

Review Article

Humanistic *Pesantren*: Systematic Literature Review and Bibliometric Visualization Analysis on Character, Moral, and Ethical Values

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ABSTRACT

This research presents a systematic literature review and bibliometric analysis of the studies on character education in Indonesian Islamic boarding schools from Scopus datasets from 2011 to 2020. With a determined flow diagram and interactive Vosviewer visualization, the urgent goals are to describe the important elements of the bibliography, i.e., publication trends, the collaboration of the authors (co-authorship), and the terms used in the title and abstract (co-occurrence). It also synthesizes applied methods and classifies noble moral values. The summary of the findings are (1) networks visualization shows detailed links for mapping the status of topics that have or have not been widely explored or discussed, (2) many names are grouped, which means that they are working together, (3) the co-occurrence visualization shows the most dominant keyword is “Islamic boarding school,” (4) the instilling methods are classified as role models (exemplary), habituation, media-assisted, and integrated daily activities, and (5) the humanitarian values are classified as religious, friendliness, communication, environmental and social awareness, also responsibility. This SLR and BA’s major contribution is an extensive summary of the systematic classification and mapping of character, moral, and ethical values, and methods, as well as of the relevant literature. The growth of these developing topics is a recommendation for researchers

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to integrate methods in multi-disciplines and for achieving typical positive values. Finally, this review provides ideas and recommendations for determining the direction of further research. By examining connected or disconnected networks, readers may independently research using online mapping to generate fresh study ideas.

Keywords: Bibliometric, humanist character-moral ethic values, Islamic boarding school, systematic literature review, VV Online

INTRODUCTION

In essence, the study of value education has always been important and necessary throughout the ages (Berkowitz, 2011; Singh, 2019). After a decade of character education programs in Indonesia, the discussion of human character, morals, *akhlaq*, and ethics remains current, continuous (a never-ending process), and an important research issue in the world of education (Anam et al., 2019; Baehaqi & Murdiono, 2020; Kamaruddin, 2012; Pohan & Malik, 2018). Substantially, education aims to grow confident and compassionate students, contribute to the environment, and morally serve society as citizens (Piccolo et al., 2022). Proper education facilitates the achievement of intelligence and, more importantly, the acquisition of intelligence coupled with character (Y. Xu et al., 2021). Supporting this, Albert Einstein defined that the essential element in instruction is the students' character maturity (Widodo et al., 2020). Thus, education aims to develop a

generation capable of self-actualization and maintain positive behavior by humanizing humans wherever they are, whether in the family, school, or community.

Furthermore, humanist values may be formed and nurtured from an early age through continuous education. As stated by Dewantara (1977), "instilling noble character (values of national character) in children at school is obligatory" (p. 25). The recent dynamics of technology and information require the world of education to be consistent in realizing a better human civilization by preparing the next generation with awareness and good moral character. Internalizing moral and ethical education is the first step in preparing a generation of character. Character education is a deliberate effort to educate, understand, and help students carry out ethical values and have noble personalities (Lickona, 1997).

In Indonesia, the law on the National Education System, Law No. 20 of 2003, confirms the functions and objectives of national education, namely increasing faith and piety and fostering the noble character of students. According to article 3 of Law No. 20 of 2003, national education functions to develop capabilities and shape the character and civilization of a dignified nation in the context of educating the nation's life, aiming at developing the potential of students to become human beings who believe and fear God Almighty, have a noble character, are healthy, knowledgeable, capable, creative, independent, and become democratic and responsible citizens. This definition shows that education's function is to develop

cognitive abilities and, more importantly, build a society with noble character and dignity (Munfarida, 2017; Raharjo, 2010; Tyas et al., 2020). Hence, alternative efforts have been made to prepare the next generation with good moral character, whether formal, informal, or non-formal (Wijayanti, 2014).

Next, encouraging all lines in education to prepare the next generation to behave and be commendable towards themselves and their environment is an obligation, including *pesantren* (Islamic boarding schools) as non-formal education. Recently, Islamic boarding schools have become an early alternative educational program of choice for parents. Islamic boarding schools are responsible for providing their students (*santri*) with human values through character, moral, and ethical education. The success of values education in *pesantren* is proven in several articles, which state that character and moral education in Islamic boarding schools are more effective and efficient in producing a generation of noble characters (Nofiaturrahmah, 2014). An Islamic boarding school educates *santri* to internalize education in 24 hours. These institutions have been trusted to provide religious knowledge and formal education. The continuation of sustainable character, moral, and ethical education is required so that research at this institution has been interesting and has the potential to grow continually.

For their exclusive nature, Indonesian Islamic boarding schools are thought-provoking as relevant research issues

in character education. Indeed, various studies on character education have been carried out in Islamic boarding schools in Indonesia, including F. Arifin et al. (2022), Delvi and Rochmat (2019), Manshuruddin et al. (2019), Noorjutstiatini et al. (2022) and Raharjo (2010). Primarily, innovation is always needed to develop education at the *pesantren* without sacrificing noble values (Zuhri, 2016). Therefore, an evaluation or review of previous studies on humanist education values is also required.

Instilling all positive values in *pesantren* requires some effort with continuous research and reviews. The systematic literature review (SLR) is one method of conducting reviews systematically. It is carried out by identifying, assessing, and interpreting all findings on a particular research topic to answer the research questions (Bettany-Saltikov, 2010; Hariyati, 2010; Nightingale, 2009; Petticrew & Roberts, 2005; Van Klaveren & De Wolf, 2015). A systematic literature review is a structured and planned way or method to identify, assess, and interpret all findings in evidence-based research on a particular topic in order to answer research questions that have been previously determined (Kitchenham et al., 2009; Okoli & Schabram, 2010). Another definition of systematic review is a research method that summarizes the results of primary research to present a more comprehensive and balanced evaluation of facts using a reliable, rigorous (precise and accurate) methodology and can be audited (Chrastina, 2018; Morrell, 2016). The systematic review is a way to summarize

the facts of the research conducted with certain peer-reviewed protocols so that they can be useful for submitting further research agendas (Jones et al., 2017). Single studies selected as data for systematic reviews are called primary studies, while systematic reviews are a form of secondary research (Brereton et al., 2007).

Many studies have combined these two methods, SLR and BA. Potentially, research on this bibliography's systematic summary, synthesis, and analysis could aid future studies to investigate the relevant issues. Those are in green warehousing (Bartolini et al., 2019), supply chain finance (X. Xu et al., 2018), sustainable global sourcing (Jia & Jiang, 2018), and the conducted method (Linnenluecke et al., 2020). However, very few studies focus on systematic literature review and bibliometric analysis of character education, morals, and ethical values in Islamic boarding schools. Thus, this study focuses on summarizing and visualizing studies related to Islamic studies' humanist values of character education, morals, and

ethics. The systematic review is supported by bibliometric visualization analysis (BA), a quantitative technique for analyzing and visualizing bibliographical knowledge on the utilization of journals or articles within helpful patterns and mappings (Huang et al., 2020; Perianes-Rodriguez et al., 2016; Royani et al., 2019; Zupic & Čater, 2015). Table 1 shows the questions addressed in this study.

Furthermore, the discussion of moral education in Islamic boarding schools is described comprehensively. The discussion begins with an explanation of the importance of synthesizing and visualizing, followed by stating the formulation of the problem that has been determined, applying the method, and conducting a systematic search, analysis, and discussion of data. Then, conclusions and recommendations from the findings are stated. This study is urgently important to help future researchers decide the extent of their ideas and the direction of their research challenges (themes).

Table 1

Research questions

RQs	Research questions	Type of Analysis
RQ1	What has been the trending research on character education, morals, and ethics over the past decade?	Analysis of the Scopus database
RQ2	Who are the authors who conducted the research and collaborated?	Co-authorship analysis
RQ3	What are key research areas related to character, morals, and ethical education?	Co-occurrence analysis
RQ4	To what extent did the studies explain the methods of character, morals, and ethics internalization?	Content Analysis (Full-Text Reading)
RQ5	To what extent did the studies of character, moral, and ethical education discuss the values instilled in <i>santris</i> ?	Content Analysis (Full-Text Reading)

MATERIALS AND METHOD

This study uses a systematic literature review and bibliometric analysis (Bartolini et al., 2019; Huang et al., 2020; Jia & Jiang, 2018; Linnenluecke et al., 2020; X. Xu et al., 2018). The protocol stages used as the basis or guidelines are the PRISMA Protocol, consisting of identification, screening, eligibility, and inclusion (Liberati et al., 2009; Page et al., 2021; Shamseer et al., 2015). BA procedures start from determining research objectives, formulating research questions, and formulating search strategies to collect datasets (Donthu et al., 2021; Ellegaard, 2018; Huang et al., 2020). This study combined the systematic stages of SLR and BA because they have similar procedures starting from determining research objectives, formulating research questions, developing search strategies for data collection, and conducting analysis. The whole series of activities in this review are carried out systematically, including the stage of searching the dataset.

Systematic Literature Search

The entire series of activities during this article review was dispensed systematically. The flow actions established within the design (planning section) were followed to guide the research implementation (Brereton et al., 2007; Cooper et al., 2018; Kitchenham et al., 2009). A decade-long dataset was considered sufficient to track research development in this field. The Scopus dataset has wide coverage, clean,

reliable, and comprehensive data that meet the recognized standards for good publisher ratings for analysis and research (Baas et al., 2020).

The dataset collection stage was chronologically started by (1) opening Scopus.com; (2) writing down the search keywords as listed in Table 2 in the searching areas of title, abstract, and keywords. The keywords used are: *character, character education, character values, moral education, moral values, ethics, ethical values, akhlaq, akhlak, moral guidance, attitude, Islamic boarding house, Islamic boarding school, madrasah, santri*, (3) then, states the area boundaries of document type (articles and reviews), and (4) states the years (between 2011 and 2020), (5) After clicking search, the data obtained were 89 articles and reviews.

The data was collected in CSV format and stored in the reference manager, Mendeley. For later BA analysis, data in CSV format must be visualized using Vosviewer software. Meanwhile, the next process is screening or document extraction by applying the inclusion and exclusion criteria set in the previous identification stage.

Inclusion and Exclusion Criteria

At this stage, all articles and reviews were extracted (screened) to determine the data suitable for SLR analysis. The selection criteria are presented in Table 3.

Table 2

The Scopus syntax for SLR and BA

Syntax / Search query	Searching area
(TITLE-ABS-KEY (character* OR "character education" OR "character value*" OR "moral education" OR "moral value*" OR ethic* OR "ethical value*" OR akhlaq OR akhlak OR "moral guid*" OR attitude* OR "Islamic education value*") AND TITLE-ABS-KEY (pesantren OR "Islamic boarding house" OR "Islamic boarding school" OR madrasah OR santri)) AND (LIMIT-TO (PUBYEAR , 2020) OR LIMIT-TO (PUBYEAR , 2019) OR LIMIT-TO (PUBYEAR , 2018) OR LIMIT-TO (PUBYEAR , 2017) OR LIMIT-TO (PUBYEAR , 2016) OR LIMIT-TO (PUBYEAR , 2015) OR LIMIT-TO (PUBYEAR , 2014) OR LIMIT-TO (PUBYEAR , 2013) OR LIMIT-TO (PUBYEAR , 2012) OR LIMIT-TO (PUBYEAR , 2011)) AND (LIMIT-TO (DOCTYPE , "ar") OR LIMIT-TO (DOCTYPE , "re")	title, abstract, dan keyword,

Table 3

Exclusion and inclusion criteria

No.	Exclude Criteria	Excluded Result
1.	Articles are written in other than English.	1 article in Indonesian, 2 articles in Arabic
2.	Articles that are out of context (there are no keywords in the title, abstract, or keywords)	8 articles about (history, NU, and Ramayana, among others)
3.	Type of publication review (other than articles)	4 reviews
4.	Duplication	1 duplicated article
No.	Include Criteria	Excluded Result
1.	Full-text articles about values in Islamic boarding schools, not colleges or high schools.	2 articles in colleges 2 articles in public schools
2.	Full-text articles discuss the values and methods of character, moral, and ethical education in the Indonesian Islamic boarding school.	10 articles: Turkey (2), British, Russia (2), Bangladesh (3), Istanbul, Morocco
3.	The articles mention the values and methods of inculcating character, morals, and ethical values in Islamic boarding schools.	24 out of humanistic values and their methods: management, module, development, gender, jurisprudence, among others

Data extraction with inclusion criteria resulted in 36 articles. The articles were then assessed for eligibility.

Quality Assessment for Eligibility

The data collected will be evaluated using the following quality assessment criteria questions:

- a. Was the paper published in a Scopus-indexed journal between 2011 and 2020?
- b. Is the journal article inclusive of character education concepts assimilated in Islamic boarding schools?
- c. Is there anything in the journal article about internalizing the value of character education in Islamic boarding schools?

Then, for each of the questions above, each article will be marked in the table with an answer as follows: - Y= yes (if it followed the questions), and

- N= no (if it did not follow the questions).

There are 36 articles with the Y dominant answers as the final data.

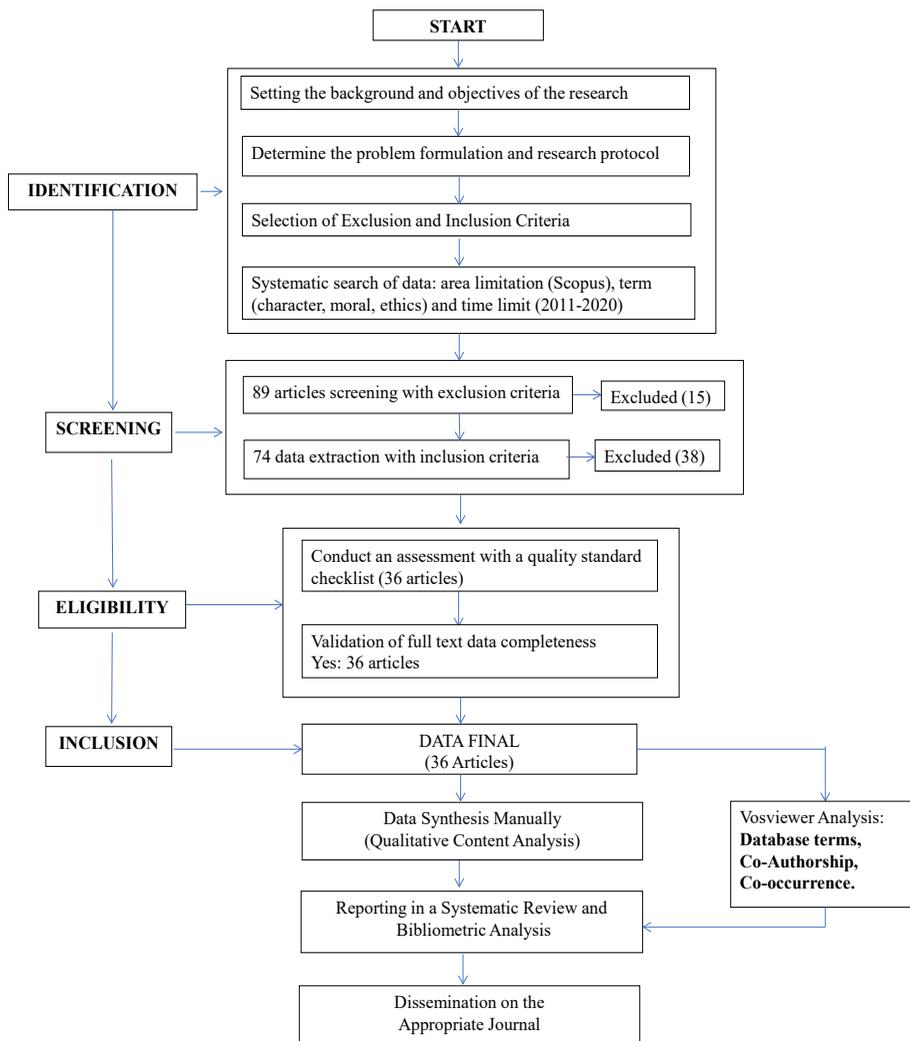


Figure 1. The PRISMA flow diagram of the systematic literature review combining bibliometric

The flow diagram in Figure 1 performs the detailed summary process of SLR and BA in the following steps: (1) In identification, first, the objectives are stated. Then, it is important to develop the review protocol. It continued to define the conceptual boundaries of the study. The following steps are systematic data searching of Scopus, the journal articles from 2011 to 2020, and in Indonesian pesantren, (2) in screening, 89 articles are extracted using the exclusion criteria. Next, 15 articles are excluded, and 74 articles continue to the next level; then, 38 articles are excluded in the inclusion criteria, (3) in eligibility, the articles should be validated and completed, and (4) finally, inclusion fixed 36 articles in the full-text were eligible for the bibliometric analysis using Vosviewer, and the content was reviewed manually. Next, the important phases are reporting and disseminating the results.

Analysis Software (Tools)

VOSviewer Online version 1.6.17 (*Visualization of Similarities-viewer*) was used to map and analyze the data, which can be downloaded from <http://www.vosviewer.com>. Primarily, this software was developed by the University of Leiden, CWTS (Centre for Science and Technology Studies; Waltman et al., 2010). VV online is a useful software for visualizing bibliometric networks or metadata within the realm of bibliography, namely titles, authors, journals, abstracts, and keywords. This latest version of the online VV is equipped with a share menu that helps readers explore the visualization results independently and interactively.

RESULTS AND DISCUSSIONS

In extracting data, the inclusion step selects 36 articles from a total of 74 for full-text analysis. The following data analysis presents visualizations and descriptions based on the order of the determined research questions.

RQ1. Publication Trends in the Time of the Scopus Database

The development of the final document of 36 articles is shown in Table 4.

Table 4

The number of articles published each year

Year	Document number	Percentage
2012	1	2.8
2014	1	2.8
2015	1	2.8
2016	3	8.4
2017	2	5.5
2018	7	19.4
2019	11	30.5
2020	10	27.8
Total	36	100

It shows the number of Scopus-indexed documents on character, moral, and ethical education in Islamic boarding schools. The number continues to increase from year to year. A slight decrease was observed in 2017, but research related to the character of students still exists. From 2018 to 2020, the number of articles continued to increase. The highest number of documents was found in 2019 (n = 11), while 2012 and 2015 have the least amount of paperwork (n =

1). The increasing number of research until 2020 indicates that research on character, moral, and ethical education in Islamic boarding schools remains relevant and has the potential to be developed. Then, 36 articles were analyzed using VV.

The network visualization is used to explore research on character education, what is new, and what has been done before. In network visualization, interrelated terms are presented in previous studies. The visualization consists of 12 clusters, 196 items, 1790 links, and 8442 total link strength. The different colors in Figure 2 saw

the clusters of the terms—the most dominant note in the biggest node. The word ‘Islam’ is linked with the ‘character education model’ and literature. VV online helps the readers to observe the visualization. Online visualization helps readers may do an independent study to discover fresh research concepts by examining connected or disconnected networks. Researchers can use this map to consider new ideas, with existing terms or those not yet in the network. Future researchers are advised to select themes with non-networked keywords considering these results.

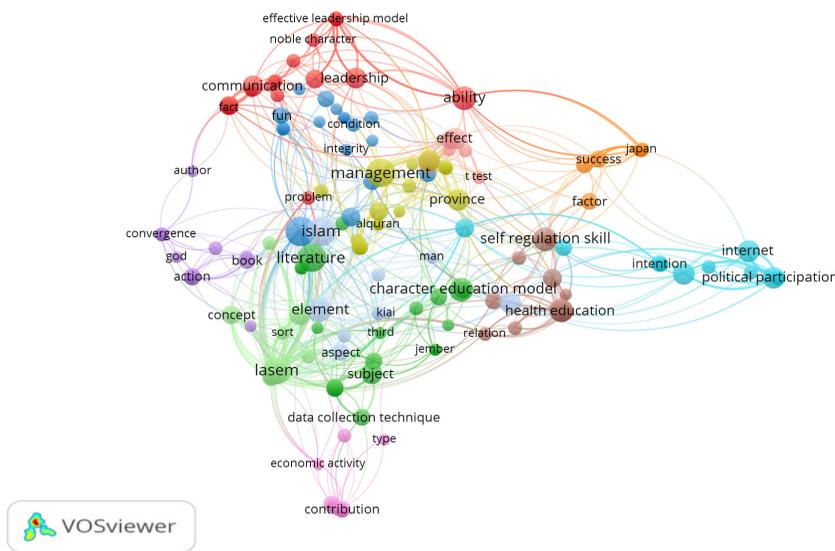


Figure 2. The visualization based on the text data

Source: <https://tinyurl.com/yxar4bjn>

RQ2. Co-Authorship Visualization Analysis

The 36 articles were analyzed using VV. If the number suggested by Vosviewer were enlarged, fewer would meet the criteria and vice versa. Therefore, researchers

must determine the number of the author’s minimum works to be displayed. Vosviewer also asks a question on the authors’ connection before visualizing the dataset on the map, with a “Yes or No” answer. “Yes” means that only the author has a

relationship or connection (network) with each other, while “no” means that all authors do not have a network with each other. In the visualization, the big circle indicates that the author is a top author. In this study, the researcher chose “No.” Then click “Finish.” Finally, VV features a network visualization for co-authorship analysis, as illustrated in Figure 3.

The Web address above is the visualization network sharing available on the latest version of VV. Hereby, the visualization may be accessed by readers interactively. The visualization shows the names of authors networked with at least one document. The circles (nodes) show authors’ names and connections, illustrating clusters or groups of writers networking. There are 96 authors, 36 clusters, and 113

links displayed in the visualization with at least one work. The size of the circle shows the focus or center of each cluster.

The authors with the highest citations are Izfanna and Hisyam, with 17 citations. If the number suggested by Vosviewer is enlarged, fewer will meet the criteria and vice versa. Therefore, researchers must determine the number of the author’s minimum works to be displayed. Several connected names in a cluster indicate that they are collaborating. Thus, the opportunities to collaborate with many writers scattered on the map and have not yet been networked widely open. When many names are clustered together, it indicates that they are cooperating. As a result, several writing opportunities are distributed globally and have not yet established a sizable network.

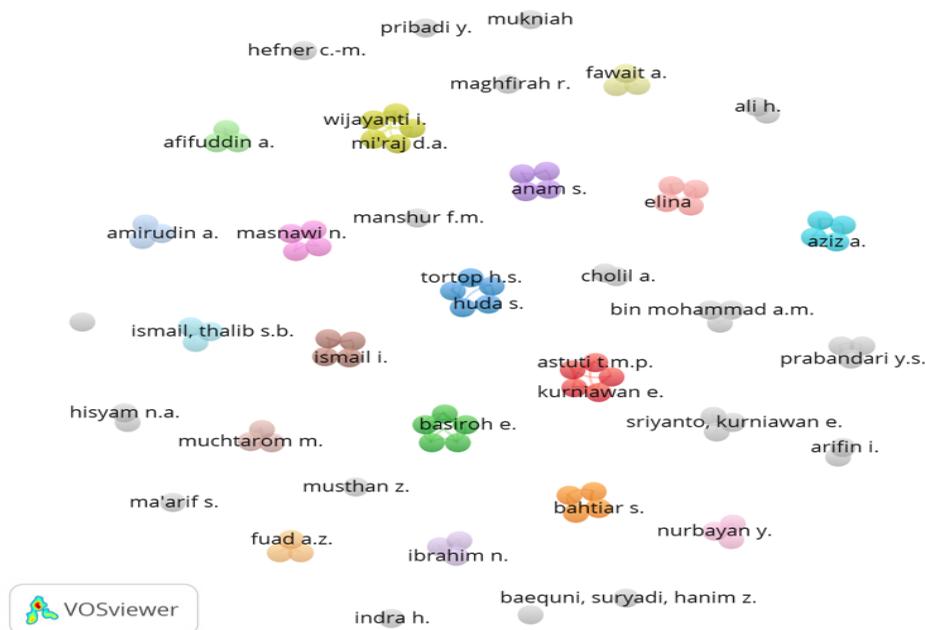


Figure 3. Co-authorship network visualization

Source: <https://tinyurl.com/yya7rfgz>

RQ3. Co-Occurrence: Author Keyword Analysis

Figure 4 shows the result of a co-occurrences analysis on the keywords used in the studies.

The 123 keywords in this visualization meet the requirement to appear at least once in the Scopus dataset from 2011–2020. In this analysis, the author chose the keyword to appear at least once because the number of articles in the dataset is not large so all keywords can be seen in the visualization. The more keywords that appear with no network, the more they represent wider new research ideas. Again, online mapping allows readers to explore independently to find new research ideas by looking at connected or non-connected networks.

The co-occurrence visualization in Figure 5 suggests that the most dominant keyword is “Islamic boarding school.” The keywords “pesantren” are zoomed in and look networked or related to other keywords, namely diffusion of innovation, local wisdom, human values, Islamic law, character, *santri*, and cultural transformation. This finding indicates that these keywords have been written together with others in one of the articles. The keywords “Islamic boarding school,” “health education,” and “attitude” are related. Based on this analysis, future researchers are suggested to choose topics with keywords that have not been networked, such as the word “eco-pesantren,” which has not been

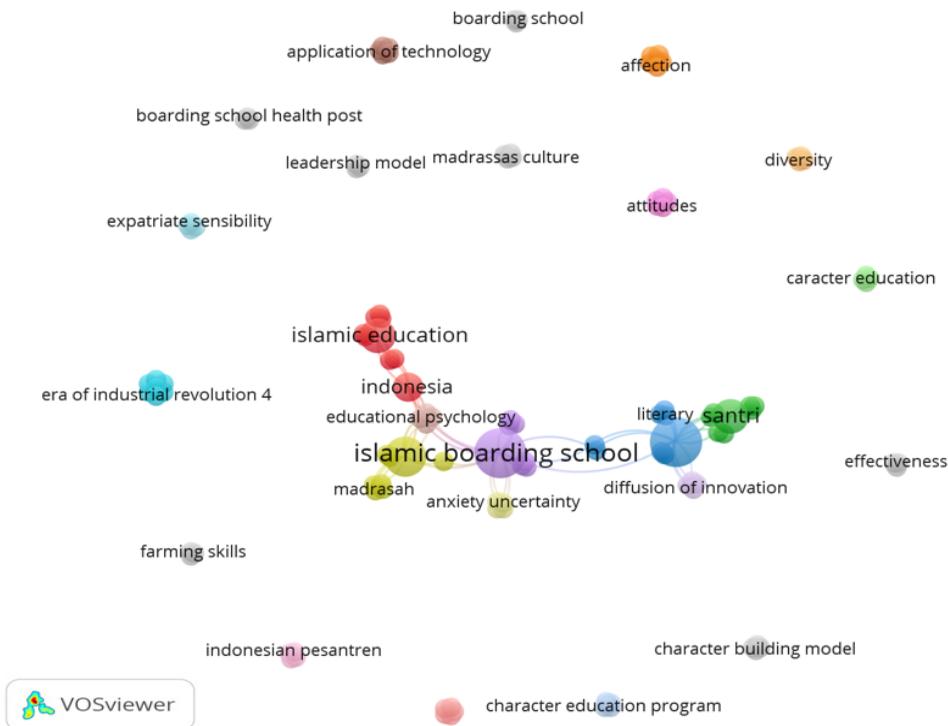


Figure 4. Co-occurrence visualization author keywords

Source: <https://tinyurl.com/y4aow7g>

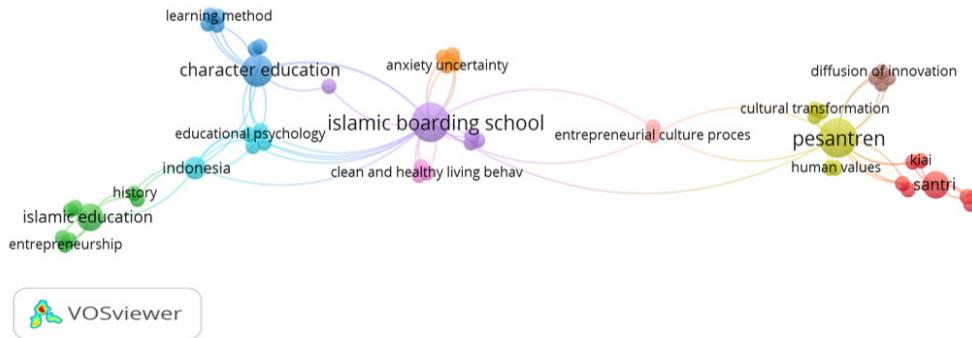


Figure 5. Visualization of co-occurrence, author's keywords

Source: <https://tinyurl.com/y5rgmk4x>

networked yet with the words “*application of technology*” or “*character education program*.”

RQ4. The Methods of Internalizing Character, Moral, and Ethical Values

Furthermore, content analysis was used to investigate variations in applied methods and values. Table 5 summarizes the findings from the 36 full-text data points regarding values and methods. It classifies the values and practices taught to students in Islamic boarding schools to shape their character.

The methods in Table 5 show that most *pesantren* apply role models (example) and habituation through interaction and communication activities of daily students. In learning, the methods applied include integrated thematic learning (religious tolerance and pluralism), *bandongan*, *sorogan*, and social involvement to gain experience and responsibility. The use of technology includes the use of computers and the internet, videos, online newspapers, and digital media. The next method is

integrating health education and behavior to enforce health attitudes by empowering healthcare learning and facilities. The habit of *santri* hygiene influences personal and social behavior in a system of *pesantren*. Finally, the dual role of the teacher is to support and be an example to practice Islamic obligations in self-sufficiency and discipline.

RQ5. The Moral Values

The core noble values for Santris' daily life were synthesized from 36 pieces and recorded as the core noble values for santris' daily life, mixed with Islamic religious principles and social and humanistic values. Those values include (1) religion, (2) honesty, (3) tolerance, (4) discipline, (5) tenacity, (6) creativity, (7) independence, (8) democracy, (9) curiosity, (10) patriotism/loyalism, (11) appreciative achievement, (13) friendliness or communication, (14) peace-loving, (15) reading motivation, (16) environmental consciousness, (17) social consciousness, and (18) responsibility.

It classifies the values and practices taught to students in Islamic boarding schools to shape their character. The core noble values that form *Santris*' daily life were synthesized from 36 articles and recorded as the core noble values for *Santris*' daily life, mixed with Islamic religious principles and social and humanistic values.

Table 5 classifies the values and practices taught to students in Islamic boarding schools to shape their character. The values were synthesized from 36 pieces and recorded as the core noble values for *Santris*' daily life, mixed with Islamic religious principles and social and humanistic values. These values are presented in Table 6.

CONCLUSION

This article presents a systematic literature review using qualitative content analysis and network visualization of 36 articles on the cultivation of commendable character, ethical, and moral values in Indonesian Islamic boarding schools to describe, analyze, and summarize the scope of this research field. Most of the studies focus on the implementation of character education reinforcement strategies and instilling values. The solvency of those issues requires further research, evaluation, and synergy involving all elements of education. Therefore, this SLR and BA provide many contributions, including (1) identifying the contents of previous studies, including methods, discussion, gaps, and others, (2) facilitating the avoidance of

repetitive ideas, thereby saving time and anticipating mistakes that have been made before, (3) the visualizations identify the previous researchers' character, moral, and ethical values, and (4) developing network communications in the same area and field to generate more useful contributions.

As an Islamic educational institution, *pesantren* has a strategic role in inculcating these values. Furthermore, efforts to internalize human values are integrated into various methods of religious learning activities and students' daily activities. The strategies applied include *kyai*/teacher role models (example), habituation, media-assisted, and integration of values education in the learning process, both for religious and general knowledge.

Humanitarian values are religious values, friendliness, communication, environmental and social awareness, and responsibility. Meanwhile, the values are categorized as religious values (Islamic values, spiritual maturity, faith), social-cultural values (loving, tolerance, solidarity, communication, among others), personal maturity (discipline, confidence, responsibility, optimism, among others), and national values (nationalism).

Santri's humanistic values manifested in their awareness of social and habituation methods. In *pesantren*, character and moral education are obtained from religious habituation and general knowledge in multi-discipline areas such as health, technology and information, communication, the nation, the environment, entrepreneurship, and economics.

Table 5
The classification of values and methods

No.	Articles	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Methods
1.	Widyasari et al. (2020)		V		V			V									V		V	Teachers and supervisors role models, peer relationships, using media: video, leaflets.
2.	Mukniah (2020)	V		V										V		V			V	The role modeling, habituation, and openness method (the method of integrated thematic learning)
3.	Manshur (2020)	V		V										V		V		V		<i>Santri's</i> experiences of Arabic literature are typical of <i>pesantren</i> learning, <i>kyai</i> , and teacher as a role model
4.	Helmi (2020)	V												V				V		The implementation values of corporate social responsibility on Islamic learning.
5.	Muassomah et al. (2020)	V		V		V			V					V	V		V	V		Teachers as models; Creative Learning Process using medium; Students' involvement in the learning process using literature messages (aesthetic and intrinsic values)
6.	Tanzeh et al. (2020)	V			V															Improving quality programs in <i>pesantren</i> , such as memorizing Al Qur'an (<i>tahfidz</i> program)
7.	Fawait et al. (2020)		V		V			V		V									V	Applying for character education programs through self-regulated learning

Table 5 (Continue)

No.	Articles	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Methods
8.	Huda et al. (2020)	V		V										V		V		V		The supply chain educational system strategy
9.	Zaki et al. (2020)				V	V	V						V						V	Brainstorming self-reliance and the doctrine of <i>santri</i> entrepreneur, familiarize <i>santri</i> to practice all values properly and responsibly.
10.	Bramantoro et al. (2020)	V						V								V			V	Integrating health behavior and environment in a comprehensive system in <i>pesantren</i>
11.	Rianti et al. (2019)	V														V			V	Empowering health care facilities, forcing healthy attitude
12.	Indra (2019)	V			V	V	V	V	V	V			V							Kyai, teachers as a role model, as a gesture giving full attention to <i>santri</i> , <i>pesantren</i> community
13.	Hefner (2019)	V			V			V										V		Subjective self-direction and reflection to <i>santris</i> ethics, experience, flourishing ethics, and learning on one else.
14.	Putra et al. (2019)									V				V		V			V	Developing learning content through direct and indirect learning, utilizing ICT and digital media. PBL uses online newspapers, videos, and social media.

Table 5 (Continue)

No.	Articles	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Methods
15.	Ridwan et al. (2019)				V									V	V	V	V			ICT-based learning, sharing information, and interaction (teachers- <i>santri</i>)
16.	Baequni et al. (2019)	V		V		V			V	V			V	V	V	V	V	V	V	The implementation of the school-based <i>pesantren</i> educational program, leading the <i>santri</i> to the positive habits
17.	Wardi et al. (2019)				V	V		V					V					V		<i>Santris'</i> students' business awareness by engagement in entrepreneurship activities
18.	Astuti et al. (2019)			V							V				V			V		Harmonious interaction among <i>santris</i> and their society, the role model of Kyai as a tolerant and helpful person.
19.	Anam et al. (2019)	V		V					V								V	V		The exemplary method, habituation, integration into many activities, intensive interaction between educators and <i>santri</i>
20.	Musthan (2019)				V		V						V	V			V			The model of effective leadership
21.	Mas'ud et al. (2019)	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	The addition of Islamic habits and instructions

Table 5 (Continue)

No.	Articles	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Methods
22.	Maghfirah (2018)			V						V						V		V	V	Personal management by lacking anxiety in three ways: observation, learning the language, and adaptation to the habits of a new culture
23.	I. Arifin et al. (2018)	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	Islamic crash course students apply <i>tashih</i> (competence of reading Al-Qur'an), <i>tausihyah</i> (lecturing on Islamic leadership values, and apprenticeship to apply <i>santri</i> 's character, ethics, and moral values.
24.	Sauri et al. (2016)	V	V											V				V	V	Bandongan and Sorogon methods
25.	Cholil & Zanuddin (2018)									V			V	V						<i>Santri</i> uses new media and the internet, and they experience the computer equipment (hardware, software, and how to use it)
26.	Amri et al. (2018)	V		V					V			V		V	V			V		The internalization of pluralist values in the daily process of interaction and learning. <i>Santri</i> becomes the main agent of change. Planting the doctrine of religious tolerance and pluralism

Table 5 (Continue)

No.	Articles	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Methods
27.	Sriyanto et al. (2018)	V									V									Implementation of self-development program integrated through <i>santris</i> daily activities
28.	Ma'arif (2018)							V					V		V		V			Integration of the art of teachings and sciences
29.	Ma'arif (2017)	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	<i>Santris</i> interactions and communications
30.	Suhan et al. (2017)	V	V	V	V	V						V					V			Islamic spiritual leadership practices
31.	Susanto et al. (2016)								V								V			Promote personal health and hygiene environment, coaching <i>santri</i> to practice clean and healthy life
32.	Ismail et al. (2016)												V			V				Character education model
33.	Ali et al. (2016)	V	V		V												V		V	Kyai role model to perform habit of work ethos
34.	Fatchan et al. (2015)	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	Training skill bandongan model
35.	Pribadi (2014)	V																	V	Religious learning, Integrated Syari'ah (Islamic Law) into all daily life aspects.

Table 5 (Continue)

No.	Articles	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Methods
36.	Izfaana and Hisyam (2012)	V						V						V	V			V		Giving support and habit to ibadah (practical Islamic duties), setting good examples and role models, and implementing knowledge, condition, and practice. (Positive and supportive condition of <i>santri</i>)
Total		23	12	13	14	14	7	11	6	13	7	7	11	19	11	12	17	18	17	

Table 6
The noble values of santri

No.	Values	Percentage (%)
1.	religious	9.92
2.	honest	5.17
3.	tolerances	5.61
4.	discipline	6.04
5.	persistence	6.04
6.	creativity	3.01
7.	independence	4.74
8.	democracy	2.58
9.	curiosity	5.61
10.	patriotism/loyalism	3.01
11.	appreciative achievement	4.74
12.	friendliness or communication	8.18
13.	love of peace	4.74
14.	interest in reading	5.17
15.	environmentally conscious	7.33
16.	socially conscious	7.77
17.	responsible	7.33

The analysis results suggest that research on moral values, character, and ethics has many potentials to be carried out in the future with several considerations. Trending research is indexed by Scopus in the field of research on character, morals, and ethics, resulting in a lower number of categorized research. Exploration of this topic is essential because the research results can be a consideration and reference for developing and evaluating its internalization. The

visualization networks show detailed links for mapping the status of topics that have not been widely explored or discussed. This paper's major contribution is an extensive summary of the systematic classification and mapping of character, moral, and ethical values, methods, and the relevant literature.

There are a few key points that should be investigated further. First, all *santri* activities, such as religion, lectures, extracurricular activities, healthy living, and other activities that demonstrate the *pesantren's* individuality, should be supported in creating ways to internalize Islamic boarding school ideals. The combination or integration of these methods can be examined to see whether they can be adopted and reinforced. It indicates that noble principles are taught through various methods, including exemplary, habituation, and activities. Further research is required to strengthen the development of methodologies and tactics in this subject. Future studies on character, morality and ethical education in Islamic boarding schools might investigate new study areas using the findings of this SLR and the visualization of BA.

Given the large number of publications that many international journals have not indexed, it is suggested that future researchers be passionate about publishing in international journals to access their work easily. Writers who pursue research in moral character education in Islamic boarding schools are observed to be unproductive in producing articles on Scopus. For further studies, researchers are suggested

to collaborate with other researchers from various disciplines to generate creativity and new perspectives in *pesantren*. Collaboration is very important and opens the exchange of ideas, knowledge, and expertise from various disciplines. Collaborating results in intellectual friendship. Internationally, it can be accessed more widely in this field.

Finally, the outcomes of past research trends resumption can be observed by evaluating the distribution of the number of recorded keywords based on the year of publication of the researcher. Future researchers may develop and perform bibliometric and SLR research. They should use databases from other indexing journals to attain a wide range of study options.

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