

INTEGRATING ARTIFICIAL INTELLIGENCE IN ISLAMIC RELIGIOUS EDUCATION: INNOVATION AND TEACHERS' EPISTEMIC AUTHORITY

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Abstrak

Integrasi *Artificial Intelligence* (AI) dalam Pendidikan Agama Islam (PAI) di Madrasah Ibtidaiyah menawarkan peluang inovasi sekaligus menghadirkan tantangan etis, pedagogis, dan epistemik. Penelitian ini bertujuan untuk menganalisis strategi integrasi AI serta implikasinya terhadap otoritas epistemik guru dan integritas nilai-nilai Islam. Penelitian ini menggunakan pendekatan *Systematic Literature Review* berdasarkan pedoman PRISMA 2020 serta analisis tematik terhadap literatur yang memenuhi kriteria seleksi. Hasil penelitian mengidentifikasi empat tema utama, yaitu strategi pembelajaran berbasis AI, pemeliharaan otoritas epistemik guru sebagai *murabbi*, etika AI dan bias algoritmik, serta pengembangan kerangka integrasi AI yang berorientasi pada nilai. Temuan menunjukkan bahwa AI dapat mendukung personalisasi pembelajaran, pengembangan materi, dan pengambilan keputusan pedagogis, tetapi penerapannya tetap memerlukan validasi, pengawasan manusia, serta pertimbangan etis dari guru. Penelitian ini mengusulkan kerangka konseptual yang mengintegrasikan inovasi teknologi, konsep *murabbi*, etika AI, dan *maqāṣid al-sharī'ah* untuk mendukung implementasi AI yang bertanggung jawab, kontekstual, dan selaras dengan tujuan pendidikan Islam.

Kata kunci: Kecerdasan Buatan; Pendidikan Agama Islam; Madrasah Ibtidaiyah; Otoritas Epistemik; Etika AI.

Abstract

The integration of Artificial Intelligence (AI) into Islamic Religious Education (PAI) at Madrasah Ibtidaiyah offers opportunities for innovation while presenting ethical, pedagogical, and epistemic challenges. This study aims to analyze AI integration strategies and their implications for teachers' epistemic authority and the integrity of Islamic values. A Systematic Literature Review approach guided by the PRISMA 2020 framework and thematic analysis was employed to examine literature meeting the selection criteria. The findings identify four major themes: AI-supported instructional strategies, preservation of teachers' epistemic authority as *murabbi*, AI ethics and algorithmic bias, and the development of a value-oriented AI integration framework. AI can support learning personalization, instructional material development, and pedagogical decision-making; however, its implementation requires teacher validation, meaningful human oversight, and ethical consideration. This study proposes a conceptual framework integrating technological innovation, the *murabbi* concept, AI ethics, and

maqāṣid al-sharī'ah to promote responsible, contextually appropriate AI implementation aligned with the objectives of Islamic education.

Keywords: Artificial Intelligence; Islamic Religious Education; Madrasah Ibtidaiyah; Epistemic Authority; AI Ethics.

A. INTRODUCTION

The rapid advancement of Artificial Intelligence (AI), particularly generative AI, has transformed contemporary education by enabling personalized learning, intelligent tutoring systems, automated assessment, adaptive feedback, and data-driven instructional decision-making (Arif et al., 2026; Liu et al., 2022). Beyond technological innovation, AI has become a strategic driver of educational transformation capable of improving learning effectiveness and supporting evidence-based teaching practices. However, its integration also introduces significant ethical, pedagogical, and epistemological challenges, including algorithmic bias, academic integrity, transparency, accountability, and the evolving role of teachers. Consequently, current scholarship emphasizes that AI implementation should be guided not only by technological advancement but also by pedagogical principles and ethical governance to ensure that innovation strengthens rather than diminishes the human dimensions of education (Cotton et al., 2024; Ogunleye et al., 2024; Porayska-Pomsta et al., 2024).

These challenges become more complex within the context of Islamic Religious Education (Pendidikan Agama Islam/PAI) at the Madrasah Ibtidaiyah (MI) level. Unlike general education, PAI aims not only to develop learners' cognitive competence but also to cultivate faith (*iman*), moral character (*akhlaq*), spirituality, and Islamic identity from an early age. Accordingly, teachers serve as *murabbi* who function as educators, mentors, role models, and spiritual guides responsible for holistic character formation. In this context, AI should be positioned as a pedagogical partner that enriches learning rather than replaces teachers' educational authority. Recent studies indicate that AI and digital learning media can strengthen Islamic education through interactive learning, curriculum innovation, personalized instruction, and digital literacy enhancement. Nevertheless, their implementation must remain grounded in Islamic educational values and supported by appropriate ethical safeguards to ensure meaningful human interaction and students' holistic development (Achruh et al., 2024; Faizin et al., 2025; Huda et al., 2024).

Recent scholarship demonstrates substantial progress in investigating Artificial Intelligence (AI) across diverse educational contexts. Studies have shown that AI enhances personalized learning, intelligent tutoring systems, learning analytics, and adaptive instructional environments, thereby improving teaching effectiveness and supporting data-driven educational decision-making (Arif et al., 2026; Liu et al., 2022). Within Islamic education, research has increasingly examined the integration of AI and digital learning media to enrich instructional practices, promote curriculum innovation, and strengthen students' digital literacy while responding to the demands of educational transformation (Huda et al., 2024). Other studies have explored institutional readiness, technology acceptance, and opportunities for AI implementation in Islamic educational settings, highlighting both its

pedagogical potential and the need for responsible adoption (Achruh et al., 2024; Faizin et al., 2025). Collectively, these studies confirm the transformative capacity of AI in education; however, the dominant orientation remains technology-centered, focusing primarily on implementation effectiveness, instructional efficiency, and adoption models. Comparatively limited attention has been given to integrating AI within the philosophical foundations of Islamic education, where educational success is measured not only by cognitive achievement but also by the cultivation of morality, spirituality, and ethical responsibility.

This tendency exposes several important research gaps. First, studies specifically addressing AI integration in Islamic Religious Education at the Madrasah Ibtidaiyah level remain relatively limited, despite the distinctive developmental characteristics of elementary learners and the unique educational mission of Islamic primary education. Second, previous studies rarely examine AI implementation from the perspective of teachers' epistemic authority as *murabbi*, although teachers remain the primary agents responsible for transmitting religious knowledge, modelling ethical behaviour, and fostering students' spiritual development. Third, while discussions concerning AI ethics and *maqasid al-shariah* have recently expanded, these discussions generally evolve independently from studies of Islamic pedagogy and classroom learning. As a result, the existing body of knowledge remains conceptually fragmented, offering limited explanation of how AI can simultaneously promote educational innovation, preserve teachers' educational authority, and protect the spiritual objectives of Islamic Religious Education. These unresolved issues indicate the need for a more comprehensive conceptual framework capable of connecting educational technology with Islamic pedagogical philosophy.

A more critical review of previous studies further reveals three major streams of scholarship that have developed independently. The first stream focuses on AI-enabled educational innovation, emphasizing technology adoption, intelligent learning systems, digital transformation, and instructional effectiveness within educational institutions (Achruh et al., 2024; Faizin et al., 2025). The second stream concentrates on the concept of *murabbi* as the philosophical foundation of Islamic pedagogy, emphasizing teachers' responsibility for nurturing learners intellectually, morally, emotionally, and spiritually, yet paying little attention to AI-supported educational environments (Badrasawi et al., 2018). The third stream discusses AI ethics and *maqasid al-shariah* as normative frameworks for governing emerging technologies from ethical and legal perspectives, although these discussions are rarely connected to pedagogical practice within Islamic elementary education. Although each stream has generated valuable theoretical insights, they have largely developed in isolation. Consequently, previous studies have yet to establish an integrated conceptual model capable of explaining how technological innovation, Islamic pedagogy, ethical AI governance, and teachers' educational authority can function synergistically within PAI learning at the Madrasah Ibtidaiyah level.

Responding to these limitations, this study proposes a conceptual framework that integrates AI-enabled educational innovation, the Islamic pedagogical concept of *murabbi*, and the ethical principles of *maqasid al-shariah* into a unified perspective for AI implementation in Islamic Religious Education. Unlike previous studies that primarily examine these perspectives separately, this study conceptualizes AI as an educational ecosystem in which technological innovation remains pedagogically mediated by teachers, ethically governed through responsible AI principles, and normatively evaluated according to the objectives of *maqasid al-shariah*.

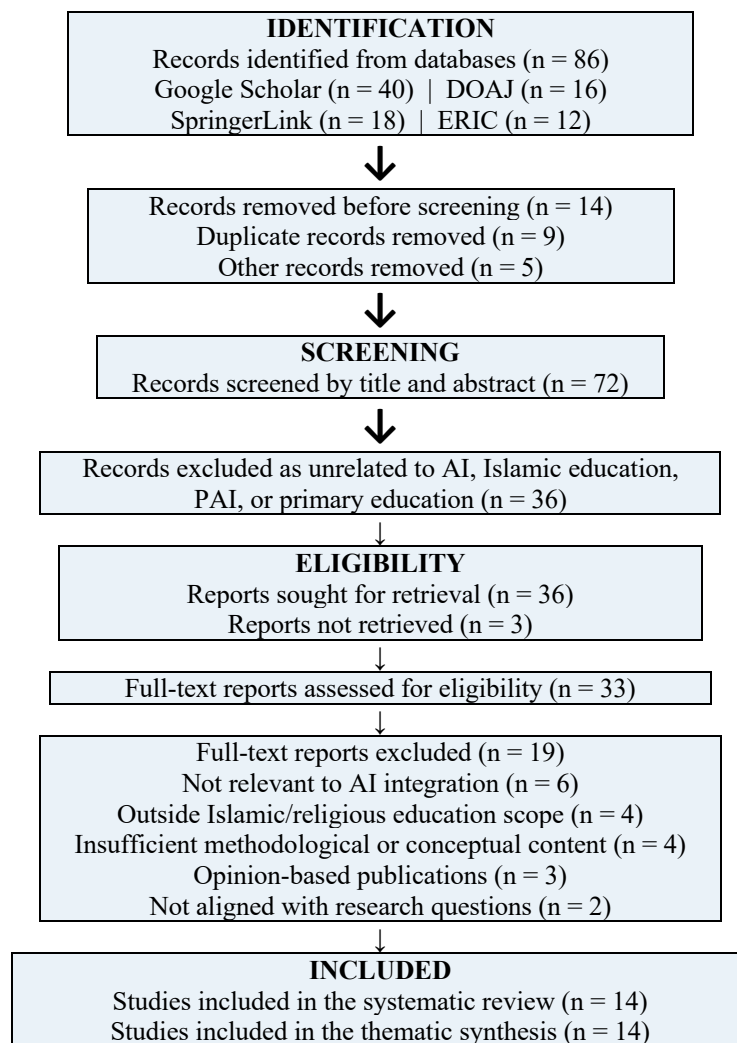
Accordingly, the novelty of this study lies not merely in discussing AI integration within PAI learning but in offering a value-oriented conceptual model that bridges educational technology, Islamic pedagogy, and ethical governance as mutually reinforcing dimensions. This integrated framework is expected to contribute theoretically by expanding contemporary discourse on AI in Islamic education and practically by providing guidance for policymakers, curriculum developers, and teachers in designing AI integration strategies that preserve Islamic educational values while embracing technological innovation.

Based on this conceptual foundation, the present study aims to analyse how Artificial Intelligence can be integrated into Islamic Religious Education at Madrasah Ibtidaiyah in ways that support educational innovation without diminishing teachers' epistemic authority or students' spiritual development. Specifically, this study addresses two research questions: (1) How can AI be integrated into PAI learning at Madrasah Ibtidaiyah to promote educational innovation while preserving teachers' pedagogical authority and students' spiritual values? And (2) What ethical and pedagogical challenges emerge from AI implementation in PAI learning, particularly concerning teachers' epistemic authority and the potential risks of algorithmic bias? By addressing these questions, this study seeks to provide both theoretical and practical contributions toward the development of an ethically grounded and pedagogically appropriate framework for AI integration in Islamic elementary education, thereby supporting future educational policies and classroom practices that are responsive to technological advancement while remaining firmly rooted in the principles and objectives of Islamic education.

B. RESEARCH METHODS

This study employed a Systematic Literature Review (SLR) following the PRISMA 2020 (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines to ensure a transparent, systematic, and reproducible literature selection process (Page et al., 2021). The SLR approach was selected because it enables a comprehensive synthesis of existing evidence on the integration of Artificial Intelligence (AI) in Islamic Religious Education (PAI), particularly in the context of Madrasah Ibtidaiyah. The review followed four sequential stages: identification, screening, eligibility, and inclusion, providing a structured procedure for selecting relevant literature while minimizing selection bias.

During the identification stage, literature was systematically retrieved from four academic databases: Google Scholar, DOAJ, SpringerLink, and ERIC. Searches were conducted using combinations of keywords including *Artificial Intelligence*, *AI in Education*, *Islamic Religious Education*, *Madrasah Ibtidaiyah*, *Primary Islamic Education*, *murabbi*, *AI ethics*, and *maqasid al-shariah*. The search was limited to publications from 2016–2026, written in English or Indonesian, available in full-text open-access format, and relevant to AI implementation in education. Subsequently, duplicate records and publications such as editorials, conference abstracts, book reviews, and studies unrelated to AI integration in Islamic education were removed during the screening stage. Full-text articles were then evaluated against predetermined inclusion criteria: peer-reviewed publications that discuss AI implementation, educational ethics, Islamic education, or primary education, and that provide sufficient conceptual or empirical explanations. Articles lacking full-text access or not directly addressing the objectives of this review were excluded.

Figure 1. PRISMA 2020 Flow Diagram of the Literature Selection Process

Source: Adapted from the PRISMA 2020 flow diagram.

The final included studies constituted the unit of analysis for this research. Since this study is literature-based, no human participants were involved. Instead, comprising peer-reviewed journal articles, scholarly preprints, and authoritative institutional reports that met the predetermined inclusion criteria and were analysed to identify conceptual patterns concerning AI integration, teachers' epistemic authority, ethical challenges, and pedagogical implications for Islamic Religious Education at the Madrasah Ibtidaiyah level (Snyder, 2019).

Data were analysed using thematic analysis following the six-phase procedure proposed by Braun & Clarke (2019), comprising data familiarization, initial coding, theme development, theme review, theme definition, and reporting. Initially, all selected studies were read repeatedly to develop a comprehensive understanding of their objectives, methodologies, findings, and conceptual arguments. Meaningful textual segments were then manually coded before being grouped into broader conceptual categories representing recurring patterns across the literature. Subsequently, preliminary themes were reviewed by comparing conceptual consistency across studies, merging overlapping categories, refining ambiguous themes, and

eliminating unsupported interpretations. The finalized themes were interpreted in relation to the research questions and relevant theoretical perspectives.

To strengthen analytical transparency and consistency, NVivo 12 was employed as a qualitative data management tool to organize coded documents, classify nodes, retrieve coded excerpts, compare coding patterns, and verify relationships among emerging themes. Rather than generating automated interpretations, the software functioned as a tool for systematic data organization and cross-verification throughout the analytical process (Braun & Clarke, 2019; Castleberry & Nolen, 2018). The thematic synthesis ultimately produced four principal themes: (1) AI integration strategies in PAI learning, (2) teachers' epistemic authority as *murabbi*, (3) AI ethics and algorithmic bias, and (4) the balance between technological innovation and students' spiritual development, which subsequently formed the basis for answering the research questions and developing the proposed conceptual framework.

C. RESEARCH RESULTS

Following the PRISMA 2020 selection procedure, the eligible studies were systematically analysed to identify recurring patterns regarding the integration of Artificial Intelligence (AI) in Islamic Religious Education. Rather than presenting publication characteristics, this section synthesises the substantive findings emerging from the reviewed literature. The analysis demonstrates that previous studies converge around four major themes: (1) AI integration strategies in PAI learning, (2) teachers' epistemic authority as *murabbi*, (3) AI ethics and algorithmic bias, and (4) balancing technological innovation with students' spiritual development. These themes constitute the analytical framework used to address the research questions.

To facilitate comparison across previous studies, Table 1 summarises the principal characteristics and findings of the reviewed literature.

Table 1. Summary of Previous Studies on AI Integration in Islamic Religious Education

No	Author(s)	Method	Research Focus	Principal Findings
1.	Arif et al. (2026)	Review	AI-driven transformation in education	AI enhances personalized learning, intelligent tutoring systems, learning analytics, and evidence-based instructional decision-making across educational settings
2.	Liu et al. (2022)	Quantitative	AI-assisted teaching and learning	AI improves adaptive learning, intelligent feedback, and instructional effectiveness by supporting teachers with data-driven pedagogical decisions
3.	Huda et al. (2024)	Systematic Literature Review	Digital learning media in Islamic education	AI and digital learning media strengthen Islamic Religious Education through interactive learning while

				maintaining teachers' pedagogical roles
4.	Achruh et al. (2024)	Qualitative	AI adoption in Islamic education	AI offers significant opportunities for Islamic education but requires institutional readiness, ethical governance, and responsible implementation
5.	Faizin et al. (2025)	Quantitative	Muslim students' acceptance of AI	Students generally demonstrate positive acceptance of AI, although trust depends on ethical considerations, teachers' guidance, and educational context
6.	Badrasawi et al. (2018)	Conceptual	<i>Murabbi</i> concept in Islamic education	Teachers remain central in nurturing learners' intellectual, moral, and spiritual development through holistic educational practices
7.	Shofiyyah et al. (2024)	Conceptual	AI-based transformation of PAI learning methods	AI supports innovation in Islamic Religious Education when integrated with teacher-centred pedagogy and Islamic educational values
8.	Supriatin et al. (2025)	Conceptual	<i>Maqāṣid al-sharī'ah</i> and AI ethics	AI implementation should align with Islamic ethical principles, particularly the preservation of religion (<i>ḥifẓ al-dīn</i>) and intellect (<i>ḥifẓ al-'aql</i>)
9.	Papakostas (2025)	Conceptual	AI in religious education	AI should complement teachers through theological, pedagogical, and ethical supervision rather than replacing human judgment
10.	Cotton et al. (2024)	Conceptual	AI ethics and academic integrity	AI improves learning efficiency but introduces challenges related to academic integrity, ethical responsibility, and responsible AI use
11.	Kasneci et al. (2023)	Narrative Review	Large Language Models in education	Generative AI supports teaching and learning but requires continuous teacher supervision, critical evaluation, and pedagogical responsibility
12.	Tlili et al. (2023)	Review	ChatGPT in education	Generative AI offers substantial pedagogical opportunities while requiring

				meaningful human oversight to minimize educational and ethical risks
13.	UNESCO (2023)	Policy Guidance	Governance of Generative AI in education	Responsible AI implementation requires transparency, accountability, human oversight, and ethical governance across educational systems
14.	Fauzi et al. (2026)	Conceptual	AI, Spritual Ethics, and Islamic Character Formation	AI integration in Madrasah Ibtidaiyah should strengthen Islamic character formation through a framework of spiritual ethics, ensuring that technological innovation supports rather than weakens the educational mission of Islam

The synthesis presented in Table 1 indicates that existing studies have predominantly examined AI from technological, pedagogical, ethical, or Islamic philosophical perspectives independently. Only a limited number of studies attempt to connect these perspectives into a coherent framework for Islamic Religious Education, particularly within the context of Madrasah Ibtidaiyah. Consequently, the reviewed literature reveals an important conceptual gap regarding how technological innovation can coexist with teachers' epistemic authority and the spiritual objectives of Islamic education. The subsequent discussion therefore examines each of the four identified themes to construct a more comprehensive conceptual understanding of AI integration in PAI learning.

D. DISCUSSION

1. AI-Supported Instructional Strategies for PAI Learning in Madrasah Ibtidaiyah

The reviewed studies indicate that AI integration in Islamic Religious Education (PAI) at the Madrasah Ibtidaiyah level functions primarily as a pedagogical support system rather than merely a digital instructional tool. Recent scholarship demonstrates that AI has considerable potential to enhance instructional quality through interactive learning media, personalized learning, and curriculum innovation while supporting teachers in delivering meaningful learning experiences (Faizin et al., 2025; Huda et al., 2024). The synthesis of the reviewed literature identifies three interconnected instructional strategies. First, AI-supported digital applications facilitate multimedia-based learning through Qur'anic stories, Islamic values, daily worship practices, and moral education, enabling abstract religious concepts to become more accessible and engaging for elementary students. Second, AI-powered content recommendation systems enable teachers to provide differentiated learning materials according to students' learning progress while maintaining pedagogical control over religious content. Third, AI-based learning analytics assist teachers in identifying students' participation, learning difficulties, and conceptual understanding, thereby supporting timely instructional interventions without replacing teachers' professional judgment.

The reviewed literature further emphasizes that these instructional strategies should not be interpreted as mechanisms for automating PAI instruction. Instead, AI serves as a complementary pedagogical instrument whose effectiveness depends upon teachers' professional and spiritual authority as *murabbi*. Recent studies argue that AI should be positioned as a teacher's partner, assisting educators in lesson preparation, instructional adaptation, and formative assessment while leaving pedagogical and ethical decision-making under teachers' supervision (Nun et al., 2025). Similarly, the transformation of Islamic Religious Education through AI requires the integration of technological innovation with Islamic pedagogical principles rather than replacing conventional teacher-centered guidance (Shofiyyah et al., 2024).

Accordingly, successful AI integration in Madrasah Ibtidaiyah depends not only on technological capability but also on teachers' ability to harmonize AI-supported innovation with authentic Islamic educational values and students' developmental characteristics. Teachers remain responsible for validating AI-generated content against authoritative Islamic sources, contextualizing learning materials, and ensuring that instructional activities continue to support character formation and spiritual development. Therefore, the reviewed studies consistently conclude that AI should strengthen instructional quality while preserving teachers' epistemic authority, religious authenticity, and holistic student development as the defining characteristics of PAI learning (Achruh et al., 2024; Faizin et al., 2025; Huda et al., 2024).

2. Challenges to Teachers' Epistemic Authority in AI-Supported PAI Learning

The reviewed literature consistently indicates that integrating Artificial Intelligence (AI) into Islamic Religious Education (PAI) presents challenges extending beyond technological adoption to the preservation of teachers' epistemic authority. Rather than representing a single dimension, the role of the *murabbi* encompasses multiple forms of authority that may be influenced differently by AI-supported learning. The synthesis identifies four interrelated dimensions requiring careful attention: authority of knowledge sources, authority of religious interpretation, pedagogical authority, and moral-spiritual authority. The first challenge concerns the authority of knowledge sources. Although generative AI rapidly produces explanations, summaries, and responses to religious questions, it cannot independently distinguish authoritative Islamic references from weak, disputed, or contextually inappropriate sources. Consequently, teachers remain responsible for validating AI-generated content against authentic references, including the Qur'an, *Hadith*, and recognized scholarly interpretations before integrating it into classroom instruction. This finding reinforces that AI should function as an information-support tool rather than an autonomous religious authority, while its implementation should remain aligned with the principles of *maqāṣid al-sharī'ah*, particularly the preservation of religion (*ḥifẓ al-dīn*) and intellect (*ḥifẓ al-'aql*) (Supriatin et al., 2025).

The second challenge relates to the authority of interpretation, which remains central to PAI learning. Unlike factual subjects, Islamic Religious Education requires contextual interpretation of religious texts, ethical reasoning, and sensitivity to students' developmental characteristics. AI-generated responses are produced through statistical language prediction and therefore cannot fully accommodate the theological, historical, and pedagogical nuances underlying Islamic teachings. Recent studies on generative AI emphasize that large language models should support rather than replace teachers' professional judgment because educational

interpretation depends upon contextual expertise and human reasoning (Kasneci et al., 2023; Tlili et al., 2023). Likewise, teachers as *murabbi* retain an indispensable role in interpreting religious knowledge, explaining scholarly differences of opinion, and contextualizing Islamic values according to learners' cognitive and spiritual needs. This synthesis demonstrates that AI can facilitate access to religious information but cannot replace the interpretative responsibility exercised by qualified educators in ensuring that learning remains aligned with accepted theological principles and educational objectives (Papakostas, 2025).

The remaining challenges concern pedagogical authority and moral-spiritual authority, both of which remain fundamentally human-centred. Although AI may assist teachers in lesson planning, differentiated instruction, formative assessment, and adaptive learning support, pedagogical decisions regarding classroom interaction, learning strategies, and students' developmental readiness continue to depend upon teachers' professional judgment. More importantly, moral and spiritual authority cannot be replicated through algorithmic systems because character formation (*tarbiyah*), exemplary conduct (*uswah hasanah*), empathy, and religious mentoring depend upon authentic human relationships. International guidance further recommends that generative AI should always operate under meaningful human oversight to preserve educational integrity and ethical accountability (UNESCO, 2023). Accordingly, the reviewed studies consistently conclude that AI should be positioned as a pedagogical assistant operating under teachers' educational supervision rather than as an autonomous instructional authority. Preserving teachers' epistemic authority therefore requires balancing technological innovation with the philosophical foundations of Islamic education so that AI enhances learning while safeguarding the authenticity, spirituality, and humanistic values characterizing PAI in Madrasah Ibtidaiyah (Achruh et al., 2024; Badrasawi et al., 2018; Faizin et al., 2025).

3. Algorithmic Bias and AI Ethics in PAI Learning

The reviewed literature consistently identifies algorithmic bias as one of the most significant challenges in integrating Artificial Intelligence (AI) into Islamic Religious Education (PAI). Unlike general educational subjects, PAI requires accuracy not only in factual information but also in the selection, interpretation, and contextualization of Islamic teachings. Recent studies on AI ethics demonstrate that generative AI systems may produce convincing responses while simultaneously reproducing biases originating from training data, limited contextual understanding, and probabilistic language generation (Khan et al., 2021; Yan et al., 2023). Consequently, AI-generated religious content may appear linguistically coherent but lack theological precision, contextual sensitivity, and alignment with established Islamic epistemology, making algorithmic bias a challenge not only to technical accuracy but also to the integrity of Islamic educational content (Cotton et al., 2024; Papakostas, 2025).

The reviewed studies reveal three recurring patterns through which algorithmic bias may affect PAI learning at the Madrasah Ibtidaiyah level. First, AI may recommend Qur'anic verses (*dalil*) or *Hadith* without adequately considering educational context or authoritative scholarly interpretation, potentially leading to fragmented understanding. Second, AI-generated explanations of *aqidah* frequently simplify complex theological concepts, overlooking the developmental characteristics of elementary learners and the need for gradual conceptual guidance. Third, responses concerning Islamic law (*fiqh*) may present a single legal opinion while neglecting legitimate scholarly diversity (*ikhtilaf*), thereby limiting students' appreciation

of the richness of Islamic jurisprudence. These findings suggest that algorithmic bias extends beyond factual inaccuracies to include conceptual oversimplification, reduction of theological nuance, and the erosion of value-based learning that characterizes Islamic education.

The literature further emphasizes that mitigating these risks requires continuous human supervision grounded in Islamic educational philosophy and spiritual ethics. Teachers as *murabbi* remain responsible for validating AI-generated materials, selecting authentic religious references, and contextualizing doctrinal explanations according to students' cognitive and spiritual development. Previous studies therefore recommend collaboration among Islamic education scholars, *ulama*, curriculum specialists, and AI developers to establish ethical guidelines, algorithmic auditing procedures, and human-in-the-loop validation mechanisms for AI-assisted learning (Achruh et al., 2024; Papakostas, 2025). Likewise, recent research on Islamic character formation argues that AI should operate within a framework of spiritual ethics so that technological innovation strengthens moral education rather than merely improving instructional efficiency (Fauzi et al., 2026). Accordingly, responsible AI integration in PAI should prioritize theological validity, pedagogical appropriateness, ethical accountability, and the preservation of teachers' epistemic authority alongside technological innovation.

4. A value-oriented framework balancing technological innovation and students' spiritual development

Rather than viewing Artificial Intelligence (AI) solely as a technological solution or a potential threat, the reviewed literature suggests that its successful integration into Islamic Religious Education (PAI) depends on a value-oriented educational framework that harmonizes technological innovation with Islamic pedagogical principles. Effective AI implementation cannot be explained merely by technological readiness or digital infrastructure; rather, it emerges through the interaction of four complementary dimensions identified in this review: AI-supported instructional strategies, preservation of teachers' epistemic authority as *murabbi*, ethical governance to minimize algorithmic bias, and learning designs responsive to the developmental characteristics of Madrasah Ibtidaiyah students. Collectively, these dimensions demonstrate that AI should reinforce, rather than redefine, the philosophical objectives of Islamic education and remain aligned with the principles of *maqāṣid al-sharī'ah* (Achruh et al., 2024; Papakostas, 2025; Supriatin et al., 2025).

Another important finding concerns the concept of personalization. The reviewed studies emphasize that personalization in PAI should not be interpreted merely as algorithm-driven adaptation of learning materials but as a pedagogical process requiring teachers' professional judgment in responding to students' cognitive readiness, emotional maturity, spiritual needs, and social development. Although AI can assist in identifying learning patterns and recommending instructional resources, decisions regarding religious content, moral guidance, and character formation remain inseparable from teachers' contextual understanding. This perspective is consistent with recent discussions on digital transformation in Islamic education, which emphasize that technological innovation should strengthen meaningful human interaction and value-based learning rather than diminish them (Muslim, 2024).

Furthermore, the literature highlights that responsible AI implementation requires collaborative governance involving educators, Islamic education scholars, curriculum developers, AI specialists, and policymakers throughout the design, implementation, and

evaluation of AI-assisted learning. International guidance likewise recommends that generative AI systems operate under principles of human oversight, transparency, and ethical accountability to ensure that technological innovation remains aligned with educational objectives (UNESCO, 2023). Complementing this perspective, recent scholarship also emphasizes the importance of ethical AI governance and policy frameworks that balance technological advancement with societal and educational values (Muchtasor, 2025). Accordingly, this review proposes a value-oriented framework in which AI functions as a pedagogical ecosystem governed by Islamic educational philosophy, ethical AI principles, and teachers' professional expertise, thereby supporting sustainable AI integration in Madrasah Ibtidaiyah (Faizin et al., 2025).

From a theoretical perspective, this study contributes by synthesizing contemporary AI discourse with Islamic educational philosophy into a coherent conceptual framework. Rather than positioning AI as an autonomous educational actor, the proposed framework conceptualizes it as a pedagogical ecosystem governed by teachers' professional expertise, Islamic ethical principles, and students' developmental needs. This synthesis extends existing discussions by demonstrating that technological innovation, pedagogical wisdom, ethical responsibility, and spiritual objectives should operate as mutually reinforcing dimensions. Such an orientation is consistent with community-wide AI ethics frameworks emphasizing human agency, stakeholder responsibility, transparency, and educational accountability (Holmes et al., 2022), while also responding to emerging opportunities and challenges associated with AI integration in Islamic education (Salim & Aditya, 2025).

The proposed framework further reinforces the argument that AI integration in Madrasah Ibtidaiyah should be grounded in spiritual ethics and Islamic character formation so that technological innovation strengthens, rather than weakens, the educational mission of Islam (Fauzi et al., 2026). Recent studies similarly emphasize the importance of developing humanistic AI-supported learning models that preserve meaningful teacher–student relationships and align technological adaptation with Islamic educational values (Azis et al., 2026). Moreover, the growing significance of AI in the future development of Islamic education requires institutions to move beyond technology adoption toward pedagogically purposeful and ethically responsible implementation (Djazilan et al., 2024).

At the practical level, these findings encourage educators, curriculum developers, madrasah administrators, and policymakers to formulate AI implementation strategies incorporating ethical review, meaningful human oversight, contextual adaptation, and continuous evaluation. Such strategies should ensure that AI-generated materials remain pedagogically appropriate, developmentally responsive, and consistent with authentic Islamic values. Therefore, responsible AI integration should prioritize not only instructional efficiency but also teachers' epistemic authority, students' holistic development, and the preservation of spiritual and humanistic dimensions within Madrasah Ibtidaiyah learning environments (Cotton et al., 2024; Faizin et al., 2025).

E. CONCLUSION

This systematic literature review demonstrates that the integration of Artificial Intelligence (AI) into Islamic Religious Education (PAI) at the Madrasah Ibtidaiyah level should be understood as a value-oriented educational transformation rather than merely a

process of technological adoption. The synthesis of the reviewed literature identifies four interrelated dimensions that determine successful AI implementation: AI-supported instructional strategies, preservation of teachers' epistemic authority as *murabbi*, ethical governance to mitigate algorithmic bias, and learning designs responsive to the developmental characteristics of elementary students. Collectively, these findings indicate that AI can enhance instructional quality, personalized learning, and evidence-informed pedagogical decision-making only when its implementation remains grounded in Islamic educational philosophy and guided by teachers' professional and spiritual authority.

The principal theoretical contribution of this study lies in proposing an integrated conceptual framework that connects AI-supported learning, the *murabbi* concept, AI ethics, and the principles of *maqāṣid al-sharī'ah*. Unlike previous studies that have generally examined these perspectives independently, this review demonstrates that responsible AI implementation requires the interaction of pedagogical innovation, ethical governance, and Islamic educational values within a coherent framework. Practically, the findings provide guidance for educators, curriculum developers, and policymakers in designing AI-assisted learning environments that preserve theological validity, pedagogical appropriateness, and students' holistic development while minimizing the risks of algorithmic bias and epistemic misalignment.

Despite these contributions, this study is limited by its reliance on published literature and the absence of empirical classroom validation. Therefore, future studies should examine the proposed conceptual framework through qualitative, quantitative, or mixed-methods research involving teachers and students in Madrasah Ibtidaiyah. Further investigations are also needed to develop AI governance models, human-in-the-loop validation mechanisms, and ethical evaluation frameworks that integrate technological capability with Islamic educational values. Such efforts are expected to strengthen the responsible implementation of AI while ensuring that technological innovation continues to support, rather than compromise, the philosophical, pedagogical, and spiritual foundations of Islamic Religious Education.

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