
Integrating Islamic Religious Education for SDGs: A Systematic Literature Review and Bibliometric Study

Burhan Efendi¹, Happy Susanto², Nuraini³, Mokmin Bin Basri⁴, Muh Samsuri⁵

^{1,2,3}Islamic Education, Universitas Muhammadiyah Ponorogo, Jawa Timur, Indonesia

⁴University Islam Selangor, Bandar Seri Putra, Kajang, Selangor, Malaysia

^{1,5}Universitas Muhammadiyah Karanganyar, Jawa Tengah, Indonesia

¹efendiburhan@umuka.ac.id, ²happysusanto@umpo.ac.id, ³nuraini@umpo.ac.id,
⁴mokmin@uis.edu.my, ⁵muhsamsuri4@gmail.com

Received May 02, 2025; Revised July 09, 2025; Accepted August 30, 2025

Abstract

Objective: This study aims to systematically examine the development of interdisciplinary integration of Islamic Religious Education (IRE) and its contribution to the achievement of the SDGs, especially SDG 4 (quality education), SDG 16 (peace and justice), and SDG 13 (environmental responsibility). **Theoretical framework:** The theoretical framework refers to the integration of IRE in three main domains: epistemological-philosophical, pedagogical-practical, and institutional-structural, and is associated with the values of sustainable development. **Literature review:** Previous studies have addressed the integration of Islamic values into science, moderate curriculum, character education, and digital transformation, with the main contributions coming from Indonesia and Malaysia since 2019. **Methods:** The study used the Systematic Literature Review (SLR) approach based on the PRISMA protocol, as well as bibliometric analysis using VOSviewer. Of the 2,083 articles in Scopus, 25 passed the selection. **Results:** An increase in publications related to IRE integration has been found since 2019. There are eight key indicators of integration classified into the three conceptual domains above. **Implications:** The results of this study offer a conceptual and practical framework for the development of an IRE curriculum that is adaptive to social and global issues and relevant in supporting the SDGs agenda. **Novelty:** This study uniquely combines SLR and bibliometric approaches and identifies new classifications of IRE integration practices that are directly associated with the three main SDGs targets.

Keywords: islamic religious education, integration, islamic values, curriculum development, sdgs.

INTRODUCTION

Islamic Religious Education (IRE) plays a strategic role in shaping students' character, ethics, and spiritual identity amidst the increasingly complex challenges of the global era [1]. In the context of 21st-century education, the integration of Islamic values across various disciplines has become an urgent necessity to bridge the dichotomy between religious and secular sciences, as well as to respond to contemporary issues such as environmental crises, moral degradation, and radicalism [2][3].

Previous studies have shown that integrative approaches can strengthen character education and spiritual literacy while enhancing the curriculum's relevance to real-life contexts. The integration of IRE into social-emotional learning (SEL) has proven effective in fostering self-awareness, empathy, and responsible decision-making. This aligns with the principles of sustainable education (SDG 4) and the promotion of peaceful and inclusive educational institutions (SDG 16). The demand for integrated Islamic education models is also growing, particularly among urban Muslim communities who seek educational approaches that are both contextual and modern while remaining rooted in Islamic values. Integrative models such as *ulû al-'ilm* and prophetic value-based learning are increasingly relevant in supporting the sustainability and competitiveness of Islamic education in the global landscape [4] [5].

Nevertheless, there remains a gap between the theoretical discourse and the practical implementation of IRE integration. Several studies highlight challenges in the field, including limited teacher training, the lack of adaptive learning materials, and the absence of a comprehensive evaluation framework. Moreover, the digital era presents new demands for adaptive, technology-based learning methods to ensure that Islamic values can be effectively transmitted to the digital generation. In this context, a systematic study of IRE integration becomes essential—not only to strengthen its conceptual foundations but also to provide evidence-based policy and practice recommendations. The Systematic Literature Review (SLR) approach offers a means to explore research trends, identify gaps, and map the global development trajectory of IRE integration, while also linking it to its potential contribution toward the achievement of the Sustainable Development Goals (SDGs) [6].

Accordingly, this study aims to: (1) identify trends and dominant themes in scholarly publications related to IRE integration; (2) map scholarly networks and institutional contributions; and (3) formulate the theoretical and practical implications of IRE integration in supporting the SDGs, particularly in fostering inclusive, ethical, and sustainable education [7].

This study holds significant value in advancing the discourse on the integration of Islamic Religious Education (IRE) within the framework of sustainable development. By systematically mapping the intersection between IRE and the Sustainable Development Goals (SDGs), it addresses an urgent global need to harmonize faith-based education with contemporary educational imperatives. In particular, the focus on SDG 4 (Quality Education), SDG 16 (Peace, Justice, and Strong Institutions), and SDG 13 (Climate Action) situates IRE as a strategic driver of ethical, inclusive, and environmentally responsible education systems. The findings contribute not only to educational theory but also to policy and curriculum development, offering concrete pathways for educational institutions to operationalize the integration of Islamic values across diverse learning contexts [8] [9].

The study's significance also lies in its holistic conceptualization of IRE integration into three interrelated domains—epistemological-philosophical, pedagogical-practical, and institutional-structural. This triadic framework enables a comprehensive understanding of how Islamic values can be embedded into curricula, teaching methodologies, and institutional governance, while remaining adaptive to global challenges such as environmental crises, moral degradation, and digital transformation. By uncovering eight key integration indicators, this research provides actionable guidance for educators, policymakers, and researchers in shaping education that is both contextually relevant and globally competitive. In terms of novelty, this research distinguishes itself in two main ways. First, it is the first known study to combine a Systematic Literature Review (SLR) guided by the PRISMA protocol with bibliometric network analysis using VOSviewer to

investigate IRE integration in direct relation to the SDGs. This methodological synergy not only enhances the rigor of the findings but also produces a dual-layered insight: a qualitative synthesis of thematic trends and a quantitative mapping of scholarly networks, institutional collaborations, and citation patterns [8] [9].

Second, the study offers a new classification scheme for IRE integration practices, explicitly linked to SDG targets. While previous research has explored Islamic education reform or integration in isolated contexts, this classification connects conceptual domains with sustainable development imperatives, thus bridging the gap between religious education theory and measurable global objectives. This enables stakeholders to design IRE programs that are not merely value-based but also outcome-oriented, aligning spiritual formation with competencies essential for the 21st century. Ultimately, the combination of methodological innovation, thematic clarity, and practical relevance positions this research as a pioneering reference for advancing the role of Islamic Religious Education in building just, peaceful, and sustainable societies [10], [11].

LITERATURE REVIEW

The integration of Islamic Religious Education (IRE) represents both an epistemological and pedagogical response to the fragmentation of knowledge and the dominance of secular paradigms in modern education. The tauhid-based integration framework places the Oneness of God (tauhid) as the foundation of epistemology, unifying spiritual, ethical, and rational dimensions in the educational process. Within this paradigm, knowledge is not dichotomized between the “religious” and the “worldly”; rather, it is oriented toward cultivating ethical consciousness and a sense of responsibility as stewards (khalifah) on earth. This vision aligns closely with the Sustainable Development Goals (SDGs), particularly those related to quality education, social justice, and environmental sustainability (SDGs 4, 10, and 13) [12].

Abdullah’s integrative-interconnective paradigm emphasizes the necessity of epistemological dialogue between naqli (revealed knowledge) and aqli (rational knowledge) as a foundation for developing a holistic and contextually relevant Islamic curriculum. This approach has become a key reference in the advancement of transdisciplinary Islamic education focused on comprehensive human development. In practice, IRE integration has been implemented across various educational models, both formal and non-formal. For instance, schools such as SD Muhammadiyah Kriyan Jepara, SDIT Al-Furqon Palembang, and SD Plus Rahmat Kediri have developed hybrid curricula that merge national education standards with Islamic principles through Qur’anic values, ritual habituation, and social projects. Furthermore, several Islamic boarding schools (pesantren), such as Al-Fath Sukoharjo, integrate tahfidz programs with entrepreneurial skills and productive waqf management, in line with SDG 8, which promotes decent work and economic growth [13].

The literature also shows that the integration of Islamic values extends beyond the spiritual domain into areas such as science, mathematics, environmental education, and even digital-based early childhood education. A study by Mohammed et al. affirms that Islamic education emphasizing moderation, tolerance, and diversity contributes to the development of peaceful and inclusive societies, consistent with the aims of SDG 16 [14] [15].

However, the majority of existing studies remain normative or descriptive. Empirical research assessing the actual impact of integration on learning outcomes, character formation, or students’ spiritual growth remains limited. This gap highlights the need for systematic, evidence-based studies to develop replicable

indicators and frameworks for integrative educational practices. By understanding the philosophical foundations and evolving practices of IRE integration, such efforts can serve not only as tools for reconstructing Islamic education but also as avenues for Islam’s contribution to addressing global challenges through education that is just, meaningful, and sustainable [16]-[17].

Table 1. Defining Elements of Integration of Islamic Education

No	Defining factors of Islamic leadership	reference
1	The integration of Islamic education refers to a deliberate effort to incorporate Islamic values and teachings into subjects and learning activities, aiming to align the content of formal education with Islamic ethical and spiritual frameworks, while holistically shaping students’ intellect, character, and morality.	[18]
2	The integration of Islamic education into mathematics involves consciously embedding Islamic values within mathematics instruction, based on the perspective that religious and mathematical knowledge complement each other. This approach enhances student engagement, contextual understanding, and moral reflection to improve learning outcomes.	[19]
3	The integration of Islamic education in environmental conservation entails applying Islamic principles of stewardship (<i>khalifah</i>) across the curriculum, including subjects such as science and moral education. This approach seeks to cultivate environmental awareness, ethical reflection, and student participation in sustainable practices from elementary to secondary levels.	[20]
4	The integration of Islamic education into online preschool programs involves embedding Islamic values into digital learning, which supports children’s cognitive, moral, and spiritual development and serves as an innovative solution in situations such as the pandemic.	[21]
5	At SD Plus Rahmat Kediri, the integration of Islamic education combines academic instruction with structured religious practices—such as murâja’ah and social programs—to foster students’ moral, spiritual, and social character from an early age.	[22]
6	Islamic education integration is a systematic tauhid-based approach that applies Islamic values across various disciplines, including sociology, through dialogue between religion and science in both curriculum and instructional practices, aimed at enriching educational content and moral development.	[23]

METHODOLOGY

This study adopts a combined approach of Systematic Literature Review (SLR) and bibliometric analysis to examine the development of Islamic Religious Education (IRE) integration across various disciplines and its relevance to the achievement of the Sustainable Development Goals (SDGs). The SLR approach was selected to systematically construct thematic syntheses, while bibliometric analysis was employed to map scholarly networks, institutional collaborations, and publication trends emerging in the discourse on integrating Islamic values into both formal and non-formal education [24], [25].

The SLR process in this study follows the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) protocol, which includes stages of initial identification, screening, and final selection based on inclusion criteria. Data were retrieved from the Scopus database, considering its credibility as a reputable indexing platform for international journals. The keywords used included:

“integration of Islamic religious education,” “integrating Islamic education,” “Islamic values integration,” and “Islamic education integration.” From the initial search results of 2,083 articles, a rigorous selection process yielded 25 journal articles that met the inclusion criteria, namely: (1) original journal articles, (2) written in English, and (3) thematically relevant to interdisciplinary IRE integration [26]–[28].

In the bibliometric analysis stage, VOSviewer software was utilized to visualize co-author networks, institutional affiliations, dominant keywords, and thematic mapping. This approach allowed the study to present not only a systematic thematic review but also to uncover the structure and relationship patterns within the global research ecosystem on IRE integration. Thus, the methodology enabled the combination of conceptual depth and analytical breadth, while demonstrating how IRE integration contributes meaningfully to the realization of SDGs—particularly in the domains of quality education (SDG 4), peaceful and inclusive institutions (SDG 16), and environmental responsibility (SDG 13) [29]–[31].

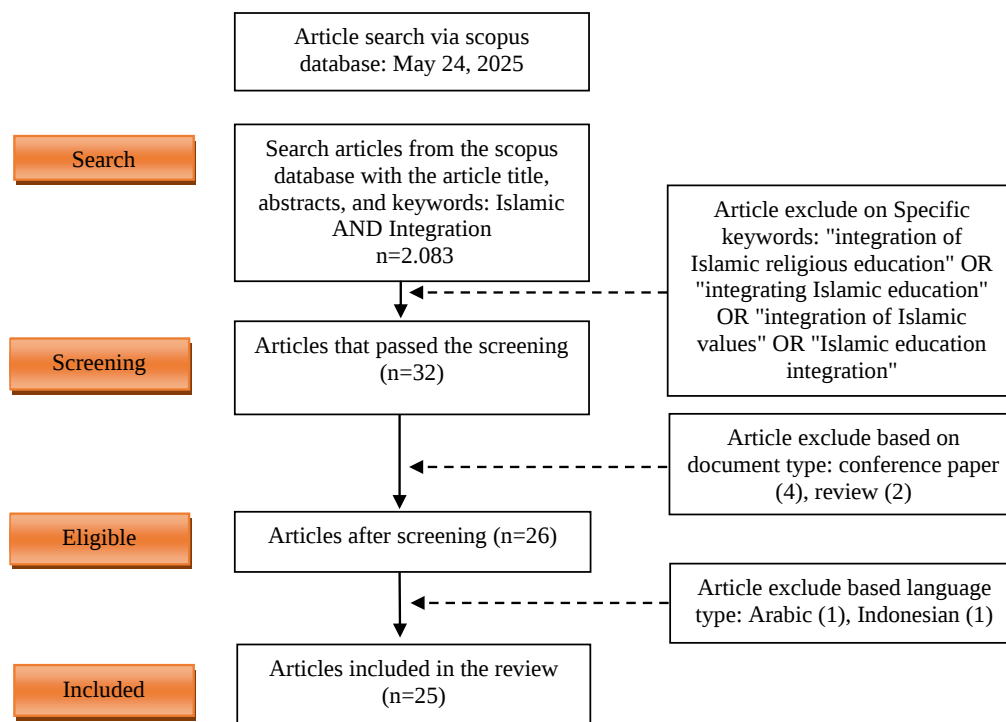


Figure 1. SLR Information Flow Using PRISMA

This document is then further analyzed in this study to answer RQ1: To what extent has the integration of Islamic Religious Education across disciplines been explored in scholarly publications, and how has this evolved? RQ2: What are the dominant themes, contributors, and publication trends in research on interdisciplinary integration of Islamic Religious Education? RQ3: What are the theoretical and practical implications of integrating Islamic Religious Education into various educational domains, and what gaps remain for future research?

RESULTS AND DISCUSSION

RQ1: To What Extent Has The Integration Of Islamic Religious Education Across Disciplines Been Explored In Scholarly Publications, And How Has This Evolved?

The analysis reveals a significant increase in the number of scholarly publications addressing interdisciplinary integration of Islamic Religious Education (IRE) since 2019, reaching its peak in 2023. This growth reflects a rising academic awareness of the importance of educational models that harmoniously combine spiritual, moral, and scientific dimensions. This phenomenon is also driven by global demands for education that go beyond cognitive achievement, emphasizing character formation and ethical awareness in response to modern challenges such as environmental crises, intolerance, and digital disruption—issues closely aligned with the Sustainable Development Goals (SDGs), particularly SDG 4 and SDG 16.

During the earlier period (2007–2017), publications on IRE integration were sporadic and predominantly normative in approach. However, since 2019, there has been a shift toward more systematic and applicative approaches, combining classical Islamic educational concepts such as *adab* and *tauhid* with modern pedagogical frameworks. The analyzed articles frequently discuss the integration of Islamic values into science, mathematics, social studies, and environmental issues, indicating a shift from conventional religious instruction to value-based education that supports sustainable development. Moreover, recent studies highlight the emergence of institution-based integration practices, such as those implemented at *Madrasah Aliyah Negeri Insan Cendekia* and *tahfidz*-based Islamic boarding schools that integrate economic activities, agriculture, and spiritual education. These models demonstrate that IRE integration is not merely a curricular agenda, but also part of a broader Islamic educational movement that promotes self-reliance, entrepreneurship, and environmental preservation, consistent with SDG 8 and SDG 13.

Nevertheless, significant challenges persist in the implementation of IRE integration. These include the gap between theoretical discourse and practical application, limited teacher resources, and a mismatch between national curriculum standards and Islamic values content. Several studies also note that integration practices tend to become formalistic if not accompanied by adequate teacher training and consistent institutional support [32]. Therefore, while the trend of IRE integration is encouraging, it requires a more systemic, evidence-based approach focused on strengthening institutional capacity.

In conclusion, the trend of IRE integration in global academic literature reflects a notable shift from normative approaches toward transformative, value-oriented models. The surge in publications after 2019 signals growing recognition of the importance of Islamic education that is integrated with science, technology, and global challenges. This affirms the relevance of IRE integration as a meaningful approach to advancing sustainable education by the principles of SDG 4.

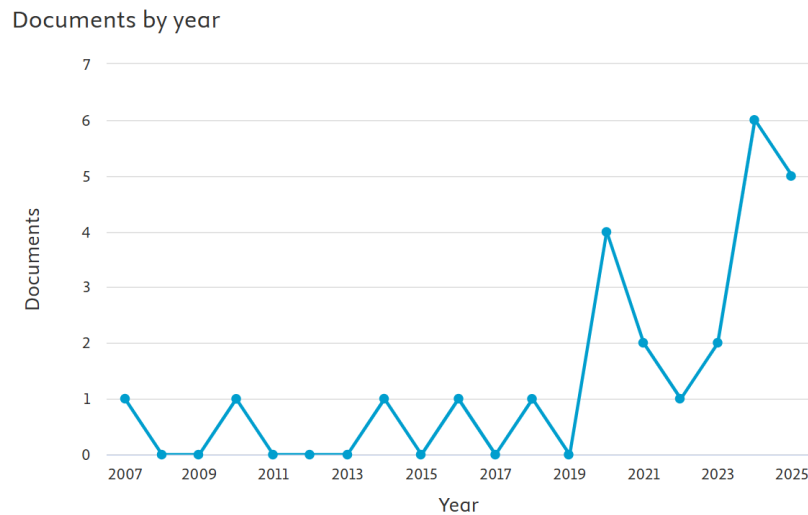


Figure 2. Number Of Integrating Islamic Religious Education Publications

RQ2: What Are The Dominant Themes, Contributors, And Publication Trends In Research On Interdisciplinary Integration Of Islamic Religious Education?

Bibliometric analysis indicates that Indonesia is the largest contributor to scholarly publications on interdisciplinary integration of Islamic Religious Education (IRE), followed by Malaysia, Oman, India, and several Middle Eastern countries. Indonesia's dominant position reflects a strong institutional commitment among Islamic educational institutions to address local needs for contextual, value-based, and responsive education in the face of rapid societal changes [33] [34]. This trend also aligns with the national agenda to promote inclusive, equitable, and meaningful education, as emphasized in SDG 4 and SDG 16.

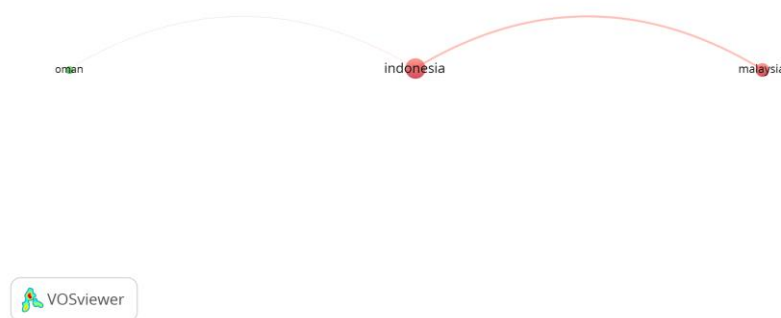


Figure 3. Network Country Visualization

As illustrated in Figure 3, Indonesia and Malaysia occupy central positions within the global research network on IRE integration. Both countries demonstrate strong collaborative ties within Southeast Asia and with institutions in the Middle East and Europe. The link strength between Indonesia and Malaysia reflects high co-publication frequency and thematic convergence in research areas such as *tauhid*-based education, religious moderation, and integrative curriculum development.

This collaboration reinforces the region's role as an epicenter of contemporary Islamic knowledge production that significantly contributes to the global sustainable development agenda [35]–[37].

The dominant themes emerging from the literature include the integration of Islamic values into science, technology, and environmental education; character development rooted in Qur'anic values; and multicultural and religious moderation approaches. These themes are highly relevant in addressing global challenges such as intolerance, social polarization, and moral crises that threaten community sustainability [38] [39]. Several studies also emphasize the importance of integrative curriculum development in professional higher education fields such as nursing and accounting, aimed at aligning technical competencies with Islamic ethical principles [40].

Institutionally, universities in Southeast Asia—particularly UIN Syarif Hidayatullah Jakarta, Muhammadiyah universities, and the International Islamic University Malaysia—have become innovation hubs for integrative Islamic education models. Their active involvement is evident not only in the volume of publications but also in their influence on educational policy and curriculum formation at both national and regional levels [41] [42]. However, from the perspective of authorship, most contributors have only published a single article on this topic, indicating that the field remains fragmented and lacks a robust, sustained research network. This situation underscores the need for greater consolidation of scholarly communities, enhanced collaboration among researchers, and the establishment of thematic research centers dedicated to advancing the integration of Islamic values across educational disciplines.

Based on these findings, it can be concluded that IRE integration has emerged as a central discourse in contemporary Islamic education, particularly in the Southeast Asian region. Cross-country and institutional collaborations serve as key driving forces behind this trend. The prominence of themes such as digitalization, character education, and multicultural pedagogy illustrates that IRE integration is not merely a religious concern but also a pedagogical strategy to shape inclusive, ethical, and civilized societies, in alignment with SDG 16.

RQ3: What Are The Theoretical And Practical Implications Of Integrating Islamic Religious Education Into Various Educational Domains, And What Gaps Remain For Future Research?

The results of this systematic review indicate that, theoretically, the integration of Islamic Religious Education (IRE) constitutes a robust epistemological foundation for constructing an educational paradigm that unifies spiritual values, scientific rationality, and social responsibility. The tauhid-based integration framework reinforces the position of Islam as a religion that promotes the pursuit of knowledge for ethical purposes and communal well-being. This model challenges the dichotomy between religious and secular sciences and underscores the importance of transdisciplinary approaches in curriculum development. In this sense, IRE integration represents a distinctive Islamic contribution to the realization of holistic education in support of SDG 4 (quality education), SDG 13 (climate action), and SDG 16 (peace, justice, and strong institutions).

Practically, this study proposes eight key indicators of IRE integration, categorized into three major domains 1) Epistemological-philosophical, including tauhid as the foundation of knowledge and the use of transdisciplinary approaches; 2) Pedagogical-practical, covering the integration of religious and general curricula, holistic assessment, teacher competence, and digital literacy; 3) Institutional-

structural, involving institutional policies, digital innovation in response to crises, and socio-cultural contextualization.

These indicators offer a concrete framework for designing curricula, teacher training, and Islamic educational policies that are responsive to both local and global challenges. Innovative practices such as integrating Islamic values into science education, *pesantren*-based entrepreneurship through productive *waqf*, and the reinforcement of tauhid-oriented digital literacy illustrate the transformative potential of IRE integration in 21st-century education [43].

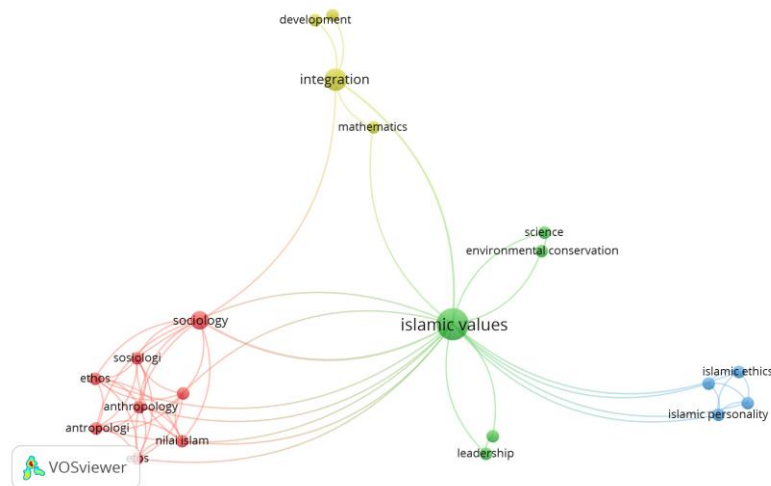


Figure 4. Co-Occurrence Framework And Representation Of Key Terms

Keyword mapping further reveals that the concept of “*Islamic values*” serves as a central node in the discourse, closely connected to terms such as “*integration*,” “*curriculum development*,” “*tauhid-based education*,” and contextual themes like “*digital learning*,” “*environmental conservation*,” and “*teacher competence*.” This suggests that IRE integration is not merely a religious agenda, but part of a broader global ethical-pedagogical movement capable of strengthening sustainable and socially just education (SDGs 13, 4, and 10). The visualization supports the formation of an IRE integration framework that is not only conceptually sound but also adaptive to global issues such as digitalization, environmental education, and character development. Core vocabulary such as *curriculum development*, *Islamic values*, and *digital learning*, highlights the need for future research to emphasize the interconnection between Islamic values and contemporary pedagogical approaches responsive to the SDGs. As such, these findings reinforce the urgency of advancing collaborative, transdisciplinary, and classroom-based studies.

However, several research gaps remain. Most existing publications are normative or descriptive, while empirical studies measuring the actual impact of integration on learning outcomes, behavioral change, or students’ spiritual competence are still scarce. Additionally, few studies employ longitudinal or classroom-based research methods, and there is a lack of evaluation instruments specifically designed for Islamic value-integrated education. Another underexplored area is the role of digital technology and artificial intelligence (AI) in supporting integrative Islamic pedagogy. In the post-pandemic context and amidst rapid digital transformation, Islamic education must become adaptive, interactive, and deeply rooted in core values. Furthermore, comparative studies across countries and cultures—including minority Muslim contexts—are needed to explore how Islamic values are integrated into pluralistic and secular educational systems [44].

In conclusion, the future of IRE integration research requires a more collaborative, evidence-based, and context-sensitive approach, addressing both local realities and global shifts. Future research agendas should prioritize strengthening transformative Islamic educational practices that contribute tangibly to the achievement of the SDGs through education rooted in *tauhid*, ethics, and social responsibility. Conceptually and practically, the eight indicators developed in this study provide an operational framework that can be applied in curriculum development, teacher competency enhancement, and institutional policy. This framework offers a foundation for Islamic education that is adaptive to digital challenges, cultural pluralism, and sustainable development, all grounded in prophetic values [45]–[47].

Analytical Overview. The study “Integrating Islamic Religious Education: A Systematic Literature Review and Bibliometric Study in Support of SDGs” provides a comprehensive examination of how Islamic Religious Education (IRE) integration has evolved and its role in advancing the Sustainable Development Goals (SDGs). Employing a dual methodology—Systematic Literature Review (SLR) following PRISMA protocols and bibliometric analysis using VOSviewer—the research combines qualitative thematic synthesis with quantitative mapping of scholarly networks, yielding both depth and breadth in analysis.

The findings indicate a sharp increase in academic output on IRE integration since 2019, peaking in 2023. This surge reflects a shift from predominantly normative discourse toward applied, transdisciplinary frameworks that merge Islamic concepts such as *tauhid* and *adab* with modern pedagogical models. The thematic expansion includes embedding Islamic values into science, mathematics, environmental education, and social-emotional learning, demonstrating a broadening scope that aligns with SDG 4 (quality education), SDG 16 (peace and justice), and SDG 13 (climate action) [45]–[47].

Geographically, Indonesia leads global scholarship in this field, followed by Malaysia and several Middle Eastern nations. The collaborative network between Indonesian and Malaysian institutions is particularly strong, highlighting Southeast Asia’s position as an epicenter for contemporary Islamic educational innovation. Key institutional contributors—such as UIN Syarif Hidayatullah Jakarta, Muhammadiyah universities, and the International Islamic University Malaysia—have actively developed and disseminated integrative models. However, authorship patterns show fragmentation, with most scholars contributing only one publication, suggesting the need for more sustained, collaborative research communities.

The study identifies eight key indicators of IRE integration, categorized into three domains: 1). Epistemological-philosophical – emphasizing *tauhid* as the foundation of knowledge and advocating for transdisciplinary approaches. 2). Pedagogical-practical – focusing on curriculum integration, holistic assessment, teacher competence, and digital literacy. 3). Institutional-structural – involving policy alignment, crisis-responsive innovation, and socio-cultural contextualization.

These indicators provide an operational framework for curriculum design, teacher training, and institutional policy-making, offering tangible pathways for embedding Islamic values into both formal and non-formal education systems. Case studies—such as *pesantren* integrating entrepreneurship and environmental stewardship—illustrate how IRE integration can foster self-reliance, ethical awareness, and sustainable practices. Despite these advances, the study highlights persistent challenges: limited empirical research measuring integration’s direct impact on learning outcomes; inadequate teacher preparation; and potential formalism without strong institutional backing. Additionally, the role of digital technology and artificial intelligence in IRE integration remains underexplored, representing a

crucial frontier in adapting Islamic pedagogy to contemporary educational ecosystems [45]–[47].

The analysis concludes that IRE integration has moved toward transformative, value-oriented education models capable of addressing both local and global challenges. To maximize impact, the field requires longitudinal, classroom-based studies; enhanced cross-national collaborations; and the development of evaluation instruments tailored to Islamic value-integrated education. By providing a conceptual classification tied to SDG imperatives and a methodological model combining SLR with bibliometrics, this study positions itself as a foundational reference for policymakers, educators, and researchers seeking to operationalize faith-based, ethical, and sustainable education worldwide.

CONCLUSION

This study affirms that the integration of Islamic Religious Education (IRE) across various disciplines is not merely an epistemological agenda but also a transformative strategy for developing ethical, contextual, and sustainable education. Through a Systematic Literature Review (SLR) and bibliometric analysis of 25 scholarly publications, the findings reveal a significant increase in research on IRE integration in recent years, particularly in Southeast Asia, with Indonesia emerging as the primary contributor. Dominant themes include the integration of Islamic values into science, environmental education, character development, and the digitalization of learning, reflecting a new trajectory for Islamic education in responding to global challenges. The key contribution of this study lies in the formulation of eight core indicators of IRE integration, categorized into three main domains: epistemological-philosophical, pedagogical-practical, and institutional structural. These indicators offer a comprehensive framework that educators, researchers, and policymakers can use to design Islamic education models that are responsive to digital transformation, cultural pluralism, and the imperatives of sustainable development. Such integration holds strong potential to support the achievement of SDG 4 (quality education), SDG 13 (climate action), and SDG 16 (peace and inclusive societies), while simultaneously strengthening the role of Islam in building a global civilization grounded in justice and dignity. The study offers several key recommendations. First, there is an urgent need for empirical, classroom-based research to evaluate the effectiveness of IRE integrative models in various educational contexts. Second, teacher competence must be enhanced through transdisciplinary pedagogical training and digital literacy programs that enable the creative and adaptive transmission of Islamic values. Third, Islamic higher education institutions should expand cross-national and cross-cultural research collaborations to reinforce the position of IRE integration in global educational discourse on sustainability. Fourth, policymakers are encouraged to support systemic regulations and curriculum designs that accommodate integrative approaches. Ultimately, IRE integration must continue to be developed as a distinctive Islamic contribution to shaping the future of education, one that is meaningful, ethical, and committed to peace and the sustainability of humanity.

Acknowledgements

The authors would like to express their sincere gratitude to the Muhammadiyah University of Karanganyar and the Muhammadiyah University of Ponorogo, and the University Islam Selangor, Bandar Seri Putra, Kajang, Selangor, Malaysia, for their academic and institutional support during the completion of this study. Special thanks are also extended to the librarians, reviewers, and editors who provided constructive feedback, as well as to the research teams who contributed to data access and validation.

This research would not have been possible without the collaboration and insight from fellow educators and scholars in the field of Islamic education.

Author Contribution

All authors contributed equally to the conceptualization, design, analysis, and writing of this article. Burhan Efendi led the bibliometric analysis and manuscript drafting. Happy Susanto contributed to the theoretical framework and literature synthesis. Nuraini, Mokmin Bin Basri, and Muh Samsuri provided methodological support and critical revisions. All authors reviewed and approved the final manuscript for submission and publication.

Conflicts of Interest

The authors declare no conflict of interest. The research was conducted independently, and no financial or personal relationships could have appeared to influence the work reported in this paper.

REFERENCES

- [1] Muh Ibnu Sholeh *et al.*, “The Role of Teachers in Increasing Students’ Learning Motivation in Islamic Religious Education,” *J. Pendidik. Agama Islam*, vol. 21, no. 2 SE-Articles, pp. 421–441, Dec. 2024, <https://doi.org/10.14421/jIRE.v21i2.8846>.
- [2] M. Amin Abdullah, “Religion, science and culture: An integrated, interconnected paradigm of science,” *Al-Jami’ah*, vol. 52, no. 1, pp. 175–203, 2014, <https://doi.org/10.14421/ajis.2014.52i1.175-203>.
- [3] R. W. Hefner, “Islamic knowledge and education in the modern age,” in *The New Cambridge History of Islam: Muslims and Modernity Culture and Society Since 1800*, Institute on Culture, Religion, and World Affairs, Boston University, United States: Cambridge University Press, 2010, pp. 497–520. <https://doi.org/10.1017/CHOL9780521844437.021>.
- [4] N. Budiayanti, K. S. Komariah, W. Hermawan, and P. Hyangsewu, “Impact Of The Ulû Al-Ilm Model On Six Domains Of Student Learning Outcomes In Islamic Religious Education,” *J. Pendidik. Islam*, vol. 10, no. 1, pp. 113–124, 2024, <https://doi.org/10.15575/jpi.v10i1.33225>.
- [5] M. Husnul Abid, “Traditional Madrasah, State Policies And The Rise Of Integrated Islamic Schools In Jambi,” *J. Indones. Islam*, vol. 15, no. 1, pp. 75–102, 2021, <https://doi.org/10.15642/JIIS.2021.15.1.75-102>.
- [6] U. Aliyah, E. Purwanto, M. E. Wibowo, and S. Sunawan, “Construct Social Emotional Learning (SEL) in the Islamic Paradigm for Muslim Students in Indonesia,” *Islam. Guid. Couns. J.*, vol. 7, no. 2, 2024, <https://doi.org/10.25217/0020247500300>.
- [7] M. F. Sidik, V. P. Vachruddin, E. F. Rusydiyah, A. S. Pertiwi, and M. A. Darmawan, “Conceptualization of the Integrated Islamic Religious Education Curriculum: A Literature Study at Imam Hatip Schools, Turkey and MAN Insan Cendekia Indonesia,” *J. Pendidik. Agama Islam*, vol. 21, no. 1, pp. 111–130, 2024, <https://doi.org/10.14421/jIRE.v21i1.7617>.
- [8] “Learning The Values Of Religious Moderation In Madrasah Aliyah: Model Analysis,” *J. Ilm. Peuradeun*, vol. 11, no. 2, pp. 551–568, 2023, <https://doi.org/10.26811/peuradeun.v11i2.1006>.
- [9] D. Mariyono, “Multicultural values: meeting point of two forces in developing Islamic education,” *Qual. Educ. All*, vol. 1, no. 1, pp. 46–69, 2024, <https://doi.org/10.1108/QEA-02-2024-0018>.
- [10] Z. Hartati, A. Rahman, M. Kibtiyah, and F. Liadi, “Islamic Teachers’ Implementation of the Merdeka Curriculum in Senior High Schools: A Systematic Review,” *Int. J. Learn. Teach. Educ. Res.*, vol. 23, no. 4, pp. 394–408, 2024, <https://doi.org/10.26803/ijlter.23.4.21>.
- [11] Z. Ni’mah and H. Rahmawati, “Educational Technology in Islamic Education: A Systematic Literature Review,” in *ACM International Conference Proceeding Series*, Universitas Islam Negeri Sunan Kalijaga, Yogyakarta, Indonesia: Association for Computing Machinery, 2023, pp. 148–155. <https://doi.org/10.1145/3637907.3637967>.
- [12] D. Setiowati, W. B. Utomo, and M. Agustina, “Integration in nursing curriculum for building Islamic nurses’ character in Indonesia: a descriptive qualitative approach,” *Healthc. Low-Resource Settings*, vol. 11, no. 2, 2023, <https://doi.org/10.4081/hls.2023.11739>.
- [13] M. M., I. Firdaus, “Management of Productive Waqf for Empowerment of the Ummah,” *Profetika J.*

-
- Stud. Islam*, vol. 21, no. 2, pp. 253–259, 2020, <https://doi.org/10.23917/profetika.v21i2.13085>.
- [14] W. Hidayat, “Implementing Science, Social Integration In Islamic Education Learning,” *J. Pendidik. Islam*, vol. 7, no. 1, pp. 1–16, 2021, <https://doi.org/10.15575/jpi.v7i1.12515>.
- [15] S. N. Arim, M. T. Ajmain, K. Abdul Razak, M. N. Mohamad Salleh, A. S. Yusof, and S. S. Mohd Noor, “Navigating Educational Turbulence: A Systematic Literature Review on Challenges Faced by Islamic Education Amid the Pandemic,” in *Studies in Systems, Decision and Control*, vol. 537, University of Technology Malaysia, Johor, 81310, Malaysia: Springer Science and Business Media Deutschland GmbH, 2024, pp. 663–680. https://doi.org/10.1007/978-3-031-62106-2_50.
- [16] D. Mohammed, Q. Aini, D. Supriyanti, and M. Anggraeni, “Assimilate The Qur’an’s View with Science and Technology Perspectives,” *APTISI Trans. Technopreneursh.*, vol. 3, no. 1, pp. 42–47, 2021, <https://doi.org/10.34306/att.v3i1.141>.
- [17] A. Fauzi and N. L. Inayati, “Implementasi Evaluasi Pembelajaran Pendidikan Al Islam di Sekolah Menengah Atas Muhammadiyah,” *Munaddhomah*, vol. 4, no. 2, pp. 272–283, 2023, <https://doi.org/10.31538/munaddhomah.v4i2.438>.
- [18] S. O. Sappari *et al.*, “The Content-Validated Geometry Lessons in Islam Observed Brain-based Learning,” *Qubahan Acad. J.*, vol. 3, no. 4, pp. 153–168, 2023, <https://doi.org/10.48161/qaj.v3n4a166>.
- [19] R. Putri, R. Johar, and S. Munzir, “Teachers’ Perception About Islamic Values Integration Into Mathematics Learning Through Comics,” *J. Ilm. Peuradeun*, vol. 10, no. 1, pp. 105–116, 2022, <https://doi.org/10.26811/peuradeun.v10i1.606>.
- [20] M. Nurhidayah and M. Pewangi, “Integration of Islamic Values in the Field of General Studies at SMP Unismuh Makassar: Evaluation of the Stake Countenance Model Approach,” *Educ. Process Int. J.*, vol. 14, 2025, <https://doi.org/10.22521/edupij.2025.14.59>.
- [21] S. H. Lubis, M. R. F. Islamy, and A. Faqihuddin, “Exploring Online Preschool Programs in children’s academic preparation for elementary school: a case study in Indonesia,” *Cogent Educ.*, vol. 11, no. 1, 2024, <https://doi.org/10.1080/2331186X.2024.2433818>.
- [22] I. Tsani, “Evaluating The Integration Of Islamic Values In Primary Education: A Logic Model Approach,” *J. Pendidik. Islam*, vol. 10, no. 1, pp. 87–100, 2024, <https://doi.org/10.15575/jpi.v10i1.34238>.
- [23] T. Hidayat, A. S. Rizal, A. Abdussalam, and A. G. Fawwaz, “Designing Islamic Values Integration Into Sociology Learning,” *J. Pendidik. Islam*, vol. 6, no. 1, pp. 37–56, 2020, <https://doi.org/10.15575/jpi.v6i1.8119>.
- [24] M. Fundoni, L. Porcu, and G. Melis, “Systematic literature review: Main procedures and guidelines for interpreting the results,” in *Researching and Analysing Business: Research Methods in Practice*, Granada University, SIREn: Taylor and Francis, 2023, pp. 55–74. <https://doi.org/10.4324/9781003107774-5>.
- [25] F. J. García-Peñalvo, “Developing robust state-of-the-art reports: Systematic Literature Reviews,” *Educ. Knowl. Soc.*, vol. 23, p. E28600, 2022, <https://doi.org/10.14201/eks.28600>.
- [26] A. N. Andri Nirwana, Mahmudhassan, F. D. Marshal, M, and N. Fadli, “Human Rights and Social Justice in Quranic Contexts: A Global Trend,” *Leg. J. Ilm. Huk.*, vol. 32, no. 2, pp. 453–471, 2024, <https://doi.org/10.22219/ljih.v32i2.35088>.
- [27] S. Uddin Ahmed Khondoker, “Understanding the Essence of Islamic Education: Investigating Meaning, Essence, and Knowledge Sources,” *Solo Univers. J. Islam. Educ. Multicult. E*, vol. 2, no. 1, pp. 27–36, 2024, <https://doi.org/10.61455/sujiem.v2i01.115>.
- [28] S. Rochanah, A. R. Ridha, and A. Nirwana, “Development of Teacher ’ s Performance of Construct Reliability and Avarice Variance Extracted Measurement Instruments of Certified Islamic Education Teachers,” *Int. J. Relig.*, vol. 3538, no. 10, pp. 3828–3849, 2024, <https://doi.org/10.61707/xzjvmb82>.
- [29] S. Trihariyanto, E. Supriyanto, M. M, and Z. ’Uyun, “Strategi Pembelajaran Inovatif Pendidikan Agama Islam Dengan Media Powerpoint Dalam Meningkatkan Mutu Pendidikan Di Sdit Muhammadiyah Sinar Fajar Cawas Dan Sd Muhammadiyah Pk Bayat,” *Profetika J. Stud. Islam*, vol. 21, no. 1, pp. 109–120, 2020, <https://doi.org/10.23917/profetika.v21i1.11653>.
- [30] M. M, I. Amelia, and A. B. Eprahim Ali, “Islamic accounting: Ethics and contextualization of recording in Muamalah transactions,” *Multidiscip. Rev.*, vol. 7, no. 8, 2024, <https://doi.org/10.31893/multirev.2024132>.
- [31] E. B. G. Suwoko, Waston, Bambang Setiaji, M, Huda Kurnia Maulana, “Family Education To Improve The Quality Of Human Resources And Sustainable Development In Samarinda,” *Rev. Gestão Soc. e Ambient.*, vol. 18, no. 6, pp. 1–19, 2024, <https://doi.org/10.24857/rgsa.v18n6-011>.
-

-
- [32] Zulfatmi, "Learning the Values of Religious Moderation in Madrasah Aliyah: Model Analysis," *J. Ilm. Peuradeun*, vol. 11, no. 2, pp. 551–568, 2023, <https://doi.org/10.26811/peuradeun.v11i2.1006>.
- [33] "Policies and patterns of integration of science and religion in Indonesian Islamic higher education," *High. Educ.*, 2025, <https://doi.org/10.1007/s10734-024-01378-9>.
- [34] A. Subhan, "Al-madrasah (Madrasah) am al-madrasah al-'āmmah (Sekolah): al-Mufaḍḍalah 'inda atbā' jam'iyyah al-Muḥammadiyyah wa Nahḍah al-'Ulamā' fī Indūnisiyā," *Stud. Islam*, vol. 30, no. 3, pp. 561–594, 2023, <https://doi.org/10.36712/sdi.v30i3.38201>.
- [35] R. Imron, M. M., "The phenomenon of the rise of online transactions : A case study of Tokopedia. com and Bukalapak. com," *Multidiscip. Rev.*, 2024, <https://doi.org/10.31893/multirev.2024133>.
- [36] M. Apriantoro, A. Suryaningsih, and M. M., "Bibliometric Analysis of Research Development of Economic Dispute Settlement," *EUDL Eur. Union Digit. Libr.*, 2023, <https://doi.org/10.4108/eai.19-10-2022.2329068>.
- [37] S. N. Asia, M. M., M. S. Apriantoro, A. Amrin, S. Sya'roni, and R. Irfan Rosyadi, "Analysis of Islamic Economic Law on Fishing Pool Business in Indonesia," *Demak Univers. J. Islam Sharia*, vol. 1, no. 01, pp. 01–09, 2023, <https://doi.org/10.61455/deujis.v1i01.7>.
- [38] M. Kosim, M. Kustati, W. R. Sirait, S. Fajri, S. R. Febriani, and D. D. Perrodin, "Developing A Religious Moderation-Based Curriculum Module For Laboratory Madrasah Tsanawiyah In Islamic Higher Education," *J. Pendidik. Islam*, vol. 10, no. 2, pp. 350–362, 2024, <https://doi.org/10.15575/jpi.v10i2.39163>.
- [39] M. A. Ma'arif, M. H. Rofiq, S. Kausar, A. Sirojuddin, A. Kartiko, and M. S. Hasan, "Shaping Students' Moderate Islamic Character At Madrasah," *J. Pendidik. Islam*, vol. 10, no. 2, pp. 323–335, 2024, <https://doi.org/10.15575/jpi.v10i2.34029>.
- [40] Y. R. Hanny and N. Rizal, "Hidden curriculum: The concept of integrating Islamic value in higher education accounting at Muhammadiyah on ulab albab perspective," *J. Adv. Res. Dyn. Control Syst.*, vol. 12, no. 1, pp. 113–121, 2020, <https://doi.org/10.5373/JARDCS/V12I1/20201018>.
- [41] M. Y. M. Hussin, F. Muhammad, A. A. Razak, and S. A. Awang, "Islamic Religious School as an Alternative Education Institution in the Global Era: A Bibliometric and Thematic Analysis," *Int. J. Learn. Teach. Educ. Res.*, vol. 23, no. 9, pp. 560–591, 2024, <https://doi.org/10.26803/ijlter.23.9.28>.
- [42] M. Mahsusi, M. Solehuddin, M. R. Wijaya, D. A. Mardani, and S. A. Sahfutra, "A bibliometric study of papers published in Islamic research during 2020-2022," in *AIP Conference Proceedings*, R. T., N. null, N. A.A., S. D.A.N., and R. R., Eds., Universitas Islam Negeri Syarif Hidayatullah, Jakarta, Indonesia: American Institute of Physics, 2024. <https://doi.org/10.1063/5.0224980>.
- [43] I. Zakiyyah, "Learning Management of Islamic Religious Education Based on Digital Technology," in *2024 12th International Conference on Cyber and IT Service Management, CITSM 2024*, Graduate School, Uin Syarif Hidayatullah Jakarta, Jakarta, Indonesia: Institute of Electrical and Electronics Engineers Inc., 2024. <https://doi.org/10.1109/CITSM64103.2024.10775708>.
- [44] C. S. Rochmat, R. Riza, and S. A. Murni, "Artificial Intelligence in Education: Opportunities and Challenges in Improving Learning Efficiency in the Society 5.0 Era," *Progres. J. Pemikir. Dan Pendidik. Islam*, vol. 13, no. 01, pp. 91–100, 2024, <https://doi.org/10.22219/progresiva.v13i01.30007>.
- [45] M. M. Nugroho, M., "Outsourcing System in View of Islamic Law : Study on Employees at Universitas Muhammadiyah Surakarta," in *Proceedings of the International Conference on Engineering, Technology and Social Science (ICONETOS 2020)*, Atlantis Press, 2021, pp. 91–95, <https://doi.org/10.2991/assehr.k.210421.015>.
- [46] M., Nuha, "Mengungkap Isi Pendidikan Islam Perspektif Al- Qur ' an Surat Al -Ashr Ayat 1-3," in *The 7th University Research Colloquium 2018 STIKES*, 2018, pp. 206–218.
- [47] A. Haironi, M., "Implementasi Metode Tahfīzul Qur'an 'Sabaq, Sabqi, Manzil' Di Marhalah Mutawasithah Dan Tsanawiyah Putri Pondok Pesantren Imam Bukhari Tahun Pelajaran 2010-2014," UMS, 2016.
-