TRENDS AND DIRECTIONS OF RESEARCH ON INNOVATION IN ISLAMIC EDUCATION: A BIBLIOMETRIC ANALYSIS

*Aulia Rizki¹, Miftahul Jannah², Dira Abdi³

¹ Universiti Utara Malaysia
 ² Universitas Islam Negeri Ar-Raniry, Banda Aceh
 ³ Universitas Islam Kebangsaan Indonesia
 *Corresponden Author: aulia_rizki@ahsgs.uum.edu.my

Abstract

This study aims to analyze the trends and directions of research on innovation in Islamic education using a bibliometric approach based on publications indexed in the Web of Science (WoS) from 2006 to mid-2025. The methods employed include citation analysis, collaborative network analysis, and keyword mapping using VOSviewer software. The results show a significant increase in the number of publications and citations since 2012, with a peak in 2018 and the highest citation surge occurring in 2024. Al-Jami'ah: Journal of Islamic Studies, the author Abdullah, and an article focusing on Islamic higher education in Indonesia emerged as the most influential. In addition, Universitas Islam Negeri Sunan Kalijaga Yogyakarta was identified as the most cited institution. In terms of collaboration, strong national author networks were identified, although international collaboration remains limited. Keyword analysis revealed the dominance of the theme "Islamic education" and its connection to contemporary issues such as sustainability, environment, and 21st-century competencies. The study concludes that although innovation in Islamic education is gaining increasing global attention, there remains significant potential to strengthen cross-national and interdisciplinary collaboration to enhance the future impact and relevance of the field.

Keywords: Bibliometric; Innovation; Islamic Education

A. Introduction

Bibliometric analysis aims to identify the number of publications discussing innovation in Islamic education as part of a literature review (Utami & Karlina, 2022). Bibliometric indicators play a role in mapping research trends and the distribution of publications across various disciplines and are aligned with research problems related to innovation in Islamic education (Devos, 2011). This approach has been applied in various scientific fields (Rohanda & Winoto, 2019), by using mathematical methods to analyze academic publications (Daulay, 2018). Studies on academic productivity also include themes of innovation in Islamic education, which have developed across different academic discourses (Latief, 2014). In addition, bibliometric analysis is used to explore and analyze

relevant journals or process a collection of scientific data with the help of VOSviewer to identify articles discussing innovation in Islamic education.

Although many studies on innovation in Islamic education have been conducted, researchers' limited understanding of publication trends and research streams in this field results in a lack of up-to-date citation perspectives. This limited understanding of citation and publication trends reduces the opportunity for researchers to identify and collaborate with leading academics at the international level in the field of innovation in Islamic education. This issue is a key concern that needs to be addressed. By using bibliometric citation and network analysis methods, this study examines the development of research on innovation in Islamic education in articles published between 2006 and 2025.

The results of this study are expected to assist researchers and policymakers in understanding publication patterns, sources of citation, network strength, relationships among authors and studies, as well as other factors that influence the development of studies on innovation in Islamic education. This study is important as it applies a bibliometric citation and network analysis approach to produce reliable indicators regarding the development of academic discourse on innovation in Islamic education. The next section of this paper will discuss the importance of citation and network bibliometric analysis in understanding the research landscape on innovation in Islamic education.

- i. Therefore, to fill this information gap, descriptive and bibliometric network analysis is used. The objectives of this study include:
- ii. To descriptively analyze the overall journals, papers, authors, and institutions related to research on innovation in Islamic education.
- iii. To analyze the most influential journal citations, articles, authors, institutions, and countries in research on innovation in Islamic education.
- iv. To analyze the network strength among authors, institutions, and countries in research on innovation in Islamic education.
- v. To analyze the frequency of all keywords cited in research on innovation in Islamic education.

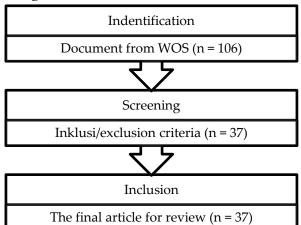
B. Methods

The bibliometric citation analysis in this study uses journal articles from the Web of Science (WoS) database. WoS is widely regarded as the most influential database in terms of high-quality research publications. It is a crossdisciplinary index that provides quick access to approximately 205,000

conference proceedings, including high-level research, and more than 70 million other citations (Merigo et al., 2015).

The PRISMA review method (Preferred Reporting Items for Systematic Review and Meta-Analysis) was employed in this study for articles related to innovation in Islamic education collected from WoS. PRISMA consists of three stages: (1) identification, (2) screening, and (3) final inclusion (see Figure 1). All three stages of this assessment procedure were completed on May 26, 2025. The WoS database used in the first stage involved a search using the keywords: ALL=(("Islamic Education*" AND "Innovation*")). This search resulted in a total of 106 articles.

Figure 1. The PRISMA review method



In the second stage, from the 106 articles obtained, screening was conducted based on several criteria, namely document type, research area, year of publication, and language. After this screening process, a total of 37 articles remained (see Table 1). The third stage involved the final inclusion of the filtered articles, which amounted to 37 in total. The data collected during this period were then used as the source for bibliometric citation analysis and network analysis.

In this study, only research articles, books, and editorial reviews published in English and indexed in the Web of Science database were selected. The study focused on research publications in the fields of religion, education, and psychology. The research examined materials related to innovation in Islamic education published between 2006 and 2025, aiming to ensure the quality and relevance of the data. Based on the PRISMA procedure, a total of 37 articles were ultimately selected for bibliometric analysis.

DOI: 10.22373/fitrah.v7ix1.7973

E-ISSN: 2722-7294 | P-ISSN: 2656-5536 Halaman:50-75

Table 1
Inclusion and Exclusion Criteria

Criteria	Inclusion	Exclusion
Document Type	Article	Early Access
	Proceeding Paper	
	Book Chapter	
Research Area	Religion	Linguistics
	Education	History
		Etc.
Year	2006 - 2025	Before 2005
Language	English	Non-english

The VOSviewer program by Van Eck and Waltman has been used for the bibliometric analysis in this study (Kovacs et al., 2015). This program assists in mapping information related to citations, co-authorship, co-citation, and the frequency of keyword usage in scientific works, as well as in creating network relationships for the extracted researchers and articles (Sue & Lee, 2010; Van Eck &. Waltman, 2010).

C. Result and Discussion

1. Result

Descriptive Analysis

After applying the inclusion and exclusion criteria through the PRISMA procedure, a total of 37 out of the original 106 articles were selected and used for bibliometric citation analysis and network analysis. In addition to citations, one of the most important aspects of these articles is the h-index. The h-index is an author-level metric that measures a researcher's productivity and citation impact.

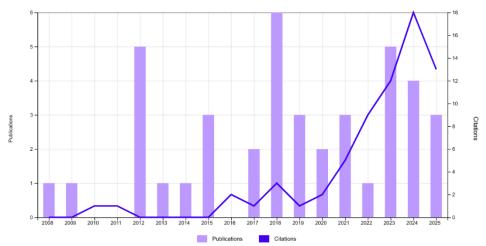
According to the findings of this study, all social media influences involved in documents related to paid advertising collected from WoS have an h-index of 4. This figure indicates that the researchers have published at least 4 articles, each of which has been cited at least 4 times in total (see Table 2). A total of 37 publications and 54 citations were found in studies related to innovation in Islamic education from 2006 to 2025.

Table 2
WoS Analysis Result

· · · · · · · · · · · · · · · · · · ·				
Publication	Citing Articles	Times Cited	1.46	4
37	53	54	Average per item	h-index
Total	Total	Total	_	
	53	54		
	Without self-	Without self-		
	citations	citations		

This table shows that out of a total of 53 published articles, those articles have been cited 54 times, with an average of 1.46 citations per article. An h-index value of 4 indicates that there are 4 articles, each of which has received at least 4 citations, reflecting the presence of several influential publications. The recorded citation data also excludes self-citations, which means that the figures reflect independent recognition and impact of these works within the academic community.

Figure 2. WoS Analysis Graphic



The data on article publications related to innovation in Islamic education shows a significant increase since 2012. During the early period from 2006 to 2011, the number of publications was very low, with some years having no publications at all. However, beginning in 2012, there was a spike with 5 articles published, and although fluctuations occurred, the overall trend continued to rise, reaching a peak in 2018 with 6 articles, and remained relatively high through 2024 and 2025. It is important to note that the data for 2025 only covers up to June, so there is still potential for the number of articles to increase by the end of

the year. This indicates that innovation in Islamic education is increasingly becoming an important focus of research and gaining more attention.

Meanwhile, the citation data shows a different pattern, where citations began to increase significantly after 2015, with a rapid growth starting in 2021. Citations peaked in 2024 with 18 citations and remained high in 2025 with 13 citations recorded up to June. Since the 2025 data is not yet complete, there is potential for the number of citations to continue rising over time. This suggests that articles on innovation in Islamic education are not only being published in greater numbers, but are also increasingly being used as important references in other research. Thus, innovation in Islamic education is gaining more academic recognition and has become a relevant and influential field of study in the education sector.

Network Analysis Most Cited Journal

Based on the table of publication sources containing citation data for journals related to innovation in Islamic education, it is evident that *Al-Jami'ah: Journal of Islamic Studies* is the journal with the highest number of citations, totaling 10 citations from a single document. The journals *Islamic Africa* and *Religions* also hold significant positions with 7 and 6 citations respectively, despite having only one and two published documents. Additionally, several other journals such as *Educational Action Research*, *Global Journal Al-Thaqafah*, and the *International Journal of Instruction* each received between 4 and 5 citations. However, most of the journals listed show a link strength of zero, indicating weak or non-existent citation network connections.

Table 3

Most Cited Journal

No	Source	Document	Citation	Total Link
1	Al-Jami'ah: Journal of	1	10	0
	Islamic Studies			
2	Islamic Africa	1	7	0
3	Religions	2	6	0
4	Educational Action	1	5	0
	Research			
5	Global Journal Al-	1	4	0
	Thaqafah			
6	International Journal of	1	4	0
	Instruction			

FITRAH, Volume 7 Nomor 1 Tahun 2025

E-ISSN: 2722-7294 | P-ISSN: 2656-5536

7	Quality Assurance in Education	1	3	0
8	Higher Education and Belief Systems in the Asia Pacific Region	1	2	0
9	INTED2012: International Technology, Education and Development	1	2	0
10	International Conference on New Horizons in Education, INTE 2014	1	2	0
11	Studia Islamika	1	2	0
12	Teachers College Record	1	2	0
13	Cogent Education	2	1	0
14	Hitit Theology Journal	1	1	0
15	Proceedings of the 2nd Global Conference on Linguistics and Communication	1	1	0
16	Proceedings of the 3rd Asian Education Symposium (AES 2018)	1	1	0
17	Religious Education: Between Radicalism and Tolerance	1	1	0
18	12th International Conference of Education, Research and Innovation	1	0	0
19	2nd International Conference on Education and Social Sciences	1	0	0
20	6th International Conference of Education, Research and Innovation	1	0	0

Most Cited Author

The most frequently cited authors in research related to innovation in Islamic education reveal that Abdullah is the most cited author, with a total of 10 citations from a single document. This highlights the strong influence of Abdullah's work, which is frequently referenced by other researchers in the field. Other highly cited authors include Renne with 7 citations, and Berger and

Sanjakdar with 5 citations each, indicating their notable contributions and perceived relevance within the academic community.

Most authors on the list have only one cited document, yet the number of citations they have received shows that their individual works have had considerable impact. However, the majority of these authors have no citation link connections (total link strength = 0), indicating weak integration within a broader citation network. An exception is Da Wan, who has a total link strength of 5, suggesting some degree of interaction and connectivity with other authors in the research network.

Table 4

Most Cited Author

No	Author	Document	Citation	Total Link
1	Abdullah	1	10	0
2	Renne	1	7	0
3	Berger	1	5	0
4	Sanjakdar	1	5	0
5	Abidin	1	4	0
6	Aisyah	1	4	0
7	Shifa	1	4	0
8	Shofiyyah	1	4	0
9	Haddade	1	3	0
10	Nur	1	3	0
11	Rashid	1	3	0
12	Raviq	1	3	0
13	Alvarez	1	2	0
14	Busro	1	2	0
15	Da Wan	1	2	5
16	Davo	1	2	0
17	Herrera	1	2	0
18	Idris	1	2	0
19	La Parra	1	2	0
20	Munoz-Bael	1	2	0

Most Cited Article

The most frequently cited authors in research related to innovation in Islamic education reveal that *Abdullah* is the most cited author, with a total of 10 citations from a single document. This indicates that Abdullah's work has gained significant attention and is commonly referenced in this field. The next most cited authors are *Renne* with 7 citations, and *Berger* and *Sanjakdar* with 5 citations each,

FITRAH, Volume 7 Nomor 1 Tahun 2025

E-ISSN: 2722-7294 | P-ISSN: 2656-5536

showing that their research is also considered relevant by scholars. Most of the authors listed have only one cited document, yet the citation count shows the strong individual impact of their work. However, most of these authors show no link strength (total link = 0), indicating limited citation connections with other authors. An exception is *Da Wan*, who has a total link strength of 5, reflecting some degree of connectivity within the academic network.

Table 5

Most Cited Article

No	Title	Author	Year	Citation	Citation Mean
1	Islamic Studies in Higher Education in Indonesia Challenges, Impact And Prospects For The World Community	Abdullah	2017	10	1,11
2	Educating Muslim Women and the Izala Movement in Zaria City, Nigeria	Renner	2012	7	0,5
3	Shifting Paradigms in Islamic Higher Education in Europe: The Case Study of Leiden University	Berger	2021	5	1
4	Participatory action research: creating spaces for beginning conversations in sexual health education for young Australian Muslims	Sanjakdar	2009	5	0,29
5	Awarness And Motivation In Crowdfunding For Islamic Banking And Finance Research	Shofiyyah	2019	4	0,66
6	Stakeholders Evaluation on Educational Quality of Higher Education	Abidin	2021	4	0,8
7	Quality assurance strategies of higher education in digital era: an Anthropology of education study in Islamic higher education institution	Haddabe	2024	3	1,5

DOI: 10.22373/fitrah.v7ix1.7973

E-ISSN: 2722-7294 | P-ISSN: 2656-5536 Halaman:50-75

0	Tarrend Creatain alala	Taluia	2010		0.20
8	Toward Sustainable	Idris	2019	2	0,28
	Islamic Communities in				
	Malaysia: The Role of				
	Islamic-Based Higher				
	Education Institutions				
	(IHEIs)		2021		0.5
9	Doing Hijrah through	Qomaruzzam	2021	2	0,5
	Music: A Religious	an			
	Phenomenon Among				
	Indonesian Musician				
	Community				
10	The study of concepts	Nitjarunkul	2015	2	0,18
	understanding and using				
	competence of teachers in				
	educational innovation				
	and technology for				
	teaching management at				
	schools of the unrest areas				
	of three southern border				
	provinces of Thailand				
11	A Song for Humanistic	Herrera	2008	2	0,11
	Education: Pedagogy and				
	Politics in the Middle East				
12	The European Higher	Munoz-Baell	2012	2	0,14
	Education Area And				
	Project Based Learning:				
	Implementing The Pbl				
	Approach In A New				
	Degree Course: General				
	Linguistics I				
13	Science Education in the	Zou'bi	2015	1	0,09
	Islamic World: A Snapshot				
	of the Role of Academies				
	of Sciences				
14	Exploring Online	Nurhayati	2024	1	0,5
	Preschool Programs in	J			•
	children's academic				
	preparation for elementary				
	school: a case study in				
	Indonesia				
		A 1 '	2010		4.05
15	Engaging Critically with	Agbaria	2018	1	1,25

FITRAH, Volume 7 Nomor 1 Tahun 2025

E-ISSN: 2722-7294 | P-ISSN: 2656-5536

	Islamic Education A Socio-				
	Theological Perspective on				
	Intellectual Rigidness				
16	The Foreign Language	Marwazi	2018	1	1,25
	Learning in the Holistic				
	Education Perspective				
17	Hospitable Education-	Avest	2023	1	0,33
	Interreligious Education R				
	evisited				
18	Evaluation on the Impact	Turkel	2023	1	0,33
	of Islamic Sciences				
	Accreditation Agency				
	(IAA) Criteria on the				
	Process of Acquiring the				
	21st Century				
	Competencies				
19	Innovation Governance of	Ali	2019	0	-
	Buntet Traditional Islamic				
	Education				
20	Higher Education In a	Ruiz Callejon	2014	0	-
	Multicultural				
	Society: Innovation and				
	The Past In The Teaching-				
	Learning Process				
	of Islamic Philosophy and				
	Thinking				

Most Cited Institution

Based on the data of the most frequently cited institutions in research on innovation in Islamic education, *Universitas Islam Negeri (UIN) Sunan Kalijaga Yogyakarta* ranks at the top with 10 citations from a single document. This highlights the institution's significant role in producing influential scholarly work in this field. It is followed by the *University of Michigan* with 7 citations, and both *Leiden University* and *Monash University* with 5 citations each, reflecting the global engagement in the study of innovation in Islamic education from institutions in both Muslim-majority countries and the Western world. Additionally, institutions such as *UIN Maulana Malik Ibrahim Malang, Universiti Kebangsaan Malaysia (UKM)*, and *Universiti Teknologi MARA (UiTM)* also show a noteworthy level of contribution, with each institution receiving 4 citations. However, all listed institutions display no citation links (total link = 0), suggesting

an absence of inter-institutional citation connectivity or collaboration within the research network.

Table 6

Most Cited Institution

No	Institution	Document	Citation	Total Link
1	Universitas Islam Negeri	1	10	0
	Sunan Kalijaga			
	Yogyakarta			
2	University of Michigan	1	7	0
3	Leiden University	1	5	0
4	Monash University	1	5	0
5	Universitas Islam Negeri	2	4	0
	Maulana Malik Ibrahim			
	Malang			
6	Universiti Kebangsaan	2	4	0
	Malaysia			
7	Universiti Teknologi	1	4	0
	MARA			
8	Universitas Hasanuddin	1	3	0
9	Universitas Islam Negeri	1	3	0
	Alauddin Makassar			
10	Institute of Social Studies	1	2	0
11	Prince of Songkla	1	2	0
	University			
12	Universitas Islam Negeri	1	2	0
	Sunan Gunung Djati			
	Bandung			
13	University of Alicante	1	2	0
14	Universiti Sains Malaysia	1	2	0
15	Inholland University of	1	1	0
	Applied Sciences			
16	Institute of Education	1	1	0
17	Universitas Islam Negeri	1	1	0
	Sultan Thaha Saifuddin			
18	Islamic World Academy	1	1	0
	of Sciences (IAS)			
19	Kütahya Dumlupınar	1	1	0
	University			
20	Mandel School of	1	1	0
	Educational Leadership			

Most Cited Country

Based on the data on the most frequently cited countries in research on innovation in Islamic education, Indonesia ranks first with 21 citations from 14 documents, indicating that the country is a major hub for the development of studies on this topic. Indonesia's leading position is supported by the presence of numerous prominent Islamic educational institutions such as UIN (State Islamic Universities) and modern pesantren, which form the backbone of innovation in Islamic education. Other countries showing notable contributions include the Netherlands with 8 citations from 3 documents, the United States with 7 citations from 1 document, and Malaysia with 6 citations from 5 documents. Additionally, Australia registers 5 citations, suggesting the presence of an interdisciplinary and multicultural approach to Islamic education in that context.

Despite these citation counts, all listed countries display a total link strength of 0, indicating that citation connections or collaborative networks among countries have not yet been established.

Table 7 *Most Cited Country*

No	Country	Document	Citation	Total Link
1	Indonesia	14	21	0
2	Belanda	3	8	0
3	Amerika Serikat	1	7	0
4	Malaysia	5	6	0
5	Australia	1	5	0
6	Spain	2	2	0
7	Thailand	1	2	0
8	England	1	1	0
9	Israel	1	1	0
10	Yordania	1	1	0
11	Turki	2	1	0
12	Bahrain	1	0	0
13	Bangladesh	1	0	0
14	Prancis	1	0	0
15	Iran	2	0	0
16	Arab Saudi	1	0	0
17	Uganda	1	0	0

DOI: 10.22373/fitrah.v7ix1.7973

E-ISSN: 2722-7294 | P-ISSN: 2656-5536 Halaman:50-75

Co-Authorship Analysis Among Authors

Based on the co-authorship analysis, most of the listed authors have zero citations, yet the first six authors (*Akhirudin Ganjar*, *Asrori Mohammad*, *Asy'arie Bima Fandi*, *Hidayat Ahmad Fadhel Syakir*, *Roibin*, and *Sofian Ganjar Yusup*) each show a total link strength of 6. This indicates strong internal collaboration within a single publication team, even though their work has not yet received citations. Another group of seven authors displays a total link strength of 5, also suggesting solid co-authorship and teamwork in producing academic output. Some authors, such as *Alvarez-Garcia J. S.*, *La Parra D.*, and *Budiman Al Mufakkir*, combine moderate collaboration strength (total link = 4) with a citation count of 2, indicating that their research is beginning to gain visibility and impact. Additionally, the inclusion of several international authors highlights the growing global engagement in the study of innovation in Islamic education.

Table 8
Co-Authorship Analysis Among Authors

No	Author	Document	Citation	Total Link
1	Akhirudin, Ganjar	1	0	6
2	Asrori, Mohammad	1	0	6
3	Asy'arie, Bima Fandi	1	0	6
4	Hidayat, Ahmad Fadhel	1	0	6
	Syakir			
5	Roibin	1	0	6
6	Sofian, Ganjar Yusup	1	0	6
7	Suja, Aidillah	1	0	5
8	Abdulrahman, Sundus M.	1	0	5
9	Alanazi, Hind Bashir	1	0	5
_10	Almutairi, Zaid Saud	1	0	5
11	Bin Abdulrahman, Khalid	1	0	5
	A.			
12	Mahmoud, Abdulrahman	1	0	5
	M.			
_13	Mahmoud, Mahmoud A.	1	0	5
_14	Alvarez-Garcia, J. S.	1	2	4
15	Davo, M. C.	1	0	4
_16	La Parra, D.	1	2	4
17	Munoz-Baell, I. M.	1	0	4
18	Ortiz-Moncada, R.	1	0	4
19	Budiman, Al Mufakkir	1	2	4
20	Elista, Amanda	1	2	4

This visualization shows that these authors have a high level of collaboration, although it has not yet translated into a significant number of citations (based on the previous data). This structure reflects the principles of Social Network Theory, in which centrality and density within a collaborative network can enhance knowledge transfer, accelerate innovation, and increase scientific productivity if sustained over the long term. Thus, this group of authors demonstrates great potential to advance research in the field of innovation in Islamic education, especially if this collaboration is supported by high-quality publications and strengthened dissemination of research findings.

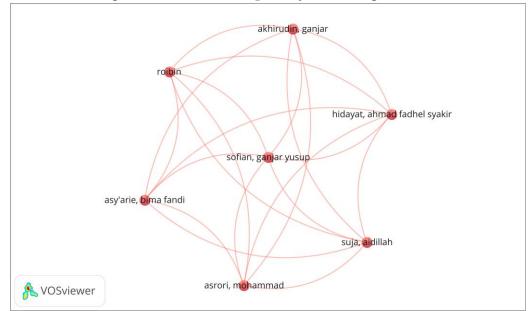


Figure 3. Co-authorship analysis among authors

Co-Authorship Between Countries

Based on the "Co-authorship Between Countries" data, international collaboration in research on innovation in Islamic education remains limited. Among the 17 countries involved, only four countries (*Bangladesh*, *the United Kingdom*, *Israel*, and *Malaysia*) show a total link strength of 1, indicating minimal cross-country co-authorship. This means that only a small number of authors from different countries have collaborated on the same publication. While Indonesia dominates in terms of research output (14 documents) and citations (21), it has no international co-authorship links recorded (total link = 0). The same is true for other major contributors such as the United States, the Netherlands, and Australia, which, despite having relatively high citation counts,

are not involved in any recorded international research collaborations within this dataset.

Table 9
Co-Authorship Between Countries

No	Country	Document	Citation	Total Link
1	Bangladesh	1	0	1
2	Inggris	1	1	1
3	Israel	1	1	1
4	Malaysia	3	6	1
5	Australia	1	5	0
6	Bahrain	1	0	0
7	Prancis	1	0	0
8	Indoensia	14	21	0
9	Iran	2	0	0
10	Yordania	1	1	0
11	Belanda	3	8	0
12	Arab Saudi	1	0	0
13	Spanyol	2	2	0
14	Thailand	1	2	0
15	Turki	2	1	0
16	Uganda	1	0	0
17	Amerika Serikat	1	7	0

This visualization reinforces previous findings that research on innovation in Islamic education remains geographically fragmented, with little to no significant international collaboration. Although Indonesia is highly active, its contributions are more local or national in nature and are not integrated into a broader global collaborative network.

This highlights the importance of promoting cross-country research collaboration to enrich studies on innovation in Islamic education with diverse perspectives and greater global impact. Such collaboration can also enhance the quality of research, increase citation counts, and open up opportunities for international funding in Islamic studies.

australia bahrain iran uganda indonesia spain usa saudi arabia malaysia england netherlands turkiye france iordan thailand 🤼 VOSviewer

Figure 4. Co-authorship between countries

Co-Authorship Between Institutions

Based on the results of the co-authorship analysis among institutions in publications related to innovation in Islamic education, several local institutions in Indonesia demonstrate a fairly strong level of collaboration. Four institutions—STAIN Sultan Abdurrahman Kepulauan Riau, Universitas Islam KH Ruhiat Cipasung, Universitas Islam Negeri Fatmawati Sukarno Bengkulu, and Universitas Islam Negeri Sultan Aji Muhammad Idris Samarinda—each have a total link strength of 4, despite not yet receiving citations. This reflects a noticeable effort toward national-level collaboration.

International cooperation is also beginning to appear, as seen in the participation of institutions such as the Institute of Education, the Mandela School of Educational Leadership, and the University of Haifa, which have engaged in co-authored publications that received citations.

On the other hand, many institutions, such as the European Centre for Research on Islam and Its Interaction and IAIN Antasari, are only involved in a single publication and show low or no connection to other institutions, indicating limited collaboration.

Table 9
Co-Authorship Between Institutions

No	Author	Document	Citation	Total Link
1	STAIN Sultan Abdurrahman	1	0	4

FITRAH, Volume 7 Nomor 1 Tahun 2025E-ISSN: 2722-7294 | P-ISSN: 2656-5536

DOI: 10.22373/fitrah.v7ix1.7973

Halaman:50-75

L-100	51N. 2722-7274 1-1551N. 2050-5550		110	alailiali.50-75
2	Universitas Islam KH Ruhiat	1	0	4
	Cipasung			
3	Universitas Islam Negeri	1	0	4
	Fatmawati Sukarno Bengkulu			
4	Universitas Islam Negeri Sultan	1	0	4
	Aji Muhammad Idris Samarinda			
5	Institute of Education	1	1	2
6	Mandela School of Educational	1	1	2
	Leadership			
7	University of Haifa	1	1	2
8	Universitas Medan Area	1	1	2
9	Universitas Tadulako	1	1	2
10	Inholland University of Applied	1	1	1
	Sciences			
11	International Islamic University	1	0	1
	Malaysia			
12	Islamic University of Uganda	1	0	1
13	Santa Maria University	3	0	1
14	Uganda Martyrs University	1	0	1
15	Universitas Hasanuddin	1	3	1
16	UIN Alauddin Makassar	1	3	1
17	Universiti Teknologi MARA	1	4	1
18	Vrije Universiteit Amsterdam	1	1	1
19	European Centre for Research on	1	0	0
	Islam and Its Interaction			
20	IAIN Antasari	1	0	0

The visualization illustrates a network of institutional collaboration through co-authorship, with Universitas Islam Negeri Maulana Malik Ibrahim Malang emerging as a central hub connected to multiple institutions. STAIN Sultan Abdurrahman and UIN Fatmawati Sukarno also demonstrate strong collaborative ties, indicating an active and growing research network at the national level. However, all visible connections are confined within Indonesia, with no indication of international collaboration. This highlights a key area for development—expanding partnerships across countries to enhance research quality, visibility, and global academic impact. While the national collaboration is relatively well-established, building international linkages is essential for

elevating the field's contribution to the global discourse on Islamic education innovation.

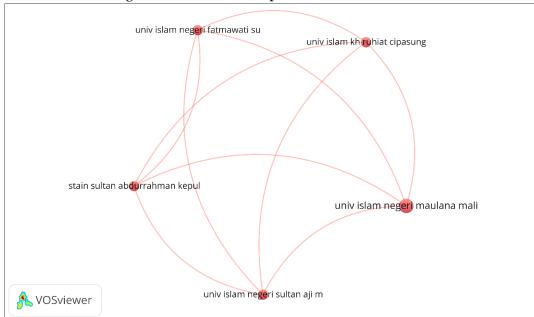


Figure 5. Co-authorship between institutions

Keywords

Based on the bibliometric analysis of keywords in publications on innovation in Islamic education, the term "Islamic education" was found to be the most dominant keyword, appearing six times in both author keywords and all keywords, and showing the highest total link strength, 26 and 30, respectively. This indicates that Islamic education is the central focus in the analyzed literature and is strongly connected to various other topics. In addition, keywords such as "education," "innovation," "development," "higher education," and "religious education" also appear frequently, suggesting that innovation in Islamic education is widely studied in the context of higher education, curriculum development, and teaching methods.

The keywords "Islamic higher education" and "higher education," each appearing twice, reinforce the trend that the primary focus of research on innovation in Islamic education lies at the level of higher education institutions. On the other hand, keywords such as "environment," "environmental crisis," "global environment," "sustainability," "sustainable development," and "values," although only appearing once, have high total link strengths (each with 13), indicating that these themes are strongly connected within the research network. This shows that some of the literature has started to link Islamic education with

contemporary global issues such as environmental concerns, sustainable development, spiritual values, and social well-being.

These findings suggest an integrative trend in research on innovation in Islamic education, where learning development is not only discussed within academic frameworks but is also connected to broader human and global challenges. Although some themes still appear with low frequency, the strength of keyword connections highlights a significant potential for the development of more extensive interdisciplinary studies in the future.

Table 10
Author Keywords and All Keywords

	or Keywords and I	All Keywords				
No	Author	Occurrence	Total	All Keywords	Occurrence	Total
	Keywords		Link			Link
1	Islamic	6	26	Islamic	6	30
	education			education		
2	Education	2	16	Education	4	20
3	Development	2	8	Innovation	3	10
4	Higher education	2	7	Islam	2	18
5	Islamic higher education	2	7	Teachers	2	16
6	Religious education	2	7	Islamic higher education	2	13
7	Innovation	2	5	Religious education	2	9
8	Environment	1	13	Development	2	8
9	Environmenta l crisis	1	13	Higher education	2	7
10	Geography of well-being	1	13	Environment	1	13
11	Global environment	1	13	Environmenta l crisis	1	13
12	Islam	1	13	Geography of well-being	1	13
13	Paradigm	1	13	Global environment	1	13
14	Social	1	13	Paradigm	1	13
15	Society	1	13	Social	1	13
16	Spirituality	1	13	Society	1	13
17	Sustainability	1	13	Spirituality	1	13
18	Sustainable development	1	13	Sustainability	1	13

FITRAH, Volume 7 Nomor 1 Tahun 2025

E-ISSN: 2722-7294 | P-ISSN: 2656-5536

19	Values	1	13	Sustainable	1	13
				development		
20	Welfare	1	13	Values	1	13

Based on the VOSviewer visualization, the keyword "Islamic education" appears as the central term in both maps, Author Keywords (left) and All Keywords (right), indicating the dominance of this theme in publications related to innovation in Islamic education. In the Author Keywords map, frequently appearing terms such as "religious education," "innovation," and "development" highlight a focus on religious aspects, curriculum innovation, and educational development. Other keywords like "curriculum reform," "conceptual model," and "five-factor model" suggest theoretical and conceptual approaches used by the authors.

Meanwhile, the All Keywords map presents a broader scope with the emergence of terms such as "Islamic higher education," "teachers," "digital era," and "21st century competencies," emphasizing the connection between innovation, higher education, technology, and 21st-century skills. Keywords like "politics," "entrepreneurship," and "paradigm" also point to social dimensions and global contexts. These findings reflect that the study of innovation in Islamic education is evolving through various approaches and is addressing a wider range of contemporary issues.

ocollaborative learning theis collaborative learning innovation adoption education innovation religious education islamic higher education innovation awareness community health islamic boarding school development concepts understanding politics entrepreneurship education development islamic education education islamic education 21st century competencies digital era arabic learning awareness innovation in education community health arabic learning five-factor model conceptual model 5-factor model islamic boarding school

Figure 6. Author keywords and all keywords

Discussion

Research on innovation in Islamic education has shown significant development, as evidenced by citation patterns, collaboration structures, and the emergence of thematic keywords in academic publications. One important indicator is the high number of citations received by journals such as Al Jami'ah: Journal of Islamic Studies, which although based on a single document, demonstrates strong influence and high academic reputation in this field (Utami & Karlina, 2022). Similarly, journals like Islamic Africa and Religions, despite publishing relatively few articles, continue to make a significant impact, reaffirming that quality and relevance outweigh quantity in terms of academic influence (Musyaffi et al., 2021).

However, the low link strength in the citation network indicates fragmentation among these journals and suggests that the academic discourse on innovation in Islamic education has not yet formed a cohesive and connected research community. This presents a major opportunity to build a more solid academic network through collaboration, mutual referencing, and the development of joint research agendas (Lee & Bozeman, 2005).

Authors such as Abdullah, Renne, Berger, and Sanjakdar have emerged as influential figures, with their works frequently cited despite having relatively few publications. Their impact confirms that the significance of research is determined more by its influence than by its volume (Silveira & Zilber). This aligns with the diffusion of innovation theory, in which highly cited authors act as "innovators" who introduce and disseminate new ideas within the academic community (Mailin et al., 2022).

Nevertheless, the limited interauthor connectivity suggests that most researchers in this field still work in isolation. In contrast, figures like Da Wan who demonstrate stronger link strength illustrate how collaborative engagement and integration into the citation network can enhance visibility and academic sustainability (Bansal, 2019). This highlights the need for a more community based model of knowledge production.

Institutions such as UIN Sunan Kalijaga Yogyakarta, the University of Michigan, Leiden University, and Monash University stand out in terms of citation impact, reflecting the global nature of scholarship on innovation in Islamic education. The involvement of institutions from both Muslim majority countries and Western countries indicates growing cross cultural and academic interest in this topic.

However, the lack of citation links between institutions signals that the institutional research ecosystem remains fragmented. Institutional legitimacy and influence are determined not only by the quantity of output but also by their recognition in the scientific communication system (Scott, 2010). Therefore, strengthening interinstitutional and cross country collaboration is crucial for enhancing influence, credibility, and knowledge transfer in this field (Ponds, 2007).

Indonesia's leading role in citation volume highlights its strategic and intellectual contribution to innovation in Islamic education. With the largest Muslim population in the world and a diverse range of Islamic educational institutions, Indonesia serves as a natural laboratory for both theoretical and practical innovations. Contributions from countries such as the Netherlands, the United States, Malaysia, and Australia underscore the growing global relevance of this field. However, the weak link strength in cross country citations points to limited international integration. Global academic collaboration is essential not only for improving research quality but also for fostering cross cultural understanding and broader intellectual exchange (Godin & Gingras, 2006).

Although the overall number of citations remains relatively low, the data indicates a promising foundation for a growing collaborative network among authors in this field. The high total link strength among author teams reflects the potential for sustainable and productive coauthorship networks (Kahn et al., 2012). International contributors such as Alvarez Garcia J. S., La Parra D., and Budiman Al Mufakkir serve as examples of how impactful research and teamwork can support each other in increasing academic influence.

At the national level, most contributions remain country specific, indicating a still closed research landscape. This segmentation limits the potential for sharing knowledge and comparative insights. International collaboration can enhance research quality, broaden perspectives, and increase citation potential (Hedges et al., 2021). Promoting joint projects, cross country funding initiatives, and multinational research centers can bridge the gap and shape a more integrated global research environment.

Institutional collaboration, particularly among Indonesian universities, is fairly active but has not yet resulted in high impact output, as shown by citation metrics. However, such partnerships provide a foundation for future growth, especially if supported by capacity building and international engagement. Early collaborations with institutions in Europe and the Middle East also indicate

potential to expand the academic legitimacy of Islamic education innovation research on the global stage.

Keyword analysis reveals integrative trends in which traditional discussions on pedagogy and Islamic institutions increasingly intersect with global and interdisciplinary themes. The centrality of the keyword "Islamic education" affirms its role as a primary lens in research within this field. The frequent appearance of terms related to higher education and pedagogical innovation reflects consistent academic interest in curriculum reform and teaching practices in Islamic universities (Santika et al., 2023).

Interestingly, although keywords related to environment and sustainability appear infrequently, their high link strength suggests early efforts by scholars to connect Islamic education with contemporary global challenges such as sustainability, ethics, and social justice (Wiranata et al., 2021). This signals opportunities to develop interdisciplinary research that integrates spiritual, social, and ecological dimensions into educational innovation. Such an approach can not only deepen academic contributions but also enhance the real world relevance and social impact of Islamic education on a global scale.

D. Conclusion

Based on the bibliometric analysis of publications on innovation in Islamic education from 2006 to mid-2025, a significant increase in publication and citation trends was observed. During the early period (2006–2011), publications were still very limited, but since 2012, there has been a surge, with the highest number recorded in 2018. Up to 2025, although the data is still provisional, the trend continues to show an upward trajectory. Citations of these articles began to rise noticeably from 2015 and experienced rapid growth starting in 2021, peaking in 2024 with 18 citations. This indicates that articles on innovation in Islamic education are increasingly being referenced in other research.

In terms of source mapping, the most frequently cited journal is *Al-Jami'ah: Journal of Islamic Studies*, while the most influential author is Abdullah. The most cited article is titled *Islamic Studies in Higher Education in Indonesia: Challenges, Impact and Prospects for the World Community*, reinforcing Indonesia's position as the country with the highest contribution in this field. The most frequently cited institution is Universitas Islam Negeri Sunan Kalijaga Yogyakarta, affirming its important role in the development of Islamic education innovation studies.

From the collaboration perspective, a network of co-authors with high contributions was identified, including Akhirudin Ganjar, Asrori Mohammad,

FITRAH, Volume 7 Nomor 1 Tahun 2025

E-ISSN: 2722-7294 | P-ISSN: 2656-5536

Asy'arie Bima Fandi, Hidayat Ahmad Fadhel Syakir, Roibin, and Sofian Ganjar Yusup. International collaborations also involve countries such as Bangladesh, the United Kingdom, Israel, and Malaysia, as well as institutions from Indonesia such as STAIN Sultan Abdurrahman, UIN Fatmawati Sukarno Bengkulu, UIN Samarinda, among others. In terms of content, the keyword "Islamic education" appears most frequently, indicating that Islamic education remains the central focus of research related to innovation.

REFERENCES

- Bansal, S., Mahendiratta, S., Kumar, S., Sarma, P., Prakash, A., & Medhi, B. (2019). Collaborative research in modern era: Need and challenges. Indian Journal of Pharmacology, 51(3), 137–139. https://doi.org/10.4103/ijp.IJP_394_19
- Daulay, W. (2018). Analisis sitiran pada tesis magister ilmu manajemen dan ketersediaan dokumen di perpustakaan Universitas Sumatera [Unpublished thesis]. Universitas Sumatera Utara.
- Devos, P. (2011). Research and bibliometrics: A long history.... Clinics and Research in Hepatology and Gastroenterology, 35(5), 336–337. https://doi.org/10.1016/j.clinre.2011.06.007
- Godin, B., & Gingras, Y. (2000). Impact of collaborative research on academic science. Science and Public Policy, 27(1), 65–73. https://doi.org/10.3152/147154300781782147
- Hedges, J. R., Soliman, K. F., Southerland, W. M., D'amour, G., Fernández-Repollet, E., Khan, S. A., ... & Ofili, E. O. (2021). Strengthening and sustaining interinstitutional research collaborations and partnerships. International Journal of Environmental Research and Public Health, 18(5), 2727. https://doi.org/10.3390/ijerph18052727
- Kahn, P., Petichakis, C., & Walsh, L. (2012). Developing the capacity of researchers for collaborative working. International Journal for Researcher Development, 3(1), 49–63. https://doi.org/10.1108/17597511211278643
- Kovacs, A., Van Looy, B., & Cassiman, B. (2015). Exploring the scope of open innovation: A bibliometric review of a decade of research. Scientometrics, 104(3), 951–983. https://doi.org/10.1007/s11192-015-1628-0
- Latief, K. A. (2014). Bibliometrics dan hukum-hukumnya: Sebuah pengantar. UIN Maliki Press.
- Lee, S., & Bozeman, B. (2005). The impact of research collaboration on scientific productivity. Social Studies of Science, 35(5), 673–702. https://doi.org/10.1177/0306312705052359
- Mailin, M., Rambe, G., Ar-Ridho, A., & Candra, C. (2022). Teori media/teori difusi inovasi. Jurnal Guru Kita, 6(2), 168. https://doi.org/10.24114/jgk.v6i2.31905

Halaman:50-75

- Merigó, J. M., Mas-Tur, A., Roig-Tierno, N., & Ribeiro-Soriano, D. (2015). A bibliometric overview of the Journal of Business Research between 1973 and 2014. Journal of Business Research, 68(12), 2645–2653. https://doi.org/10.1016/j.jbusres.2015.04.006
- Musyaffi, A. M., Zahra, S. F., Yusuf, M., & Rachmadania, R. F. (2021). Research Bootcamp: Peningkatan kualitas dasar riset. JMM (Jurnal Masyarakat Mandiri), 5(6), 3400–3409. https://doi.org/10.31764/jmm.v5i6.4867
- Ponds, R., Van Oort, F., & Frenken, K. (2007). The geographical and institutional proximity of research collaboration. Papers in Regional Science, 86(3), 423–444. https://doi.org/10.1111/j.1435-5957.2007.00126
- Rohanda, R., & Winoto, Y. (2019). Analisis bibliometrika tingkat kolaborasi, produktivitas penulis, serta profil artikel jurnal Kajian Informasi & Perpustakaan tahun 2014–2018. Pustabiblia: Journal of Library and Information Science, 3(1), 1–16. https://doi.org/10.18326/pustabiblia.v3i1.1-16
- Santika, A., Ahmad, I., & Muniroh, N. (2023). Implementasi inovasi pendidikan di lembaga pendidikan Islam. Jurnal Studi Islam MULTIDISIPLIN, 1(1), 38–56.
- Scott, W. R. (2010). Reflections: The past and future of research on institutions and institutional change. Journal of Change Management, 10(1), 5–21. https://doi.org/10.1080/14697010903549408
- Silveira, F. F., & Zilber, S. N. (2017). Is social innovation about innovation? A bibliometric study identifying the main authors, citations and co-citations over 20 years. International Journal of Entrepreneurship and Innovation Management, 21(6), 459–484. https://doi.org/10.1504/IJEIM.2017.086936
- Su, H. N., & Lee, P. C. (2010). Mapping knowledge structure by keyword co-occurrence: A first look at journal papers in technology foresight. Scientometrics, 85(1), 65–79. https://doi.org/10.1007/s11192-010-0259-8
- Utami, S. B., & Karlina, N. (2022). Analisis bibliometrik: Perkembangan penelitian dan publikasi mengenai koordinasi program menggunakan VOSviewer. Jurnal Pustaka Budaya, 9(1), 1–8. https://doi.org/10.31849/pustaka.v9i1.8485
- Van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. Scientometrics, 84 (2), 523–538. https://doi.org/10.1007/s11192-009-0146-3
- Wiranata, R. R. S., Maragustam, M., & Abrori, M. S. (2021). Filsafat pragmatisme: Meninjau ulang inovasi pendidikan Islam. Ta'allum: Jurnal Pendidikan Islam, 9(1), 110–133. https://doi.org/10.21274/taalum.2021.9.1.110-133