



Bibliometric Mapping of Character Values Education in Schools

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Abstract: This research is motivated by the critical need for an in-depth understanding of research trends concerning character education values within a global context, specifically those indexed in Scopus. The objective is to map and analyze these research trends from 2013 to 2023. The methodology employed is a bibliometric review, with data extracted from Scopus in November 2022 using the keyword "character education values in schools," subsequently analyzed descriptively and through network visualization using VOSviewer. The findings reveal a consistent annual increase in publications, with Universitas Sebelas Maret emerging as the most significant contributor from Indonesia, and the United States as the most productive country of foreign researchers. The most prolific Indonesian researcher is Arifin, and international collaborations predominantly occur with researchers from the United States and the United Kingdom. The dominant research subject is Character Education, with the research development map divided into 7 clusters. The study concludes that the field of character education values continues to evolve, presenting extensive research opportunities. This research contributes to the body of knowledge by providing a comprehensive overview of the trends and directions in character education values research globally, serving as a reference for future researchers in advancing this field.

Keywords: bibliometrics; character values education; vosviewer

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INTRODUCTION

Character education is a crucial foundation in shaping a high-quality young generation (Ramos, 2019). Its purpose is to instill noble values, ethics, and strong morals in children, so that they grow into responsible, integritous individuals who make positive contributions to society (Johan et al., 2018). Previously published articles on character education reveal several gaps that require attention. Previous research tends to focus more on the concepts and theories of character education but pays less attention to its implementation in the field. This results in a gap between expectations and reality. In addition, education often focuses too much on the cognitive development of children, while the character aspect receives less adequate attention. Because education can direct human life towards a better direction. Education is a conscious effort to develop the ability to believe in God, cultivate intelligence, possess noble character, and acquire skills in community life, nationality, and statehood. Schools are educational institutions that must create a good environment, promote good cultural values, and influence student behavior, which is one of the most important factors of a quality school (Golick et al., 2013). Therefore, schools must introduce character values based on national culture in accordance with government guidelines that regulate the implementation of character education at all levels of education in Indonesia; students' potential must be developed so that national goals can be achieved (Ulfa et al., 2021).

School is a place where students can develop their potential, receive learning experiences and opportunities for personality development, and acquire sufficient basic knowledge and skills to prepare themselves for higher levels of participation in society (Antonietti & Colombo, 2013). Character is a part of good morals; it has a certain foundation or standard in accordance with the habits used in each field. Schools are the primary foundation for shaping character, cultivating good behavior in students to strengthen the culture of manners, gentleness, kindness, mutual respect, love for one another, compassion, and willingness to help (Turner-McGrievy & Tate, 2013). Students in schools form the primary foundation for character values (Muhajir & Sudarmi, 2023). If not fortified with restrictions against emulating foreign cultures, adopting external cultural habits, influenced by technological advancements, and following the trends of cultural integration from abroad, it results in behavioral changes and erodes the character values already instilled in students (Smith et al., 2021).

Efforts by teachers to instill character values in students through habituation, exemplary behavior, and integration into subjects form a foundation for curriculum development in line with national education goals. These efforts also include synergizing with parents of students (Syahrul et al., 2018). In line with Rahayu et al. (2021), the purpose of character education is to enhance the quality of education implementation and outcomes, leading to the formation of noble character and morals in students in a holistic, integrated, and balanced manner. Character education is not solely the responsibility of schools; families are the primary educators for children, playing and achieving a more significant role than institutions (Sudarmin & Sukmawati, 2024). Kurniawati et al.

(2022) discuss the role of the family in developing a child's personality by providing gentle treatment and education on the values of life, as well as religious and sociocultural values, which are advantageous factors in preparing a generation with good character and personality. This effort requires cooperation between the school institution and the parents of the students. This is supported by [Kurniawan \(2015\)](#), who elaborates on Ki Hajar Dewantara's theory about the Three Centers of Education: family education, school education, and community education. [Jailani \(2014\)](#) asserts that it is crucial to create an atmosphere within the family that produces a generation of intelligent successors with noble character in the eyes of parents and society. Character education is essentially already formed within students themselves, acquired from home as the first education from parents and continued in schools, both integrated into the learning process and through habituation and examples set by teachers ([Sudarmin & Salmia, 2023](#)). Therefore, character education is a source of values in the education of national culture and personality ([Michelson, 2018](#)).

[Ermawati et al. \(2021\)](#) discuss character education, explaining the instillation of character values within educational institutions and the efforts of teachers in instilling character values in students. In this study, bibliometric analysis, mapping using software, and data screening with Publish or Perish software are employed. This study employs bibliometrics to present and elucidate the research topic ([Leung et al., 2017](#)). Bibliometrics, first introduced by Pritchard in 1969 in his article titled "Statistical Bibliography or Bibliometrics," is defined as the application of mathematical and statistical methods to books or other scientific communication media ([Sulardja, 2021](#)). Bibliometrics offers insights into the growth of literature and the flow of knowledge in a specific field over time by analyzing information collected in databases, such as citations, authors, keywords, or various journals consulted ([Leung et al., 2017](#)). Character education in the educational world has been extensively studied and researched ([Sarceda-Gorgoso et al., 2020](#)). However, researchers find it necessary to conduct a mapping of global scientific publications on integrating character values in education ([Gomet & Attali, 2018](#)). This effort aims to identify trends and topics that have the potential for further investigation related to this subject ([Fuhrmann & Sotelo, 2014](#)). This research aims to understand the role of education in instilling character values in the educational field from 2013 to 2022, to ascertain the direction of scientific concepts, and to identify the educational science network of character values based on countries, keyword co-occurrence, and author collaboration (co-authorship). Based on these research objectives, the author can formulate the following problems: 1) How has education been instilling character values in schools over the last 10 years?; 2) Which country has contributed the most to research on character education in schools over the last 10 years?; and 3) What does author collaboration look like in the instillation of character values in schools over the last 10 years?

Research on character education in 2013 yielded 22 documents, while in 2014, the number of publications on character education decreased to 19 documents. However, in 2016, the number of publications on character education increased again, totaling 30 articles. In 2019, the publication of articles reached 68 documents. Based on these documents, the reason why character values are not well instilled in students can be seen from various perspectives, including less supportive family environments. Character values are not only taught at school but also need to be reinforced at home by parents. If the family environment does not provide examples or lessons on good character values, students tend to have difficulty absorbing and applying them in daily life ([Usmaldi & Amini, 2020](#)).

Another cause is the curriculum and teaching methods in schools that are not yet fully effective. Although many schools have incorporated character education into their curriculum, its implementation is often not maximized. Teaching character values in a theoretical manner without relevant practice in real life makes it difficult for students to truly understand and internalize these values ([McGraw & Fish, 2018](#)). The social environment and media also influence character values. In the digital era, students are exposed to a wide range of information and behaviors through the internet and social media. Without proper guidance and supervision, students can easily be influenced by values that contradict those taught in school and by their family ([Shih, 2022](#)). This highlights the importance of the role of families and schools in monitoring and directing children's media consumption ([Gama & Tavares, 2015](#)). Therefore, families and schools must play an active role in finding solutions to this problem through close collaboration among families, schools, and the community to create an environment that supports students' character development, with an approach to teaching character values that is consistent and includes practices relevant to students' daily experiences ([Sudarmin & Munirah, 2024](#)).

In line with [Amaruddin et al. \(2019\)](#), schools are a continuation of family education. Therefore, cooperation between school and family is crucial. The purpose of character education is to enhance the quality of education provision and outcomes, leading toward the formation of students' character and noble morals in a whole, integrated, and balanced manner ([Hsiao, 2021](#)). Through character education, students are expected to independently enhance and apply their knowledge, study, and internalize and personalize those noble values and morals, so that they are manifested in their daily lives ([Khotimah, 2019](#)). Character education in schools is conducted by instilling values in daily school life, exemplifying the values of teachers within the school environment, and involving the entire school ecosystem ([Fajri & Mirsal, 2021](#)). Character values form the foundation for giving meaning to a concept, and possessing these values is essential for schools to shape and

develop students' personalities in a way that fosters good behavior and compassion (Maulidah, 2019). School is an educational institution where students develop good character, and the purpose of character education is to prepare future generations to understand norms and ethics and to respond to existing challenges (Hsiao, 2021). That is why character education has a significant impact on behavioral development in elementary schools (Lam & Tsui, 2013). The collaboration between teachers and parents in instilling character values involves demonstrating good behavior through role modeling and habituation, enabling students to emulate and look up to these positive examples, and integrating character values into the learning process (Rahayu et al., 2021).

Research on character values often faces the challenge of finding novelty, which is a crucial element in scientific research. Novelty in the context of character values research can be discovered through various approaches, such as the development of new theoretical models, the application of innovative methodologies, or the exploration of previously under-researched contexts (Tang & Hew, 2017). The development of new theoretical models may involve synthesizing different existing theories or proposing new concepts that can more effectively explain certain phenomena within the study of character values (Amaruddin et al., 2019). For instance, researchers could propose a new model that integrates character values with emotional intelligence to gain a deeper understanding of how individuals make ethical decisions in complex situations (Shih, 2022). Applying innovative methodologies is another way to introduce novelty into character values research (Okeke & Drake, 2014). With technological advancements, researchers now have access to new tools that enable the collection and analysis of data in ways previously impossible (Aisyah et al., 2019). For example, the use of big data and text analysis can help in identifying new patterns in how individuals or groups express their character values in social media or online communication.

Exploring contexts that have not been extensively researched before also offers opportunities for discovering novelty in character values research (Gomet & Attali, 2018). This could include studies on character values in cultures or subcultures that have not been extensively explored, or in unique situational contexts, such as during crises or significant social changes (Okeke & Drake, 2014). Through these explorations, researchers can uncover new ways that character values are manifested and influenced by external factors (Palennari, 2023). Overall, the quest for novelty in character values research requires creativity and a willingness to look beyond existing paradigms. With innovative approaches, this research can continue to provide valuable new insights into our understanding of character values and their influence on human behavior (Rosnaeni, 2021). Cooperation between researchers, schools, parents, and local communities plays a crucial role in developing character values among students. Researchers, with their specific knowledge and specialization, are essential in posing critical questions that help explore the needs, challenges, and possibilities in character education (Prompolmaueng et al., 2021). These questions may include strategies for the most effective teaching of values, ways to integrate these values into the curriculum, and the impact of the social environment on student character formation.

The novelty of this research lies in its holistic approach to character education, which focuses not only on theory but also on practical implementation through collaboration among researchers, schools, parents, and the community. This study offers concrete solutions to enhance the effectiveness of character education by identifying evidence-based strategies and actions. Furthermore, it offers new insights into the most effective ways to engage parents and utilize extracurricular activities in student character development, which have often been overlooked in previous research. This research's contribution to science lies in its ability to bridge the gap between theory and practice in character education. Employing organized research methods generates empirical data and evidence that support the development of more adaptive and dynamic character education programs and activities. Moreover, the strong collaboration between researchers and stakeholders enables effective knowledge transfer, allowing the research findings to be directly applied in local contexts. This not only enriches the scientific literature but also makes a tangible impact on improving the quality of character education in society.

The primary gap lies in the lack of research that comprehensively maps the trends and patterns of studies in this field using a bibliometric approach. Most studies still focus on narrative literature reviews or qualitative content analysis, thus failing to provide an in-depth quantitative overview. The novelty of this research lies in its use of bibliometric methods to analyze data from Scopus, enabling the quantitative identification of publication trends, collaboration networks among researchers, and dominant research topics. Furthermore, this study can also identify existing research gaps, such as the lack of research on the implementation of character values in specific educational contexts or the use of technology in character value education. Thus, this research is expected to make a significant contribution to understanding the development of character value education research and provide direction for future studies.

METHODS

This research adopts a qualitative approach, focusing on a literature review that delves into in-depth information from various written sources, including notes, books, papers, articles, and journals, which serve as

the primary foundation for data collection (Sukmawati & Sudarmin, 2023). In bibliometric studies, a form of literature study, data from primary, secondary, or tertiary journals are analyzed from various perspectives to identify patterns and trends, including author affiliations, countries, publication types, subject areas, sources, and publication years, thus providing a comprehensive overview of research development (Venugopal & Pramod, 2023). Literature review in qualitative research is not merely a summary, but involves critical analysis and synthesis to identify key themes, patterns, and gaps, aiding in the development of relevant conceptual frameworks and research questions. Furthermore, literature review helps in understanding historical and theoretical contexts, placing research within a broader context, and identifying different perspectives, which are crucial in qualitative research focused on understanding meaning and interpretation (Akib & Muhsin, 2019). Qualitative research with a literature review approach offers flexibility and depth in exploring topics, yielding rich and meaningful findings, and is highly suitable for understanding complex social, cultural, or psychological phenomena (Liang, 2021).

This research aims to understand the development and research focus in the field of character value education in school environments. Utilizing data from the Scopus database, a leading source of scientific information, this study maps and analyzes trends in scientific publications related to character value education from 2013 to 2023. This analysis encompasses various aspects, including the most researched topics, the research methods used, the most productive authors and institutions, and the evolution of trends over time (Bahri, 2023). The results of this research are expected to provide a comprehensive overview of the direction of research development in character value education in schools, as well as identify areas that require further attention. This research uses the Scopus search engine to identify marketing journals that utilize character value education from 2013 to 2022. Research publications related to character value education from 2013 to 2022 totaled 600, encompassing various document types (Faisal, 2020).

The instrument used in this research is the Scopus database, which collects publication metadata, including titles, authors, publication years, keywords, and abstracts (Sukmawati & Sudarmin, 2023). In this study, the primary instrument used is the Scopus database, a comprehensive source of scientific information. The data collected from Scopus consists of publication metadata, which includes essential information such as article titles, author names, publication years, keywords used, and research abstracts. This metadata is chosen because it provides a clear and structured overview of research trends and developments in the field being studied. By using this metadata, researchers can analyze publication patterns, identify dominant research topics, and understand the contributions of authors in the field. The Scopus database has become a primary source for evaluating scientific research. As one of the world's largest data centers, Scopus indexes scientific literature to provide accurate information regarding the metadata of each scientific article, including publication data, abstracts, references, and more (Valderrama et al., 2015).

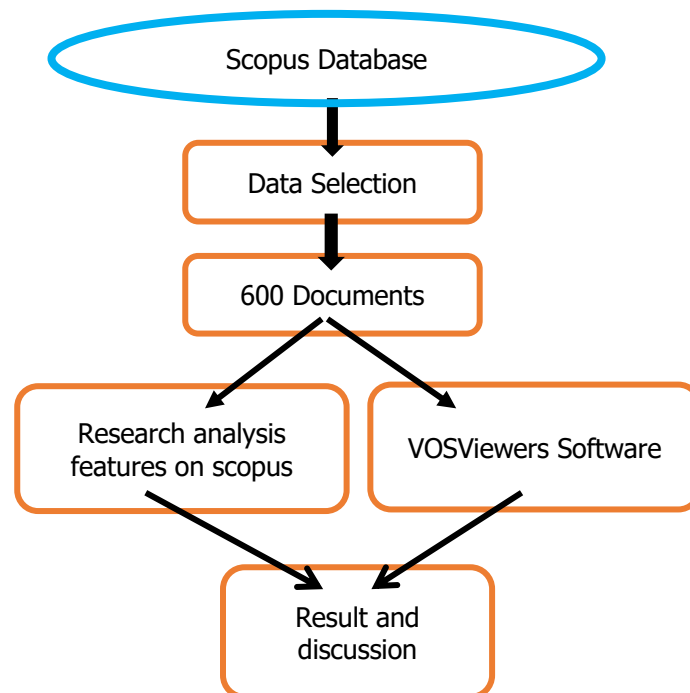


Figure 1. Research Stages.

This study also utilizes VOSviewer to map the scientific research publications on character education values. This research utilizes VOSviewer for the visualization and analysis of co-occurrence in publications.

VOSviewer places special emphasis on the graphical representation of bibliometric maps. VOSviewer is a software tool designed to construct and visualize bibliometric networks. The functionality of VOSviewer is helpful in displaying large bibliometric maps in a transparent and easily interpretable manner (Van Eck & Waltman, 2017). This study aims to categorize topics and narratives in scientific research publications related to character education values, indexed by Scopus, from 2013 to 2023. Qualitative descriptive research facilitates the collection, categorization, mapping, analysis, and visualization of qualitative data gathered from various sources, including papers (such as memos, reports, legislation, and photographic documents), and interviews (Zamawe, 2015). Therefore, this research examines the progress of research on character education values from 2013 to 2023.

RESULT AND DISCUSSION

Data analysis of 600 collected documents indicates that, despite the ongoing development of literature on character education in schools, there remains a gap in the effective and measurable implementation of this approach. Many studies focus on theories and concepts, but few provide practical guidance and comprehensive evaluations on how to integrate character values into the daily school curriculum and activities. Furthermore, there is a need for more in-depth research on the roles of teachers and parents in supporting character education, as well as how to adapt character education approaches to diverse cultural and social contexts.

The novelty and contribution of this research lie in its attempt to develop a comprehensive and integrated framework for character education in schools. This research synthesizes findings from various disciplines, including psychology, sociology, and education, to develop a comprehensive and sustainable model. Additionally, this research focuses on developing valid and reliable evaluation instruments to measure the impact of character education on student development, in cognitive, affective, and psychomotor aspects. Thus, this research is expected to provide a significant contribution to enhancing the quality of character education in schools and producing a generation of young people with strong character and competitiveness. The results of character education research, as documented in Scopus journals, are presented in Figure 2.

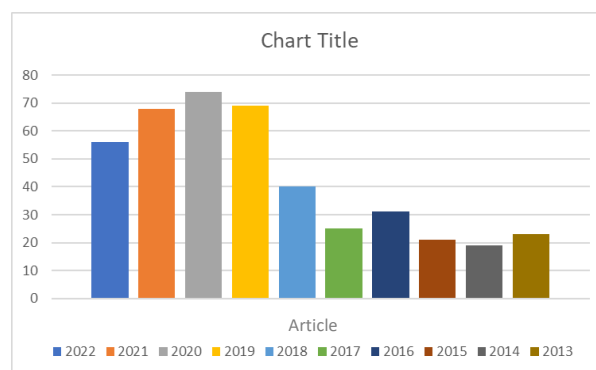


Figure 2. Publications Based on Years

As illustrated in Figure 2, research on character education reached 22 documents in 2013. In 2014, the number of publications on character education declined to 19 documents, whereas in 2016, it increased again to a total of 30 articles. By 2019, the publication of articles reached 68 documents. Therefore, it is recommended that authors submit their articles to journals with a primary focus on character education in schools, as this provides optimal focus and development for implementing character education within this sector. Several publishers issue articles on the education of character values, but ten publishers do so more frequently. In the publication of articles related to the education of character values, as shown in Figure 3.

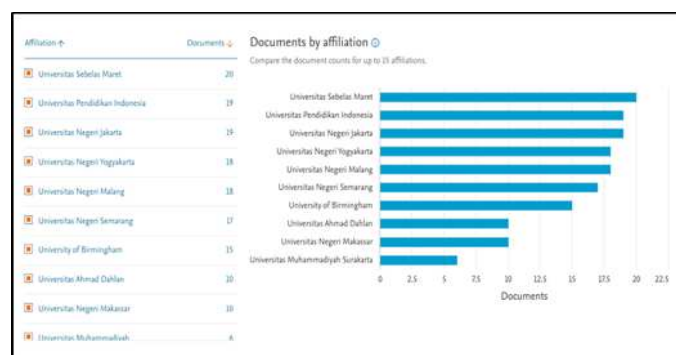


Figure 3. Publications Based on Publishers

Several publishers have published articles on character education values as seen in the image above. Most articles on character education values, based on the analysis of data obtained in the Scopus database, were published by Universitas Sebelas Maret, followed by Universitas Pendidikan Indonesia and Universitas Negeri Jakarta. Universitas Muhammadiyah Surakarta has the lowest number of articles published on character education values. Involves a network of collaboration or partnership with publications from several countries. The country that contributes the most to the research findings on character education values, indexed by Scopus, is achieved through a network of collaborations with several countries, as shown in the following table.

Create Map

Verify selected countries

Selected	Country	Documents	Citations	Total link strength
<input checked="" type="checkbox"/>	indonesia	227	498	14
<input checked="" type="checkbox"/>	united states	65	576	12
<input checked="" type="checkbox"/>	united kingdom	43	267	7
<input checked="" type="checkbox"/>	malaysia	6	6	6
<input checked="" type="checkbox"/>	china	9	21	5
<input checked="" type="checkbox"/>	australia	9	107	3
<input checked="" type="checkbox"/>	germany	3	75	3
<input checked="" type="checkbox"/>	italy	1	71	3
<input checked="" type="checkbox"/>	norway	1	71	3
<input checked="" type="checkbox"/>	taiwan	8	57	3
<input checked="" type="checkbox"/>	hong kong	7	20	2
<input checked="" type="checkbox"/>	south korea	18	61	2
<input checked="" type="checkbox"/>	bahrain	1	2	1
<input checked="" type="checkbox"/>	brunei darussalam	1	1	1
<input checked="" type="checkbox"/>	canada	3	40	1
<input checked="" type="checkbox"/>	japan	2	8	1
<input checked="" type="checkbox"/>	malta	1	8	1
<input checked="" type="checkbox"/>	netherlands	3	12	1
<input checked="" type="checkbox"/>	new zealand	1	9	1
<input checked="" type="checkbox"/>	portugal	1	6	1

Figure 4. Research Publications Based on the Country

Based on the table above, it shows that researchers with the theme of education on character values in Indonesia have the highest number at 227 documents, 498 citations, collaborating with the academic community from the United States with 65 documents, 576 citations, followed by the academic community from the United Kingdom with 43 documents, 267 citations. The countries with the least collaboration are Brunei Darussalam, Malta, New Zealand, and Portugal, each with only one document.

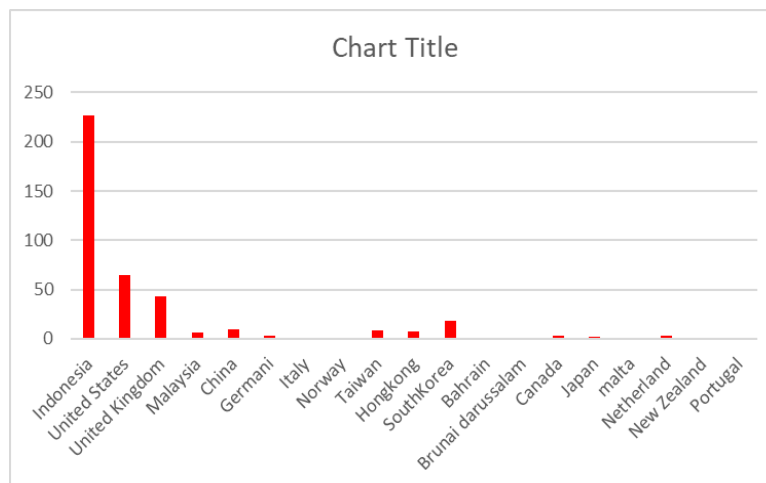


Figure 5. Number of Publications in Each Country

Based on Figure 5, researchers in the field of education in Indonesia are the most numerous, followed by the academic community from the United States, and then the academic community from the United Kingdom. As for the countries with the least collaboration, they are Brunei Darussalam, Malta, New Zealand, and Portugal. Scientific research from the Scopus database, with the title "Character Values Education" from 2013 to 2022, resulted in 600 documents written by researchers. The image shows the twenty authors who have contributed the most to scientific research on character values education in schools. Authors of articles related to character education and character values in schools were analyzed via VOSViewer. There is a minimum of three articles from previous researchers, while the maximum is eight articles. As a result, 20 researchers who met the criteria were identified.

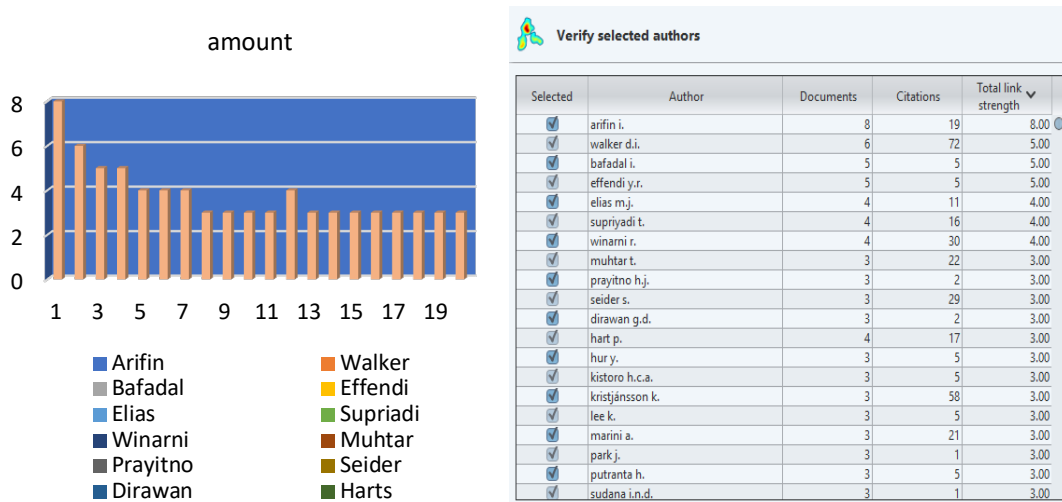


Figure 6. Research Publications Based on Authors

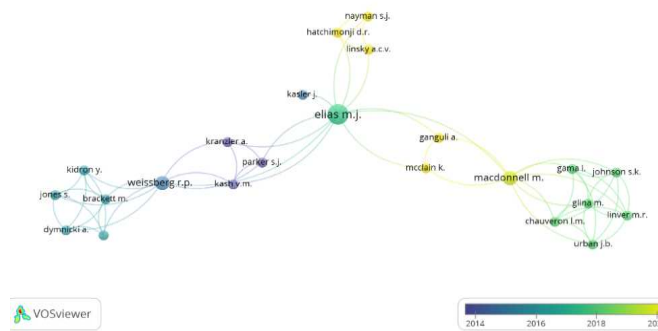


Figure 7. Network Visualization of Co-Authorship

In Figure 7, a network visualization of co-authorship is depicted, marked by the presence of nodes (circles) representing authors or researchers, and edges (connections) representing the relationships among authors or researchers. A collection of nodes connected by edges indicates a correlation or relationship among researchers in a study titled "Education of Character Values in Schools". Bibliometric analysis based on the researcher or author (author) focuses on Elias M.J. The network illustrates the existence of relationships or collaborations among authors, such as the edge connecting author Elias M.J. with other authors. Bibliometric analysis is carried out by creating visualizations in the form of networks, overlays, and densities, which aim to determine the bibliometric network between articles or online publications based on downloaded metadata. From the results of the search through the Scopus database, 600 documents on the development of research on character values education were obtained, then inputted and analyzed using VOSViewer. The result is presented in Figure 8.

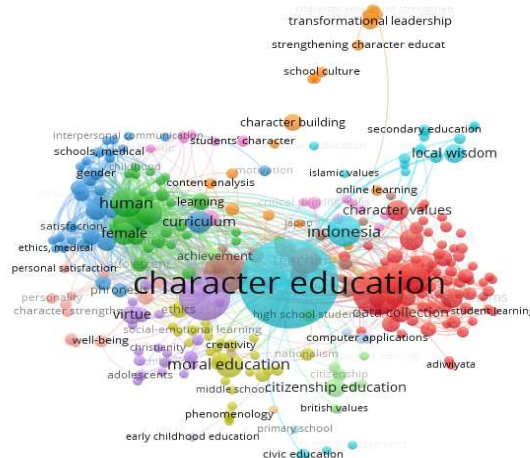


Figure 8. Research Publications Based on Keywords

In network visualization of co-occurrence, which explains the network or relationship between one term and another in research on character education from 2013 to 2022, based on 600 articles indexed by Google

Scholar, the following sentences are grouped into seven clusters that can be identified through the color of each keyword node. Cluster 1, symbolized by the color red, includes terms related to character values. Cluster 2, symbolized by light blue, consists of terms such as character education. Cluster 3, symbolized by purple, consists of terms such as character education, and Cluster 4, symbolized by yellow, consists of terms like moral education, and so on. Cluster 5, symbolized by orange, consists of terms such as achievement. Cluster 6, symbolized by green, consists of terms such as human, female, curriculum, learning, and others. Cluster 7, symbolized by dark blue, consists of terms such as gender, school medical, medical ethics, and others.

Research on character values demonstrates that this field remains a popular topic and continues to grow year by year in various countries. The context of character education for developing student character values aims to create a school environment that supports students in instilling ethics and responsibility through character value education. Character values should indeed be instilled in students so that they can apply them in their lives, whether it be in their family, school, community, or country, thereby contributing positively to their environment. Therefore, research on character value education becomes the focal point of learning activities that warrants further investigation. This is due to the developments of the times that require educators to give their best to students. Therefore, researchers need to explain the research trends on character value education, in terms of the number of publications over the last 10 years, related keywords, authors, and the relationships between authors. Not only that, but authors also create narrative maps and identify topics that have the potential to be further studied, which makes this research important. The contribution of several countries, based on VOSviewer data, shows that Indonesia is the country contributing the most, followed by the United States and the United Kingdom, while the least contribution is made in collaboration with Italy and some other countries. Scientific research from the Scopus database on the theme of character value education in the last ten years has resulted in researchers writing 600 documents. Twenty authors have made the most significant contributions to scientific research on character value education.

VOSviewer mapping analysis has themes related to character value education. This means that these themes have been frequently researched in Scopus journals from 2013 to 2022, resulting in 600 documents. This can become a new theme in terms of research and reference material for further research development. This aligns with [Utami et al. \(2019\)](#), who suggest that research is needed to analyze the increase in the use of instructional media in the teaching and learning process and efforts to enhance character values in students. [Hindarto and Nugroho \(2018\)](#) state that 70.53% of students reported that the education of character values poses a challenge in further research to instill character values in students. As the researcher conducts data analysis related to the theme of character value education, in accordance with relevant articles for this research. This becomes one of the researcher's supports in terms of obtaining research data.

The purpose of character education is to enhance the quality and outcomes of education, thereby fostering the development of students' character and noble morals in a holistic, integrated, and balanced manner. Through character education, students should be able to independently enhance and apply their knowledge, study, and internalize and personalize these noble moral values so that they are manifested in their daily lives. Character values serve as the basis for giving meaning to a concept and the significance of having moral values and ethics, which can shape students' good personalities, enabling them to apply these values at school and form and develop their personalities, thus behaving well and showing great compassion. The school itself is an educational institution where students develop good character, and the goal of character education is to prepare future generations to understand norms and ethics and meet the challenges that exist. That is why character education has a significant impact on the development of student behavior in school.

Character values education in students is not only to provide knowledge about the difference between good behavior and behavior that does not conform to ethical values and norms, but the education of character values is an effort to instill good character and traits through habituation and the example of teachers and the integration of character values with subjects in the learning process. Instilling character values in students is inseparable from the teacher's ability to integrate character values into the learning process, and teachers become role models for students in promoting noble behavior as a reinforcement of character value formation.

CONCLUSION

Based on the results of bibliometric analysis in the Scopus database from 2013 to 2023, research on character value education in schools has experienced a significant increase, indicating a growing global concern for the importance of character in education. Research trends indicate a focus on integrating character values into the curriculum, utilizing technology in character education, and examining the influence of sociocultural factors on character development. International and interdisciplinary collaboration is increasingly crucial in this research, with significant contributions from the fields of psychology, sociology, and education. Future research needs to expand its focus on the practical implementation of character education in various school contexts and the measurement of its long-term impact on student development.

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