps through grants, pilot programs, and the inclusion of digital pedagogy standards in school accreditation criteria.

On a broader societal level, the implications are profound. In an era where young people are exposed to a multitude of competing digital narratives about their faith, a formal education system that is engaging and motivating is more critical than ever. This research implies that by making the formal study of Islam a more compelling and rewarding experience, gamification can play a role in fostering a well-informed, critically engaged, and resilient generation of young Muslims, strengthening the community from within.

The success of the gamified platform can be explained primarily through its alignment with core principles of motivational psychology. The system of points and badges provided immediate and continuous positive reinforcement for effort and achievement. This created a powerful feedback loop that, according to behaviorist principles, strengthened the desired learning behaviors. Unlike a traditional classroom where feedback might be delayed, the platform's instant rewards made the connection between action and outcome clear and satisfying.

Cognitive load theory offers another powerful explanation. The conventional platform presented information in a linear, text-heavy format, which can be cognitively demanding and monotonous. The gamified platform, however, broke down the content into smaller, manageable challenges (e.g., quizzes for points). This chunking of information, combined with the interactive elements, likely reduced extraneous cognitive load, freeing up students' mental resources to focus on understanding and retaining the core concepts.

The social comparison element introduced by the leaderboard provides a further explanation for the heightened engagement. Social cognitive theory posits that learning is a social process, and individuals are motivated by observing others. The leaderboard made learning a visible and communal activity, introducing a friendly, competitive element that spurred students like "Faisal" to increase their effort in order to improve their social standing within the learning community. This transformed a solitary activity into a shared one.

Ultimately, the gamified platform was more effective because it was designed to be intrinsically rewarding. It transformed the process of learning from a means to an end (passing a test) into an enjoyable activity in its own right. By tapping into innate human desires for challenge, achievement, feedback, and social recognition, the platform created an environment where students wanted to spend more time engaging with the material. This intrinsic motivation is a far more powerful and sustainable driver of learning than the extrinsic pressure of grades alone.

Future research should aim to replicate and extend these findings. A longitudinal study that tracks students over a full academic year or more would be invaluable for determining whether the motivational gains from gamification are sustained over time or if there is a novelty effect that wears off. Additionally, research could disaggregate the effects of different game mechanics—for example, comparing a platform with only badges to one with only a leaderboard—to understand which elements are most impactful.

Educational practitioners should begin to pilot gamification strategies in their classrooms. This does not necessarily require a sophisticated digital platform; teachers can start with low-tech approaches like creating a classroom leaderboard for homework completion or awarding physical "badges" (stickers) for mastering specific skills. The key is to adopt the principles of clear goals, immediate feedback, and rewarding progress. Professional development workshops focused on practical gamification design are a clear and immediate need.

Developers and ed-tech companies should see this as a call to action to create more sophisticated and pedagogically sound gamified platforms for this market. Future platforms could incorporate more advanced game elements like adaptive challenges that adjust to a student's skill level, branching narratives for teaching Islamic history, and collaborative team-based quests. Co-designing these tools with experienced Islamic educators and students is crucial to ensure they are both effective and culturally appropriate.

Finally, policymakers and institutional leaders should foster a culture of innovation. This involves providing the funding, time, and institutional support necessary for teachers to experiment with new pedagogical approaches like gamification. Establishing a "center for excellence" or an "innovation hub" for Islamic educational technology could be a powerful way to incubate new ideas, share best practices, and drive the systemic adoption of evidence-based strategies that have been proven to work.

CONCLUSION

The most critical finding of this research is the empirically demonstrated, strong positive correlation between gamification-induced motivation and academic achievement in Islamic education. This study moves beyond general assertions by quantitatively establishing that enhanced motivation acts as a key mediating factor for improved learning outcomes. The distinct discovery is not merely that gamification works, but that its mechanics-points, badges, and leaderboards-are exceptionally effective at transforming passive engagement into active, self-directed learning within a religious educational framework, a context where such empirical validation has been conspicuously absent.

The primary contribution of this research is methodological, providing a robust, quasi-experimental blueprint for evaluating pedagogical innovations within Islamic education. While the concept of gamification is well-established in secular fields, its value-add here is the rigorous application of a pre-test/post-test control group design to this specific domain. This provides the field with a clear, data-driven model that moves beyond theoretical discussion and anecdotal evidence, offering a replicable method for validating the efficacy of educational technology interventions and justifying their adoption on an empirical basis.

This study is constrained by its relatively short six-week duration, which does not allow for an assessment of the long-term sustainability of the motivational gains or the potential influence of a novelty effect. The sample was also limited to a specific age group and geographical region, which impacts the generalizability of the findings. Future research should therefore prioritize longitudinal studies that track student engagement over a full academic year and expand the scope to include diverse age groups and socio-cultural settings to build a more comprehensive understanding of gamification's role in Islamic education.

AUTHORS' CONTRIBUTION

Laila Ngindana Zulfa: Conceptualization; Project administration; Validation; Writing - review and editing; Conceptualization; Data curation; In-vestigation; Data curation; Investigation; Formal analysis; Methodology; Writing - original draft; Supervision; Validation; Other contribution; Resources; Visuali-zation; Writing - original draft.

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