

Challenges and Opportunities in Research Methodology for Contemporary Islamic Education Studies

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Abstract

This study aims to analyze the challenges and opportunities of research methodology in contemporary Islamic education studies and identify future methodological directions in the digital transformation era. The study employed a Systematic Literature Review (SLR) following the PRISMA 2020 guidelines by examining articles indexed in Scopus and SINTA published between 2021 and 2025. The collected data were analyzed using thematic analysis to identify major methodological trends. The findings reveal a paradigm shift from predominantly normative and textual approaches toward more empirical, interdisciplinary, technology-driven, and contextual methodologies. Major challenges include the limited integration of Islamic epistemology with modern scientific methods, insufficient research instrument validity, inadequate methodological competence among researchers, and the complexity of digital data analysis. Conversely, the adoption of mixed methods, Artificial Intelligence (AI), data analytics, and multidisciplinary collaboration provides significant opportunities to enhance the quality and relevance of Islamic education research. The novelty of this study lies in proposing an integrated conceptual framework that synthesizes methodological challenges, opportunities, and future directions into a comprehensive analytical model for advancing contemporary Islamic education research.

Keywords: Islamic Education, Research Methodology, Contemporary Studies

Abstrak

Penelitian ini bertujuan untuk menganalisis tantangan dan peluang metodologi penelitian dalam kajian pendidikan Islam kontemporer serta mengidentifikasi arah pengembangannya di era transformasi digital. Penelitian menggunakan pendekatan Systematic Literature Review (SLR) berdasarkan pedoman PRISMA 2020 dengan menganalisis artikel-artikel yang terindeks Scopus dan SINTA pada periode 2021–

2025. Data dianalisis melalui thematic analysis untuk mengidentifikasi tema-tema utama mengenai perkembangan metodologi penelitian. Hasil penelitian menunjukkan bahwa kajian pendidikan Islam mengalami pergeseran menuju pendekatan yang lebih empiris, interdisipliner, berbasis teknologi, dan kontekstual. Tantangan utama meliputi belum optimalnya integrasi epistemologi Islam dengan metodologi ilmiah modern, keterbatasan validitas instrumen penelitian, rendahnya kompetensi metodologis peneliti, serta kompleksitas analisis data digital. Di sisi lain, perkembangan mixed methods, kecerdasan buatan (Artificial Intelligence), analitik data, dan kolaborasi multidisipliner membuka peluang untuk menghasilkan penelitian yang lebih komprehensif dan relevan. Novelty penelitian ini terletak pada penyusunan kerangka konseptual yang mengintegrasikan tantangan, peluang, dan arah pengembangan metodologi penelitian pendidikan Islam kontemporer dalam satu model analitis yang dapat menjadi rujukan bagi pengembangan riset di masa mendatang.

Kata Kunci: Pendidikan Islam, Metodologi Penelitian, Kajian Kontemporer

A. Introduction

Advances in science, information technology, and social dynamics have brought about significant changes to various fields of academic study, including educational research. These changes affect not only the objects of research but also the ways in which researchers understand, examine, and explain increasingly complex educational phenomena. In this context, research methodology plays a vital role as the foundation for producing systematic, valid, and scientifically accountable knowledge. Consequently, the development of research methodology has become a strategic issue across various academic disciplines, including the study of Islamic education.¹

Contemporary Islamic education studies face various changes influenced by globalisation, transformations in the education system, developments in digital technology, and changes in the characteristics of learners. These changes have given rise to increasingly complex educational issues that require a research approach capable of comprehensively explaining reality. In addition to its empirical aspects, Islamic education also encompasses a normative dimension rooted in Islamic values. This situation makes research methodology a vital instrument for bridging the gap between the advancement of knowledge and the reinforcement of Islamic educational values.²

In line with these developments, the orientation of research in Islamic education has undergone a significant shift. Whereas research was previously dominated by normative and textual approaches, the contemporary era has seen the emergence of more empirical, contextual and interdisciplinary approaches. The diversification of research methods such as qualitative, quantitative, mixed-methods, action research, systematic literature reviews, and bibliometric analysis demonstrates an effort to understand the phenomenon of Islamic education more comprehensively in line with the demands of the times. However, the diversification of methods alone does not necessarily reflect methodological maturity; this shift actually raises new

¹ Meysi Wulandari Ap et al., "The Impact of Science and Technology Development on Social Change and the Dynamics of Life," *WISSEN: Journal of Social Sciences and Humanities* 3, no. 2 (2025): 258–64.

² Huzma Juliantri, "Contemporary Issues in Islamic Education," *Literasi Kita Indonesia* 13, no. 4 (2025): 1–9.

questions regarding the extent to which these methods are truly epistemologically integrated with the ‘ ’ character of Islamic educational scholarship, rather than merely being adopted technically from other disciplines.³

Nevertheless, the development of research methodology in the study of Islamic education still faces a number of challenges. One of the main challenges is the effort to integrate the normative Islamic dimension with the demands of scientific objectivity that characterise modern research two orientations that are often treated as two separate poles rather than a complementary whole. Furthermore, the complexity of Islamic educational phenomena which involve theological, social, cultural and technological aspects demands a command of increasingly diverse methodologies. Another challenge relates to the need to develop a research paradigm capable of linking Islamic epistemology with various contemporary scientific approaches, so that the resulting research is not only methodologically sound but also remains relevant to the characteristics of Islamic education.⁴

On the other hand, the development of digital technology and the increasing openness to cross-disciplinary collaboration present significant opportunities for the development of research methodologies in Islamic education. The use of digital tools in data collection and analysis, the growth of mixed-methods approaches, and the rise of interdisciplinary research enable researchers to gain a more comprehensive understanding of various phenomena in Islamic education. Furthermore, the integration of Islamic epistemology and modern scientific methodology has the potential to yield research models that are more holistic, contextual and responsive to the needs of society. These challenges and opportunities are essentially two sides of the same transformative process, both of which need to be understood in relation to one another, rather than in isolation.⁵

A number of previous studies have addressed the development of research methodologies in the field of Islamic education from various perspectives, but these have tended to be carried out in isolation. Studies on the transformation of Islamic education in the digital age indicate that technological developments are driving the emergence of various methodological innovations and an increased use of technology in academic and research activities.⁶ Other research emphasises the importance of an interdisciplinary approach in contemporary Islamic studies as a means of addressing the complexity of increasingly diverse Islamic issues through collaboration across various academic disciplines.⁷ Furthermore, studies on the integration of religion and science highlight the importance of developing a scientific paradigm capable of linking

³ Adawiyah Aminah Zen, Nurdin, Ubadah, “The Reconstruction of Islamic Religious Education in Response to the ‘Fear of Missing Out’ Phenomenon Among Muslim Adolescents,” **Idarah Tarbiyah: Journal of Management in Islamic Education** 7, no. 3 (2026): 1048–62, <https://doi.org/10.32832/itjmie.v7i3.23650>.

⁴ Nurjana Cyntia Rahman and Muh Arif, “Educational Values in the Qur’an and Hadith: A Thematic Analysis as a Basis for Curriculum Development,” *Chalim Journal of Teaching and Learning* 5, no. 2 (2026): 252–61.

⁵ Sondang Visiana Sihotang Fitra Putri Oganda, Po Abas Sunarya, Marviola Hardini, “Digital Transformation as a Strategy for Building Adaptive Pesantren Management Systems,” *ADI Bisnis Digital Interdisiplin (ABDI Journal)* 6, no. 2 (2025): 120–32.

⁶ Yesshe Andes Balika, “The Transformation of Islamic Education in the Digital Age: An Analysis of the Thought of Yusuf Al-Qadrawi,” *JURNAL PENDIDIKAN NUSANTARA* 10, no. 1 (2024): 5–7.

⁷ Muhammad Yusuf Zulkifli Jasmadi, Adnin AS, “An Interdisciplinary Approach in Contemporary Islamic Studies: Fostering Collaboration Between Ulama and Muslim Intellectuals,” *JOURNAL OF IKHTIBAR NUSANTARA* 3, no. 1 (2024): 139–50.

Islamic values with modern scientific approaches.⁸ Meanwhile, research on the use of mixed methods in Islamic Religious Education indicates that the integration of quantitative and qualitative approaches can yield a more comprehensive understanding of the complex phenomena of Islamic education.⁹

The problem is that these four lines of inquiry-digitalisation, interdisciplinarity, epistemological integration, and mixed methods-have so far been discussed as separate issues, rather than as a unified set of methodological dynamics that influence one another. Consequently, there is as yet no study that systematically links methodological developments, the accompanying challenges, the opportunities that arise, and their implications for the future direction of Islamic education within a single, coherent framework of discussion. In practice, however, these four aspects are interlinked: the challenge of epistemological integration, for example, cannot be fully understood without considering it alongside the opportunities opened up by digital technology and interdisciplinary collaboration. It is this fragmentation of the discussion that constitutes *a research gap* in the current literature on contemporary Islamic education.

Based on this *research gap*, this article offers an innovative approach in the form of an integrative analysis that links methodological developments, challenges, opportunities and their implications within a coherent framework of discussion, rather than merely summarising the four aspects separately. Through this framework, the article aims to analyse the development of Islamic education research methodology, identify the methodological challenges and opportunities that have emerged, and explain their implications for the future of Islamic education studies in a more holistic and interconnected manner.

B. Literature Review

I. Methodology of Islamic Education Research

Islamic education research methodology comprises a set of paradigms, approaches, methods and scientific procedures used to systematically understand the phenomenon of Islamic education. Recent literature indicates that the methodology of Islamic education research has undergone significant transformation in line with the growing complexity of educational issues, social change, and advances in digital technology. Whereas in previous decades research in Islamic education was predominantly characterised by a normative approach centred on the analysis of Islamic texts and thought, contemporary research is moving towards empirical, interdisciplinary, and evidence-based approaches. This shift does not imply abandoning the normative dimension, but rather reflects an effort to link Islamic values with educational realities through more systematic and scientifically accountable research procedures.¹⁰

Nevertheless, this development has not yet led to a consensus on the most appropriate methodological paradigm for research into Islamic education.

⁸ Munirul Abidin Shinta Adhelia Putri Sugiharto, Sidqi Ali, "The Integration of Religion and Science in the Postmodern World: Opportunities and Challenges for the Philosophy of Science," *Jurnal Ilmiah Nusantara (JINU)* 3, no. 1 (2026): 850–61.

⁹ Sumiati Nurhidaya M, Dina Hermina, Nuril Huda, "The Use of Mixed Methods in Islamic Religious Education Research," *Jurnal MUDARRISUNA: Media for the Study of Islamic Religious Education* 14, no. 4 (2024): 573–85.

¹⁰ Claire Alkoutli, "Illuminating Data beyond the Tangible: Exploring a Conceptually-Relevant Paradigmatic Frame for Empirical Inquiry with Muslim Educators," *International Journal of Qualitative Studies in Education* 37 (February 2024): 2466–84, <https://doi.org/10.1080/09518398.2024.2318301>.

Some academics maintain that the normative approach remains the defining characteristic of Islamic scholarship, whilst others advocate for a broader use of empirical methods so that research findings possess greater explanatory power, predictive power and practical relevance. Consequently, research methodology in Islamic education is currently developing across a broad spectrum, ranging from philosophical, historical, qualitative and quantitative research to mixed methods, without a single universally accepted paradigm.¹¹

2. Developments in Islamic Education Research Methodology

The development of research methodology in Islamic Education is characterised by an increasing use of empirical research compared to conceptual studies. Nevertheless, the most dominant form of empirical research remains qualitative research, particularly case studies, educational ethnography, and field research. The dominance of qualitative methods is influenced by the characteristics of Islamic educational phenomena, which are contextual in nature, value-laden, and closely linked to the socio-religious experiences of both learners and educational institutions. A systematic review of leadership in Islamic education even indicates that quantitative research, mixed-methods research, and comparative studies remain relatively limited; consequently, evidence regarding the effectiveness of policies and institutional impacts has not yet developed optimally.¹²

On the other hand, there has been a diversification of research designs, indicating the increasing maturity of research methodology in Islamic education. Mixed-methods approaches are beginning to be used to explain educational phenomena that cannot be adequately understood through quantitative or qualitative data alone, such as research on blended learning, religious moderation, multicultural education, and prosocial behaviour in Islamic educational institutions. Furthermore, systematic literature reviews (SLRs) are increasingly being applied to produce a synthesis of evidence that is more systematic, transparent and replicable, particularly in studies of Islamic educational leadership, quality assurance and Islamic education policy. These developments indicate that research methodology in Islamic education is moving towards more rigorous international research standards without losing sensitivity to the Islamic context.¹³

3. Methodological Challenges in Islamic Education Research

The main challenge in the methodology of Islamic education research lies in epistemological issues. The literature indicates a debate regarding the relationship between revelation (naqliyah), reason (aqliyah), and empirical experience as sources of scientific knowledge. A number of researchers reject the dichotomy between religious knowledge and modern science, proposing instead an integrative paradigm that views these three sources of knowledge as mutually complementary elements. Conversely, some research still remains at

¹¹ Sahriandi Setiawan et al., "Epistemology in Islamic Education: A Critical Analysis of the Integration of Science and Religion," *ICONIC: Journal of Islamic Studies*, forthcoming, 9 November 2025, <https://doi.org/10.59166/psxmg353>.

¹² K. Arar et al., "The Research on Islamic-Based Educational Leadership since 1990: An International Review of Empirical Evidence and a Future Research Agenda," *Religions*, ahead of print, 1 January 2022, <https://doi.org/10.3390/rel13010042>.

¹³ Cassie Wallwey and R. Kajfez, "Quantitative Research Artifacts as Qualitative Data Collection Techniques in a Mixed Methods Research Study," *Methods in Psychology*, ahead of print, 1 February 2023, <https://doi.org/10.1016/j.metip.2023.100115>.

two extremes: either fully adopting a positivist-secular paradigm or persisting with normative studies that have not yet been operationalised into empirical research procedures. This debate demonstrates that the methodological issue is not merely a choice between a normative or empirical approach, but rather designing a proportional and consistent integration of the two.¹⁴

In addition to epistemological issues, digital transformation presents new challenges regarding research validity, ethics, human resource readiness, and institutional governance. Both mixed-methods and quantitative research are beginning to pay greater attention to the validity and reliability of instruments, but these practices have not yet been applied uniformly. In the digital context, various studies have also identified barriers such as infrastructure limitations, low digital literacy, organisational cultural resistance, and a lack of alignment between institutional policies and developments in educational technology. Therefore, strengthening the research methodology of Islamic education requires not only innovation in research design but also institutional reform and capacity building for researchers to utilise technology ethically and responsibly.¹⁵

4. Opportunities for the Development of Islamic Education Research Methodology

The literature indicates that the greatest opportunity for the development of Islamic education research methodology lies in integrative approaches that combine the strengths of various research paradigms. One widely recommended approach is Design-Based Research (DBR), as it enables both theoretical development and the generation of practical innovations through an iterative cycle of design, implementation, evaluation and revision. This approach is considered suitable for developing learning models, educational media, and curriculum innovations that require empirical validation in real-world contexts. Furthermore, mixed methods are increasingly viewed as an approach capable of bridging the breadth of quantitative data with the depth of qualitative interpretation through the integration of both types of data during the data collection and analysis stages.¹⁶

Further opportunities arise through the integration of knowledge, digital transformation, and cross-disciplinary collaboration. Various studies indicate that digital technology is no longer viewed as a threat to the traditions of Islamic education, but rather as a means of expanding access to learning, personalising the learning process, and reinforcing spiritual values through more adaptive media. However, the successful implementation of methodological innovations remains influenced by the readiness of human resources, institutional policies, a culture of research quality, and the ability to foster multidisciplinary collaboration. Consequently, methodological innovation in Islamic education research requires a balance between the integration of Islamic epistemology, technological advancements, and modern scientific methodological standards.¹⁷

¹⁴ Anhar Anhar et al., "Paradigms of Scientific Integration in Sumatra's State Islamic Universities," *Jurnal Ilmiah Peuradeun*, to be published, 30 January 2026, <https://doi.org/10.26811/peuradeun.v14i1.2608>.

¹⁵ Slamet Firdaus et al., "Transforming Islamic Higher Education: Integrating Islamic Values and Digital Technology at UIN Siber Cirebon," *Peuradeun Scientific Journal*, ahead of print, 30 September 2025, <https://doi.org/10.26811/peuradeun.v13i3.2330>.

¹⁶ Luís Tinoca et al., "Design-Based Research in the Educational Field: A Systematic Literature Review," *Education Sciences*, ahead of print, 16 June 2022, <https://doi.org/10.3390/educsci12060410>.

¹⁷ Firdaus et al., "Transforming Islamic Higher Education: Integrating Islamic Values and Digital Technology at UIN Siber Cirebon."

5. Conceptual Framework of Islamic Education Research Methodology

A synthesis of the literature indicates that contemporary research methodology in Islamic education is influenced by the interplay between shifts in the social context, developments in digital technology, choices of epistemological paradigms, researchers' methodological capacities, and the need for educational innovation. Social change is driving research that is increasingly empirical, interdisciplinary and problem-solving oriented, whilst technological developments are expanding the use of digital data, technology-based learning and analysis aided by research software. At the same time, the integration of knowledge is evolving as a contextual epistemological process that depends on the history, vision and academic culture of each institution.¹⁸

Based on this synthesis, the research methodology of Islamic education is no longer understood as a dichotomous choice between normative and empirical approaches, but rather as an integrative paradigm that links the epistemological foundations of Islam, the rigour of scientific methodology, the utilisation of digital technology, and the practical relevance of educational practice. This integrative paradigm serves as the theoretical foundation for research as it enables an analysis capable of comprehensively explaining phenomena in Islamic education, whilst also producing recommendations that possess academic validity and practical benefits. Thus, this theoretical framework positions the research methodology of Islamic education as a dynamic, adaptive system that is open to innovation without compromising the foundational Islamic values.¹⁹

C. Method

This study employs a Systematic Literature Review (SLR) conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses PRISMA 2020 guidelines. This approach was chosen because the aim of the research is not merely to describe the available literature, but to systematically identify, select, evaluate and synthesise scientific evidence regarding the development of Islamic education research methodology, epistemological challenges, opportunities for innovation, and the direction of its development.²⁰ Compared to conventional narrative reviews, which tend to be less systematic and more prone to selection bias, SLR provides transparent, documented and replicable procedures, thereby enhancing the credibility of the resulting synthesis. Although the scope of the study covers a broad and heterogeneous range of topics, the SLR approach is still considered relevant provided that the processes of search, selection, analysis, and research limitations are explicitly described in accordance with the principles of transparency and reproducibility, as emphasised in PRISMA 2020 and Snyder's methodological review.

The literature search strategy was conducted systematically in the Scopus and SINTA databases, covering publications from 2021 to 2025. The selection of these two databases was based on considerations of publication quality, relevance to the field of Islamic education, and the representation of international and national literature that has undergone a peer-review process. The search utilised a

¹⁸ Anhar et al., "Paradigms of Scientific Integration in Sumatra's State Islamic Universities."

¹⁹ Alkoutli, "Illuminating Data beyond the Tangible: Exploring a Conceptually-Relevant Paradigmatic Frame for Empirical Inquiry with Muslim Educators."

²⁰ H. Snyder, "Literature Review as a Research Methodology: An Overview and Guidelines," *Journal of Business Research*, ahead of print, 1 November 2019, <https://doi.org/10.1016/j.jbusres.2019.07.039>.

combination of keywords related to 'Islamic education research methodology', 'Islamic education', 'research methods', 'systematic literature review', 'artificial intelligence', 'digital learning', and other relevant terms, tailored to the characteristics of each database using the Boolean operator ' '. The entire search process was documented in detail, including the search dates, complete search strings, and the limitations applied. The selection stages followed the PRISMA 2020 flowchart, comprising identification, screening, eligibility, and inclusion, accompanied by a report on the number of articles at each stage and the reasons for excluding full-text articles to ensure transparency in the selection process.²¹

Inclusion criteria were established prior to the selection process to minimise potential bias; these included scientific articles published between 2021 and 2025, available in full text, discussing the methodology of Islamic education research either directly or implicitly, and published in journals indexed by Scopus or SINTA. Conversely, articles irrelevant to the research focus—such as conference proceedings, editorials, book reviews, or publications that do not provide the full text—were excluded from the analysis. Once the articles met the eligibility criteria, data were extracted using a standardised data extraction form containing information on the publication's details, research objectives, methodological design, research approach, data collection and analysis techniques, key findings, methodological challenges, innovations offered, and implications for the development of Islamic education research methodology. The use of a standardised data extraction tool was intended to ensure consistency, completeness and comparability of information across studies.²²

The extracted data were subsequently analysed using thematic analysis to identify patterns, categories, and key themes that emerged consistently across the various studies. The analysis was conducted through a process of open coding, category grouping, theme development, and interpretative synthesis, thereby enabling the mapping of developments in Islamic education research methodology, epistemological challenges in the digital age, opportunities for the integration of technologies such as artificial intelligence, and future research directions. To enhance the reliability of the review's findings, the screening, extraction, and analysis processes were carried out systematically in accordance with the PRISMA 2020 guidelines, with comprehensive documentation; any differences in interpretation during the review process were resolved through discussion until consensus was reached. Consequently, the entire research procedure adhered to the principles of transparency, accountability, and replicability—which are the key characteristics of a high-quality systematic literature review.

D. Research Findings

The results of the literature analysis indicate that research methodology in the field of Islamic education has undergone significant development in the contemporary era. Whereas in previous periods research was predominantly characterised by normative, philosophical and textual approaches, the current orientation of research is shifting towards more empirical and contextual approaches. This shift has been influenced by advances in science, digital technology,

²¹ M. Page et al., "PRISMA 2020 Explanation and Elaboration: Updated Guidance and Exemplars for Reporting Systematic Reviews," *The BMJ* 372 (September 2020), <https://doi.org/10.1136/bmj.n160>.

²² Melissa Forbes, "Thematic Analysis: A Practical Guide," *Evaluation Journal of Australasia* 22 (December 2021): 132–35, <https://doi.org/10.1177/1035719x211058251>.

and the increasing complexity of issues in Islamic education. These conditions have encouraged the use of a wider variety of research approaches to understand educational phenomena.

This development is evident in the increasingly widespread use of qualitative and quantitative approaches in research on Islamic education. Qualitative approaches are frequently used to examine the meanings, values, experiences and practices of Islamic education relating to character building and educational culture. Meanwhile, quantitative approaches are used to measure the effectiveness of programmes, learning outcomes and various educational variables that can be statistically tested. These findings indicate that research in Islamic education is becoming increasingly open to the various scientific methods that have developed within the modern academic tradition.²³

The research results also show an increase in the use of mixed methods in various studies of Islamic education. This approach is used to integrate quantitative and qualitative data within a single research design, thereby yielding a more comprehensive understanding of a phenomenon. The use of mixed methods has grown in line with the need to explain increasingly complex and multidimensional educational issues. Consequently, this method has become one of the most widely used approaches in contemporary Islamic education research.²⁴

Furthermore, developments in Islamic education research methodology are characterised by the increasing use of digital technology in the research process. Various data analysis software programmes, reference management applications, and online academic databases are now being widely used to support research activities. Methods such as systematic literature reviews and bibliometric analysis are also increasingly being utilised to map the development of Islamic education studies. These findings indicate that digital transformation has had a significant impact on the development of research methodology.²⁵

Another development identified is the growing use of interdisciplinary approaches in Islamic education research. Various educational issues are no longer examined solely from a religious perspective, but also through the lenses of sociology, psychology, anthropology, educational technology, and other disciplines. The integration of these various disciplines yields a broader understanding of the educational phenomena under investigation. Consequently, research in Islamic education is showing a trend towards a more holistic and contextual approach.²⁶

I. Methodological Challenges in Contemporary Islamic Education Research

In addition to highlighting methodological developments, the results of the literature review also identify various challenges faced in contemporary Islamic education research. One of the main challenges is the effort to integrate the

²³ Ahmad Saiful Rizal Riska Nurul Hidayah, Achmad Abdul Azis, "The Effectiveness of the Contextual Teaching and Learning Method in Improving Students' Learning Outcomes in Fiqh at MTs Miftahul Ilmiyah Mojowetan, Blora," *Indonesian Journal of Education: Theory, Research and Innovation* 5, no. 6 (2025): 11–23, <https://doi.org/10.59818/jpi.v5i6.2124>.

²⁴ Miftahul Janna Ritonga et al., "The Mixed-Methods Approach in Islamic Economics Research: Opportunities and Challenges," *Tambusai Education Journal* 9, no. 2 (2025): 18536–42.

²⁵ Riska Muh. Judrah, Mustamir, Aguswito, Suriyati, Makmur Jaya Nur, "The Use of Technology in Islamic Education," *Dahzain Nur* 15, no. 2 (2025): 104–10.

²⁶ Ahmad Izzuddin Hotami et al., "Approaches to Islamic Studies (Monodisciplinary Studies, Interdisciplinary Studies, Multidisciplinary Studies and Transdisciplinary Studies)," *Risalah: Journal of Education and Islamic Studies* 11, no. 1 (2025): 249–59.

normative dimensions of Islam with the demands of modern scientific methodology based on empirical data. Islamic education is founded on values derived from Islamic teachings, whilst modern research demands systematic, objective and verifiable procedures. This situation highlights the need to develop a methodological approach capable of bridging these two dimensions in a balanced manner.²⁷

Another challenge relates to the increasing complexity of Islamic education in the contemporary era. Educational issues are not only related to learning and the curriculum, but also encompass the development of digital technology, changes in the characteristics of learners, globalisation, and the social dynamics of society. This complexity demands mastery of a wider range of research approaches that are more diverse and adaptive. Therefore, methodological competence is a key requirement for researchers in Islamic education.²⁸

Table 1. Methodological Challenges in Contemporary Islamic Education Research

No	Findings	Supporting Data/Facts
1	The predominance of descriptive qualitative approaches	The results of a bibliometric study conducted by Anggun et al. in 2025 show that publications on Islamic Education over the past five years are still dominated by qualitative research focusing on conceptual analysis and field studies, whilst research based on programme evaluation and experimental design is far less common. ²⁹ Nurhidaya et al. in 2024 state that the use of mixed methods in Islamic education research remains relatively limited, ³⁰ whilst UNESCO 2023 emphasises that the transformation of education in the digital age demands the application of more innovative methodologies through the use of learning analytics, artificial intelligence (AI), big data, and digital data analysis to generate stronger scientific evidence. ³¹
2	The integration of the Islamic paradigm with modern scientific methodology has not yet been optimised	research still separates the normative approach (the Qur'an and Hadith) from the empirical approach, meaning that research findings have not yet been able to provide a comprehensive analysis. The findings of a study by Marhamah et al. 2020 ³² indicate that research in Islamic education remains dominated by textual analysis and conceptual studies, whilst research integrating normative analysis, empirical evaluation, and

²⁷ Eva Dewi Endang Retnowati, Hatni, Amril, "Integrating Modern Science with Islamic Values: An Interdisciplinary Approach in Islamic Education," *AL-USWAH: Journal of Research and Studies in Islamic Education* 7, no. 2 (2024): 223–35, <https://doi.org/10.24014/au.v7i2>.

²⁸ Juliantri, "Contemporary Issues in Islamic Education."

²⁹ Anggun Cahya Kamilla et al., "A Bibliometric Analysis of Trends and Developments in Islamic Education Research at Higher Education Institutions in Indonesia (2019–2024)," *AL-WIJDAŃ Journal of Islamic Education Studies* 10, no. 3 (2025): 668–709.

³⁰ M. Nurhidaya et al., "The Use of Mixed Methods in Islamic Religious Education Research," *MUDARRISUNA: Journal of Islamic Religious Education Studies* 14, no. 4 (2024): 573–85.

³¹ Mohammad Givi Efgivia, "The Use of Big Data in Educational Technology Research," *Journal of Educational Technology* 5, no. 2 (2020): 107–20, <https://doi.org/10.32832/educate.v5i2.3381>.

³² Abdul Hakim Abdullah et al., "Reform of the Islamic Education System in Indonesia According to Azyumardi Azra," **Islam Universalia: International Journal of Islamic Studies and Social Sciences** 2, no. 1 (2020): 34–108.

No	Findings	Supporting Data/Facts
		interdisciplinary approaches remains relatively limited.
3	Limited use of Artificial Intelligence (AI) and Big Data in Islamic Education research methodology	Findings by Jauhar et al. in 2024 reveal that generative AI is capable of assisting with literature reviews, data analysis, the development of research instruments, and even academic writing. However, its use still requires human validation and robust ethical guidelines. This indicates that whilst the potential for utilising AI in research is vast, it has not yet been widely adopted within the research methodology of Islamic Education. ³³
4	Lack of integration of a transdisciplinary approach in Islamic Education research	Dewi et al. 2026 found that research in Islamic Education faces challenges in integrating Islamic perspectives with the social sciences and technology. ³⁴ This finding is reinforced by Hawwin & Ahmad 2021, who emphasise that a monodisciplinary approach is no longer sufficient to explain the complexity of issues in Islamic Education; consequently, collaboration between Islamic studies, the social sciences, and educational science is required. ³⁵

The findings in the table indicate that methodological challenges in contemporary Islamic education research are not only related to the selection of research methods but also reflect epistemological, methodological and technological gaps that affect the quality, relevance and competitiveness of research at a global level.³⁶ These four findings are interrelated and indicate that the transformation of research methodology in Islamic education is still only partially underway, meaning it has not yet been able to respond to the complexity of educational issues in the digital age and Society 5.0.

Firstly, the dominance of descriptive qualitative approaches indicates that research in Islamic education remains oriented towards the exploration of phenomena, conceptual analysis, and the description of educational practices. The findings of Anggun et al. in 2023 and Nurhidaya et al. in 2024 indicate that the use of experimental, quasi-experimental, and mixed-methods designs remains relatively low. Yet, global developments in educational research methodology have moved towards a more diverse approach through the integration of quantitative, qualitative, and digital data analysis methods.³⁷

This situation implies that research in Islamic education has limited capacity to produce evidence-based findings that can serve as a basis for formulating educational

³³ A. Jauhar Fuad and Fathiyah Mohd Fakhruddin, "The Use of Artificial Intelligence in Islamic Religious Education," *Indonesian Proceedings and Annual Conference of Islamic Education (IPACIE)* 3 (2024): 1–14.

³⁴ Dewi Mashlahatul Ummah et al., "The Integration of Islamic Studies and Technology from the Perspective of Contemporary Islamic Education," *An-Nadwah: Journal of Research on Islamic Education* 2, no. 01 (2026): 36–49, <https://doi.org/10.62097/an-nadwah.v2i01.2883>.

³⁵ Hawwin Muzakki et al., "The Transformation of Islamic Religious Education Curriculum Development through Indonesian Islamic Values (From a Monodisciplinary Approach to an Interdisciplinary Approach)," *Journal of Islamic Education Research* 2, no. 1 (2021).

³⁶ Moh Safik Al Mubarak and Fikri Maulana, "Challenges and Opportunities for Islamic Education in a Modern Context," *Raqib: Journal of Islamic Studies* 2, no. 1 (2025): 1–11, <https://doi.org/10.56872/ex1f3197>.

³⁷ Ikhsan Nurachman et al., "A Philosophical Analysis of the Choice of Qualitative, Quantitative and Mixed Methods in Research on Islamic Education Management," *JlIP—Scientific Journal of Educational Sciences* 9, no. 1 (2026): 105–11.

policy or evaluating the effectiveness of learning innovations. In other words, research in Islamic education remains largely focused on generating descriptive knowledge rather than knowledge capable of testing cause-and-effect relationships, predicting phenomena, or evaluating the impact of an educational intervention.

Secondly, the sub-optimal integration of the Islamic paradigm with modern scientific methodology indicates that methodological issues in Islamic education are not merely technical in nature but are also linked to epistemological concerns. The dominance of normative and textual analysis, as highlighted by Marhamah et al. (2020), suggests that research still tends to separate Islamic sources from empirical approaches. Consequently, much research produces studies that are conceptually robust but fail to adequately explain how Islamic values operate within the dynamic practice of education. Conversely, empirically oriented research often fails to adopt Islamic epistemology as its primary analytical framework. The implication of this situation is the emergence of a dichotomy between normative and empirical studies, meaning that research in Islamic Education has not yet fully succeeded in producing theoretical models that bridge Islamic values with the realities of contemporary education.³⁸

Thirdly, the digital transformation in Islamic education research methodology is still progressing slowly compared to developments in educational research in general. Findings by Jauhar et al. in 2024 show that generative AI has great potential to support various stages of research, ranging from literature reviews and data analysis to the drafting of scientific reports. However, in research on Islamic education, AI is still more frequently positioned as an object of study rather than as a methodological tool.

Consequently, researchers have not yet capitalised on opportunities to process data on a large scale, conduct text mining on Islamic literature, analyse digital learning traces (learning analytics), or develop data-driven predictive models. This situation risks leaving Islamic education research behind in producing findings that are more accurate, efficient and replicable. Nevertheless, the use of AI must also be accompanied by a strengthening of research ethics, algorithmic transparency and human validation to ensure that research results retain their scientific integrity.

Fourthly, the lack of integration of transdisciplinary approaches indicates that research in Islamic Education still tends to be conducted within the boundaries of specific academic disciplines. The findings of Dewi et al. In 2026 and Hawwin in 2021 show that contemporary issues in Islamic education—such as digital transformation, religious moderation, character education, pupils' mental health, and the sustainability of education—can no longer be explained through a single academic perspective.

This situation highlights the limitations of research in producing comprehensive solutions to multidimensional educational issues. Therefore, a transdisciplinary approach not only broadens analytical perspectives but also facilitates collaboration between Islamic studies, psychology, sociology, educational technology, data science and public policy, thereby generating methodological innovations that are better adapted to global challenges.

³⁸ Muhamad Maimun et al., "From Scientific Truth to Transcendent Truth: A Reconstruction of the Philosophy of Science Based on Islamic Epistemology," *YUDHISTIRA: Journal of Philosophy* 1, no. 2 (2025): 66–74.



Figure 1: Visualisation of methodological challenges in Islamic Religious Education (PAI) research

The data indicate that the methodological challenges in contemporary Islamic Religious Education (PAI) research are dominated by the qualitative–quantitative dichotomy (35 per cent), reflecting the need for a more integrative methodology.³⁹ Furthermore, the integration of Islamic epistemology and modern science (30%) presents a significant challenge in developing an interdisciplinary approach,⁴⁰ followed by the low validity of research instruments (20%), which has the potential to undermine the quality of findings, as well as weaknesses in field data analysis (15%) due to persistent interpretative bias and limitations in researchers' analytical capabilities.⁴¹

Based on these data, it is evident that the greatest challenge in the research methodology of contemporary Islamic Education is the qualitative–quantitative dichotomy, accounting for 35 per cent. This implies that there remains a strong tendency for Islamic Education research to be divided between approaches emphasising deep meaning and those emphasising empirical measurement. The next biggest issue is the integration of Islamic epistemology and modern science, accounting for 30 per cent. This indicates that many studies still struggle to fully integrate the Islamic scholarly framework with modern scientific approaches, thereby creating a strong need for interdisciplinary methodologies and transformative paradigms.

Meanwhile, the low validity of research instruments accounts for 20 per cent. This is significant because the quality of the instruments largely determines the quality of the research findings; in one PAI evaluation study, only 2 out of 15 items were valid and their reliability was very low, meaning the instrument is not yet suitable for use without major revisions. Furthermore, the 15 per cent weakness in field data analysis indicates that some research is still lacking in its ability to process, interpret and synthesise empirical data in depth. This is usually related to limitations

³⁹ Hilyatul Auliya and Mohammad Kurjum, "CHALLENGES IN ISLAMIC STUDIES IN THE MODERN ERA AND THE NEED FOR AN INTERDISCIPLINARY METHODOLOGY AS AN ALTERNATIVE APPROACH," *An-Nahdlah: Journal of Islamic Education* 5, no. 2 (2025): 977–83.

⁴⁰ Joni Putra et al., "Psychology as an Epistemological Tool in Contemporary Islamic Studies in Indonesia," *Journal of Islamic Religious Education* 1, no. 3 (2025): 100–107.

⁴¹ Fahriana Nurrisa et al., "Evaluation of the Validity, Reliability, and Discriminating Power of Islamic Education Exam Items for Year 12 through Item Analysis," *Journal of Islamic Education* 14, no. 2 (2025): 272–85.

in analytical techniques, interpretative bias, or the use of data that is not yet robust enough to address the research problem comprehensively.

Overall, these data illustrate that methodological problems in Islamic Education research are not merely a matter of method selection, but also concern epistemological foundations, the quality of research instruments, and the rigour of analysis. In terms of publication trends, there is a growing shift towards a critical-transformative paradigm; however, this change is still occurring gradually and has not yet been fully realised across all Islamic Education research.⁴²

2. Opportunities for Research Methodology in Contemporary Islamic Education Studies

Alongside these various challenges, the results of the analysis indicate significant opportunities for the development of research methodologies in Islamic education. The development of mixed-methods approaches provides researchers with the opportunity to obtain more comprehensive data through the integration of quantitative and qualitative approaches. Furthermore, advances in digital technology enable the research process to be conducted more effectively and efficiently. These conditions open up broader scope for methodological innovation in Islamic education research.⁴³

Firstly, the mixed-methods approach in Islamic education research offers the opportunity for a more comprehensive integration of quantitative and qualitative data, as it enables researchers to interpret phenomena from both a numerical perspective and in terms of contextual meaning.⁴⁴ In studies on research methodologies in Islamic educational management, mixed methods are regarded as crucial for strengthening ontological, epistemological and axiological integration, ensuring that research findings are not merely descriptive and empirical, but also contextual and meaningful.⁴⁵

These findings are consistent with a mixed-methods study on the development of chemistry modules integrated with Islamic values, which demonstrated that an exploratory design can combine interviews, expert validation, feasibility testing and learner responses within a single, mutually complementary research framework.⁴⁶ In terms of the utilisation of digital technology, research on the integration of AI in Islamic education indicates that AI-based Qur'an applications can enhance learners' engagement, motivation and initial understanding, whilst fostering ethical awareness in the use of technology.⁴⁷

⁴² Anharul Ulum et al., "The Transformation of Islamic Education: Digital Literacy as a Foundation in the Modern Era," *Edusifa: Journal of Islamic Education* 9, no. 3 (2023): 38–46.

⁴³ Mukhtar Lutfi A. M. Luthfi Virgiawan, Wahyuddin Abdullah, "Mixed-Method Research," *Tambusai Education Journal* 9, no. 2 (2025): 24313–20.

⁴⁴ Nurachman et al., "A Philosophical Analysis of the Choice of Qualitative, Quantitative and Mixed Methods in Islamic Education Management Research."

⁴⁵ Jumadil Awali Habibullah et al., "The Implementation of Mixed Methods in Educational Research: Concepts and Applications," *Peradaban Journal of Interdisciplinary Educational Research* 3, no. 1 (2025): 17–31.

⁴⁶ Annas Hafidz Ihsanudin and N. S. A. Aznam, "Integration of Islamic Values into Corrosion Material in Chemistry Modules as an Implementation of Character Education," *WUNY Scientific Journal* 6, no. 2 (2024): 67–78.

⁴⁷ Khairini Elzannah Nababan et al., "The Integration of AI in Islamic Education: The Effectiveness of the AI-Qur'an AI Application for Generation Z from Pedagogical and Ethical Perspectives at the Al-Munif Tahfidz Centre," *Al-Anshor: Journal of Education* 2, no. 2 (2025).

Secondly, at the institutional level, a study on Agile Project Management in IT projects at the Directorate-General of Islamic Education emphasises that digital transformation requires systematic strategies for communication, documentation and stakeholder management to ensure that research projects and educational services operate more adaptively. Thus, digital technology serves not only as a tool, but also as a medium that accelerates research work, broadens access to data, and enhances the efficiency of analysis in Islamic education research.⁴⁸

Thirdly, an interdisciplinary approach enriches the analysis of Islamic education research by enabling collaboration with psychology, sociology, technology, and other educational sciences. Studies on AI in Islamic education, on the other hand, demonstrate that pedagogical and ethical dimensions are closely linked to the learning psychology of Generation Z, particularly in terms of motivation, engagement, and acceptance of digital media.⁴⁹ Meanwhile, research on the IT project of the Directorate-General of Islamic Education also indicates that the success of digital innovation is determined by organisational factors, work culture and relationships between actors, which fall within the realm of sociological and managerial studies.⁵⁰

Furthermore, the integration of Islamic values into chemistry modules also significantly demonstrates that collaboration between Islamic education and the natural sciences results in learning that is more relevant to the needs of modern society, whilst simultaneously expanding the function of Islamic education from the mere transmission of values to the integration of values, science and character.⁵¹ Consequently, an interdisciplinary approach is essential to make research in Islamic education more adaptive, contextual and applicable to the issues facing contemporary society.

Table 2. Visualisation of the research methodology for Contemporary Islamic Education

Findings	Primary Data	Visual Representation of the Table
1. Trends in Islamic education research methods	Out of 40 articles: qualitative 14, quantitative 13, mixed methods 13.	Qualitative: 14 Quantitative: 13 Mixed methods: 13
2. Shifts in the proportion of research methods	2015–2019: qualitative 65 per cent, quantitative 30 per cent, mixed methods 15 per cent. 2020–2024: qualitative 55 per cent, quantitative 30 per cent, mixed methods 15 per cent.	2015–2019: Q 65% Q 30% M 15% 2020–2024: Q 55% Q 30% M 15%
3. The use of AI in	AI enhances learning engagement,	Engagement ↑

⁴⁸ Mutiara Nur Insani Yuwantara and Bob Hardian Syahbuddin, "Implementation of Agile Project Management in Public Sector IT Projects: A Case Study of the Directorate General of Islamic Education," *The Indonesian Journal of Computer Science* 14, no. 3 (2025).

⁴⁹ Nababan et al., "The Integration of AI in Islamic Education: The Effectiveness of the AI-Qur'an AI Application for Generation Z from a Pedagogical and Ethical Perspective at the Al-Munif Tahfidz Centre." *Op.cit*

⁵⁰ Yuwantara and Syahbuddin, "Implementation of Agile Project Management in Public Sector IT Projects: A Case Study of the Directorate General of Islamic Education." *Op.cit*

⁵¹ Ihsanudin and Aznam, "Integration of Islamic Values into Corrosion-Related Content in Chemistry Modules as an Implementation of Character Education." *Op.cit*

Islamic education	motivation, initial understanding of verses, and ethical awareness.	Motivation ↑ Understanding ↑ Ethics ↑
4. Challenges in implementing technology at the Directorate General of Islamic Education	Processes 37%, Human Resources 32%, Organisation 31%.	Process 37% Human resources 32% Organisation 31%
5. Mixed-methods findings on teacher performance	Guidance 3.82; supervision 3.63; evaluation 3.64.	Mentoring 3.82 Supervision 3.63 Evaluation 3.64

Finding 1 shows that, of the 40 articles, qualitative methods remain the most prevalent (14), whilst quantitative and mixed-methods approaches each account for 13; thus, research in Islamic education appears to be becoming more diverse, although the qualitative approach remains strong. Finding 2 reveals a shift in the proportion of methods, namely a decline in qualitative methods from 65 per cent to 55 per cent, whilst quantitative methods remained at 30 per cent and mixed methods at 15 per cent, signalling that research is becoming increasingly varied in terms of methodology.⁵² Finding 3 indicates that the use of AI in Islamic education has led to increased learning engagement, motivation, initial understanding of verses, and ethical awareness, suggesting that digital technology has the potential to strengthen research and learning processes.⁵³

Finding 4 highlights the challenges of technology implementation within the Directorate-General of Islamic Education, with the main obstacles relating to processes (37 per cent), human resources (32 per cent) and organisation (31 per cent), indicating that the success of digitalisation is highly dependent on systems and institutional readiness.⁵⁴ Finding 5 presents the results of mixed methods regarding teacher performance, with professional development (3.82), supervision (3.63) and evaluation (3.64) falling into the high category; thus, mixed methods have proven effective for combining quantitative and qualitative data in Islamic education research.⁵⁵ Generally, the data indicate that research in Islamic education remains dominated by qualitative methods, but is beginning to move towards more varied, digital and integrative approaches. The findings also show that technology and mixed methods offer significant opportunities to enhance the quality of contemporary Islamic education research.

Consequently, these findings suggest that the methodology of contemporary Islamic education research is moving towards a more varied, integrative and relevant direction. Mixed methods, the use of digital technology and interdisciplinary approaches appear to present important opportunities to enhance the quality of

⁵² Nurachman et al., "A Philosophical Analysis of the Choice of Qualitative, Quantitative and Mixed Methods in Research on Islamic Education Management." *Op.cit*

⁵³ Nababan et al., "The Integration of AI in Islamic Education: The Effectiveness of the AI-Qur'an AI Application for Generation Z from a Pedagogical and Ethical Perspective at the Al-Munif Tahfidz Centre." *Op.cit*

⁵⁴ Yuwantara and Syahbuddin, "Implementation of Agile Project Management in Public Sector IT Projects: A Case Study of the Directorate-General of Islamic Education." *Op.cit*

⁵⁵ Mawardi Pewangi et al., "Improving Teacher Performance Through the Integration of at Muhammadiyah Limbung Senior High School, Gowa Regency," *Jurnal Mudarrisuna: Journal of Islamic Education Studies* 14, no. 3 (2024): 341, <https://doi.org/10.22373/jm.v14i3.24520>.

analysis, the validity of findings, and the practical utility of research for the needs of Islamic education in modern society.

E. Discussion

1. Methodological Challenges

The integration of the normative Islamic paradigm with modern scientific methodology based on empirical data remains one of the most fundamental challenges in the development of contemporary Islamic education research.⁵⁶ The complexity of educational issues in the digital age demands a far more diverse, adaptive and innovative mastery of methodology compared to the conventional approaches that have long dominated, whilst the methodological competence of the researchers themselves is a decisive factor that cannot be ignored in efforts to improve the quality of scholarly output in this field.⁵⁷

There are at least four main, interrelated issues that shape this landscape of challenges. Firstly, research in Islamic education has historically and structurally been dominated by descriptive qualitative approaches, with the use of experimental, quasi-experimental, or mixed-methods designs generally remaining limited when compared to the potential and needs of this field; consequently, empirical evidence that can serve as a basis for evaluating educational policy remains relatively scarce. Secondly, the integration of normative studies of the Qur'an and Hadith with empirical approaches has not yet been optimally realised, meaning that a dichotomy between the two still frequently arises and a truly integrative research model combining Islamic epistemology and modern science has not yet been fully established.

Thirdly, the utilisation of artificial intelligence and big data in Islamic education research remains minimal, with AI more often positioned as an object of study rather than an analytical tool, whilst the vast potential of text mining and learning analytics has not yet been fully harnessed; nevertheless, human validation and ethical considerations remain indispensable prerequisites for this process.⁵⁸ Fourthly, transdisciplinary approaches remain underdeveloped, as research in this field tends to remain within a monodisciplinary framework, even though collaboration with the social sciences, psychology, technology, data science and public policy is urgently needed to address the complexity of contemporary educational issues.⁵⁹

These four challenges have significant implications for the direction of development in this field. Methodological transformation is still taking place only partially and is not yet comprehensive, whilst the quality, relevance and global competitiveness of research in Islamic Education still require significant

⁵⁶ Sulfikar Muhaemin et al., "Methodological Reflections on Field Research in Islamic Religious Education: The Integration of Islamic Values and the Scientific Approach," *Andi Djemma Journal | Journal of Education* 9, no. 1 (2026): 1–9.

⁵⁷ Auliya and Kurjum, "CHALLENGES IN ISLAMIC STUDIES IN THE MODERN ERA AND THE NEED FOR AN INTERDISCIPLINARY METHODOLOGY AS AN ALTERNATIVE APPROACH."

⁵⁸ Hastuti Hastuti and Nahrin Hartono, "Reconstructing Technoscience-Based Islamic Education: Optimising Artificial Intelligence for Innovative Learning," *Kaunia: Journal of the Integration and Interconnection of Islam and Science* 20, no. 2 (2024): 73–86.

⁵⁹ Andi Amiruddin Rahmah and Husnul Yaqin, "Islamic Learning through Multi-, Inter- and Transdisciplinary Approaches (Essence and Implementation)," *Tarbawi: Journal of Islamic Religious Education* 09, no. 01 (2024): 75–91.

improvement.⁶⁰ Consequently, research in this field tends to produce descriptive findings rather than strong empirical evidence on which to base policy.

Proportionally, methodological challenges in the context of Islamic Religious Education can be categorised into four main areas: the dichotomy between qualitative and quantitative approaches accounts for the largest share (35 per cent), followed by issues regarding the integration of Islamic epistemology with modern science (30 per cent), low validity of research instruments (20 per cent), and weaknesses in field data analysis (15 per cent). It can therefore be concluded that the challenges faced encompass epistemological, methodological and technological aspects, as well as issues relating to the quality of instruments and weaknesses in data analysis simultaneously; consequently, an integrative methodology—based on empirical evidence, utilising technology and transdisciplinary in nature—is required to meet the demands of the Society 5.0 era.

2. Methodological Opportunities

Amidst these various challenges, developments in research methodology actually present significant opportunities for improving the quality of Islamic education studies in the future. The development of mixed methods, the utilisation of digital technology, and interdisciplinary approaches collectively drive methodological innovations that enable research to become more comprehensive, efficient, and relevant to the needs of the times.⁶¹

Three main opportunities can be identified from these developments. The development of mixed methods allows for a more holistic integration of quantitative and qualitative data, whilst strengthening coherence at the ontological, epistemological and axiological levels; in practice, this approach has proven effective when combining in-depth interviews, expert validation, instrument feasibility testing and learner responses within a single, mutually complementary research design.⁶² The use of digital technology and artificial intelligence also opens up opportunities to enhance literature reviews, data analysis and the development of research instruments, whilst improving the effectiveness and accessibility of data, although the success of this utilisation remains dependent on adequate institutional communication and management support.⁶³ An interdisciplinary approach, in turn, enables integration with psychology, sociology, technology and science to produce more contextualised solutions, whilst also promoting the integration of Islamic values and character building into a broader research framework.⁶⁴

The empirical findings of this study further reinforce this picture, although some of them require careful interpretation. Of the 40 articles reviewed, methodological trends indicate that qualitative approaches still dominate with 14 articles, followed by quantitative and mixed methods, each totalling 13 articles—a composition which, when juxtaposed with the statement in the 'Challenges' section that 'the use of mixed methods remains low', appears to be an anomaly. This

⁶⁰ Rizal Ilham Ramadhan et al., "The Transformation of Islamic Education Methodology through the Integration of Project-Based Learning (PjBL) and Islamic Critical Pedagogy," **Idarah Tarbawiyah: Journal of Management in Islamic Education** 7, no. 1 (2026): 44–50.

⁶¹ Sri Haryati and Desy Eka Citra Dewi, "THE INTEGRATION OF MIXED METHODS IN ISLAMIC RELIGIOUS EDUCATION RESEARCH," *Didaktik: Scientific Journal of Primary School Teacher Education, STKIP Subang* 11, no. 04 (2025): 491–500.

⁶² Nurhidaya et al., "The Use of Mixed Methods in Islamic Religious Education Research."

⁶³ Louis Ainur and Rofiq Prayoga, "The Role of Artificial Intelligence in the Development of Information Systems in the Digital Age," *Maliki Interdisciplinary Journal (MIJ)* eISSN 3 (2025): 1269–73.

⁶⁴ Khoirudin Miftah et al., "An Interdisciplinary Approach in Islamic Education", 2025.

anomaly can, in fact, be logically reconciled by recognising that the two statements are based on different frames of reference: the assessment that the use of mixed methods is 'still low' represents a historical and structural overview of Islamic education research more broadly, whilst the data on the 40 articles reflects a more specific sample and is likely to be skewed towards more recent and better-indexed literature, thus naturally showing a higher proportion of mixed methods compared to the research population as a whole. Within this framework, the apparent contradiction can in fact be interpreted as evidence of a shifting trend over time, rather than as a data inconsistency.

This shift in trends is also evident from a comparison of two periods: between 2015 and 2019, qualitative research accounted for 65 per cent, quantitative for 30 per cent, and mixed methods for 15 per cent, whilst in the 2020–2024 period, the proportion of qualitative studies decreased to 55 per cent, whilst quantitative and mixed-methods studies remained at the same levels. This ten-per-cent decline in the use of qualitative approaches indicates an epistemological shift towards more diverse methodologies; however, determining the exact direction of this shift—whether it has been implicitly absorbed into the realm of mixed methods, towards mixed-methods research designs not yet explicitly classified, or towards other, as yet unmapped forms of methodology, requires further examination of the primary database to be interpreted with certainty.

The use of artificial intelligence in the context of learning also shows quite promising impacts, including in enhancing learner engagement, motivation, learners' prior understanding, and ethical awareness regarding the use of technology.⁶⁵ Nevertheless, the challenges of technology implementation remain real, with process-related barriers accounting for the largest share (37 per cent), followed by human resource- -related barriers (32 per cent) and organisational barriers (31 per cent). These last two barriers are not, in essence, stand-alone issues, but rather a series of interlocking causal factors: the capacity of individual researchers struggles to develop without institutional structures that support its application, whilst those institutional structures themselves will not change without the presence of competent actors driving change from within.

Therefore, in order for the potential to utilise AI as a research tool—rather than merely as a subject of study—to be realised in Islamic educational institutions, a two-tiered strategy running in parallel is required: at the capacity level, the AI literacy developed must be methodological and specific, for example through the use of AI-assisted coding in qualitative data analysis or the application of learning analytics in the evaluation of learning; whilst at the structural level, clear institutional policies are required in the form of incentives for AI-based research publications, the establishment of research units fostering collaboration between methodology and technology, and ethical guidelines governing the limits and validation of its use in religious research. Furthermore, the effectiveness of applying mixed methods in the context of educational guidance, evaluation and supervision has also yielded relatively good results, with scores of 3.82 for guidance, 3.64 for evaluation and 3.63 for supervision. Overall, it can be concluded that research methodology in Islamic Education is moving towards a more varied, integrative, digital and interdisciplinary approach, in an effort to improve the quality of analysis and the validity of studies in the modern era.

⁶⁵ Dwi Robiul Rochmawati et al., "The Benefits of Artificial Intelligence for Education," *Journal of Computer Technology and Informatics* 2, no. 1 (2023): 124–34.

Conclusion

Developments in research methodology within contemporary Islamic education studies indicate a significant transformation from an approach originally dominated by normative and textual studies towards one that is more empirical, contextual, interdisciplinary, and supported by advances in digital technology. The findings indicate that the use of qualitative, quantitative, mixed-methods, systematic literature review, and various technology-based approaches is increasingly prevalent as an effort to address the complexity of issues in Islamic education in the contemporary era. Specifically, this study identifies four major, intertwined methodological challenges: the qualitative quantitative dichotomy (35 per cent), the sub-optimal integration of the Islamic paradigm with modern scientific methodology (30 per cent), the low validity of research instruments (20 per cent), and weaknesses in field data analysis (15 per cent), which underscore that methodological issues in Islamic education are both epistemological and technical in nature, rather than merely a matter of method selection. Nevertheless, these developments also present significant opportunities for enhancing the quality of research in Islamic education through the utilisation of digital technology, the development of mixed-methods approaches, the strengthening of interdisciplinary collaboration, and the integration of Islamic epistemology with modern scientific methodology.

The findings from mixed-methods research on teacher training, evaluation and performance monitoring, which consistently fell within the high category (3.82; 3.64; and 3.63), as well as the positive impact of AI utilisation on engagement and learning motivation, demonstrate that these opportunities are not merely theoretical potential but have already yielded tangible results in practice, although the success of their implementation remains dependent on the readiness of processes, human resources, and institutional organisation. These various opportunities have significant implications for enhancing researchers' methodological competence and digital literacy, the development of research methodology curricula at Islamic higher education institutions, and the emergence of a research paradigm that is more integrative, adaptive and relevant to the needs of society. By linking these four aspects developments, challenges, opportunities and implications within a coherent framework of discussion, this study addresses *the research gap* that has long existed due to studies on the methodology of Islamic education tending to discuss these aspects in isolation. Consequently, the development of research methodology serves as a strategic foundation for strengthening the quality, relevance and contribution of Islamic education studies, thereby enabling them to address the various educational challenges of the contemporary era and the future.

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