



Digital Media Integration in Islamic Religious Education: Students' Responses and Islamic Value Formation

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Abstract

The growing adoption of digital technology has transformed instructional practices in Islamic Religious Education (IRE), creating opportunities to improve learning quality while preserving the ethical and spiritual objectives of Islamic education. This study investigates students' responses to the integration of digital media in IRE and examines its relationship with Islamic value formation at SMA Al-Azhar Syifa Budi Surakarta, Indonesia. A descriptive quantitative survey was conducted involving 82 students who had experienced digitally supported IRE instruction. Data were collected through a validated 15-item questionnaire covering three dimensions: digital media integration, contemporary Islamic education, and students' learning responses. Descriptive statistical techniques, including frequencies, percentages, and mean scores, were employed to analyze the data. The findings indicate that students expressed highly positive perceptions of digital media integration, with an overall mean score of 4.25 (85.01%), classified as very good. The strongest evaluation emerged in the dimension of Islamic value formation, suggesting that technology-supported learning can reinforce religious understanding, ethical awareness, and responsible technology use when guided by appropriate pedagogical practices. Nevertheless, students' concentration received comparatively lower ratings, indicating the need for more structured and interactive digital learning activities. These findings highlight that effective digital integration in IRE depends not only on technological resources but also on pedagogical design capable of balancing instructional innovation with the cultivation of Islamic values.

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INTRODUCTION

The rapid expansion of digital technology has fundamentally transformed educational systems worldwide, reshaping how knowledge is created, delivered, and experienced across diverse learning contexts. Educational institutions are increasingly expected to integrate digital technologies into teaching and learning processes to improve instructional quality, learning flexibility, and student engagement. This transformation extends beyond the adoption of technological devices, representing a pedagogical shift that encourages more interactive, collaborative, and learner-centered educational practices (Bhardwaj et al., 2025; Mir, 2025; Rahimi et al., 2025). Within this changing landscape, Islamic Religious Education (IRE) faces unique challenges because its educational objectives encompass not only cognitive development but also the cultivation of faith, moral character, and spiritual awareness. Consequently, integrating digital media into Islamic Religious Education requires careful pedagogical planning to ensure that technological innovation complements rather than diminishes the transmission of Islamic values (Ubaedullah et al., 2025). Digital platforms can facilitate access to diverse learning resources, encourage active participation, and enrich students' understanding of religious concepts when appropriately integrated into classroom instruction (Mashudi & Hilman, 2025a; Papakostas, 2025). Nevertheless, the effectiveness

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of digital learning depends less on technological sophistication than on teachers' ability to design meaningful learning experiences that integrate technology with educational objectives and ethical values. Therefore, understanding how digital media influences students' learning experiences has become an increasingly significant concern in contemporary Islamic education.

The urgency of this issue has intensified as digital technology has become deeply embedded in students' everyday lives (Dontre, 2021; Fischer, 2021; Higgs & Stornaiuolo, 2024). Secondary school students regularly obtain information through smartphones, social networking platforms, online videos, learning management systems, and search engines, making digital interaction an inseparable part of their educational experiences. While these technologies provide unprecedented opportunities for accessing religious knowledge, they simultaneously expose students to fragmented information, misleading religious interpretations, and unverified online content (Hidayatullah et al., 2025; Putra et al., 2024). Such conditions create significant challenges for Islamic Religious Education teachers, who are expected to guide students in distinguishing authentic Islamic teachings from inaccurate or misleading digital information. In addition to strengthening religious literacy, teachers must also cultivate digital literacy, ethical reasoning, and responsible online behavior that reflects Islamic principles (Muharromah & Manshur, 2025). Recent studies argue that digital literacy has become an indispensable competency within Islamic education because students must develop the ability to critically evaluate digital information before accepting or disseminating religious knowledge (Rusadi & Aripin, 2023). Furthermore, contemporary educational environments require teachers to facilitate reflective learning experiences that encourage students to interpret religious teachings critically while maintaining adherence to authentic Islamic sources (Muis, 2026; Saada & Magadlah, 2021). These realities indicate that successful digital integration in Islamic education should be evaluated not only by technological accessibility but also by its contribution to students' intellectual, ethical, and spiritual development.

From a broader educational perspective, integrating digital media into Islamic Religious Education represents an opportunity to modernize instructional practices while preserving the essential objectives of Islamic education (Mashudi & Hilman, 2025; Rifdillah, 2025). Islamic education has traditionally emphasized holistic human development by balancing intellectual achievement with moral integrity, social responsibility, and spiritual growth (Maidugu & Isah, 2024). Digital technologies offer innovative opportunities to present Qur'anic verses, Hadith, Islamic history, ethical dilemmas, and contemporary religious issues through multimedia resources that are more relevant to students' learning preferences. Interactive videos, digital storytelling, virtual discussions, educational applications, and collaborative online platforms can enhance students' engagement and facilitate deeper conceptual understanding when integrated with appropriate instructional strategies (Alam & Mohanty, 2023; Palioura & Dimoulas, 2022; Zou et al., 2025a). However, technology alone cannot guarantee meaningful learning outcomes because educational effectiveness depends primarily on pedagogical quality rather than technological availability. Previous research consistently demonstrates that student engagement increases when digital media are integrated with reflective activities, collaborative learning, and clearly defined instructional objectives rather than being used merely as presentation tools. Likewise, the emergence of Education 5.0 emphasizes that technological advancement should remain inseparable from human values, creativity, ethical responsibility, and character education (Maguni et al., 2026). Accordingly, Islamic Religious Education must position digital media as a means of strengthening religious understanding and character formation rather than as an end in itself.

Empirical observations in Indonesian secondary schools further demonstrate the growing relevance of digital media within Islamic Religious Education classrooms (Nasaruddin et al., 2023; Pasha & Rahmanto, 2025). Many schools have gradually adopted digital learning platforms, presentation software, educational videos, online assessments, and interactive applications to improve instructional effectiveness following the acceleration of digital learning practices in recent years (Mhlongo et al., 2023; Zou et al., 2025). At SMA Al-Azhar Syifa Budi Surakarta, digital media have become an integral component of Islamic Religious Education instruction, enabling teachers to diversify learning activities and increase students' participation during classroom instruction. Preliminary observations indicate that students generally respond positively to technology-supported learning because digital resources make Islamic learning materials more accessible, attractive, and closely connected to contemporary social realities (Fajria, 2026). At the same time,

teachers recognize that maintaining students' concentration, encouraging reflective thinking, and ensuring the internalization of Islamic values remain ongoing pedagogical challenges within digitally mediated learning environments (Agustian et al., 2022; Ratnawulan et al., 2026). These observations suggest that students' perceptions toward digital learning cannot be interpreted solely as indicators of technological acceptance but should also be understood as reflections of broader educational experiences involving cognitive engagement, learning motivation, ethical awareness, and religious value formation. Consequently, investigating students' responses to digital media integration provides important empirical evidence for evaluating the educational quality of contemporary Islamic Religious Education (Abubakari et al., 2024). Such evidence is essential for designing instructional strategies capable of balancing technological innovation with the enduring mission of Islamic education in preparing morally responsible and digitally competent learners.

Recent scholarship has increasingly acknowledged that digital transformation has become an essential component of Islamic Religious Education, leading researchers to investigate its pedagogical, technological, and ethical implications from multiple perspectives. Several studies have demonstrated that innovative digital media contribute positively to students' learning engagement, instructional effectiveness, and classroom interaction by providing more flexible and contextual learning experiences (Md Sabri et al., 2024; Muir et al., 2022; Wong & Hughes, 2023). Other scholars have emphasized that teachers' professional digital competence significantly determines the success of technology integration because effective digital instruction requires pedagogical knowledge in addition to technical skills (Amemasor et al., 2025; Çebi et al., 2022; Demissie et al., 2022). Research has also explored digital transformation through the perspectives of educational management, teacher readiness, and institutional adaptation, highlighting the importance of strategic leadership and continuous professional development in sustaining technology-enhanced learning environments (Altassan, 2025; Norman, 2023; Zhang & Chen, 2025). Furthermore, investigations into digital assessment and online instructional practices reveal that Islamic education should preserve principles of fairness, honesty, and accountability despite the growing reliance on digital technologies (Mustari et al., 2026). Beyond classroom practices, bibliometric analyses indicate that research concerning digital religious education has expanded considerably over the last decade, reflecting increasing scholarly attention to digital literacy, educational innovation, misinformation, and ethical challenges within religious learning environments. Collectively, these studies confirm that digital technology possesses substantial potential to enhance Islamic Religious Education when pedagogical innovation, teacher competence, and ethical guidance are effectively integrated (Mundofi, 2025; Sari, 2025). Nevertheless, the majority of previous investigations have concentrated on institutional readiness, technological innovation, or teacher-related factors, leaving students' lived experiences comparatively underexplored.

Another stream of literature has focused on students' engagement, motivation, and learning satisfaction within technology-supported educational environments. Evidence consistently suggests that digital learning environments enhance students' motivation by offering greater flexibility, multimedia resources, collaborative interaction, and personalized learning opportunities (Cevikbas et al., 2023; Spaho et al., 2025; Zou et al., 2025). Similarly, studies concerning Education 5.0 emphasize that successful digital learning should simultaneously promote technological competence, creativity, collaboration, critical thinking, and ethical responsibility (Adel, 2024; Ahmad et al., 2023). Despite these valuable contributions, previous investigations generally evaluate educational effectiveness using indicators such as learning achievement, digital competence, instructional quality, or technology acceptance. Comparatively little attention has been directed toward understanding how students perceive the relationship between digital learning and the internalization of Islamic values during classroom instruction (Diana et al., 2024; Sahib et al., 2026; Suradji & Faridi, 2025). Existing studies rarely examine whether students believe digital media facilitate religious understanding, strengthen moral awareness, encourage responsible technology use, and maintain the spiritual objectives of Islamic education simultaneously. Consequently, current knowledge remains fragmented because technological outcomes and value-oriented educational outcomes are frequently examined separately rather than within a unified analytical framework (Mudarris & As, 2026). Addressing this limitation is essential because the ultimate success of Islamic Religious Education cannot be measured solely by technological effectiveness but must also consider students' religious experiences and ethical development throughout the learning process.

The present study seeks to address these limitations by examining digital media integration from the perspective of students while simultaneously considering its relationship with Islamic value formation. Unlike previous studies that primarily investigate teachers' digital competence, instructional innovation, or institutional digital transformation, this research integrates three interrelated dimensions into a single analytical framework: the transformation of Islamic Religious Education through digital media, students' perceptions of contemporary Islamic educational values, and students' learning responses toward digitally supported instruction. This integrated perspective represents the principal novelty of the study because it recognizes that educational technology, pedagogical effectiveness, and religious value formation should be understood as mutually reinforcing rather than independent educational constructs. The study therefore extends existing discussions by positioning students not merely as technology users but as active participants whose perceptions provide valuable evidence regarding the educational quality of digital Islamic learning. From a theoretical perspective, the findings contribute to contemporary discussions concerning value-based digital pedagogy within Islamic education by demonstrating how technological innovation can coexist with moral and spiritual development. Practically, the results are expected to assist teachers, school administrators, and educational policymakers in designing digital learning environments that remain pedagogically effective while preserving the ethical foundations of Islamic education. Accordingly, this study aims to analyze students' responses toward the integration of digital media in Islamic Religious Education learning at SMA Al-Azhar Syifa Budi Surakarta and to examine how such integration contributes to the formation of Islamic values within contemporary digital learning environments.

METHOD

Research Design

This study employed a quantitative approach using a descriptive cross-sectional survey design to investigate students' responses toward the integration of digital media in Islamic Religious Education (IRE) learning at SMA Al-Azhar Syifa Budi Surakarta. A descriptive quantitative design was considered appropriate because the primary objective of this study was to systematically describe students' perceptions and learning experiences rather than to examine causal relationships or evaluate the effects of an intervention. The cross-sectional survey enabled the researchers to collect data from participants at a single point in time, providing a comprehensive overview of students' responses toward digital-based Islamic Religious Education learning within its natural educational context. This design has been widely adopted in educational research investigating attitudes, perceptions, and learning experiences because it allows researchers to obtain objective quantitative descriptions of naturally occurring educational phenomena.

Research Setting and Period

The study was conducted at SMA Al-Azhar Syifa Budi Surakarta, Central Java, Indonesia, an Islamic secondary school that has consistently integrated digital technologies into the teaching and learning process of Islamic Religious Education. The school was selected because digital media such as presentation software, educational videos, online learning platforms, and multimedia resources have become integral components of classroom instruction. Data collection was undertaken during the second semester of the 2025/2026 academic year, after students had experienced several digital-based Islamic Religious Education learning sessions. Conducting the research after sustained exposure to digital learning ensured that participants possessed sufficient experience to evaluate the implementation of digital media objectively.

Population and Participants

The population of this study comprised all students enrolled in Islamic Religious Education classes at SMA Al-Azhar Syifa Budi Surakarta during the research period. Using a purposive sampling technique, 82 students were selected as research participants because they met predetermined inclusion criteria. Participants were required to (1) be actively enrolled at SMA Al-Azhar Syifa Budi Surakarta, (2) have participated in Islamic Religious Education learning utilizing digital media, and (3) voluntarily agree to participate in the study. Students who had limited participation in digital learning activities or submitted incomplete questionnaires were excluded from the analysis.

Purposive sampling was selected because the study specifically required respondents who possessed direct learning experience with digital media integration in Islamic Religious Education, thereby ensuring that the collected data accurately reflected authentic learning experiences.

Research Instrument

Data were collected using a structured self-administered questionnaire developed through an extensive review of previous studies on digital learning, Islamic Religious Education, educational technology, and student learning engagement. The questionnaire consisted of 15 closed-ended items distributed across three dimensions: Digital Transformation in Islamic Religious Education Learning, Contemporary Islamic Education Perspective, and Students' Responses toward Digital Islamic Religious Education Learning, with each dimension represented by five indicators. Participants responded using a five-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Higher scores indicated stronger positive perceptions regarding the integration of digital media into Islamic Religious Education learning. To ensure clarity and comprehension, the questionnaire was prepared in Indonesian before being administered to participants.

Instrument Validity and Reliability

Before the main data collection, the questionnaire underwent a comprehensive content validation process through expert judgment involving three specialists in Islamic Religious Education, educational technology, and educational evaluation. The experts assessed each questionnaire item based on its relevance, clarity, linguistic appropriateness, and consistency with the conceptual framework of the study. Revisions were subsequently made in accordance with the experts' recommendations to improve the quality and representativeness of the instrument. Following content validation, a pilot test was conducted involving students with characteristics comparable to those of the target participants to evaluate the readability and consistency of the questionnaire. The internal consistency of the instrument was then examined using Cronbach's Alpha, with a coefficient exceeding the recommended threshold of 0.70, indicating satisfactory reliability for educational research. These procedures ensured that the questionnaire possessed adequate validity and reliability for measuring students' responses toward digital media integration in Islamic Religious Education learning.

Data Collection Procedure

Data collection followed a systematic and sequential procedure to ensure the consistency, transparency, and credibility of the research process. Initially, the researchers identified the research problem through preliminary observations and an extensive review of relevant literature to establish the theoretical foundation of the study. Based on the identified objectives, an appropriate descriptive quantitative survey design was selected, followed by the development of a structured questionnaire representing the three research dimensions. The preliminary instrument was then evaluated through expert validation before being revised according to the reviewers' recommendations. Subsequently, a pilot test was conducted to examine the clarity, readability, and consistency of the questionnaire prior to its administration. After obtaining permission from the school administration and informed consent from all participants, the finalized questionnaire was distributed to 82 students who met the established inclusion criteria. All completed questionnaires were screened for completeness, coded systematically, and entered into the statistical database before statistical analysis. The overall procedure adopted in this research is illustrated in Figure 1.

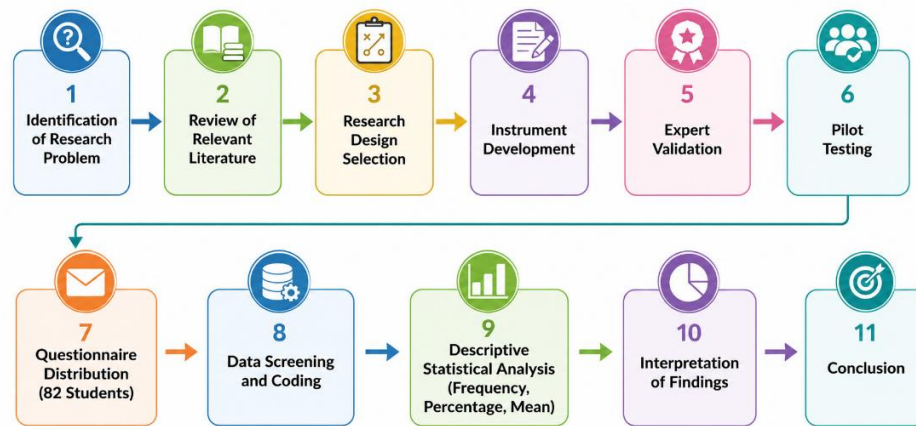


Figure 1. Research Procedure of the Study

Following questionnaire administration, all collected data were carefully examined to identify incomplete responses, coding errors, and potential inconsistencies before statistical analysis was conducted. The cleaned dataset was subsequently analyzed using descriptive statistical techniques to summarize students' responses across the three research dimensions. Finally, the statistical findings were interpreted in relation to the research objectives and previous empirical studies to provide a comprehensive understanding of students' perceptions regarding digital media integration and Islamic value formation. This systematic procedure ensured that every stage of the research was conducted consistently, thereby enhancing the credibility, transparency, and reproducibility of the study.

Data Analysis

The collected data were analyzed using IBM SPSS Statistics version 26. Because the study aimed to describe students' responses rather than test causal hypotheses, descriptive statistical techniques were employed throughout the analysis. The analytical procedure involved data coding, frequency distribution, percentage calculation, mean score computation, and categorization of respondent achievement levels according to predetermined criteria. Mean scores were interpreted using a five-level classification ranging from Very Poor, Poor, Fair, Good, to Very Good based on the percentage of respondent achievement. Higher mean values indicated more favorable student perceptions regarding digital media integration in Islamic Religious Education learning. The statistical findings were subsequently interpreted descriptively to identify response patterns across the three dimensions and to explain their educational implications for strengthening Islamic value formation within digital learning environments.

Ethical Considerations

The study adhered to established ethical principles governing educational research involving human participants. Prior to data collection, official permission was obtained from the school administration, and all participants received a clear explanation regarding the objectives, procedures, voluntary nature of participation, confidentiality of responses, and intended academic use of the collected data. Students participated voluntarily without any form of coercion and retained the right to withdraw from the study at any stage without academic consequences. To protect participants' privacy, no personally identifiable information was collected, and all responses were anonymized throughout the analysis and reporting processes. These ethical procedures ensured that the study respected participants' autonomy, confidentiality, and well-being while maintaining the integrity and trustworthiness of the research.

RESULTS AND DISCUSSION

Results

This section presents the results of student responses to digital media integration in Islamic Religious Education learning at SMA Al-Azhar Syifa Budi Surakarta. The data were collected from 82 students through a five-point Likert scale questionnaire. The instrument consisted of 15 items divided into three dimensions: digital transformation in PAI learning, contemporary Islamic education perspective, and students' responses to digital PAI learning. The result section emphasizes frequency, percentage, mean score, and response category. The student response data in the attached document show that all items were answered by 82 respondents across the three dimensions .

Table 7. Digital Transformation in PAI Learning

No.	Statement	Strongly Agree	Agree	Undecided	Disagree	Mean	Category
1	PAI teachers use digital media in the learning process.	29.3%	62.2%	7.3%	1.2%	4.20	Very good
2	The use of digital media makes PAI learning more interesting.	32.9%	63.4%	2.4%	1.2%	4.28	Very good
3	Digital media helps students understand PAI materials more easily.	34.1%	63.4%	2.4%	0.0%	4.32	Very good
4	PAI teachers use digital learning resources such as videos, presentations, or learning platforms.	35.4%	61.0%	2.4%	1.2%	4.30	Very good
5	Digital-based PAI learning makes students more active in learning.	23.2%	65.9%	9.8%	1.2%	4.11	Very good
Average						4.24	Very good

Table 7 shows that students gave a very positive response to the digital transformation of PAI learning. The highest mean score appeared in the statement that digital media helps students understand PAI materials more easily, with a mean score of 4.32. This finding indicates that digital media does not only function as a visual aid but also supports students' cognitive understanding. The statement about student activeness obtained the lowest mean score in this dimension, although it still reached the very good category. This result suggests that digital media has created a positive learning atmosphere, but the aspect of active participation still needs further strengthening through interactive tasks, discussion, reflection, and student-centered digital activities.

Table 8. Contemporary Islamic Education Perspective

No.	Statement	Strongly Agree	Agree	Undecided	Disagree	Mean	Category
1	PAI learning in the digital era continues to instill Islamic values.	41.5%	56.1%	2.4%	0.0%	4.39	Very good
2	PAI materials are relevant to students' current life needs.	32.9%	58.5%	8.5%	0.0%	4.24	Very good
3	PAI learning helps students understand Islamic teachings in facing contemporary developments.	41.5%	54.9%	3.7%	0.0%	4.38	Very good
4	PAI teachers relate learning materials to modern life issues.	32.9%	63.4%	2.4%	1.2%	4.28	Very good

5	PAI learning encourages students to use technology wisely and responsibly.	32.9%	61.0%	2.4%	3.7%	4.23	Very good
Average						4.30	Very good

Table 8 shows that digital-based PAI learning remains strongly connected to the values of contemporary Islamic education. The highest mean score was found in the statement that PAI learning in the digital era continues to instill Islamic values, with a mean score of 4.39. This result is important because it shows that students do not perceive digital learning as a threat to Islamic values. They see digital learning as compatible with religious education when teachers guide the process properly. The statement about wise and responsible technology use obtained a mean score of 4.23. Although this score remains very good, it suggests that ethical technology use should become a stronger part of PAI learning design.

Table 9. Students' Responses to Digital PAI Learning

No.	Statement	Strongly Agree	Agree	Undecided	Disagree	Mean	Category
1	Students enjoy PAI learning that uses digital media.	34.1%	63.4%	1.2%	1.2%	4.30	Very good
2	Students find it easier to concentrate when PAI learning is delivered digitally.	23.2%	61.0%	13.4%	2.4%	4.05	Good
3	Students are more motivated to join PAI learning when teachers use digital media.	31.7%	62.2%	4.9%	1.2%	4.24	Very good
4	Digital PAI learning helps students understand the material better.	31.7%	62.2%	6.1%	0.0%	4.26	Very good
5	Students can follow digital-based PAI learning well.	24.4%	68.3%	7.3%	0.0%	4.17	Very good
Average						4.20	Very good

Table 9 indicates that students responded positively to digital PAI learning. The highest response appeared in the statement that students enjoy PAI learning using digital media, with a mean score of 4.30. This result shows that digital media can improve students' emotional acceptance of PAI learning. However, the concentration indicator obtained the lowest score, with a mean of 4.05. This finding is still in the good category, but it reveals an important issue. Digital learning can attract students, yet it does not automatically guarantee deep focus. Teachers need to manage digital learning activities carefully so that media use supports concentration rather than distraction.

Table 10. Summary of Research Dimensions

Dimension	Number of Items	Average Mean	Average Achievement	Category
Digital transformation in PAI learning	5	4.24	84.83%	Very good
Contemporary Islamic education perspective	5	4.30	86.10%	Very good
Students' responses to digital PAI learning	5	4.20	84.10%	Very good
Overall average	15	4.25	85.01%	Very good

Table 10 shows that all dimensions reached the very good category. The highest dimension was the contemporary Islamic education perspective, with an average mean of 4.30 and an achievement level of 86.10%. This result indicates that students view digital PAI learning as still aligned with Islamic values and contemporary life needs. The second dimension was digital transformation in PAI learning, with an average mean of 4.24. The third dimension was student response, with an average mean of 4.20. Although the score remains very good, it shows that student response needs continuous improvement, especially in concentration and active participation.

Table 11. Main Empirical Findings

Finding	Empirical Evidence	Interpretation
Digital media supports PAI learning.	Most items in the digital transformation dimension reached above 4.00 mean score.	Students perceive digital media as useful, attractive, and helpful for understanding PAI materials.
Islamic values remain present in digital PAI learning.	The value internalization item reached the highest mean score, 4.39.	Digital learning does not weaken Islamic orientation when guided by teachers.
Students enjoy digital PAI learning.	The enjoyment indicator reached a mean score of 4.30.	Digital media increases students' affective acceptance of PAI learning.
Concentration needs more attention.	The concentration indicator had the lowest mean score, 4.05.	Digital learning needs stronger pedagogical control to prevent distraction.
Overall response is very good.	The overall average mean was 4.25, with an achievement level of 85.01%.	Digital PAI learning is positively accepted by students and relevant for Islamic education development.

The findings show that the integration of digital media in PAI learning has been positively received by students. The most important result is that digital media does not only make learning more interesting but also helps students understand Islamic materials, relate them to modern life, and respond positively to learning. The data also show that value internalization remains strong. This strengthens the argument that technology can support Islamic education when it is guided by clear pedagogical and ethical principles.

Discussion

The findings demonstrate that students perceived the integration of digital media into Islamic Religious Education (IRE) as highly beneficial, as reflected in the consistently high mean scores across all three research dimensions. Rather than merely indicating technological acceptance, these results suggest that digital media have become pedagogical resources capable of supporting meaningful learning experiences when aligned with clear instructional objectives. This finding reinforces learner-centered educational perspectives, which argue that technology contributes to educational quality not because of its technological sophistication but because it enables students to engage more actively with learning content (Bhardwaj et al., 2025; Mir, 2025). From this perspective, digital transformation should be understood as a pedagogical rather than a technological phenomenon, where instructional design determines whether digital tools facilitate deeper understanding or merely provide attractive learning environments. The present findings therefore support previous arguments that digital innovation becomes educationally valuable only when integrated with reflective pedagogy and meaningful learning activities rather than functioning as an isolated instructional component (Md Sabri et al., 2024; Muir et al., 2022; Wong & Hughes, 2023). Compared with earlier studies that primarily evaluated digital transformation through institutional readiness or teachers' technological competence (Amemasor et al., 2025; Çebi et al., 2022; Demissie et al., 2022), this study extends the literature by demonstrating that students themselves recognize digital media as an integral component of effective Islamic learning. Consequently, the findings contribute to the growing global discourse on learner-centered digital pedagogy by emphasizing that students' perceptions constitute an essential indicator for evaluating the success of technology integration within faith-based educational settings.

A particularly significant finding concerns students' perception that digital media facilitate a better understanding of Islamic Religious Education materials, which received the highest mean score within the digital transformation dimension. This result indicates that digital technologies contribute not only to improving instructional attractiveness but also to enhancing students' cognitive engagement with religious concepts. Cognitive learning theories suggest that multimedia resources reduce unnecessary cognitive load by presenting abstract concepts through multiple representations, thereby enabling learners to construct richer conceptual understanding. Within Islamic education, this principle becomes especially relevant because many religious concepts require contextual interpretation that can be supported through videos, digital storytelling, visual illustrations, and interactive learning platforms. Previous research similarly reported that multimedia-based instruction increases conceptual understanding and classroom engagement when instructional materials are carefully aligned with learning objectives (Alam & Mohanty, 2023; Palioura & Dimoulas, 2022; Mashudi & Hilman, 2025a). Likewise, studies examining digital learning environments consistently conclude that technology-supported instruction promotes greater accessibility and flexibility, allowing students to interact with educational resources beyond conventional classroom boundaries (Mhlongo et al., 2023; Zou et al., 2025a). Nevertheless, the present findings provide an additional conceptual contribution by illustrating that enhanced understanding is achieved not solely through technological accessibility but through pedagogical mediation that connects digital resources with meaningful religious learning experiences. This interpretation suggests that digital transformation in Islamic education should prioritize cognitive enrichment rather than technological novelty, thereby extending existing discussions on digital pedagogy within religious education.

Another noteworthy finding is that students strongly agreed that Islamic values remain embedded within digitally supported learning environments, with the highest overall score observed for the statement regarding the continued internalization of Islamic values during digital instruction. This finding challenges the common assumption that increasing digitalization inevitably weakens moral and spiritual education by replacing reflective learning with technologically mediated interactions. Instead, the results indicate that students perceive technology as compatible with Islamic educational objectives when teachers intentionally integrate ethical guidance and religious values into classroom activities. This interpretation is highly consistent with holistic Islamic educational philosophy, which positions intellectual development, moral formation, and spiritual awareness as inseparable educational goals (Maidugu & Isah, 2024; Saada & Magadlah, 2021). It also aligns with recent discussions emphasizing that digital transformation within Islamic education should preserve religious identity while responding to contemporary technological developments (Ubaedullah et al., 2025; Rifdillah, 2025; Sari, 2025). Furthermore, previous investigations have argued that successful digital Islamic education depends on balancing technological innovation with ethical responsibility and value-oriented pedagogy rather than prioritizing technological efficiency alone (Muharromah & Manshur, 2025; Mustari et al., 2026; Papakostas, 2025). However, unlike earlier studies that largely approached this issue from normative or conceptual perspectives, the present study provides empirical evidence from students themselves, demonstrating that value internalization remains achievable within digitally mediated learning environments. This finding therefore strengthens emerging theories of value-based digital pedagogy by suggesting that technology and religious education should be viewed as complementary rather than contradictory educational forces.

The findings further reveal that students responded positively to digital learning in affective terms, particularly regarding learning enjoyment and motivation, both of which achieved very high mean scores. This suggests that digital media successfully create learning environments that are emotionally engaging and capable of increasing students' willingness to participate in Islamic Religious Education classes. Educational psychology consistently emphasizes that positive emotional engagement represents a crucial prerequisite for meaningful learning because motivation influences students' persistence, participation, and willingness to construct knowledge actively. These results therefore support learner engagement theories proposing that interactive digital environments stimulate curiosity, autonomy, and sustained participation when instructional activities encourage meaningful interaction rather than passive information consumption (Cevikbas et al., 2023; Wong & Hughes, 2023; Zou et al., 2025b). Similar conclusions have been reported by studies showing that

multimedia learning environments improve students' satisfaction, collaborative interaction, and intrinsic motivation across diverse educational contexts (Mashudi & Hilman, 2025b; Pasha & Rahmanto, 2025; Spaho et al., 2025). Nevertheless, the present study expands previous literature by demonstrating that emotional engagement within Islamic Religious Education is closely connected with students' perception that digital learning remains relevant to their religious identity and contemporary social realities. In other words, motivation appears to emerge not merely because learning becomes technologically attractive but because students recognize meaningful connections between Islamic teachings, modern life, and digital learning experiences. This broader interpretation contributes to international discussions by suggesting that affective engagement in digital religious education depends on pedagogical relevance and value integration as much as on technological innovation itself.

Despite the overwhelmingly positive responses across all dimensions, the relatively lower score for students' concentration during digital learning deserves careful consideration because it reveals an important pedagogical challenge rather than a technological limitation. Although students enjoyed digitally supported learning and acknowledged its instructional benefits, maintaining sustained attention remained comparatively more difficult than other aspects of the learning experience. This finding suggests that digital environments simultaneously function as facilitators of learning and potential sources of cognitive distraction, particularly when instructional activities are insufficiently structured. The result is consistent with research demonstrating that digital technologies frequently compete for students' attention by exposing them to multiple information streams that may reduce sustained cognitive engagement (Dontre, 2021; Higgs & Stornaiuolo, 2024). Likewise, broader reviews of digital learning environments acknowledge that the educational benefits of technology are often moderated by learners' self-regulation, instructional design, and teachers' classroom management strategies rather than by technology itself (Mhlongo et al., 2023; Zou et al., 2025a). However, the present findings indicate that this challenge should not be interpreted as evidence against digital learning but rather as an indication that technology requires pedagogical scaffolding capable of directing students' attention toward meaningful reflection and active participation. Therefore, improving concentration in digital Islamic Religious Education depends less on reducing technological use than on designing learning experiences that combine interactive media with structured discussions, collaborative inquiry, reflective exercises, and opportunities for critical engagement with Islamic teachings.

When interpreted collectively, the three dimensions examined in this study reveal that effective digital Islamic Religious Education emerges through the interaction between technological innovation, pedagogical quality, and value-oriented instruction rather than through technological adoption alone. This integrated interpretation provides an important theoretical contribution because previous studies have frequently examined these dimensions independently, focusing either on technology integration, teachers' digital competence, institutional readiness, or student engagement (Altassan, 2025; Norman, 2023; Zhang & Chen, 2025). By contrast, the present findings demonstrate that students perceive these components as mutually reinforcing elements within a holistic educational experience. Such evidence supports the principles of Education 5.0, which emphasize that technological advancement should remain inseparable from creativity, ethical responsibility, collaboration, and human-centered learning (Ahmad et al., 2023; Adel, 2024). Within Islamic education, this holistic orientation is particularly significant because educational success is evaluated not only through academic achievement but also through the development of moral character, religious understanding, and responsible citizenship. Consequently, the study extends existing theoretical discussions by proposing that digital transformation in Islamic education should be conceptualized as value-centered digital pedagogy, where technology serves as an instrument for strengthening intellectual inquiry and spiritual formation simultaneously. This conceptual perspective moves beyond technology acceptance models by positioning ethical and religious values as integral dimensions of successful digital learning rather than as supplementary educational outcomes.

Another important implication of the findings concerns the practical responsibilities of teachers and educational institutions in sustaining meaningful digital learning environments. The consistently high student evaluations indicate that teachers at SMA Al-Azhar Syifa Budi Surakarta have successfully integrated digital resources into classroom instruction while maintaining the

religious objectives of Islamic Religious Education. Nevertheless, sustaining these positive outcomes requires continuous professional development because digital technologies evolve more rapidly than pedagogical practices. Previous studies have emphasized that teachers' digital competence extends beyond technical proficiency and includes instructional planning, classroom facilitation, ethical guidance, and the ability to connect technological innovation with meaningful learning objectives (Amemasor et al., 2025; Çebi et al., 2022; Demissie et al., 2022). The present findings reinforce this argument by suggesting that teachers act not merely as users of technology but as pedagogical mediators who shape students' experiences, attitudes, and value formation within digital learning environments. Accordingly, educational institutions should prioritize professional development programs that integrate technological competence with reflective pedagogy, digital ethics, and Islamic educational philosophy. Such initiatives are likely to strengthen teachers' capacity to design learning environments that simultaneously promote cognitive development, active participation, responsible technology use, and the internalization of Islamic values, thereby ensuring that digital transformation remains aligned with the broader mission of Islamic education.

Overall, this study contributes to the international literature by addressing an important research gap concerning students' perspectives on digital transformation within Islamic Religious Education. Whereas much of the existing literature has concentrated on institutional digitalization, technological infrastructure, curriculum reform, or teachers' readiness (Nasaruddin et al., 2023; Mundofi, 2025; Sari, 2025), the present research positions students' perceptions as a central indicator for evaluating the educational quality of technology-supported religious learning. This perspective enriches current scholarship by demonstrating that successful digital transformation should be assessed not only through technological effectiveness but also through its capacity to preserve educational values, promote meaningful engagement, and support holistic human development. At the same time, the findings should be interpreted within the context of a single Islamic secondary school employing a descriptive cross-sectional design, which limits causal inference and broader generalization. Future studies should therefore investigate these relationships across more diverse educational settings, employ longitudinal or mixed-methods approaches, and examine additional variables such as digital literacy, self-regulated learning, teacher digital competence, and religious identity development. Such research would enable scholars to develop a more comprehensive theoretical model explaining how digital technologies can simultaneously enhance academic learning, strengthen Islamic values, and prepare students to become ethically responsible digital citizens in an increasingly technology-driven educational landscape.

CONCLUSION

The increasing integration of digital media into Islamic Religious Education offers opportunities to create learning experiences that are more engaging, relevant, and responsive to the realities of contemporary education. The findings of this study indicate that students generally perceive digital media as a valuable learning resource that enhances their understanding of Islamic concepts, strengthens learning motivation, and encourages greater participation during classroom activities. More importantly, the positive responses toward the dimension of Islamic value formation suggest that technology can complement, rather than replace, the educational mission of nurturing faith, character, and ethical awareness. These findings reinforce the view that the educational value of digital technology is determined not by the technology itself but by the pedagogical decisions that shape its use in classroom practice. At the same time, the relatively lower level of students' concentration highlights the need for teachers to design digital learning activities that remain structured, interactive, and focused on meaningful learning rather than merely increasing the use of technological tools. This study also enriches current discussions on digital Islamic education by presenting students' perspectives as an essential indicator for evaluating the quality of technology-supported learning. Rather than viewing digital transformation solely from the standpoint of technological innovation or teachers' digital competence, the study illustrates that successful implementation should also be reflected in students' learning experiences

and the continuity of Islamic values throughout the instructional process. The proposed integration of digital transformation, student responses, and Islamic value formation offers an alternative perspective for understanding how technology can contribute to holistic religious education. Nevertheless, the findings should be interpreted within the context of a single Islamic secondary school and a descriptive research design, which may limit their broader generalization. Future research may extend this work by involving more diverse educational settings, larger participant groups, and explanatory or mixed-methods approaches to explore the long-term influence of digital media on students' religious learning, ethical development, and responsible digital citizenship.

AUTHOR CONTRIBUTIONS STATEMENT

Viki Bayu Mahendra conceived the study, developed the research framework, designed the methodology, coordinated the data collection process, performed the data analysis, and prepared the original manuscript draft. Rochmawati Sholikhah Sukemi contributed to the development of the research instrument, literature review, data interpretation, and critical revision of the manuscript for intellectual content. Ashabil Yaqin assisted in data collection, data verification, statistical interpretation, and manuscript editing to improve academic clarity and coherence. Ghufon Ali Sya'bana supervised the overall research process, reviewed the methodological and theoretical aspects of the study, and finalized the manuscript for publication. All authors discussed the findings, contributed to the refinement of the manuscript, approved the final version, and agreed to be accountable for all aspects of the work.

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