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Mapping Research on Islamic Education in Higher Education: Insights from Recent Trends Analysis

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ABSTRACT

This study investigates the evolving landscape of Islamic education in higher education by conducting a comprehensive bibliometric analysis of 801 Scopusindexed documents published between 2015 and 2024, aiming to map publication growth, leading contributors, and emerging research themes. Using VOSviewer and Bibliometrix for data visualization and performance analysis, the study identifies a remarkable 453 percent rise in publication output, from 30 documents in 2015 to 166 in 2024, demonstrating a significant surge in scholarly interest. Indonesia emerges as the most productive country with 43.5 percent of total publications, followed by Malaysia at 18 percent and Iran at 11 percent, while English dominates as the primary language of dissemination at 92.6 percent. The analysis reveals strong research concentrations in Social Sciences and Arts and Humanities, accounting for over 65 percent of publications, yet indicates growing interdisciplinary engagement with fields such as Medicine, Computer Science, and Business. Trend and co-occurrence analyses highlight the emergence of gender, public health, digital learning, and artificial intelligence as influential themes, particularly in post-pandemic years. The findings underscore the increasing global relevance of Islamic education research while revealing underexplored domains such as environmental sustainability, technological innovation, and cross-regional collaboration beyond Southeast Asia and the Middle East. This study provides a data-driven foundation for future research agendas, encouraging broader methodological diversity, stronger international partnerships, and deeper exploration of how Islamic education can address contemporary global challenges across academic and societal contexts.

1. Introduction

Islamic education in higher education has entered a period of rapid transformation, shaped by intensified globalisation, shifting socio cultural expectations, and accelerating technological change. This evolving landscape has encouraged universities and Islamic higher education institutions to re evaluate how faith knowledge, intellectual based tradition, and pedagogical contemporary demands meaningfully integrated. As global competition increases and learning becomes more interconnected, the urgency to redesign Islamic education that remains faithful to spiritual values while being responsive to modern academic realities has never been more prominent. Recent discussions emphasise that the current era requires educational systems to move beyond conventional approaches and prepare learners for a world defined by innovation, ethical complexity, and multicultural encounters (Zuliana et al., 2025; Alhajj et al., 2024).

Within this shifting global terrain, Islamic higher education institutions play an important role in nurturing intellectual growth, moral character, and faith based identity formation. These institutions serve as spaces where spiritual and academic development intersect, enabling students to engage critically with traditional Islamic scholarship while navigating twenty first century challenges. As Wahyuni et al. (2024) explain, Islamic universities cultivate both intellectual and spiritual capacities, offering curricula that merge religious principles with contemporary knowledge domains. The increasing integration of digital learning, artificial intelligence, and technology enhanced models into Islamic education further reinforces the need to maintain ethical anchors and ensure that technological expansion aligns with Islamic moral frameworks (Hakim and Anggraini, 2023; Annisa, 2024).

Despite widespread recognition of the importance education in higher education, comprehensive analyses of research trends in the field remain limited. Existing studies often focus on specific sub themes, such as management of Islamic education, character education, or the role of alternative Islamic schooling models (Ansori et al., 2024; Ariona et al., 2023; Kistoro et al., 2023). These works contribute valuable theoretical and practical insights yet tend to examine narrow aspects of Islamic education rather than the broader landscape of disciplinary development. For instance, investigations into Islamic education management foreground institutional governance and policy frameworks but do not map how research in the field evolves across time and geographical contexts. Similarly, studies on Islamic character education highlight moral and ethical development but rarely situate their findings within larger global and interdisciplinary trajectories.

Furthermore, although several studies have addressed the intersection of Islamic education with technology, digital learning, and artificial intelligence (Zuliana et al., 2025; Annisa, 2024), very few provide a structured overview of how these themes contribute to the long term direction of Islamic education scholarship. Research on Islamic schooling alternatives has also increased in recent years (Hussin et al., 2024); however, the literature still lacks comprehensive analyses that integrate global perspectives and collaborative networks (Rizki et al., 2025; Shabani & Peykari, 2025). Importantly, regional scholarship remains heavily concentrated in Iran and Malaysia, with limited examination of Islamic education research in Africa, Europe, Central Asia, and multicultural minority settings (Hallinger & Chatpinyakoop, 2019; Wahab et al., 2022). These gaps reveal a need for a systematic and data-driven approach that maps intellectual development, thematic evolution, and global distribution of Islamic education research in higher education using bibliometric science maps and international collaboration indicators (Rizki et al., 2025; Alejandro-Cruz et al., 2019).

The present study offers a novel contribution by providing a wide ranging bibliometric analysis that maps the intellectual structure and development of Islamic education research in higher education from 2015 to 2024. Its niche lies in synthesising publication growth patterns, influential institutions, dominant research clusters, and emerging interdisciplinary themes. Unlike previous works that focus on single contexts or specific pedagogical aspects, this study employs a holistic analytical framework that draws from performance analysis, co occurrence mapping, and co citation networks to identify how the field has evolved conceptually and geographically over the past decade. The study's novelty emerges from its ability to reveal hidden patterns, emerging directions, and underexplored domains, offering insights that have not been fully addressed in earlier studies.

The significance of this research lies in its capacity to inform future scholarly agendas and guide educational decision making across Islamic higher education institutions. By identifying publication trends, thematic growth, and regional disparities, the study provides evidence based recommendations for strengthening interdisciplinary connections and enriching Islamic education research. The primary aim of the study is to systematically map the development of Islamic education scholarship in higher education, assess its intellectual structure, and highlight areas that require greater academic engagement. These aims respond directly to the need for strategic planning and innovation within Islamic higher education as it navigates contemporary shifts in technology, learning culture, and global socio political realities.

In conclusion, the structure of this study allows readers to understand not only the current state of Islamic education research in higher education but also the broader implications for academic development and institutional policy. The final sections synthesise the transformative trends identified through the analysis and highlight their relevance for educators, researchers, and policymakers. The implications extend beyond Islamic studies and contribute meaningfully to the English language teaching context, particularly in the design of culturally grounded curricula, the integration of digital literacy, and the development of inclusive pedagogical models that respect religious identity while promoting global engagement.

By offering a comprehensive mapping of research trends and intellectual trajectories, this study provides scholars and practitioners in Islamic education and English language teaching with a robust foundation for future inquiry. It underscores the need for stronger global collaborations, more diversified methodological approaches, and greater attention to underrepresented themes such as technology, sustainability, and cross cultural education. In doing so, it charts a pathway for Islamic higher education to continue evolving as a dynamic and globally relevant field of study.

2. Methodology

This study employed a bibliometric research design to systematically map the development of Islamic education scholarship in higher education. Bibliometric analysis is a quantitative approach commonly used to examine large bodies of academic publications, identify research patterns, and visualise the intellectual structure of a field over time (Donthu et al., 2021). In line with established bibliometric procedures, the methodology of this study consisted of four essential components, namely data retrieval, data screening, data cleaning and preprocessing, and analytical procedures using specialised bibliometric tools.

This study employed a bibliometric analysis approach to obtain a systematic, quantitative, and comprehensive understanding of the research landscape on Islamic education in higher education over the past decade. Bibliometric analysis is widely recognised as an effective method for mapping scientific publications, identifying intellectual patterns, and exploring thematic developments within a particular field (Donthu et al., 2021). The methodological process consisted of three key stages, namely data source and search strategy, data cleaning and preprocessing, and bibliometric analysis through specialised software tools.

2.1 Data Source and Search Strategy

Scopus was selected as the primary data source due to its status as one of the largest and most reputable databases of peer reviewed literature. Its extensive coverage of global scholarly output made it ideal for capturing international trends in Islamic education research. A structured search string was developed to ensure precision and relevance: ("Islamic Education" OR "Education in Islam") AND ("Higher Education" OR "University" OR "College") AND PUBYEAR > 2014 AND PUBYEAR < 2025. This search strategy targeted publications between 2015 and 2024 and was limited to English language journal articles to ensure academic consistency, reliability, and comparability. Non journal publications, such as conference papers, book chapters, editorials, and non academic sources, were excluded to maintain methodological rigour.

2.2 Data Cleaning and Preprocessing

Following data extraction, metadata were exported in both CSV and BibTeX formats for refinement. A rigorous cleaning process was implemented, which included checking for duplicates, correcting author name variations, merging synonymous keywords, and removing irrelevant or misindexed entries. This step ensured the accuracy of later analyses, as inconsistencies in metadata could affect the interpretation of co authorship, keyword clustering, and citation networks. Preprocessing also involved normalising institutional affiliations and standardising terms to support precise mapping of collaboration patterns and thematic structures.

2.3 Bibliometric Tools and Analysis

Two complementary bibliometric tools, VOSviewer and Bibliometrix, were used to analyse the dataset. VOSviewer facilitated the visualisation of co authorship networks, co occurrence of keywords, citation relationships, and thematic clusters, enabling the identification of influential authors, key institutions, and emerging research areas. Bibliometrix, accessed via RStudio or Biblioshiny, provided advanced quantitative analyses such as annual publication trends, most productive countries and journals, historiographic mapping, and thematic evolution. This dual tool approach strengthened the

analytical depth of the study and allowed for triangulation between visual and statistical outputs. Together, these tools offered a robust framework for performance analysis and science mapping, producing insights into the intellectual structure and developmental trajectory of Islamic education research within higher education.

3. Result

3.1 Trends in Publication according to years

The The research output in Islamic education within higher education demonstrates a consistently upward trajectory over the past decade, revealing a field that is rapidly expanding in both scholarly attention and academic relevance. The dataset shows an early baseline of 30 publications in 2015, which marks the beginning of a steady climb. Although the increase to 32 publications in 2016 appears modest, this early growth signals the initial strengthening of interest in the field. A more pronounced escalation becomes visible in 2017, where publications rise to 48, reflecting a significant expansion of scholarly activity before experiencing a mild correction to 45 in 2018. This slight decline does not indicate weakening interest but instead suggests a recalibration phase commonly found in emerging research fields.

A dramatic shift occurs in 2019, marked by a near doubling of publication output to 89 articles. This surge represents one of the most pivotal moments in the decade, indicating that Islamic education in higher education had entered a more active, globally visible research phase. The strong upward movement continues into 2020, reaching 97 publications. This growth period coincides with widespread educational disruption and innovation during the global pandemic, which likely stimulated heightened scholarly engagement in topics related to digital learning, online pedagogy, and the integration of technology in Islamic educational contexts.

Although a dip appears in 2021 with 86 publications, the decrease is relatively minor within the larger upward trend. The immediate rebound in 2022 to 96 publications demonstrates the resilience of the field and the sustained interest of researchers. This recovery gains even more momentum in 2023, where publication numbers rise to 112, signalling renewed scholarly productivity and possibly an expansion of interdisciplinary contributions.

In 2024, publication output peaks at 166 documents, the highest level in the decade. The 48.2 percent increase from the previous year signals an accelerated expansion of research activity and confirms the rising global prominence of Islamic education in higher education. This sharp growth suggests that emerging themes such as artificial intelligence, digital transformation, socio religious identity in learning, and global collaboration are driving new scholarly agendas that both broaden and deepen the field.

Overall, the pattern across ten years reveals not only sustained growth but also critical turning points that reflect broader shifts in educational, technological, and societal contexts. The field is moving from a regionally concentrated research area to an increasingly international academic domain, characterised by expanding thematic diversity, stronger methodological sophistication, and greater strategic relevance for contemporary higher education systems.

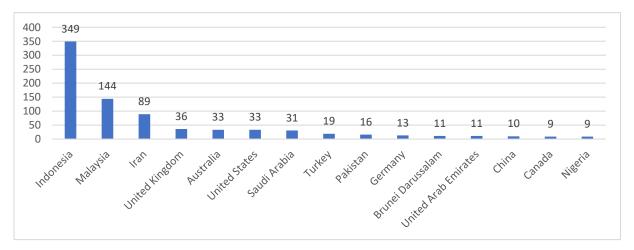


Figure 1. Trends in Publication According to Years

The findings reveal an impressive expansion of scholarly interest, with publication output growing by approximately 453 percent over the ten year period, rising from 30 publications in 2015 to 166 in 2024. This dramatic increase indicates not only heightened academic engagement but also the solidification of Islamic education as a significant research domain within higher education studies. The remarkable peak in 2024 suggests a rapid acceleration of scholarly activity, reflecting the field's widening relevance and its increasing visibility in global academic discourse. Such growth is likely shaped by expanding recognition of how Islamic education contributes to contemporary debates on educational reform, ethical values, identity formation, and curriculum innovation within higher education systems worldwide.

The sustained upward trend also illustrates a broader paradigm shift toward integrating value oriented perspectives into university level teaching and learning. As higher education institutions seek frameworks that balance disciplinary knowledge, technological advancement, and moral development, research in Islamic education appears to offer timely and meaningful contributions. The sharp rise observed in recent years indicates a growing scholarly commitment to examining how Islamic principles, pedagogical models, and institutional practices intersect with modern educational challenges. This pattern suggests that Islamic education is no longer viewed as a niche research area but is gradually being positioned as a central component of global conversations on values based and culturally responsive higher education.

3.2 Trends in Publication according to countries

The bibliometric analysis highlights the top 15 countries contributing to research on Islamic education in higher education from 2015 to 2024. Indonesia is the leading country, contributing 43.5 percent of the total publications with 349 articles. Malaysia follows with 144 publications, accounting for 18 percent of the total, while Iran contributes 11 percent with 89 publications. These three countries dominate the field, reflecting their strong academic commitment to Islamic education at the higher education level.

Other countries, such as the United Kingdom, Australia, and the United States, show notable engagement with the topic, each contributing 4 percent to the total research output, with 36, 33, and 33 publications, respectively. This indicates that Islamic education in higher education is receiving growing attention beyond Muslim-majority countries, suggesting a global scholarly interest in the topic. Saudi Arabia (31 publications), Turkey (19), and Pakistan (16) also contribute to the discourse, highlighting the regional significance of Islamic education in the Middle East and South Asia.

Further contributions come from Germany (13 publications), Brunei Darussalam (11), the United Arab Emirates (11), China (10), Canada (9), and Nigeria (9), all of which further demonstrate the international scope of this research area. This diverse geographical representation reflects the increasing global collaboration and interest in Islamic education within higher education, transcending regional boundaries.

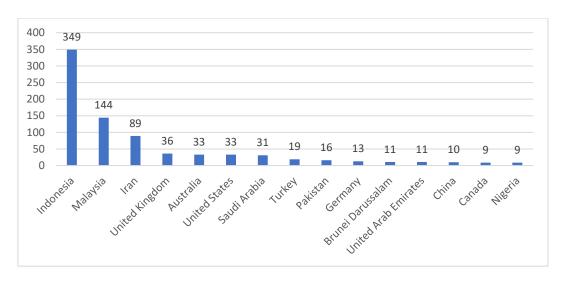


Figure 2. Trends in Publication According to Countries

This data highlights the expanding global visibility of Islamic education within higher education, demonstrated by meaningful contributions from both Muslim majority and non Muslim majority countries. The geographical spread of publications illustrates not only strong regional participation but also an increasingly diverse international engagement, indicating that interest in Islamic education is no longer confined to specific cultural or religious contexts. Instead, it is emerging as a topic of broader academic relevance, attracting scholars from varied educational systems and research traditions.

The observable patterns of collaboration reveal growing cross national linkages that extend beyond traditional regional clusters. This shift suggests that Islamic education is gaining recognition as an important field through which global issues such as cultural identity, ethical leadership, and educational reform can be examined. The expanding involvement of countries across different continents points to a gradual transformation of the research landscape into a more interconnected and multidisciplinary arena. These developments indicate strong potential for deeper international cooperation, which could further enrich scholarly dialogue, diversify methodological approaches, and foster comparative insights that strengthen the intellectual maturity of the field.

3.3 Trends in Publication according to languages

The analysis of publication languages from 2015 to 2024 reveals that English dominates the scholarly discourse on Islamic education in higher education, accounting for 92.6 percent of the total publications with 742 articles. This reflects the central role of English as the global language of academic communication, facilitating wider dissemination and

engagement in the international scholarly community. The significant predominance of English indicates the field's alignment with global academic standards and the growing importance of Islamic education research on a global scale.

In contrast, several other languages appear in much smaller numbers within the dataset. Persian accounts for 1.9 percent of the publications with 15 documents, followed by Turkish with 12 publications, representing 1.5 percent of the total. Malay with 10 publications and Indonesian with 8 publications make comparable contributions, indicating notable regional scholarly activity, particularly in Southeast Asia where these languages are widely used in academic and educational settings. Taken together, these patterns highlight that, although English remains the dominant language for global academic communication, Islamic education research continues to maintain a strong presence regional through locally grounded scholarship written in national and community languages.

Additional languages, such as Arabic (6 publications), Russian (5), French (4), and German (3), further reflect the diverse and expanding scholarly interest that crosses linguistic and cultural boundaries. The presence of publications in Ukrainian (2), Spanish (1), and Urdu (1) suggests the emergence of more specialized or niche academic efforts in these linguistic communities, pointing to growing engagement beyond dominant publication languages. Taken together, this pattern indicates an ongoing internationalization of Islamic education research that extends beyond traditional academic regions and language hegemonies, as scholars from varied contexts increasingly contribute to and reshape the global discourse on Islamic education.

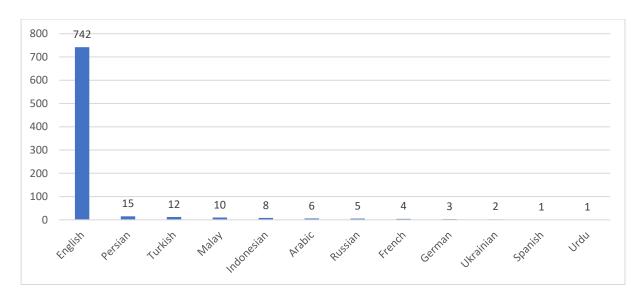


Figure 3. Trends in Publication According to Languages

Although English remains the dominant medium of publication, the presence of multiple other languages in the dataset illustrates the increasingly global and culturally diverse character of Islamic education research. This multilingual distribution shows that scholarship in the field is emerging from a wide range of linguistic and regional backgrounds, reflecting its relevance across different educational systems and cultural settings. The engagement of languages beyond English indicates that Islamic education is not only a topic of international academic interest but also one that remains deeply rooted in local intellectual traditions, particularly in regions with long standing Islamic scholarly heritage.

The involvement of various linguistic communities enriches the field by bringing culturally grounded perspectives, unique methodological orientations, and context specific interpretations to the broader discourse. This multilingual participation helps expand the epistemic boundaries of Islamic education research, making it more inclusive and reflective of the diverse realities of Muslim societies around the world. As a result, the landscape of Islamic education scholarship is becoming more dynamic and globally interconnected, opening opportunities for comparative studies, cross linguistic collaborations, and knowledge exchange that can deepen and broaden the academic conversation in higher education contexts.

3.4 Trends in Publication according to research areas

The distribution of research areas in Islamic education within higher education reveals a clear dominance of the Social Sciences, which accounts for 65 percent of the total publications, with 521 studies. This underscores the central role that educational theory, cultural context, philosophy, and religious studies play in the ongoing academic discourse on

Islamic education. The significance of these areas highlights the intellectual and pedagogical foundations of Islamic education in higher education institutions. Similarly, the Arts and Humanities, with 286 publications (35.6 percent), reflect the close relationship between Islamic education and the broader humanistic and cultural studies, contributing to the exploration of values, identity, and ethics in educational frameworks.

Interestingly, Islamic education's relevance extends beyond the traditional domains of social sciences and humanities, with interdisciplinary engagement evident in a variety of professional and applied fields. Medicine, for instance, contributes 12.1 percent with 97 publications, showcasing an increasing interest in integrating Islamic educational principles within healthcare practices. Business, Management, and Accounting (88 publications, 11 percent) and Economics, Econometrics, and Finance publications, 6.8 percent) also demonstrate the crosssector impact of Islamic education, emphasizing the alignment of Islamic values with economic and business practices. Engineering (46 publications, 5.7 percent) further indicates the growing intersections between Islamic education and technical disciplines.

The emergence of new interest areas signals further diversification of the field. Computer Science, with 45 publications (5.6 percent), Psychology (41 publications, 5 percent), and Environmental Science (16 publications, 2 percent) illustrate how Islamic education is intersecting with contemporary technological, cognitive, and ecological concerns. These fields show that Islamic education is adapting to modern academic and professional landscapes, fostering a dialogue between Islamic teachings and cutting-edge fields of knowledge. While these areas are still emerging, they demonstrate the increasing interdisciplinarity of Islamic education research.

Smaller numbers of publications in fields such as Nursing (14 publications, 1.7 percent), Energy (13 publications, 1.6 percent), Decision Sciences (11 publications, 1.4 percent), and Mathematics (8 publications, 1 percent) reveal that although Islamic education has traditionally been rooted in social and humanistic inquiry, it is now gradually gaining

attention in the health, natural, and applied sciences. The presence of publications in Dentistry (7), Pharmacology (7), Biochemistry (6), Neuroscience (3), and Physics (1) further indicates that Islamic education is slowly gaining traction in these more specialized domains.

Table 1. Trends in Publication According to Research Areas

Social Sciences 521 Arts and Humanities 286 Medicine 97 Business, Management, and Accounting 88 Economics, Econometrics, and Finance 55 Engineering 46 Computer Science 45 Psychology 41 Environmental Science 16 Nursing 14 Energy 13 Decision Sciences 11 Health Professions 10 Multidisciplinary 10 Mathematics 8 Dentistry 7 Pharmacology, Toxicology, and Pharmaceutics 7 Biochemistry, Genetics, and Molecular Biology 6 Agricultural and Biological Sciences 5 Immunology and Microbiology 3 Neuroscience 3 Chemistry 2 Chemical Engineering 1 Earth and Planetary Sciences 1 Materials Science 1 Physics and Astronomy 1	Subject Area	Total
Medicine 97 Business, Management, and Accounting 88 Economics, Econometrics, and Finance 55 Engineering 46 Computer Science 45 Psychology 41 Environmental Science 16 Nursing 14 Energy 13 Decision Sciences 11 Health Professions 10 Multidisciplinary 10 Mathematics 8 Dentistry 7 Pharmacology, Toxicology, and Pharmaceutics 7 Biochemistry, Genetics, and Molecular Biology 6 Agricultural and Biological Sciences 5 Immunology and Microbiology 3 Neuroscience 3 Chemistry 2 Chemical Engineering 1 Earth and Planetary Sciences 1 Materials Science 1 Materials Science 1	Social Sciences	521
Business, Management, and Accounting Economics, Econometrics, and Finance Engineering 46 Computer Science 45 Psychology 41 Environmental Science 16 Nursing 14 Energy 13 Decision Sciences 11 Health Professions 10 Multidisciplinary 10 Mathematics 8 Dentistry 7 Pharmacology, Toxicology, and Pharmaceutics 7 Biochemistry, Genetics, and Molecular Biology 6 Agricultural and Biological Sciences 5 Immunology and Microbiology Neuroscience 3 Chemistry 2 Chemistry Chemical Engineering 1 Earth and Planetary Sciences 1 Materials Science 1	Arts and Humanities	286
Economics, Econometrics, and Finance 55 Engineering 46 Computer Science 45 Psychology 41 Environmental Science 16 Nursing 14 Energy 13 Decision Sciences 11 Health Professions 10 Multidisciplinary 10 Mathematics 8 Dentistry 7 Pharmacology, Toxicology, and Pharmaceutics 7 Biochemistry, Genetics, and Molecular Biology 6 Agricultural and Biological Sciences 5 Immunology and Microbiology 3 Neuroscience 3 Chemistry 2 Chemistry 2 Chemical Engineering 1 Earth and Planetary Sciences 1 Materials Science 1	Medicine	97
Engineering46Computer Science45Psychology41Environmental Science16Nursing14Energy13Decision Sciences11Health Professions10Multidisciplinary10Mathematics8Dentistry7Pharmacology, Toxicology, and Pharmaceutics7Biochemistry, Genetics, and Molecular Biology6Agricultural and Biological Sciences5Immunology and Microbiology3Neuroscience3Chemistry2Chemistry2Chemical Engineering1Earth and Planetary Sciences1Materials Science1	Business, Management, and Accounting	88
Computer Science 45 Psychology 41 Environmental Science 16 Nursing 14 Energy 13 Decision Sciences 11 Health Professions 10 Multidisciplinary 10 Mathematics 8 Dentistry 7 Pharmacology, Toxicology, and Pharmaceutics 7 Biochemistry, Genetics, and Molecular Biology 6 Agricultural and Biological Sciences 5 Immunology and Microbiology 3 Neuroscience 3 Chemistry 2 Chemical Engineering 1 Earth and Planetary Sciences 1 Materials Science 1	Economics, Econometrics, and Finance	55
Psychology 41 Environmental Science 16 Nursing 14 Energy 13 Decision Sciences 11 Health Professions 10 Multidisciplinary 10 Mathematics 8 Dentistry 7 Pharmacology, Toxicology, and Pharmaceutics 7 Biochemistry, Genetics, and Molecular Biology 6 Agricultural and Biological Sciences 5 Immunology and Microbiology 3 Neuroscience 3 Chemistry 2 Chemical Engineering 1 Earth and Planetary Sciences 1 Materials Science 1	Engineering	46
Environmental Science 16 Nursing 14 Energy 13 Decision Sciences 11 Health Professions 10 Multidisciplinary 10 Mathematics 8 Dentistry 7 Pharmacology, Toxicology, and Pharmaceutics 7 Biochemistry, Genetics, and Molecular Biology 6 Agricultural and Biological Sciences 5 Immunology and Microbiology 3 Neuroscience 3 Chemistry 2 Chemical Engineering 1 Earth and Planetary Sciences 1 Materials Science 1	Computer Science	45
Nursing14Energy13Decision Sciences11Health Professions10Multidisciplinary10Mathematics8Dentistry7Pharmacology, Toxicology, and Pharmaceutics7Biochemistry, Genetics, and Molecular Biology6Agricultural and Biological Sciences5Immunology and Microbiology3Neuroscience3Chemistry2Chemical Engineering1Earth and Planetary Sciences1Materials Science1	Psychology	41
Energy13Decision Sciences11Health Professions10Multidisciplinary10Mathematics8Dentistry7Pharmacology, Toxicology, and Pharmaceutics7Biochemistry, Genetics, and Molecular Biology6Agricultural and Biological Sciences5Immunology and Microbiology3Neuroscience3Chemistry2Chemical Engineering1Earth and Planetary Sciences1Materials Science1	Environmental Science	16
Decision Sciences 11 Health Professions 10 Multidisciplinary 10 Mathematics 8 Dentistry 7 Pharmacology, Toxicology, and Pharmaceutics 7 Biochemistry, Genetics, and Molecular Biology 6 Agricultural and Biological Sciences 5 Immunology and Microbiology 3 Neuroscience 3 Chemistry 2 Chemical Engineering 1 Earth and Planetary Sciences 1 Materials Science 1	Nursing	14
Health Professions10Multidisciplinary10Mathematics8Dentistry7Pharmacology, Toxicology, and Pharmaceutics7Biochemistry, Genetics, and Molecular Biology6Agricultural and Biological Sciences5Immunology and Microbiology3Neuroscience3Chemistry2Chemical Engineering1Earth and Planetary Sciences1Materials Science1	Energy	13
Multidisciplinary10Mathematics8Dentistry7Pharmacology, Toxicology, and Pharmaceutics7Biochemistry, Genetics, and Molecular Biology6Agricultural and Biological Sciences5Immunology and Microbiology3Neuroscience3Chemistry2Chemical Engineering1Earth and Planetary Sciences1Materials Science1	Decision Sciences	11
Mathematics8Dentistry7Pharmacology, Toxicology, and Pharmaceutics7Biochemistry, Genetics, and Molecular Biology6Agricultural and Biological Sciences5Immunology and Microbiology3Neuroscience3Chemistry2Chemical Engineering1Earth and Planetary Sciences1Materials Science1	Health Professions	10
Dentistry 7 Pharmacology, Toxicology, and Pharmaceutics 7 Biochemistry, Genetics, and Molecular Biology 6 Agricultural and Biological Sciences 5 Immunology and Microbiology 3 Neuroscience 3 Chemistry 2 Chemical Engineering 1 Earth and Planetary Sciences 1 Materials Science 1	Multidisciplinary	10
Pharmacology, Toxicology, and Pharmaceutics Biochemistry, Genetics, and Molecular Biology Agricultural and Biological Sciences Immunology and Microbiology Neuroscience 3 Chemistry 2 Chemical Engineering 1 Earth and Planetary Sciences 1 Materials Science 1	Mathematics	8
Biochemistry, Genetics, and Molecular Biology 6 Agricultural and Biological Sciences 5 Immunology and Microbiology 3 Neuroscience 3 Chemistry 2 Chemical Engineering 1 Earth and Planetary Sciences 1 Materials Science 1	Dentistry	7
Agricultural and Biological Sciences 5 Immunology and Microbiology 3 Neuroscience 3 Chemistry 2 Chemical Engineering 1 Earth and Planetary Sciences 1 Materials Science 1	Pharmacology, Toxicology, and Pharmaceutics	7
Immunology and Microbiology3Neuroscience3Chemistry2Chemical Engineering1Earth and Planetary Sciences1Materials Science1	Biochemistry, Genetics, and Molecular Biology	6
Neuroscience3Chemistry2Chemical Engineering1Earth and Planetary Sciences1Materials Science1	Agricultural and Biological Sciences	5
Chemistry2Chemical Engineering1Earth and Planetary Sciences1Materials Science1	Immunology and Microbiology	3
Chemical Engineering 1 Earth and Planetary Sciences 1 Materials Science 1	Neuroscience	3
Earth and Planetary Sciences 1 Materials Science 1	Chemistry	2
Materials Science 1	Chemical Engineering	1
	Earth and Planetary Sciences	1
Physics and Astronomy 1	Materials Science	1
	Physics and Astronomy	1

These findings illustrate the expanding breadth of Islamic education research, which now extends well beyond its traditional foundations and increasingly intersects with a wide spectrum of emerging and applied disciplines. This diversification demonstrates the adaptability of Islamic educational values and their relevance in responding to contemporary academic,

technological, and professional developments. The noticeable rise in studies situated within fields such as Medicine, Business, Engineering, and Computer Science indicates that researchers are exploring how Islamic perspectives can inform and enrich specialised domains that were once considered unrelated to religious or value based education.

The growth of publications in these applied areas suggests a deeper integration of Islamic principles with global scientific and professional advancements. This shift reflects a growing awareness of the need for ethical grounding, cultural sensitivity, and holistic educational approaches within rapidly evolving disciplines. It also points to an increasing willingness among scholars to engage in interdisciplinary work that bridges moral frameworks with scientific innovation. As these intersections continue to strengthen, they create fertile ground for innovative research agendas, theoretical contributions, and practical applications that position Islamic education as an active contributor to contemporary debates on technology, health, economy, and sustainable development. This expansion marks an important step toward establishing Islamic education as a dynamic, globally engaged academic field capable of addressing modern societal challenges through interdisciplinary collaboration and knowledge integration.

3.5 Trends in Publication according to organizations

The analysis of institutional affiliations reveals that Malaysia and Indonesia are the primary contributors to the scholarly output on Islamic education in higher education. Malaysia leads with significant academic engagement, with the International Islamic University Malaysia (IIUM) at the forefront, producing 32 publications. Universiti Malaya follows closely with 31 publications, while Universiti Kebangsaan Malaysia contributes 21 publications, reflecting Malaysia's strong academic investment in the field. These institutions highlight Malaysia's pivotal role in shaping the discourse on Islamic education within the context of higher education.

Indonesia also plays a vital role in advancing Islamic education research. Several Indonesian universities have made notable contributions, with Universitas Islam Negeri (UIN) Maulana Malik Ibrahim Malang leading at 19 publications. UIN Syarif

Hidayatullah Jakarta and UIN Sunan Gunung Djati each contributed 18 publications, with UIN Ar-Raniry closely following with 17 publications. These contributions underscore the significance of State Islamic Universities in Indonesia, reflecting their central role in developing and disseminating research in Islamic education. Other Indonesian institutions such as Universitas Negeri Malang (15 publications), Universitas Pendidikan Indonesia, and UIN Raden Mas Said Surakarta (12 each) further demonstrate the country's commitment to expanding Islamic education research. Additionally, Universitas Islam Indonesia and UIN Sunan Kalijaga Yogyakarta each contributed 10 publications, further adding to the diversity of Indonesian institutional contributions.

Beyond Malaysia and Indonesia, several other institutions have made noteworthy contributions to the global research landscape. Universiti Teknologi MARA (UiTM), a public university in Malaysia, produced 16 publications, strengthening Malaysia's leadership in the field. In Iran, Shahid Beheshti University of Medical Sciences and Islamic Azad University contributed 13 and 11 publications, respectively, signaling the increasing international scope of interest in Islamic education in higher education. These contributions from Iran highlight the expanding geographical reach of research in Islamic education.

Overall, the data indicates that academic institutions in Malaysia and Indonesia are the leaders in scholarly work on Islamic education in higher education, with growing contributions from other regions, particularly Iran. This trend demonstrates the global relevance and commitment of academic institutions to integrating Islamic values and perspectives within contemporary higher education systems. The increasing international collaboration among institutions in Southeast Asia, the Middle East, and beyond further emphasizes the worldwide engagement with Islamic education in higher education.

Table 2. Trends in Publication According to Organizations

Affiliation	Total
International Islamic University Malaysia	32
Universiti Malaya	31
Universiti Kebangsaan Malaysia	21
Universitas Islam Negeri Maulana Malik Ibrahim Malang	19
Universitas Islam Negeri Syarif Hidayatullah Jakarta	18
UIN Sunan Gunung Djati	18
Universitas Islam Negeri Ar-Raniry	17

Affiliation	Total
Universiti Teknologi MARA	16
Universitas Negeri Malang	15
Shahid Beheshti University of Medical Sciences	13
Universitas Pendidikan Indonesia	12
Universitas Islam Negeri Raden Mas Said Surakarta	12
Islamic Azad University	11
Universitas Islam Indonesia	10
Universitas Islam Negeri Sunan Kalijaga, Yogyakarta	10

The institutional data underscores a strong and expanding scholarly commitment to Islamic education, particularly among universities in Malaysia, Indonesia, and Iran, which emerge as leading contributors to the field's intellectual development. The consistent output from these institutions reflects well established academic ecosystems where Islamic education is prioritised as both a research focus and an integral component of higher education identity. Their collective contributions not only shape the direction of regional scholarship but also strengthen the global visibility of Islamic education as an evolving academic discipline.

The growing involvement of institutions beyond these core regions suggests that international engagement will continue to play a pivotal role in advancing the field. As more universities across different continents participate in Islamic education research, new opportunities for collaboration, comparative studies, and interdisciplinary partnerships are likely to emerge. This broadening institutional presence enriches the research landscape by introducing diverse perspectives, methodological approaches, and thematic priorities. Over time, such global participation will help consolidate Islamic education research as a vibrant and internationally recognised domain, capable of contributing discussions curriculum meaningfully to on development, educational reform, and culturally responsive pedagogy in higher education.

3.4 Most global cited documents

The analysis of the most globally cited documents in the field of Islamic education within higher education reveals the key articles that have garnered significant academic attention. The most cited paper in this domain is by Sahin (2018), published in *Religions*, which has received 118 citations. This article stands out for its substantial academic impact, with an average of 14.75 citations per year and a normalized citation score (TC) of 10.90, figures that indicate not only high

visibility but also sustained and consistent engagement within the scholarly community. These citation patterns suggest that Sahin's work has become a key reference point for subsequent studies, shaping theoretical debates and guiding empirical inquiries. The paper's prominence demonstrates its influential role in advancing the discourse on Islamic education, particularly in relation to how Islamic educational principles are negotiated, adapted, and integrated within the context of modern educational challenges.

Another highly cited work is by Maseleno et al. (2017), published in the *Journal of Artificial Intelligence*, with 88 citations. This article also reflects a strong impact, with an annual average of 9.78 citations and a normalized TC of 6.25. The article's relevance underscores the emerging intersection between artificial intelligence and Islamic education, contributing to contemporary debates on digital innovation and pedagogy in faith-based learning.

Other notable works include those by Asif et al. (2020), published in *Sustainability*, which has garnered 55 citations and a high normalized TC of 9.72. Similarly, Darvishi et al. (2019) in *Open Access Macedonian Journal of Medical Sciences* has also received 55 citations, further emphasizing the interdisciplinary nature of Islamic education research. Richardson (2015), published in *London Review of Education*, with 53 citations, also contributes significantly to the body of knowledge in this field.

In addition, papers by Uysal et al. (2020), Adewuyi et al. (2019), Sholikhah et al. (2019), and Yaya et al. (2017) are also among the top ten most cited works in this field, each receiving between 46 and 48 citations. Collectively, these highly cited studies reflect the broad and sustained academic interest in Islamic education, with contributions that span diverse research domains, including curriculum, pedagogy, policy, and sociocultural analysis, as well as a wide range of geographical contexts.

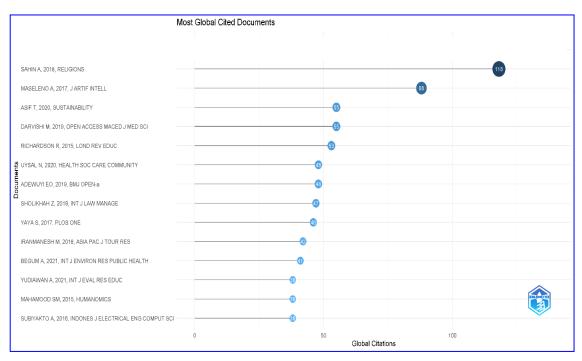


Figure 4. Most Globally Cited Documents

These citation patterns clearly demonstrate the substantial academic influence of the most frequently referenced documents, underscoring their pivotal role in shaping contemporary discussions within the broader landscape of Islamic education research. Highly cited works typically signal conceptual robustness, methodological sophistication, and thematic relevance, which collectively contribute to their sustained visibility in scholarly discourse. Their prominence indicates that these studies provide foundational insights or innovative perspectives that other researchers repeatedly draw upon to advance theoretical debates, refine pedagogical models, or interpret emerging trends in higher education.

The metrics also reveal that Islamic education research is becoming increasingly interdisciplinary. The diversity of highly cited works, which span areas such as pedagogy, technology, ethics, and public health, shows that scholars are drawing on a wide range of perspectives and methodological approaches. Together, these patterns reflect a field that is steadily expanding its scope and actively adapting to complex global educational realities.

This interdisciplinary engagement enhances the field's relevance, positioning Islamic education as a valuable lens for addressing contemporary challenges such as digital transformation, cultural pluralism, and value based curriculum development. Moreover, the international citation footprint suggests that scholars across various regions recognise the significance of these contributions, marking Islamic education as an important area of inquiry within global academic conversations.

3.5 WordCloud Analysis

The WordCloud analysis provides a visual representation of the most frequently occurring terms in the dataset, offering valuable insights into the dominant themes and research topics within the field of Islamic education in higher education. The most common term in the dataset is "female," which appears 108 times, followed by "human" (94), "male" (83), and "adult" (80). These terms reflect the strong focus on gender and age demographics in the research, highlighting a significant interest in how gender and age intersect with Islamic education in higher education settings.

Additionally, terms such as "Iran" (47), "Islam" (46), and "Islamism" (16) emphasize the geographical and religious context of many of the studies, suggesting a concentration of research in Islamic societies, particularly in Iran. These terms reveal the field's regional focus and the growing global academic interest in the role of Islam in educational settings.

The frequent appearance of terms like "cross-sectional study" (41) and "questionnaire" (37) indicates that a large portion of the studies in this dataset employed quantitative research methods, particularly surveys. This methodological trend reflects the field's reliance on empirical, data-driven approaches to understand the dynamics of Islamic education.

Other key terms, such as "education" (39), "educational status" (24), and "higher education" (15), point to the field's considerable focus on educational issues, particularly in relation to the status and development of Islamic education within higher

education systems. In addition, terms like "prevalence" (28), "major clinical study" (38), and "controlled study" (30) suggest that some studies within this dataset are health-oriented, with a focus on clinical or public health aspects in the context of Islamic education.

The analysis also highlights the broad scope of research on diverse age groups, with terms such as "adolescent" (43), "middle-aged" (32), "young adult" (31), "child" (22), and "aged" (18) reflecting the diverse populations considered in the studies. This broad age range indicates an interdisciplinary approach, considering the impact of Islamic education across different stages of life.



Figure 5. WordCloud Analysis

The WordCloud analysis offers a clear illustration of the widening interdisciplinary scope of Islamic education research, revealing strong thematic engagement with gender, health, religious identity, and core educational issues. The prominence of gender related and demographic terms suggests heightened scholarly attention to how Islamic education intersects with issues of equity, student diversity, and sociocultural dynamics in higher education settings. At the same time, the recurring presence of health related terminology indicates a meaningful shift in the field, where researchers increasingly explore how Islamic perspectives intersect with public health, behavioural studies, and wellbeing among learners communities.

The simultaneous appearance of religious and educational terms demonstrates that while the field continues to prioritise its foundational concerns related to faith, pedagogy, and moral development, it is also adapting to address complex contemporary challenges faced by Muslim societies. The convergence of social and health related vocabulary reflects a growing awareness that Islamic education cannot be examined in isolation from broader societal realities, including public health crises, demographic change, social behaviour, and evolving cultural norms. Taken together, these patterns indicate that Islamic education research is becoming a multidimensional field that integrates spiritual, social, and scientific perspectives, increasing its relevance for addressing global and regional challenges in Muslim majority societies and beyond.

3.6 Trend topics

The trend Topics analysis provides a clear picture of how the focus of research in Islamic education has evolved over time, highlighting the shift in academic interests and the emergence of new themes. This analysis tracks the frequency of key terms over the years, while also reflecting the quartile distribution of publication years (Q1 – earliest 25%, Median – midpoint, Q3 – latest 75%), offering insights into the timing and progression of research priorities.

In the earlier years (2016-2018), research focused heavily on regional, demographic, and socio-political issues. Terms such as "Pakistan" (2017), "age" (2017), "unemployment" (2017), "Islamism" (median: 2018), and "university" (median: 2018) were frequently used, reflecting the concerns of the time around the socio-political landscape, particularly in Muslim-majority regions. This period also saw increasing interest in psychological and developmental studies, with keywords like "psychology" and "adolescent" (median: 2018–2019) gaining prominence. These terms highlight the field's early focus on individual development and socio-economic challenges within Islamic educational contexts.

From 2019 onwards, there was a noticeable shift toward topics related to health and gender. The frequency of terms such as "female", "male", "human", and "educational status" increased significantly, with their median years ranging from 2020 to 2022. This shift indicates a growing emphasis on gender studies and the role of education in shaping identity, as well as

broader social issues, including equality and access to education. The continued relevance of "Islam" (median: 2021) underscores its centrality in the field, with research continuing to explore the intersection of faith and education.

Recent years (2022-2024) have seen a marked emergence of health-related and pandemic-related topics. Keywords such as "Saudi Arabia", "smoking", "sexual behavior", "hypertension", "coronavirus disease 2019", and "vaccination" peaked in median or upper quartile years of 2023-2024. This shift reflects the growing academic interest in public health, particularly within the context of Islamic societies, and the impact of the COVID-19 pandemic on educational

systems and public behavior. The focus on health and behavioral issues represents a significant evolution in the field, aligning with broader global research trends that have gained traction during and after the pandemic.

Overall, the Trend Topics analysis highlights a dynamic shift in Islamic education research, moving from socio-demographic and political themes in the early years to a growing focus on health, gender, and the socio-political impacts of the global pandemic. This progression mirrors broader global research directions, while maintaining a distinct focus on Islamic societies and their unique challenges and opportunities.

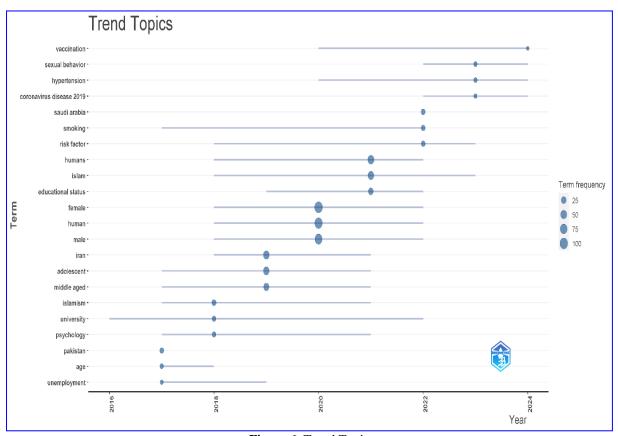


Figure 6. Trend Topics

This evolving pattern in the research landscape indicates that Islamic education is actively responding to contemporary global concerns while maintaining its core intellectual and spiritual foundations. The growing emphasis on health related themes, gender dynamics, and broader societal changes reflects an important shift in how scholars approach the field. Rather than limiting inquiry to traditional questions of pedagogy, theology, or institutional structure, researchers are increasingly examining how Islamic education intersects with pressing global issues such as public health, social equity, and cultural transformation. This broadened scope demonstrates a field that is both responsive and forward looking.

At the same time, the persistence of concepts rooted in Islamic values confirms that these modern inquiries do not replace foundational principles but instead expand their application to new contexts. The field appears to be moving toward a more holistic and context sensitive framework, where Islamic educational values inform discussions about identity, wellbeing, ethics, and social responsibility. These trends indicate a maturing research domain that recognises the complexity of higher education. Meanwhile, the field continues to prioritise the moral and spiritual dimensions of Islamic educational philosophy, ensuring that intellectual advancement remains firmly grounded in its ethical and theological foundations.

3.7 Co-occurrence Network

The co-occurrence network provides a powerful visualization of the relationships between key terms in the research on Islamic education within higher education. By mapping how frequently terms appear together in the same documents, this analysis uncovers the conceptual structure and thematic clusters that define the field. The analysis includes cluster groupings and centrality measures, such as Betweenness, Closeness, and PageRank, which help identify the importance and interconnectedness of each term within the overall research network.

Key Clusters and Central Terms:

- Cluster 1: This cluster focuses on institutional and educational themes, with prominent terms like "students," "student," "university," and "Saudi Arabia." While these terms exhibit moderate PageRank and Closeness values, they are essential in linking broader educational discussions with specific geographic contexts, particularly Saudi Arabia's role in Islamic higher education research. This cluster reflects the field's focus on understanding the institutional and regional dynamics of Islamic education.
- Cluster 2: The largest and most influential cluster is centered around biomedical and demographic terms such as "human" (PageRank: 0.0701), "female" (0.0592), "male" (0.0496), and "adult" (0.0507). These terms show high Betweenness and Closeness centrality, indicating that health-related demographic dimensions are deeply embedded within Islamic education research. This cluster also includes research methodologies like "questionnaire," "controlled study," and "human experiment," highlighting the empirical nature of much of the research in this field. This cluster is indicative of the growing integration of health and demographic studies within the broader discourse of Islamic education.
- Cluster 3: This cluster emphasizes educational concepts, with "education" and "Iran" being central terms. The connection between "education" and "Iran" suggests a cross-disciplinary overlap between pedagogical studies and regional analysis. "Education" holds high Betweenness (39.28) and a prominent PageRank (0.0294), indicating its central role in linking different research themes and maintaining its importance across various studies.
- Cluster 4: This cluster focuses on public health and aging, with key terms like "middle aged," "young adult," "prevalence," and "health survey." These terms reflect a rising scholarly interest in age-related health issues and epidemiological studies, particularly within the context of Islamic education research. It shows the field's engagement with public health challenges and the intersection between education and health.
- Cluster 5: Representing ideological themes, this cluster includes the term "Islamism," signaling the

presence of sociopolitical discourse within Islamic education research. However, its lower centrality scores suggest that it is less connected with other major clusters, indicating that while ideological discussions are important, they are somewhat more isolated in the broader research landscape.

- Cluster 6: Represented by "higher education," this cluster is a crucial research theme but exhibits moderate centrality scores. This suggests that "higher education" serves as a bridge between different thematic areas rather than dominating any particular domain. It reflects the foundational role of higher education in linking various research clusters and fields within Islamic education.
- Cluster 7: Including the term "Pakistan," this cluster points to localized research interests within South Asia. Although it is not a dominant cluster, it plays a significant role in regional studies, focusing on the specific contexts and challenges of Islamic education in the South Asian region.
- Cluster 8: This cluster revolves around epidemiological themes, highlighted by the term "epidemiology." This further supports the growing trend of integrating health-related research with Islamic education studies, particularly concerning public health and disease prevention.

Interpretation of Centrality Metrics

- Betweenness Centrality: Terms such as "human," "female," and "education" emerge as crucial connectors in the network. These terms play an integral role in linking various research themes and are key to bridging different areas of study within the co-occurrence network.
- Closeness Centrality: Health-related terms, such as "article," "major clinical study," and "humans," exhibit strong closeness, meaning these terms are closely connected to many other nodes in the network. This indicates that health-related research has broad relevance and intersects with a wide array of topics in Islamic education.
- PageRank: Terms like "human," "female," and "article" score the highest in PageRank, suggesting that these terms are frequently connected and cited across multiple research topics. Their prominence within the network highlights their importance in shaping the direction of Islamic education research.

This co-occurrence network reveals an increasingly multidisciplinary landscape, where Islamic education research intersects with health, demographics, methodology, and regional studies. The strongest conceptual clusters reflect growing scholarly interest in how Islamic higher education aligns with social sciences, health research, and contemporary sociocultural dynamics. The integration of health-related research with Islamic education, as well as the focus on gender and demographic studies, shows how

the field is adapting to modern challenges while maintaining a focus on its Islamic roots.

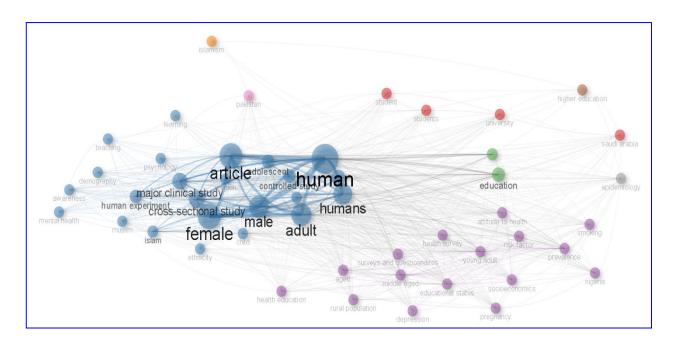


Figure 7. Co-occurrence Network

This network offers a holistic visualisation of the core thematic forces shaping research in Islamic education, revealing how the field is increasingly defined by cross disciplinary connections and shifting scholarly priorities. The prominence of central terms within the network highlights a research landscape that is no longer confined to traditional pedagogical or theological questions but is progressively engaging with broader concerns related to gender dynamics, public health, demographic change, and regional diversity. These focal points indicate that Islamic education is undergoing a conceptual expansion, reflecting a growing awareness of the social, cultural, and structural factors that influence educational experiences and institutional practices.

The emergence of intersections among gender studies, health related research, and region specific inquiries suggests that scholars are exploring Islamic education through more nuanced and contextually grounded lenses. These convergences create fertile opportunities for future investigations that integrate sociological, behavioural, and cultural perspectives into the study of Islamic higher education. As these links strengthen, the field is poised to expand its theoretical boundaries and methodological approaches, allowing researchers to address complex, real world issues while preserving the moral and philosophical foundations that underpin Islamic educational thought. This trajectory points to a dynamic and evolving discipline that will continue to diversify and deepen its contributions to global higher education scholarship.

3.8 Co-citation network

The co-citation network analysis reveals distinct thematic clusters based on frequently co-cited references within the field of Islamic education in higher education. Each node in the network represents a cited work, and the clusters represent thematic groupings formed based on citation similarity. Key metrics such as Betweenness, Closeness, and PageRank provide insights into the influence, connectivity, and centrality of each reference within the network. These metrics help identify the most influential works and the connections between different thematic areas in the field of Islamic education research.

Key Clusters and Central Terms:

- Cluster 1: This cluster is focused on contemporary sociological studies, with references such as "Being Christian in Western Europe" (2018) and "Europe's Growing Muslim Population" (2017). These references are frequently co-cited because of their shared focus on religion within Western societies. These works exhibit high Closeness Centrality (0.2), indicating their strong connection to other terms within the cluster. However, they show no Betweenness Centrality, meaning that these references are well integrated within their specific cluster but do not serve as bridges connecting other clusters.
- Cluster 2: This cluster includes foundational works in quantitative research methodology and behavioral theory, such as Fornell (1981), Ajzen (1991), and

several works by Hair J.F. Fornell's work (1984) stands out with the highest Betweenness (3) and the highest PageRank (0.082), making it a central node in the network. Fornell's work serves as a key connector between various research areas, demonstrating its foundational role in the methodological framework of Islamic education research.

- Cluster 3: This cluster consists of recent empirical studies, including works by Sahin (2018) and Davids (2016), likely related to educational studies. These references show high Closeness Centrality (0.2), indicating their strong connections within the cluster. However, similar to Cluster 1, these references do not bridge connections across other clusters, suggesting a focus on specific empirical areas without linking broader themes.
- Cluster 4: This cluster focuses on classical Islamic education thought, featuring works such as Al-Attas (1980) and Abaza (2002). These seminal works remain influential within the Islamic education domain but exhibit lower connectivity to other clusters. They are isolated in terms of inter-cluster connectivity, indicating their foundational importance in the field, yet limited integration with more contemporary, interdisciplinary research.
- Cluster 5: This cluster addresses discussions on values and religious education, with key works by Boyle (2006) and Halstead (2004). These scholars have significantly contributed to the discourse on values-based education, with a focus on religious and moral education within the Islamic framework.
- Cluster 6: This cluster focuses on Islamic economic perspectives, with Cizakca (1998, 2000) serving as a central reference in this domain. These works represent the intersection of Islamic principles and economics,

marking a distinctive thematic area in Islamic education research.

• Cluster 7: This cluster includes older works related to the historical development of Islamic education, such as those by Makdisi (1981), Davies (1988), and Eickelman (1985). These works form a tightly connected sub-group within the network, with moderate Closeness Centrality (0.1) and relatively balanced influence (PageRank ranging from 0.05 to 0.06). These references are foundational to the historical understanding of Islamic education but are less influential in the contemporary discourse.

Overall Network Interpretation

The co-citation network reveals the rich diversity of literature that informs Islamic education research, spanning classical Islamic thought to modern quantitative methodologies. The distinct clusters reflect the interdisciplinary nature of the field, with connections between sociology, educational theory, economics, values-based education, and health. The central works, such as Fornell (1981) and Sahin (2018), illustrate the growing interdisciplinary engagement within the field. Additionally, the network highlights the continued importance of classical Islamic education theories while demonstrating the integration of modern methodologies and contemporary issues into the discourse.

The network's structure illustrates how Islamic education research is evolving, with increasing academic contributions from multiple disciplines and regions. The presence of these distinct clusters emphasizes the dynamic and multifaceted nature of the field, suggesting that Islamic education's relevance is expanding, engaging with a broader array of topics.

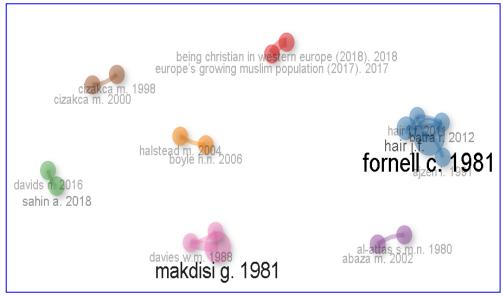


Figure 8. Co-citation Network

This co-citation network offers valuable insights into the evolving structure of Islamic education research. By visualizing the interconnections between key works, it highlights the growing diversity in research and points to both foundational and emerging areas of scholarly focus. The network suggests that future research will continue to broaden the boundaries of Islamic education, creating more interdisciplinary and globally relevant discussions in higher education.

4. Discussion

This study

This study provides an evidence-based overview of Islamic education research in higher education from 2015 to 2024, revealing a substantial 453 percent increase in publication volume, rising from 30 documents in 2015 to 166 in 2024. This rapid growth confirms the expanding scholarly attention to Islamic higher education during the Fourth Industrial Revolution, echoing recent analyses that highlight the transformation due to digitalization, sociocultural change, and policy reforms (Zuliana et al., 2025; Wahyuni et al., 2024). Indonesia and Malaysia dominate the scholarly landscape, jointly accounting for more than 61 percent of all publications, consistent with earlier findings on the centrality of Southeast Asian Islamic universities in shaping global Islamic education discourse (Athoillah et al., 2024; Hardaker & Sabki, 2018). Leading institutions such as IIUM, Universiti Malaya, UIN Maulana Malik Ibrahim Malang, and UIN Syarif Hidayatullah Jakarta emerged as the most productive contributors, confirming the strong institutional capacity previously documented in Islamic higher education systems (Wahyuni et al., 2024; Ansori et al., 2024).

A prominent finding of this study is the strong presence of health-related themes across the dataset. Keyword frequencies such as "female" (108 occurrences), "human" (94), "male" (83), "adult" (80), "hypertension," "smoking," and "coronavirus disease 2019" reveal the increasing integration of biomedical and public health concerns within Islamic education scholarship. This pattern aligns with recent studies that demonstrate the growing use of Islamic higher education environments for behavioural health research, particularly in the aftermath of COVID-19 (Darvishi et al., 2019; Uysal et al., 2020; Adewuyi et al., 2019). Similarly, the high occurrence of demographic terms such as "adolescent," "middleaged," and "young adult" indicates that much of the literature employs cross-sectional, quantitative designs, a pattern consistent with earlier findings that Islamic education research increasingly relies on empirical, survey-based methods (Kistoro et al., 2023).

Another key result is the dominant role of gender discourse. The prominence of gendered keywords, alongside emerging research on gender in Islamic universities (Waluyo, 2024; Wan Mokhtar et al., 2025),

shows that gender equity, representation, and identity are becoming central themes in Islamic higher education. The co-occurrence clusters further affirm this trend: the largest and most central cluster is anchored by "human," "female," and "male," each exhibiting high PageRank and Closeness values, indicating that health-demographic and gender issues now serve as structural connectors across the field's research network.

Despite the growth and diversification of the field, several gaps remain visible. Research areas such as Social Sciences (65 percent) and Arts and Humanities (35.6 percent) dominate the output, while fields like Environmental Science (2 percent), Energy (1.6 percent), and Engineering (5.7 percent) remain minimally represented. This imbalance highlights limited engagement with global challenges such as climate change, sustainability, and technological innovation, despite growing calls to integrate Islamic perspectives into these areas (Asif et al., 2020; Rajiani, 2024). Moreover, regional imbalance persists: while Indonesia, Malaysia, and Iran are heavily represented, African, Central Asian, and European Muslim minority contexts remain underexplored, echoing concerns raised by Zaman (2017) and Hardaker and Sabki (2018) about the uneven global distribution of Islamic education research.

Methodologically, the study demonstrates the significance of bibliometric analysis for understanding the field's evolution. The strong co-occurrence links across gender, health, educational status, and demographic variables, along with co-citation clusters featuring Sahin (2018), Halstead (2004), Fornell (1981), and Makdisi (1981), reveal a field that is conceptually anchored in sociocultural, behavioural, and classical Islamic educational foundations. These findings validate previous arguments that Islamic education scholarship is increasingly interdisciplinary and theoretically diverse (Sahin, 2018; Kistoro et al., 2023).

Overall, this study shows that Islamic education in higher education has developed into a dynamic, rapidly expanding, and increasingly interdisciplinary research domain. Policymakers and academic leaders are therefore urged to harness this momentum by strengthening collaborations across health sciences, digital learning, sustainability studies, and diverse cross-cultural contexts. Future research should systematically address the identified gaps by engaging more deeply with environmental sustainability, technology-driven pedagogies, digital ethics, and the experiences of Islamic education in African and Central Asian settings. These efforts will help further align Islamic education with global academic standards while preserving and enriching its distinctive intellectual and ethical foundations in both theory and practice at institutional, national, and global levels in diverse societal contexts.

5. Conclusion

This study offers a comprehensive bibliometric overview of Islamic education research in higher education from 2015 to 2024, clearly revealing a substantial 453 percent increase in publication output, the dominance of Indonesia, Malaysia, and Iran as leading contributors, and a noticeable widening of global participation across both Muslim majority and non Muslim majority regions. The analysis further shows that research themes have expanded beyond traditional pedagogical and theological concerns into interdisciplinary areas such as gender, public health, digital learning, artificial intelligence, and socio cultural development, signalling a rapidly evolving scholarly landscape. The novelty of the study lies in its integrated methodological approach that combines performance analysis, co occurrence clustering, and co citation network mapping to uncover hidden intellectual patterns and emerging intersections that had not been systematically documented before. These findings carry important implications for educational leaders and policymakers, who can utilise this evidence to strengthen institutional research agendas, promote culturally grounded yet globally informed curriculum innovation, and foster international collaborations that support a more inclusive and value oriented higher education system. The study also highlights the need for policy frameworks that integrate Islamic educational values with technological advancement, digital transformation, and holistic student wellbeing. Future research should explore underrepresented regions such as Africa, Central Asia, and Western minority contexts, alongside deeper investigations into sustainability education, AI ethics in Islamic learning environments, inclusive digital pedagogy, comparative evaluations between Islamic and non Islamic higher education systems. These directions will further broaden the intellectual contributions of Islamic education and reinforce its relevance in contemporary global higher education discourse.

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