

Trends in Studies on Islamic Education Pedagogy: A Bibliometric Analysis with Implications for Character Education

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ABSTRACT

Purpose – Despite the increasing significance of character education within the context of Islamic education, there is a discernible gap in scholarly discussions on this subject. This study aims to address this void by offering a bibliometric and bibliographical review concerning character education via Islamic pedagogy.

Design/methods/approach – Employing a bibliometric analysis approach, this research scrutinized 117 documents extracted from the Scopus database, spanning 2007 to 2023. The analytical tools employed include performance, co-citation, co-word, and co-authorship metrics, facilitated through VOSviewer and PoP software.

Findings – The investigation highlighted a moderate uptick in publications about Islamic education from 2007 to 2023. However, citation trends within Islamic education studies fluctuated between 2007 and 2023. This review also identified the pivotal documents, nations, authors, sources, and affiliations that have substantially impacted the growth trajectory of Islamic education research.

Research implications – The insights derived from this study underscore the potential of Islamic education in fostering positive attitudinal shifts in students. As character education strives to mold virtuous habits, Islamic education serves as a conduit by instilling Islamic values, thereby facilitating the cultivation of commendable character traits by rectifying detrimental behaviors and mindsets.

ARTICLE HISTORY

Received 9 January 2023

Revised 22 May 2023

Accepted 28 June 2023

KEYWORD:

Character education, Islamic education, Bibliometric analysis, Attitudinal shifts



Jurnal Pendidikan Islam

1. Introduction

The Industrial Revolution era illustrates how quickly science and technology in the 21st century, namely an age where everything is based on digital, artificial intelligence, and interconnectedness, so that the world is increasingly integrated into globalization (Schwab, 2016). These technological advancements bring numerous changes and increased convenience in all aspects of human life. Some Indonesians respond positively by taking advantage of these technological developments, such as the massive online transportation application, online shopping, online training, online teaching and learning activities, online work (WFH), and other online activities. Nevertheless, the ease of access to information has accelerated the process of acculturation of foreign cultures, which is a major challenge for Indonesian society. Without a strong filter and foundation, it can undoubtedly lead to cultural globalization that can remove boundaries and legitimacy through a progress-oriented ideology (Darwis Nasution, 2017). If this boundary is broken, many foreign cultures will come in, and the local culture will be in danger.



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How to Cite: Ni'mah, Z., Ariati, C., Suparman. (2023) Trends in Studies on Islamic Education Pedagogy: A Bibliometric Analysis with Implications for Character Education. *Jurnal Pendidikan Islam* 12(1), 35-55.

<https://doi.org/10.14421/jpi.2023.121.35-55>

Facing this phenomenon, education has a big part to play in integrating technological developments with the moral values of local culture. The existence of disruptive innovation, as one of the hallmarks of the 4.0 industrial revolution, is assumed to usher in the age of digitalization of the education system (A. Rahman & Nuryana, 2019). This shows that there will be a holistic change and evolution in the Indonesian education system, both physically and nonphysically, by utilizing digital technology as its basis. This prediction is in line with the opinion of Hoyles & Lagrange (2010), who assert that the biggest influence in the world of education is digital technology. Islam, as a belief and belief system, has a significant impact on the actualization of education in the context of all-digital globalization because the constancy of noble religious values that guide life is necessary to face changing times (Mujahada, 2019).

Modern people, who are going through a mental and moral crisis, need Islamic education. This is because Islamic education is a collection of different ideas, values, methods, and goals that come from God's absolute revelation and prophetic hadith and are always up to date (Kodir, 2021). This means that Islamic education functions as a control as well as a guide in the development of human civilization, so with Islamic education, there can be a gain of power where humans develop only to go with the flow without clear principles and goals. As is known, the current science in the global era results in cultural penetration and acculturation that is difficult to contain. This causes a paradigm shift, namely the existence of an all-materialistic educational orientation. For this reason, it is necessary to revitalize Islamic education so that it is not counterproductive to its essential goals (Tantowi, 2022).

In response to the talk about reviving Islamic education in the 4.0 era, Elihami (2021b) showed that Islamic education would face problems in the globalization era. Some of these problems are globalization of culture, low levels of social capital, and problems with structures, cultures, and human resources. In another study, Elihami (2021a) also explained that deploying Islamic education to develop students' character toward education 4.0 is still not optimal because student morals are still not Islamic, and the character education innovations applied are still far from expectations. Thus, Islamic education must be modified for the 4.0 era's needs, with stages condensed to reach the 5.0 community in formal and non-formal education (Elihami, 2022a).

According to the research findings, a modification or innovation in Islamic education is required to develop students' characters to local culture and the demands of the 4.0 era. Strengthening character education through Islamic education is an educational investment in achieving the golden generation's character by developing a balance of hard and soft skills, consequently generating a learning culture in society (Taufik Bk, 2020). Character education involves deliberately teaching basic characteristics that benefit individuals and communities (Berkowitz & Bier, 2007). However, until now, the development of studies on strengthening character education through Islamic education, which represents the use of technology in the Industrial Revolution 4.0, has not been reported in scientific publications such as journal articles or conference papers. Meanwhile, a report on the research on strengthening character education through technology-based Islamic education in the era of the industrial revolution 4.0 is very necessary to develop and find something new related to maintaining character education in Islamic education. So, this study aims to create a survey of character education through technology-based Islamic education in the Fourth Industrial Revolution era using a systematic review supported by bibliometric analysis.

Bibliometric analysis is a methodical approach to examining and analyzing large amounts of scientific data to indicate the status of emerging research trends (Aria & Cuccurullo, 2017). Bibliometric analysis can support researchers to get a rare one-size fit, identify knowledge gaps, position intended contributions to the field, and acquire new ideas for research (Donthu et al., 2021). Bibliometric analysis of Islamic education has been widely carried out to date. Then, Ahmad et al. (2020) conducted a bibliometric analysis study on implementing HOTS in Islamic Education in madrasahs and schools.

Additionally, a bibliometric study highlighting contributions in Islamic studies to evaluating research and scientific communication was published by the Journal of Islamic Studies between 2009 and 2011 (Hussain et al., 2016). Moreover, Rahman et al. (2021) conducted bibliometric analysis research on the impact of problem-based learning on learning outcomes in Islamic Education. Furthermore, a bibliometric analysis study by Busro et al. (2021) and Riyadi (2014) maps research trends in Islamic education. Following that, a bibliometric study of learning technology's role in advancing Islamic education in Indonesia (Ismail, 2022a).

According to the above literature review, no bibliometric analysis study has discussed strengthening character education through Islamic education. Therefore, this bibliometric analysis study focuses on studies that examine supporting character education through Islamic education. It aims to provide a bibliometric and bibliographic review of various studies supporting character education through Islamic education in the Scopus database. The following research questions are directed at the research objectives of bibliometric analysis, namely:

1. What are the trends in publications and citations of studies on strengthening character education through Islamic education?
2. Which documents, authors, countries, institutions, and sources are the most productive and influential in the research of strengthening character education through Islamic education?
3. What are the most common keywords associated with the study of character education through Islamic education? How often do the keywords that show up the most in the current time frame show up?
4. What is the author's social interaction with the state about studying character education through Islamic education?

2. Methods

A bibliometric analysis was performed to provide a bibliographic and bibliometric review of the studies related to Islamic education (Donthu et al., 2021b). A few of the literature stated that there were five steps to running the bibliometric analysis (Fuad et al., 2022; Muhammad et al., 2022). The following Figure 1 presents the steps for conducting a bibliometric analysis study.

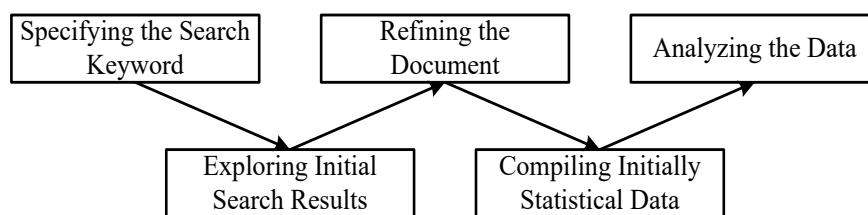


Figure 1. The steps in performing a bibliometric analysis study

Particularly, every step in conducting the bibliometric analysis in this study was itemized in the following subsections.

2.1. Specifying the Search Keyword

The database of Scopus was selected to find the document which studied Islamic education. The database was chosen due to Scopus database has many electronically well-qualified scientific documents (Montoya et al., 2018; Zhu & Liu, 2020). The keyword "Islamic Education" was assigned to discover the intended documents suitable for Islamic education studies. The search of records in the Scopus database was done on January 8th, 2023, particularly at 9.27 AM in Western Indonesian Time.

2.2. Exploring Initial Search Results

The initial search results discovered 5,185 documents published from 1924 to 2023. Moreover, the documents are sourced from journals, books, conference proceedings, and book series. The status of the publication stage of documents was still in press and also had been published. The document type consisted of the article, book chapter, conference paper, review, book, editorial, conference review, erratum, letter, note, short survey, and data paper. Additionally, the documents were written in English, Turkish, French, Persian, Russian, Arabic, Malay, German, Spanish, Italian, Indonesian, Portuguese, Bosnian, Japanese, Croatian, African, Chinese, Czech, Dutch, Norwegian, Serbian, Slovak, Slovenian, and Ukrainian.

2.3. Refining the Documents

The documents had to be selected considering the defined inclusion criteria to get suitable documents related to Islamic education studies. There were four inclusion criteria to determine the records. Firstly, the document's title had to contain the keyword "Islamic Education". Secondly, the paper had been finally published in a journal, book, conference proceeding, or book series. The record comprised the article, review, book, chapter, and conference paper. Fourthly, the document was written in English and published from 2007 to 2023. The form which did not fulfill the requirements was removed from this study. Some literature stated that there were four steps in selecting the papers systematically consisting of (1) identification, (2) screening, (3) eligibility, and (4) inclusion (Fuadi et al., 2021; Jaya & Suparman, 2021; Juandi et al., 2022; Suparman et al., 2022; Suparman & Juandi, 2022). The process of document selection is presented in Figure 2.

2.4. Compiling the Initially Statistical Data

The eligible documents were downloaded from the Scopus database in some formats, such as Comma Separated Values (CSV) and Research Information System (RIS). (Muhammad et al., 2022) Argued that the forms contain essential information such as bibliographical information, abstract and keyword, and bibliometric information. Moreover, the data presentation in RIS format utilizing the software of Perish or Publish (PoP) could provide the raw statistics data such as number of document citations, author names, document titles, publication years, document sources, publishers, and document types (Fuad et al., 2022). Additionally, the appearance of PoP software presented the descriptive analysis summary, such as the total of publications (TP), the sum of citations (TC), the number of citations per year (NCY), the number of citations per publication (NCP), the number of authors per publication (NAP), h-index, g-index, and the period of publication and citation years (Muhammad et al., 2022). Meanwhile, the data presentation in CSV format utilizing the software of VOSviewer could display the most numerous publication and citations viewed from the unit of document, author, country, source, and institution. Moreover, the appearance of VOSviewer software presented the keyword occurrence, total strength link, some visualizations, and clustering (Fuad et al., 2022).

2.5. Analyzing the Data

Some analyses were used to analyze this study's data, such as performance analysis, science mapping, and network analysis (Donthu et al., 2021b). Moreover, (Donthu et al., 2021b) itemized that science mapping consists of citation analysis, co-citation analysis, bibliographic coupling, co-word analysis, and co-authorship analysis, while network analysis consists of network metrics, clustering, and visualization. The performance analysis was used to present the development of publication and citation of the studies related to Islamic education, supported by

PoP software in analyzing the data. In addition, the citation analysis was performed to present the most productive and influential documents, countries, authors, institutions, and sources related to the studies of Islamic education. Moreover, the co-word analysis was used to map the forms of Islamic education to strengthen character education by visualizing the most frequently appearing keywords related to Islamic education studies. This analysis was enriched by visualization analysis and hierarchical clustering analysis. Then, to visualize the social interactions among authors and authors' countries regarding the studies of Islamic education, the co-authorship analysis was performed, and the network visualization analysis enriched this analysis. Some comments, such as citation analysis, co-word analysis, and co-authorship analysis, were supported by VOSviewer software (van Eck & Waltman, 2010).

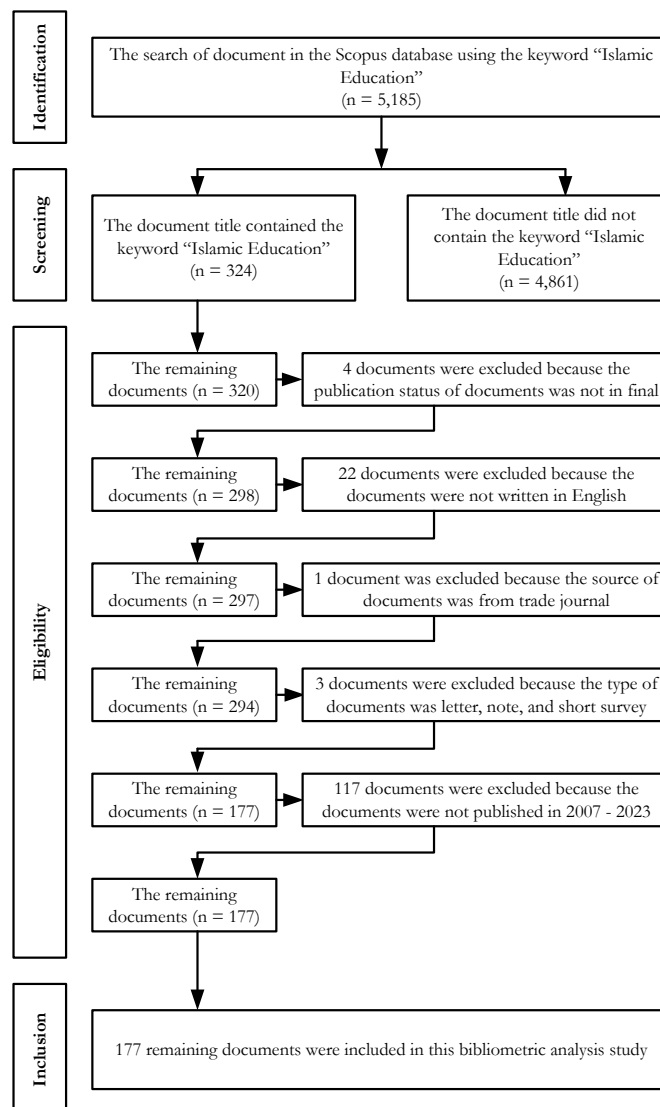


Figure 2. The selection process of documents

3. Results

3.1. Performance Analysis

From 2007 to 2023, performance analysis presented the evolution of publications and citations related to Islamic Education studies. (See Figure 3).

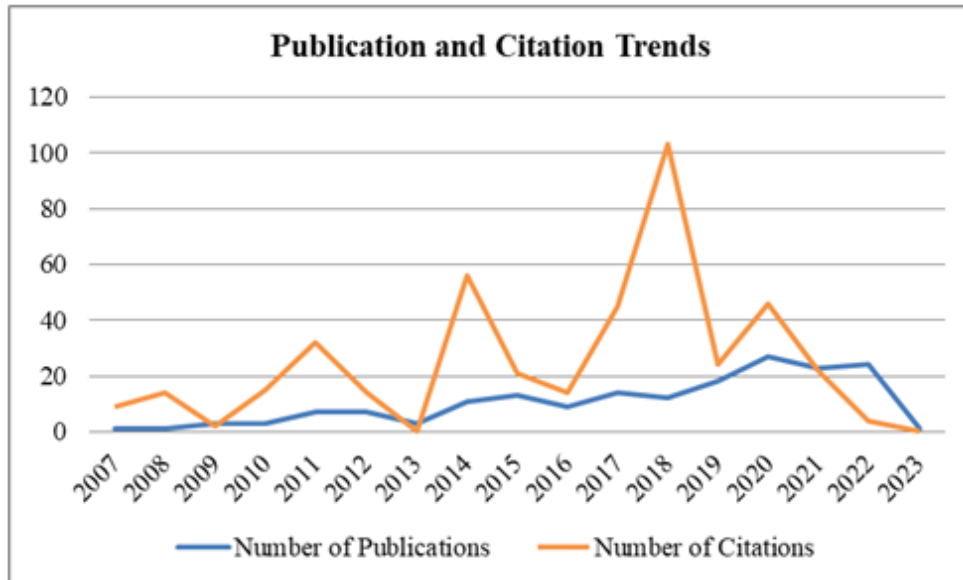


Figure 3. The development of publications and citations regarding Islamic education studies

Figure 3 presents that the development of publications related to technological literacy studies relatively increased from 2007 to 2023. In detail, of 117 documents published in the period, there was one document published in 2007, 2008, and 2023, followed by three documents in 2009, 2010, and 2013, seven documents in 2011 and 2012, nine documents in 2016, eleven documents in 2014, twelve in 2018, thirteen documents in 2015, fourteen documents in 2017, more than twenty in 2020, 2021, and 2022. These show that, in general, the development of publications on studies regarding Islamic education slightly increases from 2007 to 2022. Meanwhile, of 421 citations recorded in the Scopus database, there were 0 citations in 2022 and 2013, followed by four citations in 2022, 22 citations in 2021, 46 citations in 2020, 24 citations in 2019, 103 citations in 2018, 45 citations in 2017, 14 citations in 2016, 2012 and 2008, 21 citations in 2015, 56 citations in 2014, 32 citations in 2011, 15 citations in 2010, 2 citations in 2009, and 9 citations in 2007. These show that the development of sources on Islamic education studies soared relatively from 2007 to 2023 but sharply fell between 2021 and 2023. Generally, the effect of citations on documents related to Islamic education studies fluctuated between 2008 and 2023.

3.2. Citation Analysis

Citation analysis presented the most productive and influential documents, authors, countries, institutions, and sources related to Islamic education studies. Total publication (TP) was used to establish the most productive authors, institutions, governments, and references. In contrast, entire citation (TC) was employed to determine the most influential documents, authors, countries, institutions, and sources. Analysis of every unit was partially explained in the subsection. Firstly, the most significant documents related to Islamic education studies were presented in the top five papers with the highest citation (See Table 1).

Table 1. Top 5 documents with the highest citation

Document Title	Authors	Source	TC	Year
Critical issues in Islamic education studies: Rethinking Islamic and Western liberal secular values of education	A. Sahin	Religions	45	2018
Democratizing Indonesia through education? Community participation in Islamic Schooling	L. Parker, R. Raihani	Educational Management Administration and Leadership	37	2011
Madrasa education in South Asia and Southeast Asia: Current issues and debates	J. Park, S. Niyozov	Asia Pacific Journal of Education	28	2008
The fiqh of disaster: The mitigation of Covid-19 in the perspective of Islamic education-neuroscience	Suyadi, Z. Nuryana, N.A.F. Fauzi	International Journal of Disaster Risk Reduction	21	2020
Successful online learning factors in the covid-19 era: Study of Islamic higher education in West Papua, Indonesia	A. Yudiawan, B. Sunarso, Suharmoko, F. Sari, Ahmadi	International Journal of Evaluation and Research in Education	19	2021

Table 1 shows that "Critical Issues in Islamic education studies: Rethinking Islamic and Western liberal secular values of Education" was the most influential document regarding Islamic education. The paper written by A. Sahin was published by Religions in 2018. From 2018 until 2023, other relevant documents cited the report as many as 45 times.

Secondly, the top five authors with the most publications were the most productive, while the top five presented the most influential authors with the highest citation (See Table 2).

Table 2. Top 5 authors with the highest publication and citation

The Five Productive Authors			The Five Influential Authors		
Author	Institution	TP	Author	Institution	TC
Hamzah M.I.	Universiti Kebangsaan Malaysia	5	Sahin A.	University of Warwick	50
Noh M.A.C.	Universiti Pendidikan Sultan Idris Malaysia	5	Parker L.	University of Western Australia	37
Nor M.R.M.	University of Malaya	4	Raihani R.	University of Western Australia	37
Waghid Y.	Stellenbosch University	4	Hamzah M. I	Universiti Kebangsaan Malaysia	33
Dauids N.	Stellenbosch University	3	Suyadi	Universitas Ahmad Dahlan Yogyakarta	31

Table 2 shows that Hamzah M.I. was the most productive author affiliated with Universiti Kebangsaan Malaysia. He published five documents related to Islamic Education studies. Meanwhile, Sahin A was the most influential author affiliated with the University of Warwick. Other relevant documents cited his record related to Islamic education studies as many as 50 times.

Thirdly, the top five countries with the highest publication were the most productive, while the top five presented the most influential countries with the highest citations (See Table 3).

Table 3. Top 5 countries with the highest publication and citation

The Five Productive Countries		The Five Influential Countries	
Country	TP	Country	TC
Indonesia	51	Indonesia	167
Malaysia	34	Malaysia	90
United States	15	United Kingdom	86

United Kingdom	7	Australia	49
Australia	6	United States	49

Table 3 shows that Indonesia was the most productive country, which published 51 documents regarding Islamic education studies. Indonesia was also the most influential country. The documents related to Islamic education studies authorized by it had been cited as many as 167 times by other relevant documents.

Fourthly, the most productive institutions were presented by the top four institutions with the highest publication, while the top four institutions presented the most influential institutions with the highest citation (See Table 4).

Table 4. Top 4 institutions with the highest publication and citation

The Five Productive Institutions			Top Five Influential Institutions		
Institution	Country	TP	Institution	Country	TC
Stellenbosch University	South Africa	2	University of Warwick	United Kingdom	45
UIN Sunan Ampel Surabaya	Indonesia	2	University of Western Australia	Australia	37
UIN Sultan Thaha Saifuddin, Jambi	Indonesia	2	Stellenbosch University	South Africa	24
Universiti Kebangsaan Malaysia	Malaysia	2	University of British	United Kingdom	16

Table 4 shows that Stellenbosch University was the most productive institution in South Africa, publishing two documents related to Islamic education studies. Meanwhile, the University of Warwick was the most influential institution in the United Kingdom. The documents regarding the Islamic education studies reported by the institution had been cited as many as 45 times by other relevant documents.

Fifthly, the most productive sources were presented by the top five stars with the highest publication, while the top five presented the most significant quotations with the highest citation (See Table 5).

Table 5. Top 5 sources with the highest publication and citation

The Five Productive Sources			The Five Influential Sources		
Sources	Publisher	TP	Sources	Publisher	TC
Religions	MDPI AG	13	Religions	MDPI AG	88
Journal of Indonesian Islam	State Islamic University of Sunan Ampel	6	Educational Management Administration and Leadership	SAGE Publications	37
British Journal of Religious Education	Routledge	5	Studies in Philosophy and Education	Kluwer Academic Publishers	36
Journal for Multicultural Education	Emerald Group Publishing Ltd.	4	Asia Pacific Journal of Education	Routledge	28
Al-Jami'ah	UIN Sunan Kalijaga	3	British Journal of Religious Education	Routledge	27

Table 5 shows that Religions was the most productive source, which published 13 documents related to Islamic education studies. It was also the most influential source. The documents associated with the Islamic education studies published by MDPI AG. had been cited as many as 88 times by other relevant documents.

3.3. Co-Authorship Analysis

This analysis was used to visualize the social relationships among authors and authors' countries related to Islamic education studies. Firstly, the visualization of social relationships among authors is presented in Figure 3, where 44 interconnected authors appeared by selecting

the minimum number of documents of an author as many as one copy and the minimum number of citations of an author as many as no citation.

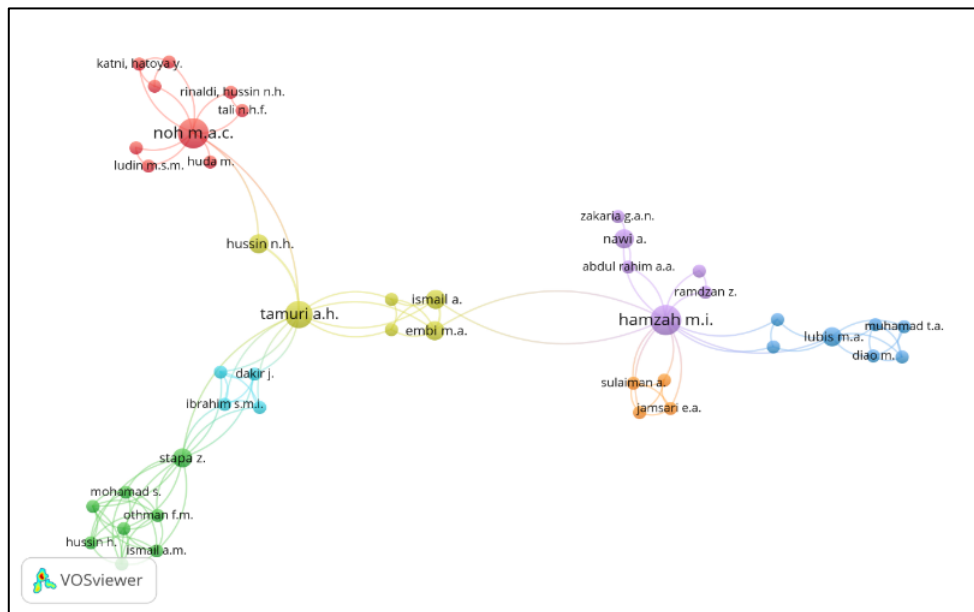


Figure 3. The social relationships among authors on the Islamic education studies

Figure 3 presents that 44 interconnected authors were grouped into seven clusters such as red, green, yellow, blue, purple, blue-sky, and brown. Particularly, the red cluster consisted of Huda, M., Katni, Y., Ludin, M. S. M., Noh, M. A. C., Nurjan, S., Rinaldi, N. H., Rohmadi, Suhid, A., and Tali, N. H. F. In addition, the green cluster consisted of Hussin, H., Ismail, A. M., Majid, L. A., Mohamad, S., Nazri, M. A., Othman, F. M., Shah, F. A., and Stapa, Z. Moreover, the blue cluster consisted of Diao, M., Ishak, N. M., Ismail, M. A., Lubis, M. A., Muhamad, T. A., Yunus, M. M. D., and Yusof, N. M. R. N. Furthermore, the yellow cluster consisted of Embi, M. A., Hamzah, I., Hussin, N. H., Ismail, A., Maimun, A. L., and Tamuri, A. H. Additionally, the purple cluster consisted of Abdul, R. A. A., Hamzah, M. I., Nawi, A., Ramdhan, Z., Zakaria, G. A. N., and Zulkifli, H. Then, the blue-sky cluster consisted of Dakir, J., Ibrahim, S. M. I., Othman, M. Y. H., and Yahya, S. A. Lastly, the brown collection consisted of Jamsari, E. A., Nawi, M. A. M., Sulaiman, A., and Umar, A.

Secondly, the visualization of social relationships among authors' countries is presented in Figure 4, where there were 22 interconnected authors' countries which appeared by selecting the minimum number of documents of a country, as many as one copy, and the minimum number of citations of a country as many as no citation.

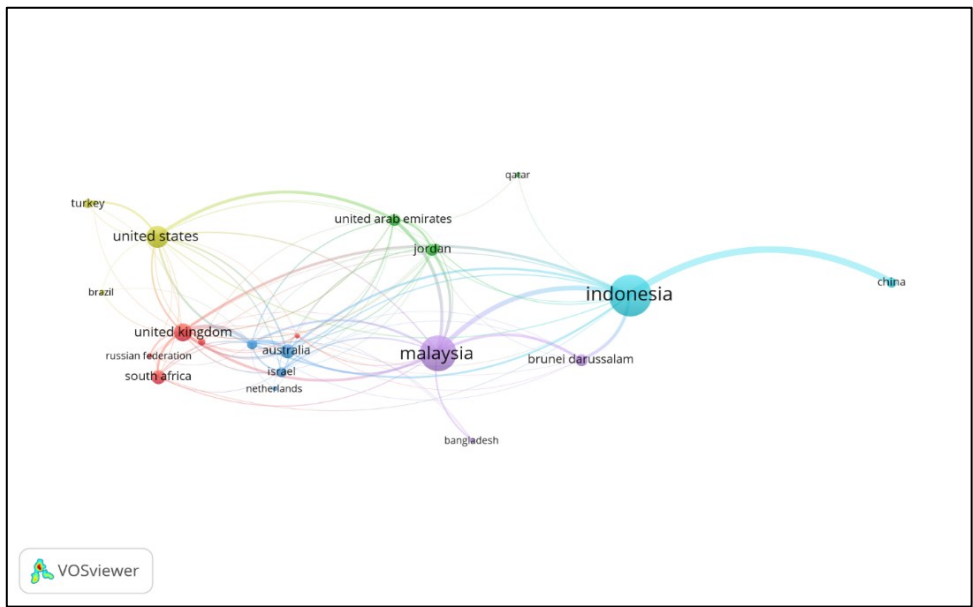


Figure 4. The social relationships among countries on the Islamic education studies

Figure 4 presents that 22 interconnected authors' countries were grouped into six clusters such as red, green, blue, yellow, purple, and blue sky. The red cluster comprised Ireland, Russian Federation, South Africa, Sweden, and the United Kingdom. Additionally, the green collection consisted of Jordan, Kuwait, and Qatar. Moreover, the blue group comprised Australia, Canada, and Netherlands—furthermore, the yellow cluster comprised Austria, Brazil, Turkey, and the United States. In addition, the purple collection consisted of Bangladesh, Brunei Darussalam, and Malaysia. Then, the blue-sky group consisted of China and Indonesia.

3.4. Co-Word Analysis

This analysis was used to map the forms of Islamic education to reinforce character education by visualizing the most frequently emerging keywords related to Islamic education studies and selecting the minimum number of occurrences of a keyword. As many as two events, 56 interconnected keywords appeared (See Figure 5).

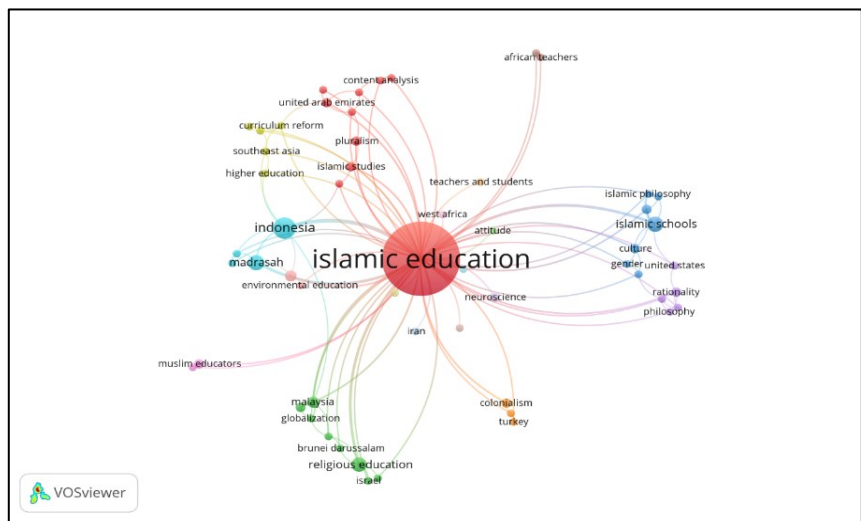


Figure 5. The network visualization of the emerging keywords on Islamic education

Moreover, the hierarchical clustering analysis was used to show the frequency of every keyword in Islamic education (See Table 6).

Table 6. The hierarchical clustering analysis of keywords on the Islamic education

No	Keyword	Freq.	No	Keyword	Freq.
1	Islamic Education	177	29	Teachers' Perception	2
2	Indonesia	15	30	Textbooks	2
3	Islamic Schools	8	31	Higher Education	2
4	Madrasah	8	32	Islamic Boarding School	2
5	Religious Education	7	33	Islamic Philosophy	2
6	Malaysia	4	34	Islamization of Knowledge	2
7	Pesantren	4	35	Israel	2
8	Rationality	3	36	Pancasila	2
9	Culture	3	37	Peace Education	2
10	Muslim Schools	3	38	Philosophy	2
11	United Arab Emirates	3	39	Socialization	2
12	Colonialism	3	40	Brunei Darussalam	2
13	Islamic Studies	3	41	Democracy	2
14	Muslim Educators	3	42	Gender	2
15	Pluralism	3	43	Islamic Pedagogy	2
16	Teaching and Learning	3	44	Online Learning	2
17	Neuroscience	3	45	Religious Diversity	2
18	United States	2	46	Senegal	2
19	Community	2	47	Attitude	2
20	Southeast Asia	2	48	Educational Reform	2
21	Women	2	49	Environmental Education	2
22	African Teachers	2	50	Turkey	2
23	Cloud Computing	2	51	Western Education	2
24	Content Analysis	2	52	Iran	2
25	Curriculum Reform	2	53	Orthodoxy	2
26	Globalization	2	54	Secondary School	2
27	History of Education	2	55	Teachers and Students	2
28	Pedagogy	2	56	West Africa	2

4.2. *The Most Productive and Influential Documents, Authors, Countries, Institutions, and Sources Regarding Islamic Education Studies*

Most of the top five documents with the highest citation focus on the critical issues in Islamic education studies: rethinking Islamic and Western liberal secular values of education. In addition, these documents also study matters concerning the academic conceptualization of the study of education within diverse historical and contemporary Islamic cultural, intellectual, political, theological, and spiritual traditions. These issues suggest that 'Islamic Education Studies offer a distinctive academic framing that incorporates an interdisciplinary empirical and scholarly inquiry strategy capable of generating a body of knowledge and understanding guiding the professional practice and policy development in the field. A few of the pieces of literature argued that several framings, such as professional practice and policy development strategies, are highly needed to enhance students' or teachers' through the learning process (Fabiana et al., 2019b; Sabith Khan et al., 2019; Sahin, 2018). It is in line with Tantowi (2022), stating that it is necessary to revitalize Islamic education so that it is not counterproductive to its essential goals.

Hamzah M.I., affiliated with Universiti Kebangsaan Malaysia, was the most productive author who had published five documents related to Islamic education studies. He conducted some studies associated with the impact of technology change in Malaysian smart schools on Islamic education teachers and students (Hamzah et al., 2009a), The effect of educational change in Malaysian smart schools on Islamic education teachers and students (Mohd Isa, 2007), the influence of parental background of secondary school students on academic performance in Islamic studies (Hamzah & Yunus, 2018), barriers in teaching critical thinking in Islamic education (Hamzah et al., 2018), and 21st-century learning in Islamic education (Ramdzan et al., 2022). This shows that to carry out the lies about Islamic education. Hamzah M.I.I involve some authors, such as Mohd. Isa, Yunus, and Ramdzan. It indicates that Hamzah M.I has social interactions with other authors concerned about Islamic Education studies. On the other hand, Sahin A, affiliated with the University of Warwick, was the most influential author of his research with the title "Critical Issues in Islamic education studies: Rethinking Islamic and western liberal secular values of Education," published in Religions in 2018, been cited by many as 45 times to date.

From then on, Indonesia was the most productive country, which published 51 documents related to Islamic Education studies. Many meta-analysis studies also revealed that Indonesia was the most productive country in reporting the study results related to Islamic education studies (As-Salafiyah et al., 2021). In addition, (Tijjani et al., 2020) stated that Indonesia was the most productive country and had published many documents related to Islamic education studies. It shows that Indonesia is the most productive country reporting the study results. There has been an increase in the study of Islamic Education in Scopus-indexed journals over the last five years, with most of them written by Indonesian scientists. Furthermore, Indonesia was also the most influential country. The documents related to Islamic Education studies reported by it had been cited as many as 167 times by other relevant documents. A bibliometric analysis piece of literature also revealed that Indonesia was the most influential country in which documents related to Islamic education studies (Darmadji et al., 2018).

In addition, Stellenbosch University was the most productive institution in South Africa, which published two documents related to Islamic Education studies. Meanwhile, the University of Warwick was the most influential institution in the United Kingdom. The documents regarding the Islamic Education studies reported by the institution had been cited as many as 45 times by other relevant documents. It shows that most institutions reporting Islamic education studies are affiliated with the United Kingdom, such as the University of British. In addition, most of the institutions that influence the studies related to Islamic education also affiliate in Australia, such as the University

of Western Australia. This result contradicts the research conducted by (Busro et al., 2021b), who stated that universities from Malaysia predominate top ranking. Universiti Kebangsaan Malaysia (55) and Universiti Malaya (22) are two universities that give most documents related to Islamic Studies. Currently, the country most influential is the state of Southeast Asia. This matter because the Islamic religion dominantly inhabits that area. However, Western countries have also begun to be interested in studying Islamic Education (Busro et al., 2021b).

Furthermore, Religion was the most productive source, which published 13 documents related to Islamic education studies. The head was also the most influential. The documents regarding Islamic education posted by MDPI AG. have been cited as many as 188 times by other relevant documents. These results align with the (Busro et al., 2021b) source. Religions, the International Journal of Innovation and Creativity Change, the International Journal of Educational Development, and the British Journal of Religious Education are leading publications. However, this result contradicts the result by (Hussain et al., et al., 2016), who stated that the Research Journal Islamic Studies is regarded as one of the International standards, as the Journal attracts submissions from a wide range of countries worldwide. It is necessary to take sources related to Islamic education from Religions and others that are influential in the field.

4.3. *The Social Relationships among Authors and Authors' Countries on Islamic Education Studies*

Hamzah, M. I., an author affiliated with Malaysia National University, was connected to the authors in clusters such as the yellow, purple, brown, and blue sky. In the purple cluster, Hamzah, M. was linked to several authors such as Abdul, A.A., Hamzah, M. I., Nawawi, A., Ramdzan, Z., Zakaria, G. A. N., and Zulkifli, H in which they commonly wrote and published a paper entitled "Teachers' acceptance of mobile learning for teaching and learning in Islamic education: A preliminary study" (A. Nawawi et al., 2015). The document was published in the Turkish Online Journal of Distance Education and has been cited as many as 16 times by other relevant documents. Additionally, Hamzah, M. was also linked to some authors in the blue cluster, such as Ismail, M. A., Lubis, M. A., and Yusof, N. M. R. N where they jointly wrote and published a document entitled "Educational strategy and technique in teaching and learning Islamic education: Perception of African teachers" (Lubis et al., 2009). The paper was published in WSEAS Transactions on Information Science and Applications, which had not been cited by other relevant papers from 2009 to 2023. Moreover, Hamzah, M. I was linked to several authors in the brown cluster, such as Jamsari, E. A., Nawawi, M. A. M., Sulaiman, A., and Umar, A in which they together wrote and published a paper entitled "The impact of globalization on current Islamic education" (M. A. M. Nawawi et al., 2012). The document was published in the Australian Journal of Basic and Applied Sciences, and it has been cited as many as 14 times by other relevant documents from 2012 until 2023. In addition, Hamzah, M. was also linked to a few authors in the yellow cluster, such as Ismail, A., and Embi, M. A where They in common wrote and published a document entitled "The impact of technology change in Malaysian smart schools on Islamic education teachers and students" (Hamzah et al., 2009b). The paper was published in the World Academy of Science, Engineering, and Technology, where it had been cited as many as three times by other relevant documents between 2009 and 2023. This indicates that Hamzah, M. I., is a leading author in generating networking research related to Islamic education.

Tamura, A. H., an author affiliated with the National University of Malaysia, was linked to red, blue sky, yellow, and green clusters. In the yellow cluster, Tamuri, A. H was linked to several authors such as Embi, M. A., Hamzah, I., Hussin, N. H., Ismail, A., and Maimun, A. L in which they commonly wrote and published a paper entitled "The emergence of new technology in Malaysian

smart schools: Views of Islamic education teachers and students” (Hamzah et al., 2009b). The document was published in the International Journal of Learning and has been cited as many as four times by other relevant documents from 2009 until 2023. In addition, Tamura, A. H was linked to one author in the red cluster, Noh, M. A. C, in which they jointly wrote and published a document entitled “The religious practices teaching pedagogy of Islamic education excellent teachers” (Hussin et al., 2014). The paper was published in the Mediterranean Journal of Social Sciences and has been cited as many as four times by other relevant documents in 2014 – 2023. Moreover, Tamura, A. H was linked to some authors in the blue-sky cluster, such as Dakir, J., Ibrahim, S. M. I., Othman, M. Y. H., and Yahya, S. A., and also one author in the green cluster who is Stapa, Z where they together wrote and published a paper entitled “Islamic education and level of character internalization of secondary school students in Malaysia” (Dakir et al., 2015). The document was published in the Mediterranean Journal of Social Sciences, which had been cited many times by other relevant papers in 2015 – 2023. Furthermore, Stapa, Z., an author affiliated with the National University of Malaysia, was linked to many authors in the green cluster, such as Hussin, H., Ismail, A. M., Majid, L. A., Mohamad, S., Nazri, M. A., and Shah, F. A, and also one author in the blue-sky cluster who is Othman, F. M where they in common wrote and published a document entitled “The contribution of Islamic education in strengthening Malay identity” (Majid et al., 2012). The paper was published in the Journal of Applied Science Research and has been cited twice by other relevant documents between 2012 and 2023. This shows that Tamuri, A. H., and Stapa, Z are also the leading authors in generating networking research related to Islamic education.

4.4. The Forms of Islamic Education in Reinforcing the Character Education

Co-word analysis shows that there were some emerging themes in the collection of appearing keywords that could be grouped into the following subsections:

4.4.1. The Object of Islamic Education

Some objects of Islamic education could be considered, such as “Islamic schools”, “Madrasahs”, “Muslim schools”, “Pesantren”, “Community”, “Islamic boarding schools”, and “Secondary schools”. This interprets that Islamic schools such as Madrasah and Pesantren are objects that can be generated to support and facilitate the process of Islamic education. (Gamal, 2020) argued that Islamic education could be carried out in Islamic schools. It means that Islamic schools become suitable for educating Islamic knowledge to reinforce the character education of young generations, especially students.

4.4.2. The Popular Country Regarding Islamic Education

There were some emerging popular countries related to Islamic education, such as “Indonesia”, “Malaysia”, United Emirates Arab”, “The United States”, “Israel”, “Brunei Darussalam”, “Senegal”, “Turkey”, and “Iran”. This shows that most countries developing Islamic education are in Asia, especially Southeast Asia, such as Indonesia, Malaysia, and Brunei Darussalam. It indicates that they are countries with the most Islamic people—Revealing that Malaysia has the most people interested in learning Islam. Moreover, (Tolchah & Mu’ammam, 2019) also stated that Indonesia is one of the biggest countries in the world in which their people believe Islam as a belief. Additionally, Brunei Darussalam is a small country with the most Islamic inhabitants. These reports prove that some countries in Southeast Asia have the most Islamic people.

4.4.3. *The Main Indicators of Islamic Education*

There were a few principle indicators that would achieve in Islamic education, such as “attitude”, “culture”, and “Islamization of knowledge”. In general, Islam appears to change the stupid cultures of most people in the world to be good cultures. (Gamal, 2020) stated that million years ago, many people had bad habits, in which Islam came to repair people's bad habits. Moreover, specifically, Islam has to generate a good attitude in humans. It indicates that Islam principally requires most people to have a good mood. To achieve a good culture and also philosophy, Islamization of knowledge must be mastered by the people. (Toosi et al., 2019) argued that Islamic knowledge could help people improve their attitude toward being good. It means that Islamic knowledge is one of the principal indicators in Islamic education that has to be mastered by humans.

4.4.4. *The Ways to Educate Islam*

There were some ways to educate Islam for humans such as “teaching and learning”, “socialization”, “textbooks”, “online learning”, and “cloud computing”. Islamic teaching and learning in schools is one way to educate Islam students specifically. Presenting Islamic values in textbooks is also an alternative way to share Islamic knowledge. (Tolchah & Mu’ammam, 2019) Also argued that books are sufficiently effective in sharing Islamic learning with the people. Additionally, the socialization of Islamic knowledge by face-to-face or social media can be conducted by messengers. (Lubis et al., 2009) stated that the socialization process using online learning is one strategy for transferring Islamic knowledge to people. This shows that the messenger can share Islamic expertise in various ways or methods.

4.4.5. *The Materials of Islamic Education*

There were many materials related to Islamic education, such as “rationality”, “pluralism”, “colonialism”, “history of education”, “globalization”, “Islamic pedagogy”, “Islamic philosophy”, “peace education”, “gender”, “religious diversity”, and “orthodoxy”. Islamic education can help humans to be real and plural to face the religious diversity in which they can be wise and tolerant of the various religions in the world because Islam teaches them to respect each other. In literature, (Dakir et al., 2015) argued that Islam is a religion that respects and tolerates the difference of ethnicity, language, and others. In addition, globalization is one of the new forms of colonialism that can break the human environment's Islamic values. Consequently, Islamic values must be strengthened in the human soul to protect the new colonialism. Moreover, Islamic pedagogy is the knowledge about how to share Islamic values with the people. According to (Hussin et al., 2014), to ensure the sharing of Islamic values with the people running well, the messenger has to master the Islamic pedagogy, and to know Islam deeply, they must master the Islamic philosophy.

5. Conclusion

This study charted the trajectory of Islamic education research from 2007 to 2023 through a bibliometric analysis. Our analysis revealed a modest rise in related publications between 2007 and 2022, yet the citation trends showed fluctuations from 2008 to 2023. The research further highlighted key contributors in the field, with documents, countries, authors, sources, and affiliations playing significant roles. Notably, Hamzah, M.I., Tamuri, A. H., and Stapa, Z emerged as central figures in the research network on Islamic education.

Five salient themes arose from the study: the objectives of Islamic education, associated countries, education indicators, pedagogical methods, and curriculum content. With a specific emphasis

on character education, Islamic schools have become pivotal in imparting Islamic knowledge, particularly to younger generations. Southeast Asian nations, including Indonesia, Malaysia, and Brunei Darussalam, have been instrumental in disseminating Islamic teachings within the Asian context. Islamic education, underscored by key methodologies such as instruction, socialization, and textbooks, fosters positive attitudinal changes, particularly among students. This shift in attitude, reflective of character development, is fundamental to transforming adverse cultural behaviors, underscoring the significance of Islamic education in cultivating virtuous habits.

However, this study's scope was limited by exclusive reliance on the Scopus database, largely due to accessibility constraints. Moreover, the bibliometric approach encompassed citation analysis, keyword analysis, and author collaboration analysis, omitting co-citation and bibliographic coupling analyses, which could have enriched the study's insights. Consequently, future research would benefit from a broader database selection and a more exhaustive bibliometric approach, ensuring a more comprehensive and profound understanding of the subject.

Declarations

Author contribution statement

Zulfatun Ni'mah conceived the presented idea. Chelsi Ariati and Suparman was data taker. All authors performed data analysis. All authors discussed the results and contributed to the final manuscript.

Funding statement

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Data availability statement

The datasets generated during and analyzed during the current study are available from the corresponding author upon reasonable request.

Declaration of Interest's statement

The authors declare that they have no known competing financial interests or personal relationships that could have influenced the work reported in this paper.

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