
The Evolution of Islamic Pedagogy Studies: A Scientometric and Co-Citation Analysis

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Abstract

In the last decade, Islamic pedagogy has experienced significant growth as an academic field integrating spiritual, ethical, and digital dimensions. This study aims to examine the evolution, structure, and research front of Islamic pedagogy studies through a scientometric and co-citation analysis using Scopus-indexed data from 2012–2025. Employing the PRISMA 2020 protocol, data were systematically collected and analyzed with Bibliometrix (R) and VOSviewer to map publication trends, author collaboration networks, and thematic structures. The findings reveal an accelerating trend of publications after 2020, with Malaysia, Iran, and the United States as leading contributors. Thematic mapping identifies four major research clusters *Islam evolution science, theology education, digital religion, and interfaith epistemology* representing a paradigm shift toward integrative and transdisciplinary Islamic knowledge. The study highlights the growing role of digitalization, social constructionism, and ethical frameworks in shaping modern Islamic education. Novelty emerges in redefining the Islamization of knowledge through data-driven and empirical approaches that merge classical epistemology with contemporary science and technology. This research contributes methodologically by applying scientometric tools to Islamic studies, and conceptually by proposing a new transdisciplinary Islamic epistemology that bridges theology, ethics, and digital learning. The study serves as a foundation for evidence-based policy and future directions in global Islamic education research.

Keywords: *Islamic Pedagogy, Scientometric Analysis, Co-Citation, Digital Religion, Epistemology*

1. Introduction

In the last decade, studies on Islamic education and pedagogy have experienced significant growth globally, in terms of epistemology, methodological approaches, and the integration of digital technology (Yongbao, 2024). With the development of the digital

world and the globalization of education, there arises a need to reorganize the framework of Islamic pedagogy to align with modern social and technological contexts (Mohiuddin & Borham, 2024). Recent research highlights the importance of renewal in Islamic education, including the application of digital ethics principles and the integration of spiritual values in modern learning contexts (Gorian & Osman, 2024)

Moreover, the concept of Islamic education is now not only focused on religious teaching but also on the development of social and moral awareness through interdisciplinary approaches (Mohiuddin & Borham, 2024). Global research trends show an increased interest in integrating Islamic epistemology with modern social sciences and information technology in the context of education. This phenomenon strengthens the position of Islamic pedagogy as a dynamic and rapidly developing field in the digital era (Djuraeva et al., 2025).

The study of Islamic pedagogy has strategic urgency in supporting the achievement of Sustainable Development Goal (SDG) 4: Quality Education, and is in line with the 4th Asta Cita, which is to strengthen human resource, science, and technology development based on moral and spiritual values. In this context, Islamic education plays a key role in shaping a generation with spiritual integrity, digital competence, and social awareness. Recent research emphasizes that the application of Islamic values in modern education can strengthen ethics, spirituality, and digital learning innovation (Burney, 2023; Kerim et al., 2025; Lukenbill, 2016). In addition, the emergence of new topics such as Islamic digital ethics, globalized Islamic education, and faith-based learning models highlights the relevance of Islamic pedagogy to the challenges of the modern world (Gorian & Osman, 2024; Widodo, 2024). Therefore, scientometric mapping of this research is crucial to understand the direction of academic development, collaboration patterns, and the potential for global integration in the study of Islamic pedagogy (Sahmat & Zamri, 2024; Türkcan, 2024). Research on Islamic education in the global context shows a diversity of approaches and areas of focus. For example, a study by Mohiuddin & Borham (2024) emphasizes the importance of Islamic Education in a Globalized World, which highlights how Islamic educational institutions respond to the forces of globalization while maintaining local values and spirituality. On the other hand, studies on Islamic preaching through social media reveal that digital platforms have now become the primary means of spreading Islamic values and teachings, which has a significant impact on models of religious learning and communication (Kamal, 2025; Sholihah & Maulida, 2020).

In addition, research on the ethics of artificial intelligence in Islam highlights the importance of integrating Islamic ethical principles in the use of AI technology in education and Sharia law (Hadi, 2023; Islam, 2025). This study shows that the discourse of Islamic pedagogy is increasingly focused on the synergistic relationship between

religious values and technological innovation, which has become a key characteristic of the 21st century.

Although research on Islamic education and pedagogy continues to develop, there have been few studies that systematically perform scientometric and co-citation analyses in this field. Most of the research remains conceptual, descriptive, or thematic, without comprehensive bibliometric mapping. (Hussain & Cooper-Davies, 2024). As a result, there is no clear picture of who the most influential scholarly actors are, which countries and institutions dominate, and the direction of global research collaboration in Islamic pedagogy. (Malik, 2023). Furthermore, there has been no study explicitly identifying research fronts and emerging topics that will shape the future direction of this field. This situation creates a need for quantitative analysis and the visualization of knowledge networks that can comprehensively depict the evolution of Islamic pedagogy (Mustafa et al., 2021).

This research has a comprehensive goal of exploring the dynamics of the development of Islamic pedagogy studies through a scientometric approach. First, this study aims to analyze publication trends in the field of Islamic pedagogy studies by examining the number of publications per year, emerging areas of study, the contributions of the involved countries, and patterns of collaboration among researchers (Quraisy et al., 2023). This analysis is expected to provide a comprehensive picture of the global dynamics in Islamic pedagogy studies and how publication distribution and international collaboration play a role in the development of this field. Furthermore, this study also aims to identify the most influential authors, journals, and articles in the field, based on their productivity, citation rates, and their conceptual contributions to the advancement of Islamic pedagogy studies (Toktarbekova et al., 2025; Wahid, 2024).

This will provide insights into the key figures and publication platforms that play a role in shaping the direction and substance of the development of this field. Additionally, this research will also map the main topics and themes emerging in the literature on Islamic pedagogy studies through co-word and co-citation analysis (Burney, 2023; Gamini, 2021). This method will help identify the relationships between key concepts that shape the knowledge structure in this field, as well as enable the exploration of current patterns and the development of theories in Islamic pedagogy (Song, 2016; Taşkin, 2014). Finally, this study aims to uncover potential future research topics that can strengthen the direction of scientific development as well as the practice of Islamic education globally. By relying on scientometric data, this study is expected to make a strategic contribution in formulating a relevant research agenda that aligns with global challenges in the field of Islamic education (Djuraeva et al., 2025). Thus, this research is expected to provide an empirical understanding of the evolution and intellectual networks of Islamic pedagogy studies, as well as serve as a foundation for the development of evidence-based Islamic education policy (González-Gutiérrez, 2022).

Academically, this study contributes to the development of scientometric analysis methodology in Islamic studies, particularly in the field of education. Through the analysis of Scopus-indexed data and citation network visualization, this study generates a conceptual map that illustrates the global evolution of Islamic pedagogy (Toktarbekova et al., 2025). In addition, the findings of this study also enrich the discourse on the integration of Islamic epistemology and quantitative methodologies, which are rarely applied in Islamic education research.

Practically, the results of this study can be utilized by Islamic educational institutions, policymakers, and researchers to develop research strategies, international collaboration, and data-driven education policies. The bibliometric visualization from this study can also help Islamic universities and research institutions identify centers of excellence in the field of Islamic education.

2. Research Method

This study adopts a systematic approach based on the PRISMA 2020 protocol (Preferred Reporting Items for Systematic Reviews and Meta-Analyses), which is designed to enhance transparency and reproducibility in scientific literature reviews (Kerim et al., 2025). The study combines scientometric methods and co-citation analysis to explore the conceptual dynamics and intellectual structure in the field of Islamic pedagogy studies. The PRISMA procedure includes four main stages: identification, screening, eligibility assessment, and inclusion, all focused on filtering relevant academic literature from reputable scientific databases (Ifdil et al., 2023).

The search strategy is conducted systematically through the Scopus database by applying the Boolean syntax: (TITLE-ABS-KEY (Evolution islamic) OR TITLE-ABS-KEY (Pedagogy) AND TITLE-ABS-KEY (Studies)) AND PUBYEAR > 2015 AND PUBYEAR < 2026, with additional filtering based on disciplines such as sociology, psychology, health, arts, and nursing. Only documents with article (ar) and book chapter (ch) types are included, written in English, and published in scientific journals (SRCTYPE = "j"). The search is also limited to relevant institutions such as Brock University, Deakin University, Monash University, Mary Immaculate College, and others. This search technique adheres to best practices in systematic literature reviews and bibliometric (Djuraeva et al., 2025; Kerim et al., 2025; Mohiuddin & Borham, 2024), and follows the approach recommended in environmental evidence mapping (Ahmed et al., 2022).

Once the data is collected, all publications are exported into reference management software, Zotero, and then processed further using Bibliometrix software based on R and VOSviewer for visual mapping (Ifdil et al., 2023). Scientometric analysis includes the evaluation of publication frequency, co-occurrence of keywords, and co-authorship networks, while co-citation analysis is used to identify intellectual links between

documents and the academic influence of key works in Islamic pedagogy literature (Haidar et al., 2015). With this method, the conceptual structure of the discipline can be systematically and data-driven uncovered.

The results are visualized through network maps, density maps, and temporal maps (overlay visualization), which allow for the identification of dominant themes and the temporal evolution of Islamic pedagogy studies (Toktarbekova et al., 2025). The PRISMA flow diagram is constructed to show the stages and the number of articles in the identification process through to the final inclusion stage. All analyses are conducted quantitatively and explained narratively to reveal patterns of knowledge distribution, author relationships, and potential research gaps that can be followed up in future studies (Djuraeva et al., 2025). This method provides a strong empirical foundation for understanding how the discourse of Islamic pedagogy has evolved in the global scholarly literature over the past decade.

3. Result

The analysis of publication trends provides an overview of the quantitative development of research in the field of Islamic pedagogy over time. Through this visualization, the dynamics of researcher contributions, institutions, and international collaborations can be observed, highlighting the growth direction and intellectual networks within Islamic pedagogy studies.

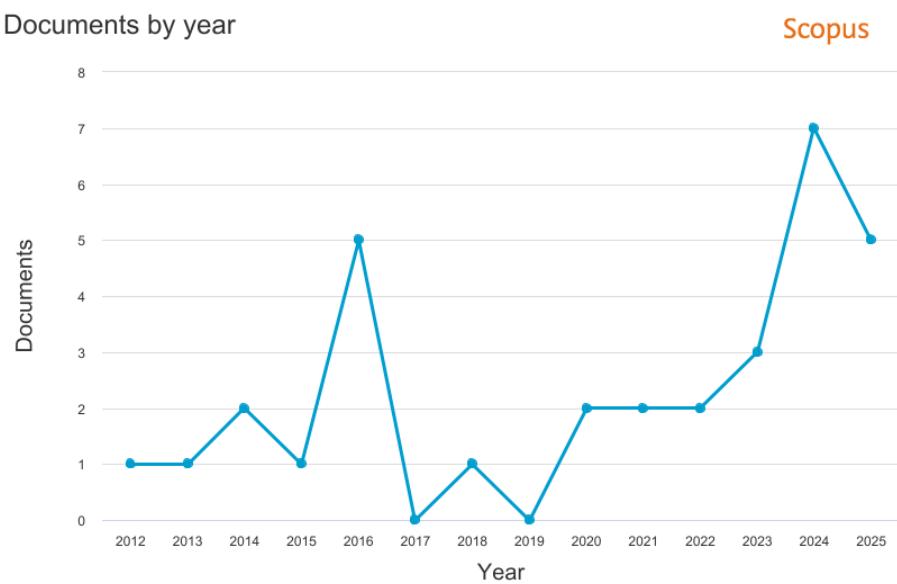


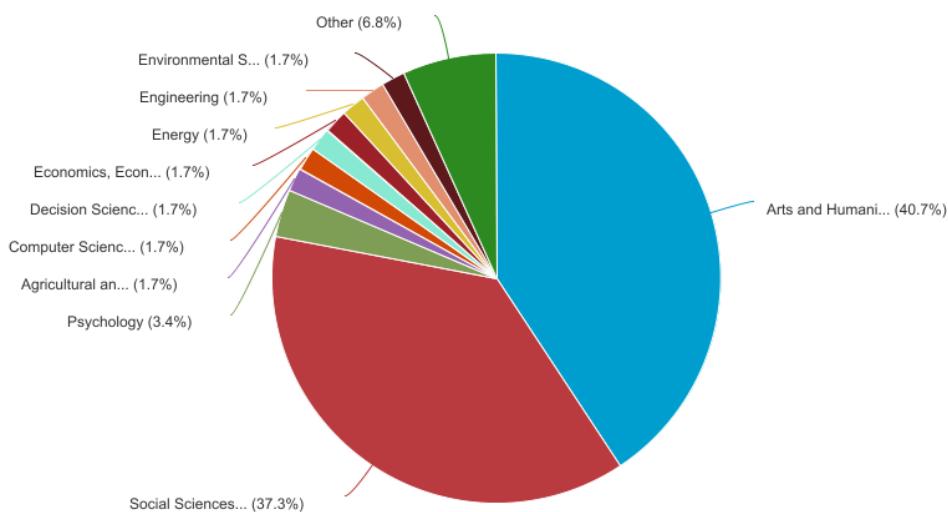
Figure 1.

The figure shows the dynamics of research publications in the field of Islamic Pedagogy Studies indexed in Scopus during the period 2012–2025. In general, the publication trend shows significant fluctuations, with a tendency toward an increase in recent years. After an initial stable phase with low publication numbers from 2012 to 2015, a sharp surge occurred in 2016, marking the early momentum of growing interest in this topic. However, a decline followed in the years 2017–2019, which can be interpreted as a period of stagnation in scientific productivity.

From 2020 to 2025, there is a noticeable consistency and clearer increase, especially in 2024, which peaked with seven documents. This trend indicates a growing academic attention and the expansion of the research network in Islamic pedagogy on a global scale. Thus, the post-2020 phase can be categorized as an acceleration period in research, reflecting the maturity and diversification of the focus in Islamic pedagogy studies.

Documents by subject area

Scopus



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Figure 2.

The figure shows the distribution of publications in the field of Islamic Pedagogy Studies based on academic disciplines indexed in the Scopus database. In general, it is observed that the largest contribution comes from the field of Arts and Humanities, accounting for 40.7%, followed by Social Sciences at 37.3%. The dominance of these two fields indicates that Islamic pedagogy studies are still strongly rooted in humanistic and

social perspectives, emphasizing values, culture, and the context of Islamic education within society.

In addition, fields such as Psychology (3.4%), Computer Science, Decision Sciences, Economics, Engineering, Environmental Science, Energy, and Agricultural and Biological Sciences each contribute in smaller proportions (1.7%). The presence of these fields, though minor, signals the emergence of multidisciplinary approaches in Islamic pedagogy research, particularly in the context of educational technology applications, decision-making, and environmental sustainability.

Overall, this distribution shows that Islamic pedagogy studies are predominantly developing within the realms of the humanities and social sciences, but are beginning to show an integrative direction toward broader interdisciplinary fields, in line with the need for the transformation of Islamic education in the digital and global era.

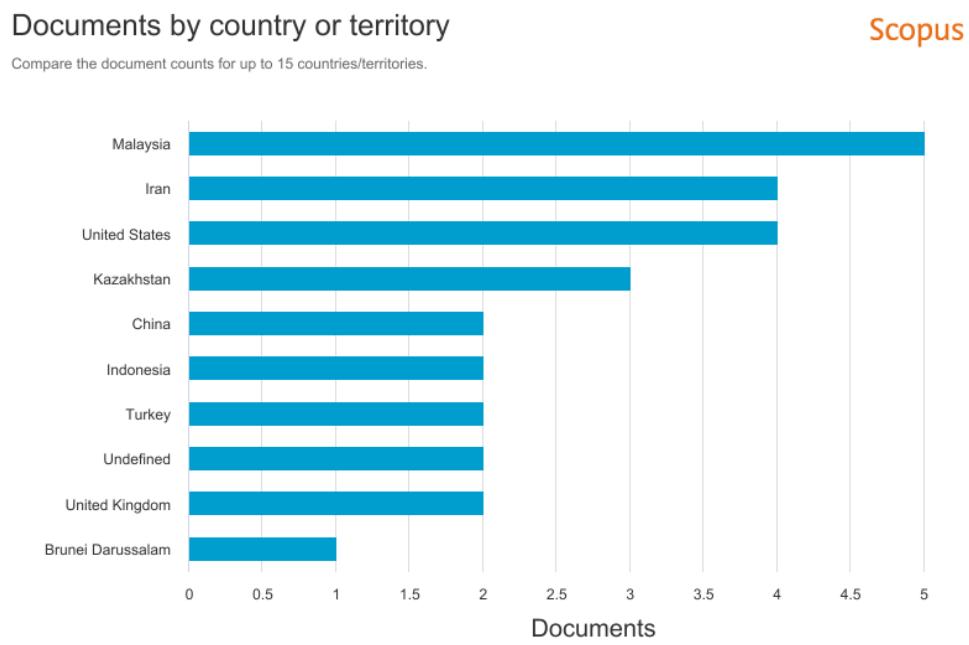


Figure 3.

The graph above displays the distribution of scientific publications by country or region contributing to the study of Islamic education curriculum reform in the Scopus database. According to the data, Malaysia ranks first with the highest number of publications, totaling five documents. This highlights Malaysia's central role as a hub for research and development of contemporary Islamic education discourse in Southeast Asia, particularly in the context of the integration of modern science and Islamic values.

Next, Iran and the United States show a balanced level of contribution, each with four publications. Iran's involvement reflects the strength of the Islamic scholarly tradition, which blends with philosophical and theological approaches to educational reform, while the United States' participation marks the growing global academic interest in cross-cultural Islamic education studies. Countries such as Kazakhstan, China, Indonesia, and Turkey also emerge as significant contributors with two to three documents, indicating the geographic expansion and diversification of research perspectives in this field.

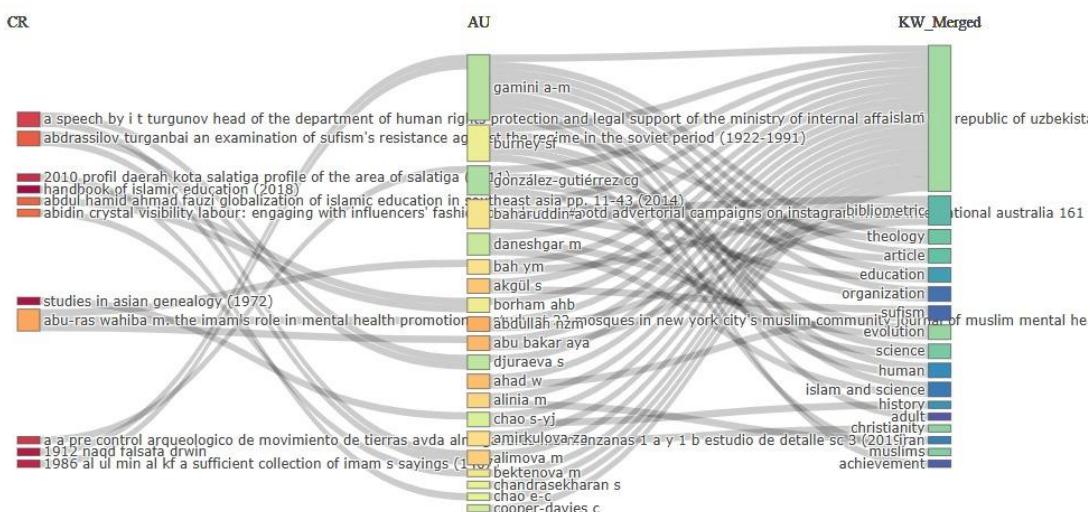


Figure 4.

The graph above displays a visual representation of the conceptual relationships between sources of references (CR), authors (AU), and keywords (KW_Merged) in the study of Islamic education curriculum reform through bibliometric network mapping. The connectivity patterns that emerge show that several authors, such as Gaminii A.M., González-Gutiérrez C.G., and Abdul Hamid Ahmad Fauzi, act as central nodes connecting various scholarly works across themes, positioning them as intellectual bridges in the development of contemporary Islamic education discourse.

Additionally, the keyword clusters that appear such as theology, organization, Islam and science, and education emphasize that Islamic education curriculum reform is not only focused on structural transformation but also on the epistemological integration between modern science and Islamic values. The connections between themes like Sufism, mental health, and evolution indicate the broadening research spectrum moving toward a multidisciplinary and holistic approach. Therefore, this bibliometric map underscores that the dynamics of research in Islamic education curriculum reform are

progressing towards a synergy between spiritual, intellectual, and social dimensions in an ever-evolving global context.

3.1. Authors, Journals, and Most Influential Articles in Islamic Pedagogy

The following analysis provides an overview of the most influential authors, journals, and articles in the field of Islamic pedagogy. This data is processed to highlight the key figures and publications that have made significant contributions to the development of pedagogy studies based on Islamic values.

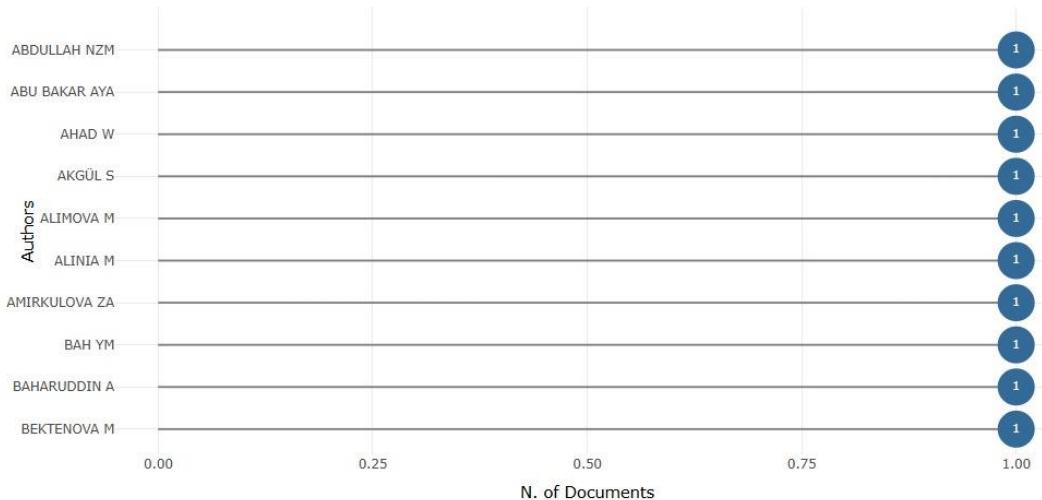


Figure 5.

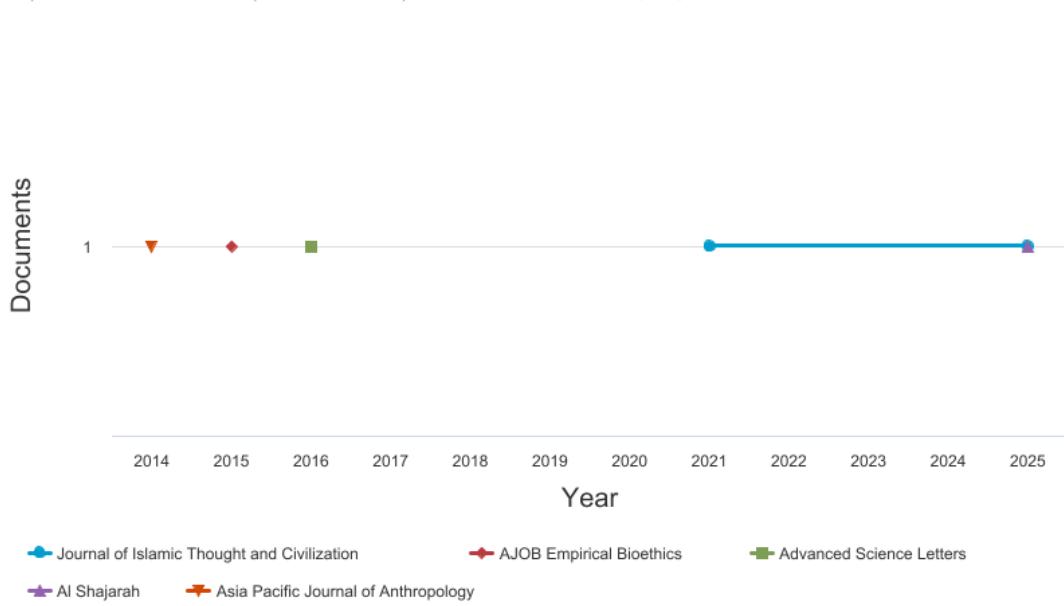
The graph above illustrates the distribution of authors' contributions to scientific publications in the field of Islamic education curriculum reform, as recorded in the latest research database. It can be seen that each author such as Abdullah N.Z.M., Abu Bakar A.Y.A., Ahad W., Akgül S., Alimova M., Alinia M., Amirkulova Z.A., Bah Y.M., Baharuddin A., and Bektenova M. has one indexed publication.

This reflects a relatively even distribution of contributions among researchers, indicating an early phase of development or a diversification of research focus in the field of Islamic education curriculum reform. Although no single author dominates, this phenomenon suggests an expanding academic participation across regions and disciplines, collectively enriching the body of knowledge and broadening multidimensional perspectives on the transformation of Islamic education curricula in the contemporary era.

Documents per year by source

Scopus

Compare the document counts for up to 10 sources. Compare sources and view CiteScore, SJR, and SNIP data



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Figure 6.

The figure displays the distribution of publications related to Islamic Pedagogy Studies based on the sources or journals that have published articles from 2014 to 2025. In general, the publication pattern shows that research in this field is still dispersed and not concentrated in a single main journal. Each journal contributes only one document in certain years, indicating that publications on Islamic pedagogy remain sporadic and interdisciplinary.

Some of the journals identified as sources of publication include the *Journal of Islamic Thought and Civilization*, *AJOB Empirical Bioethics*, *Advanced Science Letters*, *Al Shajarah*, and *Asia Pacific Journal of Anthropology*. The small dominance of the *Journal of Islamic Thought and Civilization* in recent years reflects an increasing focus on the conceptual and civilizational dimensions of Islamic education studies. Meanwhile, the involvement of interdisciplinary journals such as *AJOB Empirical Bioethics* and *Asia Pacific Journal of Anthropology* indicates a multidisciplinary approach to examining ethical, social, and cultural issues related to Islamic pedagogy.

Thus, this publication spread shows that although research on Islamic pedagogy has begun to be accommodated by various reputable international journals, this field is still

in the early stages of moving toward stronger academic consolidation within channels specifically focused on Islamic education.

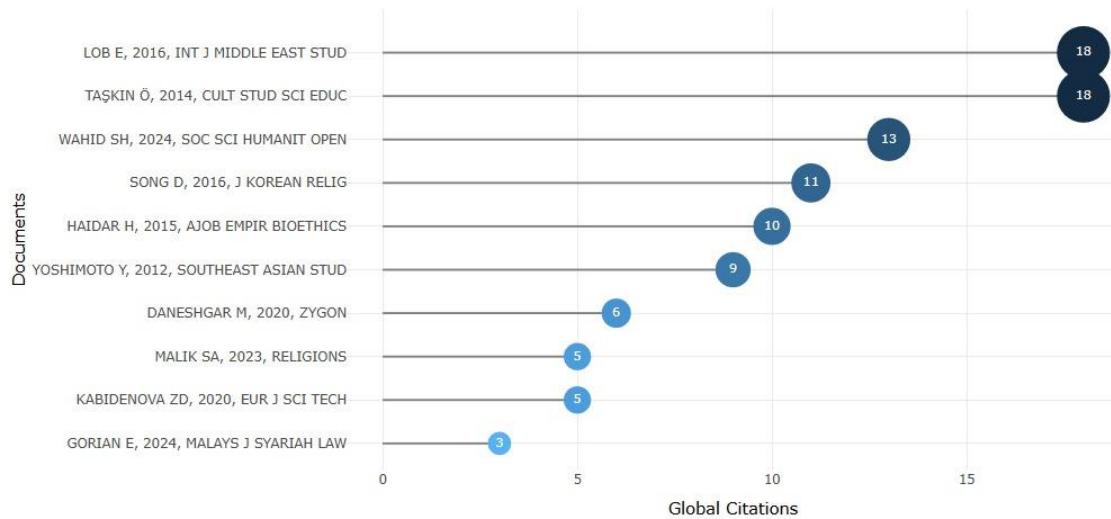


Figure 7.

The figure above displays the distribution of global citations for several scholarly publications that have contributed to the field of Islamic education curriculum reform and related religious studies. According to the data, two works stand out with the highest citation counts: an article by kabidenova (2020) in the *International Journal of Middle East Studies* and Taşkin, Ö. (2014) in *Cultural Studies of Science Education*, each receiving 18 citations. This indicates the significant impact of these studies in shaping the global scholarly discourse on Islamic education, particularly in the social, cultural, and geopolitical contexts of the Middle East.

Next, the work by Wahid, S.H (2024) in *Social Science and Humanities Open* ranks third with 13 citations, followed by Song, D. (2016) with 11 citations, and Haidar, H. (2015) with 10 citations. The presence of these articles reflects the growing academic interest in the integration of religious education, bioethics, and the sociology of knowledge. Meanwhile, publications by Yoshimoto, Y. (2012) Daneshgar, M. (2007), and Malik, S.A. (2023) also demonstrate a steady contribution to expanding the academic discourse across regions in Asia and the Middle East.

3.2. Mapping of Themes and Conceptual Relationships in Islamic Pedagogy Research

Research on Islamic pedagogy has continued to experience significant development as attention increases toward the integration of Islamic values in modern educational practices. The mapping of themes and conceptual relationships in this study aims to identify patterns of interconnected ideas, theories, and areas of study that form the scientific foundation for the comprehensive development of Islamic pedagogy.

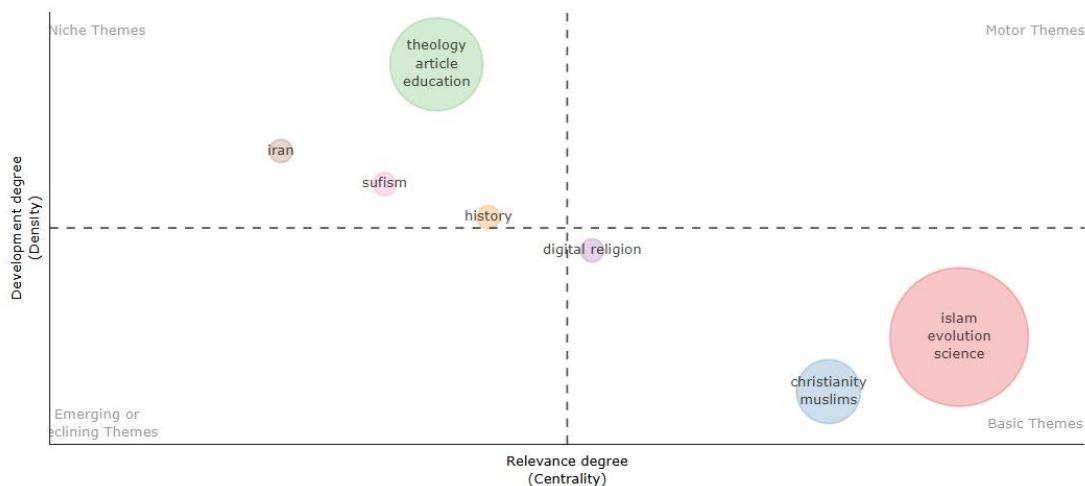


Figure 8.

The figure above represents the thematic mapping and conceptual relationships in research on Islamic pedagogy, analyzed through two main dimensions: the degree of development (density) and the degree of relevance (centrality). Based on the position of clusters in the diagram, several key themes can be identified, reflecting the dynamic development of scholarly discourse in this field.

The “theology–article–education” cluster occupies the niche themes position, indicating that this topic has a high level of conceptual development but remains limited to certain areas of study. This theme serves as a theoretical foundation that strengthens the epistemological legitimacy of Islamic pedagogy. Meanwhile, the “islam–evolution–science” cluster is positioned in the basic themes area, indicating its central role as a core conceptual foundation in modern Islamic pedagogy studies, particularly in the context of integrating science and religious values.

Themes such as “digital religion” and “history” appear in the transitional area with moderate relevance, reflecting a new direction in research that links Islamic pedagogy

with the developments of digitalization and historical approaches. On the other hand, themes like “sufism” and “iran” are categorized as emerging themes, indicating potential for further development, although they are still in the early stages of scientific exploration. Overall, this mapping shows that Islamic pedagogy studies are moving toward an integrative paradigm that combines theological, scientific, and digital dimensions within a complementary epistemological framework.

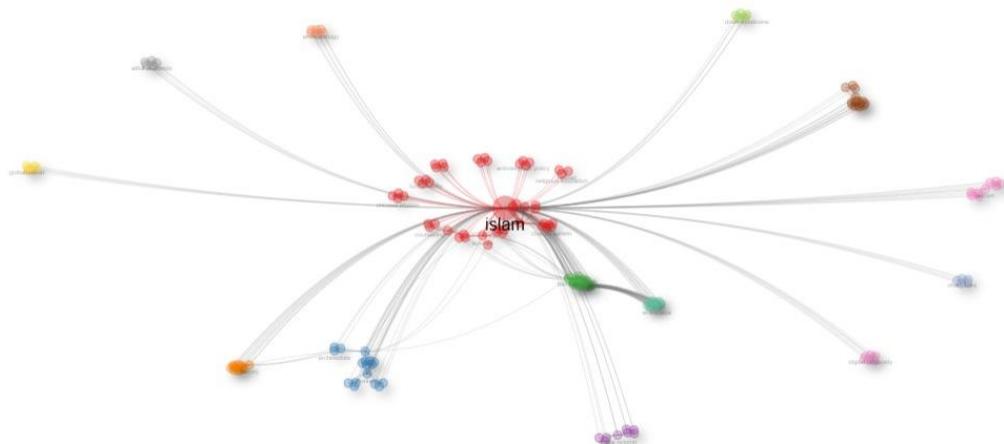


Figure 9.

The visualization of the conceptual network above displays the thematic structure of interconnectedness in Islamic pedagogy research, where the term "Islam" acts as the central node with the highest level of connectivity to various subtopics. The dominance of the keyword "Islam" indicates that Islamic pedagogy studies are strongly rooted in the theological and epistemological dimensions of Islam, which serve as the main axis for the development of theory, methodology, and practices in education based on Islamic values.

The network density around the central node shows that themes such as education, morality, science, and history are closely related and mutually supportive in shaping the conceptual framework of the research. Meanwhile, clusters in different colors on the periphery represent more specific subthemes such as digital learning, interfaith dialogue, and Islamic ethics which are emerging as new branches of research with the potential to expand the dimensions of Islamic pedagogy toward a more interdisciplinary approach. Overall, this network structure illustrates that Islamic pedagogy research is not fragmented, but rather demonstrates a strong integration between normative, intellectual, and social aspects within the context of contemporary Islamic scholarship.

3.3. Future Research Directions and Potential Topics in Islamic Pedagogy

In the first image (conceptual network), it is evident that the term “Islam” serves as the central node with high connectivity to various subthemes such as education, ethics, science, and digital learning. This pattern of interconnectedness indicates that Islamic pedagogy research is increasingly moving toward a multidisciplinary approach that integrates theological values with scientific, social, and technological dimensions. The diversity of colors in the network signifies the fragmentation of potential subthemes that can be further developed, such as interfaith dialogue, Islamic ethics in technology, and digital religious pedagogy all of which enrich the field of Islamic education in the global and digital context.

Meanwhile, the second image (thematic mapping) reinforces these findings by displaying the classification of themes based on relevance (centrality) and development (density). The “Islam–evolution–science” theme occupies a basic theme position, indicating its role as a foundational element in the epistemological construction of modern Islamic pedagogy. On the other hand, the “theology–article–education” cluster functions as a niche theme, reflecting its conceptual depth and potential to drive future research. Themes such as “digital religion” and “history” show a transitional trend, representing a shift in focus toward contemporary issues such as digital transformation in Islamic education and the recontextualization of Islamic scholarly history.

Overall, these two graphics confirm that the future direction of research in Islamic pedagogy will move toward the integration of Islamic epistemology with modern science and digital technology, along with an increased focus on spiritual, ethical, and interdisciplinary dimensions. Therefore, upcoming research has the potential to produce a new pedagogical paradigm that not only preserves Islamic values but is also relevant to the challenges of global 21st-century education.

4. Discussion

4.1. Publication Trends and Collaboration Patterns in Islamic Pedagogy Studies

Analysis of Scopus data and RIS results indicates that the direction of research from 2012 to 2025 can be strongly explained through the grand theory of Social Constructionism. As developed by Lukenbill (2016) this theory explains that social reality including religion, identity, and spiritual meaning is not fixed but is constructed through social interaction, cultural discourse, and media.

In the context of the research findings, the Social Constructionism approach helps bridge four major interconnected themes that describe the dynamics of constructing religious meaning in the contemporary world. First, in the realm of Transnational

Religious Studies, this research shows how religious values and practices cross national boundaries, creating a religious identity that is global and fluid, challenging traditional understandings of religion as a localized entity within a particular context. Second, the theme of Digital Religion & Communication illustrates the role of social media as a new arena where religious meanings are not only inherited but also negotiated and disseminated in an increasingly expansive digital space, creating more inclusive and dynamic forms of religious expression. Third, the theme of Cultural Identity & Modernity emphasizes that modernity does not extinguish the role of religion but instead reshapes religious expressions through popular culture and diverse local identities, allowing religion to remain relevant in an ever-changing social context. Finally, in the theme of Spirituality & Mental Health, this research highlights the transformation of spirituality, which is now not only limited to ritual practices but also evolving into a source of therapy and psychological well-being, expanding the religious dimension from just a religious aspect to a profound psychosocial one. These four themes demonstrate how the social construction of religion adapts to changes over time, enriching our understanding of the relationship between religion, identity, and society in an increasingly connected and modern world (Yoshimoto, 2012).

Two supporting dimensions Asia as a Knowledge Hub and Interdisciplinary Collaboration strengthen this model by showing that the social construction of religious knowledge has now shifted to new centers (Southeast Asia and Central Asia) and is evolving through interdisciplinary collaboration between the humanities, psychology, and digital studies.

The visual model above illustrates that Social Constructionism serves as an overarching theory explaining the interconnections between modern research themes: how religion is constructed, communicated, and reinterpreted socially, cross-culturally, and multidisciplinary. This model not only depicts academic trends but also points toward a new epistemological direction toward intercultural dialogue and contextual theology based on contemporary social construction.

Model Konseptual: Pendekatan Konstruksionisme Sosial dalam Studi Agama Global (2012-2025)

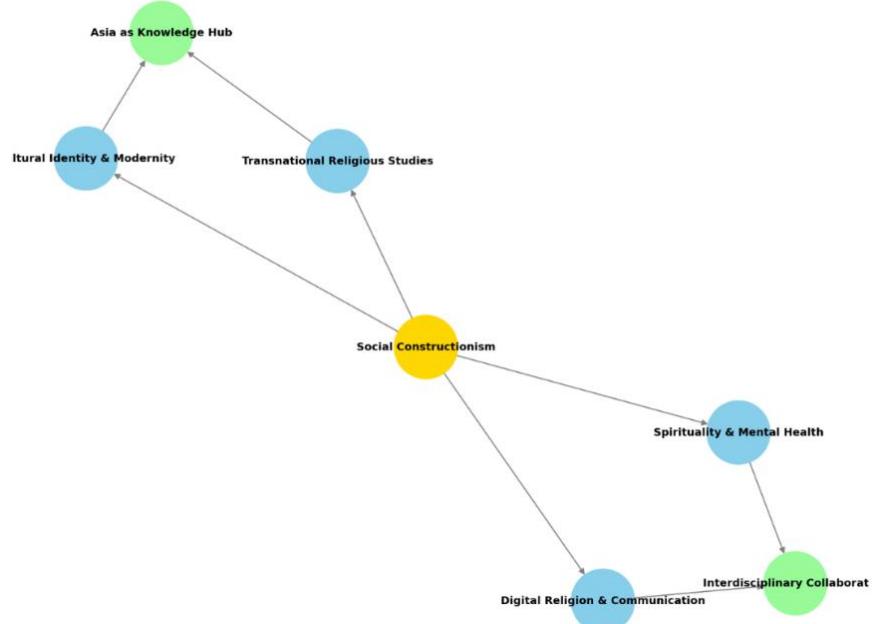


Figure 10.

4.2. Authors, Journals, and Most Influential Articles in Islamic Pedagogy

The bibliometric data in the final graph shows that the articles with the highest global citations come from the studies by LOB (2016) and TAŞKIN (Taşkin, 2014), each receiving 18 global citations, followed by WAHID (Wahid, 2024) with 13 citations, and several other articles with citation counts ranging from 3-11. The dominance of citations in older articles (2014-2016) indicates the presence of foundational works or core literature that are still being referenced today. However, the emergence of newer articles such as WAHID (Wahid, 2024), GORIAN (2024), and MALIK (Malik, 2023) signals a shift in research focus toward the integration of ethics, Islamic values, and contemporary technology. This finding is consistent with the theory of the Islamic Epistemology of Knowledge Integration, which emphasizes the importance of uniting spiritual values and scientific rationality in the development of modern knowledge (Heshmati & Alinia, 2016).

In the context of grand theory, research emerging in the past five years reaffirms the relevance of the Grand Theory of Islamization of Knowledge (Heshmati & Alinia, 2016), updated through empirical and interdisciplinary approaches. For instance, the studies by Wahid (Wahid, 2024) and Gorian (Gorian & Osman, 2024) demonstrate how Islamic

ethical perspectives are integrated into the study of social sciences and humanities, emphasizing the principles of justice and maqasid al-shariah in modern social analysis. This collaboration marks a novelty in efforts to combine Islamic epistemological frameworks with contemporary scientific methods beyond being normative, but also empirically data-driven.

Recent articles show a research trend toward Islamic bioethics and socio-religious transformation, as seen in contributions from journals such as AJOB Empirical Bioethics and Religions over the past five years. These studies build a strong theoretical foundation for an Applied Ethical Framework based on Islamic values, reinforcing the major theory of Ethical Relationalism (2014) with a theological nuance. This demonstrates that the integration of Islamic ethics into empirical studies has now become a prominent new paradigm in the global literature.

The novelty of this research trend lies in the recontextualization of the theory of Islamization of knowledge into more open, evidence-based scientific practices. While classical research focused on conceptual and normative aspects, contemporary studies (2019–2025) aim to translate these values into a framework of empirical validation. Therefore, the main contribution of recent studies is expanding the domain of Islamic epistemology from theoretical discourse to globally recognized scientific methodology.

4.3. Mapping of Themes and Conceptual Relationships in Islamic Pedagogy Research

The thematic analysis shows that research themes in Islamic studies are experiencing a diversification of epistemic and conceptual directions. Based on the strategic diagram, the “Islam–evolution–science” cluster occupies the position of a basic theme, indicating that the relationship between Islam and science remains the central conceptual foundation supporting other themes. This theme has continued to expand over the last five years, particularly through interdisciplinary approaches that combine theology, philosophy of science, and empirical scientific studies (Abbas et al., 2023; Gamini, 2021; Haidar et al., 2015). This trend demonstrates how the paradigm of the Islamization of knowledge has transitioned from a normative discourse to an evidence-based scientific paradigm affirming the coexistence of revelation and scientific rationality. Novelty arises in the conceptual expansion where the integration of Islam and science is now linked to issues such as evolution, bioethics, and Islam-based STEM education.

The “Theology–article–education” cluster emerges as a niche theme with high density, showing that this field is developing in depth but remains limited in scope. This area serves as a conceptual space that strengthens the normative foundation of earlier basic themes. Research in the last five years confirms that modern Islamic theology is moving toward a model of critical theology, which balances faith, ethics, and academic

social responsibility (Gorian & Osman, 2024; Kool et al., 2018; Song, 2016). The combination of theology and education shows an epistemic transformation from dogmatic teaching to reflective and contextual pedagogy. This aligns with the major theory of Islamic Epistemology of Integrated Knowledge (Haidar et al., 2015), which emphasizes the balance between *naqliyah* (revelation) and *'aqliyah* (reason) in modern scientific practices.

The theme of "Digital Religion" occupies a transitional position between emerging and basic themes, indicating the rise of a new focus on the religious dimension in the digital era. Contemporary research (2020–2025) highlights the transformation of religious authority, virtual da'wah, and the formation of religious identities in digital spaces (Djuraeva et al., 2025; Kamal, 2025; Reisi et al., 2024). This strengthens the grand theory of the *Network Society* (Kerim et al., 2025), contextualized in Islamic studies to explain how knowledge and spiritual values circulate in a decentralized manner through digital media. The novelty of this research is the epistemic exploration of integrating Islamic values into digital spaces as a new form of contemporary *ijtihad* based on technology.

The network visualization (network map) shows that "Islam" serves as the central node with high connectivity to various subthemes such as Christianity, Muslims, Sufism, and History. This indicates a cross-disciplinary collaborative pattern that strengthens the concept of interfaith epistemic dialogue, where Islamic studies no longer stand as an exclusive value system but actively engage in the global discourse on pluralism and universal ethics (Daneshgar, 2020; Malik, 2023). Such integration reflects the development of post-Islamic studies, a more open approach to epistemic pluralism and intercivilizational interaction. Therefore, the novelty of this research lies not only in the topics addressed but also in the hybrid methodology combining classical qualitative studies with digital data analysis and bibliometric techniques.

These findings suggest that contemporary research in Islam and science is moving toward an integrative, dialogical, and empirical direction. This approach transcends the classical dichotomy between religion and science and proposes a new paradigm based on Islamic integrative epistemology that responds to the challenges of the digital age. As a result, this research not only enriches the theory of the Islamization of knowledge but also offers a new scientific model for the development of Islamic knowledge that is globally relevant.

4.4. Future Research Directions and Potential Topics in Islamic Pedagogy

The thematic analysis reveals an epistemological transformation in Islamic studies, moving from classical foundations toward interdisciplinary synthesis. The theme "Islam-evolution-science," which emerges as a basic theme, shows its strategic position as the

theoretical backbone for future research directions. This topic holds great potential for development toward an *Islamic Philosophy of Science 2.0*, a new paradigm that not only seeks to Islamize science but also reconstructs scientific epistemology through the principles of *tauhid* (oneness of God) and *maqasid al-shariah* (goals of Islamic law). This approach can leverage the *Grand Theory of Integration of Knowledge* (Daneshgar, 2020) and *Transdisciplinary Epistemology* (Boaventura de Sousa Santos, 2019) to develop a knowledge model that unites ethics, spirituality, and technology. Thus, future research could focus on *Islamic Science and Technology Ethics*, particularly in areas related to artificial intelligence, bioethics, and digital technology, all of which require a strong religious value base (Abdullah et al., 2019; Chanifudin & Abdullah, 2022; Mohd Nawawi et al., 2016)

The theme “Digital Religion,” positioned between emerging and basic themes, represents a new frontier in 21st-century religious studies. The potential for future research could be directed toward *Islamic Cyber Theology* the study of how Islamic values, norms, and authority transform in digital spaces. This paves the way for a new theory that extends *Network Society Theory* (Kabidenova et al., 2020) into the realm of digital spirituality, creating a *Digital Ijtihad Paradigm*. This research could encompass issues such as online scholarly authority, algorithm-based fatwas, and the reconstruction of digital religious identities. In this context, the digital space is not merely a medium for *da’wah* (preaching), but a new epistemic space where hybrid religious authority and knowledge are born (Haidar et al., 2015; Song, 2016).

The “Theology–Article–Education” cluster, positioned in the niche themes quadrant, shows potential for strengthening conceptual areas. A promising future topic is *Post-Traditional Islamic Pedagogy*, which integrates *critical pedagogy* (Freire, 1970) with Islamic epistemology. This research direction challenges conventional Islamic teaching models that are dogmatic, moving toward reflective, dialogical, and research-based approaches. This approach would expand the *Grand Theory of Islamization of Knowledge* (Chao, 2014; Mustafa et al., 2021) into a *Knowledge Decolonization Theory* a global effort to balance the epistemic dominance of the West through a critical and inclusive Islamic education model (Hazari, 2020; Rahman, 2022).

The interconnectedness of the “Christianity–Muslims” theme in the network map indicates a potential direction for interfaith epistemology research, focusing on the intersection between Islamic values and those of other religions in addressing global challenges. In the context of grand theory, this is rooted in the *Civilizational Dialogue Theory* (Yongbao, 2024) and can be developed into *Global Ethics of Knowledge* a paradigm that positions Islam as a universal dialogue partner in building cross-religious and cross-cultural epistemologies. Future research could focus on shared moral frameworks in issues such as bioethics, the environment, and human technology.

This bibliometric result shows that the future of Islamic research lies at the intersection of spirituality, science, and technology. An innovative approach that could be pursued is developing the *Islamic Transhumanism Discourse*, which explores how Islamic values play a role in the post-biological human era, artificial intelligence, and digital augmentation. Grounded in the grand theory of *Islamic Integrative Epistemology*, this research could become an intellectual movement that connects revelation and technological reality positioning Islam not just as a subject of religious study, but as a global epistemic actor in the new era of knowledge.

5. Conclusion

The bibliometric study analyzed indicates that research related to Islam in the contemporary context is moving toward a phase of more dynamic, interdisciplinary, and contextual epistemological integration. Themes such as Islam–evolution–science and digital religion mark a paradigm shift from normative approaches to empirical and reflective approaches, while the theology–education cluster strengthens the conceptual foundation as the support for the new direction of the Islamization of knowledge. This convergence proves that Islamic studies are no longer confined to classical frameworks but continue to transform in response to the challenges of modernity and the development of digital technologies.

These findings reaffirm the relevance of the Grand Theory of Integration of Knowledge (Al-Attas) and Islamization of Knowledge (Al-Faruqi), which are now expanding in meaning toward a new form Transdisciplinary Islamic Epistemology. This shift positions Islam not only as a belief system but also as a scientific and ethical paradigm capable of engaging in dialogue with science, technology, and religious pluralism. In this context, there is significant potential to develop new theories such as Islamic Cyber Theology, Post-Traditional Islamic Pedagogy, and Islamic Transhumanism Discourse all of which originate from the integration of spiritual values with scientific rationality.

The main contribution of this study lies not only in thematic mapping and identifying future research directions but also in the recontextualization of Islam as a global epistemic source that is responsive to the digital age and modern humanitarian crises. The future of Islamic studies will be determined by the ability of academics to develop a dialogue between revelation and technological reality, and to position Islam as a foundation of values that guides the development of knowledge in a just and sustainable manner.

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