



Integrating Islamic Values into Mathematics Education in *Madrasah Ibtidaiyah*

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ABSTRACT

The integration of Islamic values into mathematics education in *Madrasah Ibtidaiyah* has emerged as an important pedagogical approach for simultaneously enhancing students' mathematical competencies and fostering their religious character. This study aims to examine the forms of Islamic values integration, the instructional strategies employed in mathematics education, and their implications for character development and the quality of mathematics learning. A Systematic Literature Review (SLR) was conducted by analyzing eight relevant peer-reviewed studies published between 2024 and 2025. The data were analyzed through a systematic process of study identification, thematic categorization, and evidence synthesis. The findings indicate that Islamic values are integrated into mathematics education by contextualizing mathematical concepts within Islamic teachings, developing Islamic-oriented instructional materials, and implementing contextual learning approaches. Such integration contributes to more meaningful learning experiences, increased learning motivation, improved conceptual understanding, and the development of students' religious character, particularly honesty, discipline, and responsibility. The review also reveals that empirical evidence regarding the effectiveness of Islamic value-integrated mathematics instructional models remains limited, highlighting the need for further classroom-based research to validate their educational impact.

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INTRODUCTION

Mathematics education in *Madrasah Ibtidaiyah* (Islamic elementary schools) is intended not only to develop students' numeracy competencies but also to cultivate the religious character that distinguishes Islamic education. In line with Indonesia's *Merdeka Curriculum*, character development is positioned as an integral component of the learning process through the implementation of the *Pancasila Student Profile* and the *Rahmatan lil 'Alamin Student Profile*. Within this framework, mathematics learning is no longer viewed merely as the transmission of mathematical concepts and procedures; rather, it serves as a medium for internalizing Islamic values that foster honesty, discipline, responsibility, and logical reasoning. Previous studies have demonstrated that Islamic values can be

meaningfully integrated into mathematics instruction by connecting mathematical concepts with Qur'anic verses, Hadith, contexts of Islamic worship, and value-based classroom practices embedded throughout the learning process (Ilma et al., 2024; Faadhilaha et al., 2024; Authary et al., 2025).

Despite these educational aspirations, the implementation of Islamic values integration in *Madrasah Ibtidaiyah* remains challenging. Mathematics instruction continues to be predominantly oriented toward problem-solving and the achievement of cognitive learning outcomes, while the incorporation of Islamic values is often confined to introductory classroom activities, such as reciting prayers or presenting Qur'anic verses, without establishing meaningful conceptual connections to the mathematical content being taught. A growing body of literature indicates that many teachers encounter difficulties in designing instructional strategies capable of systematically integrating mathematical concepts with Islamic values without compromising the depth and rigor of the subject matter. Consequently, the integration of Islamic values is frequently fragmented and superficial, preventing these values from becoming an inherent part of students' knowledge construction and learning experiences (Ilma et al., 2024; Supiarmo et al., 2024; Faadhilaha et al., 2024).

Recent studies have proposed a variety of approaches to integrating Islamic values into mathematics education, including the use of authentic contexts such as *zakat* (obligatory almsgiving), Islamic inheritance (*faraid*), prayer times, and the development of instructional media grounded in Islamic principles. These studies consistently report that such integration enhances students' learning motivation, strengthens their religious character, and promotes a deeper and more meaningful understanding of mathematical concepts. Nevertheless, research specifically examining the integration of Islamic values into mathematics learning at the *Madrasah Ibtidaiyah* level remains relatively limited compared with studies conducted in lower secondary education, particularly at junior high schools and *Madrasah Tsanawiyah* (MTs). Furthermore, existing research has largely concentrated on the development of instructional media and learning materials, whereas comprehensive investigations into practical models for systematically implementing Islamic values integration within everyday mathematics classroom instruction remain scarce (Khotimah & Mukmin, 2024; Faadhilaha et al., 2024; Authary et al., 2025).

METHOD

This study employed a Systematic Literature Review (SLR) using a qualitative approach to identify, evaluate, and synthesize empirical evidence concerning the integration of Islamic values into mathematics instruction at *Madrasah Ibtidaiyah* (Islamic elementary schools). The SLR approach was selected because it provides a more systematic, transparent, and reproducible synthesis of existing evidence than conventional narrative literature reviews. Furthermore, this method enables researchers to identify research trends, uncover existing research gaps, and explore future directions for the development of Islamic mathematics education (Page et al., 2021; Booth et al., 2021; Xiao & Watson, 2019).

Data Sources

The data sources consisted of scholarly publications that met the predefined inclusion criteria. The literature was drawn from articles published between 2021 and 2025 in

nationally accredited Indonesian journals indexed by SINTA and internationally recognized journals indexed by Scopus. A comprehensive literature search was conducted using the Scopus, ERIC, Dimensions, DOAJ, Crossref, and Google Scholar databases. The search strategy combined the following keywords: *Islamic values*, *Islamic mathematics education*, *integration of Islamic values*, *elementary mathematics learning*, *Madrasah Ibtidaiyah*, and *Islamic elementary school*.

Articles were included if they explicitly addressed the integration of Islamic values into mathematics education, were published in either English or Indonesian, and had undergone a peer-review process. Studies were excluded if they were unrelated to the research focus, unavailable in full-text format, or published as conference proceedings without peer review (Page et al., 2021; Haddaway et al., 2018; Booth et al., 2021).

Research Procedure

The review process followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA 2020) guidelines, which comprise four sequential stages: identification, screening, eligibility, and inclusion. During the identification stage, relevant studies were retrieved from the selected databases using the predefined search terms. The screening stage involved removing duplicate records and evaluating articles based on their titles and abstracts. Subsequently, the eligibility stage consisted of assessing the full texts of the remaining articles against the established inclusion and exclusion criteria. Finally, the inclusion stage yielded the studies that satisfied all eligibility requirements and were therefore included in the final synthesis. The entire selection process was documented using the PRISMA flow diagram to enhance the transparency and reproducibility of the review (Page et al., 2021; Booth et al., 2021; Moher et al., 2009).

The selected studies were analyzed using qualitative content analysis. The analysis involved systematic data extraction, coding, thematic categorization, interpretation, and evidence synthesis. Particular attention was given to the forms of Islamic values integrated into mathematics content, instructional strategies employed during classroom implementation, learning media and instructional materials used to support integration, and their reported effects on students' mathematical competence and religious character development.

To ensure the rigor and credibility of the synthesis, each article was critically appraised before inclusion in the final analysis. The appraisal considered the alignment between research objectives and methodology, research design, participant characteristics, data analysis procedures, and the validity of the reported findings (Krippendorff, 2019; Mayring, 2021; Schreier, 2012).

Despite the growing body of literature, a significant research gap remains regarding how Islamic values can be systematically integrated into mathematics instruction in Madrasah Ibtidaiyah to simultaneously foster students' mathematical thinking and religious character. Accordingly, this review aims to examine the various forms of Islamic values integration in mathematics education at Madrasah Ibtidaiyah, analyze the instructional strategies adopted to implement such integration, and explore their implications for strengthening students' character development and enhancing the quality of mathematics learning. The findings are expected to provide a conceptual contribution to the development

of mathematics instruction that is holistic, integrative, and aligned with the philosophical foundations and educational characteristics of Islamic education in Indonesia.

FINDINGS AND DISCUSSION

Table 1. Article Selection Process Based on the PRISMA 2020 Framework

PRISMA Stage	Selection Criteria	Number of Articles
Identification	Articles retrieved from Scopus, Google Scholar, DOAJ, ERIC, and Dimensions using the keywords <i>Islamic values</i> , <i>mathematics learning</i> , <i>Madrasah Ibtidaiyah</i> , and <i>Islamic mathematics education</i>	XX
Identification	Duplicate records removed	XX
Screening	Articles screened based on titles and abstracts	XX
Screening	Irrelevant articles excluded	XX
Eligibility	Full-text articles assessed against the inclusion criteria	XX
Eligibility	Articles excluded because they did not address the integration of Islamic values into mathematics learning at Madrasah Ibtidaiyah	XX
Included	Studies included in the final synthesis	XX

Inclusion Criteria

- Published between 2021 and 2025.
- Peer-reviewed journal articles.
- Focused on the integration of Islamic values into mathematics education.
- Conducted in elementary education contexts, particularly *Madrasah Ibtidaiyah*, Islamic elementary schools, or closely related educational settings.
- Available in full-text format.

Exclusion Criteria

- Conference proceedings.
- Undergraduate theses, master's theses, and doctoral dissertations.
- Opinion or conceptual papers without empirical or systematic review evidence.
- Studies unrelated to mathematics education.

Table 2. Characteristics of the Included Studies

No.	Author(s)	Country	Educational Level	Research Design	Research Focus	Key Findings
1	Ilma, Irawan, & Abdussakir (2024)	Indonesia	Madrasah Ibtidaiyah	Library Research	Integration of Islamic values	Islamic values were incorporated through Qur'anic verses, Hadith, and the cultivation of students' religious character within mathematics instruction.
2	Rahmah et al. (2024)	Indonesia	Elementary School Higher Education	Systematic Literature Review	Mathematics instructional materials	Islamic value-integrated instructional materials improved students' cognitive and

						affective outcomes.	learning
3	Zainal & Satriani (2025)	Indonesia	All educational levels	Systematic Literature Review	Integration of mathematics and Islam	Research focused on Qur'anic integration, Islamic ethnomathematics, and character education.	primarily
4	Syarqiyah & Faradiba (2025)	Indonesia	Junior High School–Higher Education	Literature Review	<i>Faraidh</i> (Islamic inheritance law)	Concepts of fractions, ratios, and proportional reasoning can be contextualized through Islamic inheritance law to support meaningful mathematics learning.	
5	Nurkarim et al. (2025)	Indonesia	Madrasah Ibtidaiyah	Systematic Literature Review	Religious moderation	Contextual mathematics strengthened mathematical reasoning while fostering religious moderation.	learning students' while religious
6	Authary et al. (2025)	Indonesia	Elementary School	Pre-experimental	Impact of integrating Islamic values	Mathematics instruction integrated with Islamic values improved learning achievement and supported students' character development.	integrated values learning and students'
7	Musthofa et al. (2025)	Indonesia	Elementary School	Systematic Literature Review	Character education	Character-based mathematics instruction enhanced both academic achievement and students' moral development.	enhanced academic and moral
8	Setiawan et al. (2025)	Indonesia	Various educational levels	Systematic Literature Review	Character development through mathematics	Mathematics learning grounded in Islamic values promoted students' religious character and sense of responsibility.	learning promoted religious sense of responsibility.

Characteristics of the Included Studies

Following the identification and screening process, eight studies met the eligibility criteria and were included in the final synthesis. All selected studies were published between 2024 and 2025, reflecting the growing scholarly interest in mathematics education that extends beyond cognitive achievement to encompass the development of students' religious character. Studies conducted by Ilma et al. (2024), Rahmah et al. (2024), and Authary et al. (2025) demonstrate an emerging perspective that positions the integration of Islamic values as an instructional approach capable of connecting mathematical concepts with students' spiritual, moral, and everyday experiences. Meanwhile, the reviews by Zainal and Satriani (2025) and Nurkarim et al. (2025) indicate that research on Islamic-oriented mathematics

education is currently concentrated on strengthening its conceptual foundations and developing practical implementation models.

Distribution of Publications by Year

Publication Year	Number of Articles	Percentage
2024	2	25%
2025	6	75%
Total	8	100%

The publication trend demonstrates a substantial increase in research on the integration of Islamic values into mathematics education during 2025. This growth reflects increasing academic attention to mathematics instruction that aligns with the broader objectives of Islamic education. Zainal and Satriani (2025) observed that research in Islamic mathematics education has expanded across multiple themes, including the integration of Qur'anic perspectives, the development of Islamic-oriented instructional materials, and character education. Likewise, Musthofa et al. (2025) and Setiawan et al. (2025) identified religious character development as one of the dominant themes in contemporary mathematics education research.

Distribution of Research Methods

Research Method	Number of Articles
Systematic Literature Review	5
Library Research	1
Literature Review	1
Pre-experimental	1

The methodological distribution indicates that literature-based approaches remain predominant in studies investigating the integration of Islamic values into mathematics education. This dominance suggests that current research primarily emphasizes conceptual development, theoretical mapping, and the synthesis of existing knowledge. For example, Ilma et al. (2024) and Rahmah et al. (2024) employed literature-based approaches to examine patterns of Islamic values integration in mathematics instruction, whereas Zainal and Satriani (2025) conducted a systematic review to identify emerging research trends in Islamic mathematics education. Although these conceptual investigations have substantially advanced the theoretical foundation of the field, empirical classroom-based studies evaluating the effectiveness of Islamic value-integrated instructional models remain relatively limited and warrant further investigation.

Theme 1. Integration of Islamic Values into Mathematics Learning

The synthesis identified the integration of Islamic values into mathematics instruction as the most prominent theme across the eight selected studies. Overall, the reviewed literature indicates that Islamic values are incorporated into both mathematical content and instructional practices by connecting mathematical concepts with contexts rooted in Islamic teachings. Common examples include the calculation of *zakat*, the distribution of Islamic

inheritance (*faraidh*), determining prayer times, identifying the *qibla* direction, and exploring mathematical patterns that reflect the order and harmony of Allah's creation. These contexts enable students to perceive mathematics not merely as an abstract discipline but as knowledge that is meaningful and closely related to their religious beliefs and everyday experiences.

Ilma et al. (2024) argued that the integration of Islamic values should extend beyond the inclusion of Qur'anic verses or religious quotations in instructional materials. Instead, meaningful integration requires establishing clear conceptual relationships between mathematical ideas and the ethical, philosophical, and spiritual principles embedded in Islamic teachings. This perspective suggests that Islamic values should serve as an integral component of the learning process rather than merely functioning as supplementary or symbolic elements.

Similarly, Rahmah et al. (2024) reported that mathematics instructional materials incorporating Islamic values create more contextualized learning experiences by helping students recognize the relevance of mathematics to daily life. When mathematical concepts are presented through authentic situations grounded in Islamic practices, students are more likely to understand not only the procedural aspects of mathematics but also its practical significance within their social and religious environments. Such contextualization contributes to greater engagement and facilitates deeper conceptual understanding.

Furthermore, Faadhilaha et al. (2024) demonstrated that integrating Islamic values into mathematics education strengthens the relationship between mathematical thinking and the development of students' religious attitudes. Mathematics learning therefore becomes a medium through which cognitive competencies and moral values can be cultivated simultaneously. Consistent with this finding, Authary et al. (2025) showed that systematically integrating Islamic values into mathematics instruction significantly improved students' academic achievement while also fostering positive character development at the elementary school level.

Taken together, these findings suggest that the integration of Islamic values should not be viewed solely as an affective or moral enrichment strategy. Rather, it represents a pedagogical approach that enhances the meaningfulness of mathematical concepts by situating learning within students' cultural, spiritual, and religious contexts. Consequently, mathematics education in *Madrasah Ibtidaiyah* can contribute not only to the development of mathematical competence but also to the cultivation of students' religious character, thereby supporting the broader objectives of holistic Islamic education.

Theme 2. The Effects of Integrating Islamic Values on Students' Learning Motivation and Character Development

The second major theme emerging from the reviewed studies concerns the influence of integrating Islamic values into mathematics instruction on students' learning motivation and character development. Overall, the evidence indicates that mathematics learning embedded within Islamic values promotes greater student engagement by presenting mathematical concepts in contexts that are closely connected to learners' religious beliefs and everyday experiences. This contextual relevance not only enhances students' interest in learning mathematics but also encourages them to perceive mathematical knowledge as meaningful and applicable to real-life situations.

Rahmah et al. (2024) reported that instructional materials integrating Islamic values positively influenced both students' learning motivation and their conceptual understanding of mathematics. By incorporating religious contexts into mathematical problems and learning activities, students were better able to appreciate the practical significance of mathematics while simultaneously strengthening their understanding of Islamic values. This approach transformed mathematics instruction into a more engaging and meaningful learning experience, thereby supporting both cognitive and affective learning outcomes.

The role of Islamic values in character education was further emphasized by Musthofa et al. (2025), who found that integrating character education into mathematics instruction contributed to the development of responsibility, discipline, and honesty among students. These findings suggest that mathematics classrooms can serve not only as environments for developing procedural and conceptual knowledge but also as important spaces for nurturing moral and ethical values. Through carefully designed learning activities, students are encouraged to demonstrate positive behaviors that align with both educational objectives and Islamic principles.

Similarly, Setiawan et al. (2025) argued that mathematics instruction grounded in Islamic values has considerable potential to foster a balanced development of students' intellectual and spiritual capacities. Rather than treating academic achievement and character education as separate educational goals, this approach integrates both dimensions into a unified learning process. Consequently, mathematics education becomes a medium for cultivating higher-order thinking skills while simultaneously reinforcing students' religious identity and moral awareness.

Nevertheless, Nurkarim et al. (2025) emphasized that successful character formation through mathematics education depends not only on the instructional content but also on teachers' pedagogical competence in creating learning environments that facilitate the internalization of Islamic values. The effectiveness of value integration therefore relies on how teachers design learning experiences, guide classroom interactions, and encourage meaningful reflection throughout the instructional process. Simply incorporating religious terminology or examples into mathematics lessons is unlikely to produce substantial educational outcomes unless these elements are pedagogically integrated into the learning process.

Taken together, these findings indicate that integrating Islamic values into mathematics education should be understood as a comprehensive pedagogical process rather than the mere addition of religious content to existing instructional materials. Meaningful integration requires the deliberate alignment of learning objectives, instructional strategies, classroom interactions, and assessment practices with Islamic educational values. When implemented systematically, such an approach not only enhances students' motivation and mathematical understanding but also contributes to the development of religious character, thereby fulfilling the broader educational mission of *Madrasah Ibtidaiyah* to nurture learners who are both academically competent and morally grounded.

Theme 3. Challenges in Implementing the Integration of Islamic Values into Mathematics Education

Although the reviewed studies consistently reported the educational benefits of integrating Islamic values into mathematics instruction, the synthesis also revealed several persistent challenges that hinder its effective implementation. The findings suggest that these

challenges extend beyond curriculum design and instructional resources to include teachers' pedagogical competence and the availability of appropriate learning materials. Consequently, successful integration requires systematic support at both the instructional and institutional levels.

One of the most frequently reported challenges concerns teachers' limited capacity to design learning experiences that establish meaningful connections between mathematical concepts and Islamic values. Ilma et al. (2024) observed that many existing instructional practices remain at a symbolic level, where Qur'anic verses or Islamic terminology are merely inserted into teaching materials without being conceptually linked to the mathematical content. Such practices may strengthen the religious appearance of instructional materials, yet they contribute little to students' conceptual understanding or the meaningful internalization of Islamic values. This finding highlights the need to move beyond superficial integration toward approaches that embed Islamic principles within the conceptual structure of mathematics learning.

A related challenge involves the development of instructional media and learning resources capable of supporting authentic value integration. Khotimah and Mukmin (2024) argued that designing mathematics learning materials integrated with Islamic values requires a systematic process involving instructional planning, expert validation, and practicality testing. Without rigorous development procedures, instructional materials risk presenting Islamic values as isolated additions rather than as essential components of meaningful mathematics learning. Therefore, the quality of instructional resources plays a crucial role in determining the effectiveness of value integration in classroom practice.

In addition to teachers' professional competence, the limited availability of Islamic-oriented mathematics teaching materials remains a significant constraint. Faadhilaha et al. (2024) and Rahmah et al. (2024) reported that many teachers continue to develop their own instructional materials because standardized modules and learning media integrating Islamic values are not yet widely available. While such initiatives demonstrate teachers' creativity and commitment, they also create inconsistencies in instructional quality and implementation across schools. This situation underscores the need for the systematic development of curriculum resources that are pedagogically sound, contextually relevant, and appropriate for the developmental characteristics of students in *Madrasah Ibtidaiyah*.

Collectively, these findings indicate that the successful integration of Islamic values into mathematics education depends not only on teachers' commitment but also on comprehensive institutional support. Professional development programs, high-quality instructional materials, and curriculum guidelines are essential for enabling teachers to integrate Islamic values in ways that are conceptually meaningful rather than merely symbolic. Addressing these challenges is therefore fundamental to ensuring that the integration of Islamic values contributes simultaneously to students' mathematical understanding, character formation, and holistic educational development.

Research Gap

The synthesis of the eight selected studies revealed several important gaps in the existing literature. First, research on the integration of Islamic values into mathematics education has been dominated by literature-based studies, while empirical classroom-based investigations remain relatively limited (Ilma et al., 2024; Zainal & Satriani, 2025). Consequently, there is still insufficient empirical evidence regarding the effectiveness of

implementing Islamic value-integrated mathematics instruction in authentic learning environments, particularly at the *Madrasah Ibtidaiyah* level.

Second, most previous studies have primarily focused on conceptual models of integration and the development of Islamic-oriented instructional materials. Comparatively fewer studies have examined how such integration influences students' numeracy skills, critical thinking, and mathematical problem-solving abilities (Rahmah et al., 2024; Musthofa et al., 2025). As a result, the broader educational impact of integrating Islamic values into mathematics learning has yet to be comprehensively established.

Third, the existing literature has not yet produced a comprehensive instructional model for integrating Islamic values into mathematics education that can serve as a practical reference for teachers in *Madrasah Ibtidaiyah* (Zainal & Satriani, 2025; Nurkarim et al., 2025). The absence of such a model has contributed to variations in classroom implementation, with many teachers relying on individually developed approaches that differ in both scope and instructional quality.

Research Implications

The findings of this review suggest that mathematics education in *Madrasah Ibtidaiyah* should be developed through instructional approaches that integrate cognitive, affective, and spiritual dimensions in a balanced manner. Within this framework, teachers are expected to function not only as facilitators of mathematical learning but also as educators who cultivate students' character through meaningful learning experiences. Accordingly, the development of instructional modules, learning media, and teaching models that systematically integrate Islamic values represents an important step toward addressing the limitations identified in previous studies (Rahmah et al., 2024; Khotimah & Mukmin, 2024). Furthermore, future studies should employ experimental or classroom action research designs to generate stronger empirical evidence regarding the effectiveness of integrating Islamic values in improving both mathematics learning outcomes and students' religious character (Nurkarim et al., 2025; Setiawan et al., 2025).

The synthesized literature further demonstrates that integrating Islamic values into mathematics education has broad implications for the development of learning environments that simultaneously foster students' cognitive, affective, and spiritual growth. From a conceptual perspective, this approach reinforces the view that mathematics should not be regarded merely as a discipline concerned with numbers, symbols, and computational procedures. Rather, it can also serve as a meaningful medium for cultivating *tawhid* (belief in the Oneness of God), order, honesty, discipline, and responsibility. These findings indicate that mathematics instruction can become a strategic context for nurturing students' religious character by connecting mathematical concepts with Islamic teachings and everyday life (Ilma et al., 2024; Faadhilaha et al., 2024; Zainal & Satriani, 2025).

From the perspective of instructional practice, the findings imply that mathematics teachers in *Madrasah Ibtidaiyah* should move beyond the simple insertion of religious content into learning materials. Instead, Islamic values should be systematically embedded within instructional objectives, learning activities, teaching materials, and assessment practices. Learning contexts such as *zakat* calculation, Islamic inheritance (*faraidh*), prayer time calculation, geometric patterns in Islamic architecture, and mathematics problems derived from everyday life can make mathematical concepts more authentic, contextual, and meaningful for students. Consequently, the development of instructional modules, learning

media, and assessment instruments grounded in Islamic values is essential for supporting teachers in implementing integrative mathematics instruction (Rahmah et al., 2024; Khotimah & Mukmin, 2024; Nurkarim et al., 2025).

From a character education perspective, integrating Islamic values contributes to the development of students' religious character by encouraging the consistent practice of positive values throughout the mathematics learning process. Mathematical problem-solving activities can promote honesty in obtaining solutions, accuracy in performing calculations, patience in overcoming challenges, and responsibility for learning tasks. Accordingly, mathematics education has the potential to produce students who possess not only strong numeracy skills but also personal qualities that reflect the objectives of Islamic education. These findings are consistent with those reported by Musthofa et al. (2025) and Setiawan et al. (2025), who concluded that value-based learning strengthens the relationship between academic achievement and students' character development.

The findings also have implications for educational policy and institutional practice in *Madrasah Ibtidaiyah*. Educational institutions should strengthen teachers' professional capacity by providing continuous professional development, increasing access to mathematics learning resources that integrate Islamic values, and designing curricula that support value-based contextual learning. Such initiatives are particularly important because the successful integration of Islamic values depends largely on teachers' pedagogical competence in establishing meaningful relationships between mathematical concepts and Islamic principles, rather than presenting these values solely from a normative perspective (Ilma et al., 2024; Nurkarim et al., 2025).

Despite these promising findings, the review also highlights the limited empirical evidence concerning the effectiveness of Islamic value-integrated mathematics instruction in *Madrasah Ibtidaiyah* classrooms. Therefore, future research should prioritize the development and evaluation of instructional models through experimental studies, classroom action research, and design-based research. Such investigations are essential for generating robust empirical evidence regarding the extent to which the integration of Islamic values can enhance students' mathematical competence, numeracy literacy, learning motivation, and religious character in a sustainable manner (Rahmah et al., 2024; Nurkarim et al., 2025; Setiawan et al., 2025).

DISCUSSION

The synthesis of the eight selected studies demonstrates that integrating Islamic values into mathematics instruction in *Madrasah Ibtidaiyah* represents a promising pedagogical approach for strengthening the relationship between students' cognitive development and character formation. The findings indicate that the integration of Islamic values extends beyond merely incorporating Qur'anic verses or *Hadith* into instructional materials. Instead, it is achieved by contextualizing mathematical concepts within authentic religious practices and experiences, including *zakat* calculation, Islamic inheritance (*faraidh*), prayer time calculation, determining the *qibla* direction, and exploring mathematical patterns and order that reflect the principle of *tawhid* (the Oneness of God). This finding suggests a shift in mathematics education from a predominantly procedural orientation toward a more contextualized and meaningful learning approach. These results are consistent with Ilma et al. (2024), who argued that the integration of Islamic values should be established through

meaningful conceptual relationships rather than the symbolic inclusion of religious elements. Likewise, Rahmah et al. (2024) found that mathematics instructional materials grounded in Islamic values enhance the meaningfulness of learning by enabling students to recognize the relationship between mathematical concepts and real-life experiences.

The review further indicates that implementation strategies play a crucial role in determining the success of Islamic values integration. The synthesized studies identified several commonly adopted strategies, including the development of Islamic-oriented instructional materials, contextual learning approaches, the use of mathematics problems derived from everyday life, and teachers' role in modeling Islamic values throughout the learning process. These findings suggest that successful integration depends not only on the instructional content but also on teachers' pedagogical competence in designing learning experiences that meaningfully connect mathematical concepts with Islamic values. This interpretation is supported by Nurkarim et al. (2025), who emphasized the central role of teachers in integrating cognitive, affective, and spiritual dimensions within mathematics instruction. Similarly, Authary et al. (2025) demonstrated that systematically implementing Islamic value-integrated mathematics instruction improves students' academic achievement while simultaneously fostering positive character development.

From the perspective of educational outcomes, the reviewed studies consistently indicate that integrating Islamic values into mathematics learning contributes positively to students' learning motivation, conceptual understanding, and religious character development. Presenting mathematical concepts within Islamic contexts provides learning experiences that are more closely connected to students' everyday lives, thereby making abstract mathematical ideas easier to comprehend. Beyond cognitive achievement, this approach also promotes the development of positive character traits, including honesty, discipline, responsibility, and accuracy in solving mathematical problems. These findings support those of Musthofa et al. (2025), who concluded that mathematics instruction integrated with character education promotes a balanced development of students' academic competence and personal character. Likewise, Setiawan et al. (2025) argued that mathematics education grounded in Islamic values offers considerable potential for advancing the broader objectives of holistic education.

Despite these encouraging findings, the review also highlights several limitations within the existing body of research. Most of the studies included in this review employed literature-based approaches, resulting in a limited amount of empirical evidence regarding the effectiveness of Islamic value-integrated mathematics instruction in authentic classroom settings. Moreover, previous studies have primarily concentrated on conceptual models of integration and the development of instructional materials, while comparatively less attention has been devoted to examining their influence on students' numeracy, critical thinking, mathematical problem-solving, and higher-order thinking skills. These limitations reveal important research gaps that warrant further investigation through empirical approaches, including experimental research, classroom action research, and research and development (R&D) studies. Accordingly, the development and empirical validation of mathematics instructional models integrating Islamic values should become a major priority for future research in Islamic mathematics education (Zainal & Satriani, 2025; Faadhilaha et al., 2024).

Overall, the findings demonstrate that integrating Islamic values into mathematics education should be regarded not merely as a strategy for character development but also as a pedagogical approach capable of enriching students' mathematics learning experiences. Such integration has the potential to become a distinctive characteristic of mathematics education in *Madrasah Ibtidaiyah* by simultaneously fostering logical reasoning and spiritual awareness. Therefore, future efforts to develop Islamic value-integrated mathematics instruction should focus on designing systematic, evidence-based, and developmentally appropriate instructional models that respond to students' educational needs while contributing to the continuous improvement of Islamic education.

CONCLUSION

Based on the synthesis of eight studies included in this Systematic Literature Review, it can be concluded that the integration of Islamic values into mathematics instruction in *Madrasah Ibtidaiyah* is implemented through three principal dimensions: the integration of Islamic values into mathematical content, instructional strategies, and students' character development. The integration of mathematical content is achieved by relating mathematical concepts to Islamic contexts, such as *zakat*, Islamic inheritance (*faraidh*), prayer time calculation, and the order reflected in Allah's creation. Meanwhile, implementation strategies primarily involve the development of Islamic-oriented instructional materials, the application of contextual learning approaches, and teachers' active role in facilitating meaningful learning experiences.

The synthesized evidence further indicates that integrating Islamic values positively contributes to the quality of mathematics education by enhancing students' learning motivation, conceptual understanding, and religious character, including honesty, discipline, responsibility, and accuracy. Nevertheless, the existing literature remains largely dominated by conceptual and literature-based studies, highlighting the need for more empirical investigations to evaluate the effectiveness of Islamic value-integrated mathematics instructional models in *Madrasah Ibtidaiyah*.

In conclusion, the development of mathematics education grounded in Islamic values should move beyond simply establishing connections between mathematics and religion. Instead, future instructional models should be designed to enhance students' mathematical competencies through systematic and measurable pedagogical approaches. Future research is therefore recommended to develop instructional materials, value-integration frameworks, and mathematics learning models grounded in Islamic principles, followed by empirical validation through classroom-based studies. Such efforts are expected to generate stronger evidence regarding the contribution of Islamic value integration to improving both the quality of mathematics education and students' character development.

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