Analyzing Trends in Quality and Character Education: A Bibliometric Approach

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Abstract

This research employs a bibliometric approach to analyze research trends in quality and character education, utilizing data from 161 articles sourced from the SCOPUS database. The analysis reveals central themes, such as character education, ethical development, and curriculum integration, highlighting significant contributions from prominent authors and global collaborations. Despite extensive research, gaps were identified in practical implementation strategies and the exploration of character education's role in addressing societal issues like corruption. The findings underscore the need for future research to develop effective, culturally responsive strategies and to explore digital and interdisciplinary approaches. By addressing these gaps, this study aims to enhance the understanding and integration of quality and character education, contributing to improved educational outcomes and holistic student development.

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Introduction

Quality education has increasingly become a focal point in educational discourse worldwide. As education systems evolve to meet the demands of the 21ˢᵗ century, the integration of character education with academic learning is seen as essential for the holistic development of students (Hadi et al., 2022; Sudadio, 2021). Quality education, as emphasized by international bodies like UNESCO, aims not only to impart knowledge but also to cultivate ethical, social, and emotional competencies in students (Lloyd-Jones, 2021; Teeple & Benolken, 2022). The global landscape of education is undergoing significant transformation. Countries around the world are recognizing the need to move beyond traditional metrics of academic success, such as standardized test scores, to a more comprehensive understanding of educational outcomes that include character development. This shift is driven by the recognition that academic knowledge alone is insufficient to prepare students for the complexities of modern life. Employers, community leaders, and policymakers increasingly emphasize the importance of soft skills, ethical judgment, and social responsibility (Godonoga & Sporn, 2023; Zahra & Maryanti, 2022).

Character education, therefore, encompasses the teaching of values, such as respect, responsibility, and integrity, which are fundamental for personal development and societal well-being. Internationally, there are numerous initiatives aimed at promoting quality and character education. For instance, the United Nations' Sustainable Development Goal 4 (SDG 4) aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. Within this framework, the focus is not only on access to education but also on the quality and relevance of educational content (Guarini et al., 2021; Sanabria-Z et al., 2022). Character education aligns with this goal by fostering a holistic educational approach that prepares students to contribute positively to society (Kiersch & Gullekson, 2021).

However, the integration of character education into this framework remains underexplored. One of the fundamental issues in current research is the insufficient synthesis of existing literature that connects various research on quality and character education (Abduloh & Ahmad, 2017; Bier et al., 2023; Panggabean et al., 2022; Tambovtsev & Rozhdestvenskaya, 2020). Several researchers have addressed these topics separately, leading to a gap in understanding how they intersect and influence each other.

Furthermore, the methodological approaches used in existing research often lack the robustness needed to capture the complex dynamics of these fields comprehensively. Traditional literature reviews may not adequately reveal the evolving trends and influential works within the research landscape. Khuram et al. (2023) emphasized that a bibliometric analysis can provide a more systematic and quantitative method for mapping research trends, identifying key publications, and understanding the development of research themes over time. Such an approach can offer deeper insights into the interconnectedness of quality and character education.

This research aims to address these gaps by utilizing a bibliometric approach to analyze documents sourced from the SCOPUS database. Bibliometric analysis offers a powerful tool to map the research landscape, providing insights into authorship patterns, citation networks, and the evolution of research themes over time. By doing so, this research seeks to uncover

significant trends and emerging areas of interest in quality and character education, offering valuable guidance for future research and policy development.

This research will contribute to a deeper understanding of the current state and future directions of quality and character education research. This research will thus provide valuable insights that can help educators, policymakers, and researchers develop more effective strategies for enhancing quality and character education.

Methodology

This research employs a bibliometric approach to analyze the research trends in quality and character education, utilizing data sourced from the SCOPUS database (Pham-Duc et al., 2022). Bibliometric analysis is a powerful quantitative method that allows researchers to systematically map the research landscape by examining various bibliographic elements, such as publication output, citation patterns, authorship, and keyword usage (Baas et al., 2020). This method provides a comprehensive overview of the research field, highlighting influential works, emerging themes, and collaborative networks.

Data collection

The data for this research was collected from the SCOPUS database, one of the largest and most comprehensive abstract and citation databases of peer-reviewed literature. A systematic search used specific keywords related to quality education and character education. These keywords were applied to the articles title, abstract, and keyword fields to capture a wide range of relevant literature. Boolean operators (AND, OR) will help refine the search results (Mastan et al., 2022). The search terms included "Character Education" OR "Character Building" AND "quality." The search was limited to documents published up to 2024 to ensure the inclusion of the most recent research trends. A total of 161 articles were identified and included in the analysis.

Data analysis

The bibliometric analysis was conducted using several bibliometric indicators and tools. The key steps involved are outlined below:

- Publication Output Analysis: The first step involved analyzing the annual publication output to identify trends in research activity over time. This analysis helps to understand the growth of the field and periods of increased research interest.
- Authorship and Collaboration Analysis: This analysis aimed to identify the most prolific authors and country and their collaboration networks. Co-authorship patterns were examined to determine the extent of collaboration among researchers and the formation of research clusters.
- Keyword Analysis: Keyword co-occurrence analysis was conducted to identify prevalent themes and emerging topics in quality and character education. By examining the frequency and co-occurrence of keywords, the research reveals the key areas of focus and the relationships between different research topics.

The data were processed and analyzed using various bibliometric software tools. VOS viewer was employed for network visualization and clustering analysis. This tool allows for maps based on bibliographic data, facilitating the identification of research fronts and intellectual structures within the field. Additionally, Microsoft Excel was used for data cleaning, descriptive analysis, and basic statistical calculations.

Limitations

While bibliometric analysis provides valuable insights into research trends and patterns, it has definite limitations. The analysis is limited to the data available in the SCOPUS database, which may not include all relevant publications in the field. Furthermore, bibliometric indicators, such as citation counts may be influenced by factors unrelated to the quality or impact of the research, such as publication venue or self-citations. Despite these limitations, the bibliometric approach offers a robust and systematic method for mapping the research landscape and identifying key trends in quality and character education.

Findings and Discussion

Publication output analysis

The first step involved conducting a thorough analysis of the annual publication output to identify trends in research activity over time. This analysis is crucial for understanding the growth trajectory of the field, pinpointing specific periods of heightened research interest, and revealing potential cycles of increased academic focus. By examining these temporal patterns, the researchers can gain insights into the dynamics of scholarly attention and the evolving priorities within the domains of quality and character education. To provide an overview of publication output, the researchers collected documents that had previously been obtained from Scopus and then entered them into the *R. Studio Biblioshiny* program. The results of the Publication Output Analysis can be seen in Figure 1 below.

Figure 1. *Publication output overview*

Timespan	Sources	Documents	Annual Growth Rate
1936:2024	130	161	2.53 %
Authors	**Authors of single-authored docs**	**International Co-Authorship**	**Co-Authors per Doc**
423	46	9.317 %	2.73
Author's Keywords (DE)	**References**	**Document Average Age**	**Average citations per doc**
435	6018	7.39	10.24

Figure 1 above presents an overview of the publication output from the bibliometric analysis conducted on research related to quality and character education. This overview provides a comprehensive snapshot of the key metrics and trends within this research field, spanning from 1936 to 2024.

The dataset encompasses 161 articles sourced from 130 dissimilar sources. The documents reflect the contributions of 423 authors, with forty-six authors having single-authored documents. It highlights a significant level of collaborative research, further emphasized by the average of 2.73 co-authors per document. The presence of international co-authorship is notable at 9.317%, indicating a robust global collaboration in the field. Author keywords (DE) total 435, reflecting a diverse array of topics and themes explored within this research area. This diversity is crucial for identifying emerging trends and focal points in literature. The reference count of 6018 further underscores the depth of research and the extensive engagement with existing literature, providing a rich foundation for ongoing research.

The average citation per document stands at 10.24, illustrating the impact and relevance of the research conducted. High citation counts often correlate with the significance and influence of the publications, suggesting that the documents analyzed are well-regarded within the academic community. The analysis shows an annual growth rate of 2.53% in publication output, suggesting a steady increase in research activity over the years. This growth rate points to an expanding interest and investment in the domains of quality and character education. Additionally, the document's average age of 7.39 years indicates the field is mature, with a blend of foundational and contemporary research contributing to the current understanding.

To clarify the annual growth in publications, the researchers created the annual publication growth diagram shown in Figure 2. This data was obtained directly from Scopus without further data processing by the researchers. The diagram illustrates the number of documents published in each of the last ten years, showing fluctuations over this period. Notably, there was a decline in publications in 2015, followed by a gradual increase peaking in 2018 with fourteen documents and again in 2020 with eighteen articles. These peaks suggest growing interest and investment in research related to quality and character education during these years.

However, the data also shows fluctuations with a decline in 2021 and another peak in 2023 with eighteen articles. These variations could be due to changes in research funding, academic interest, or external factors like the COVID-19 pandemic (Baxter et al., 2023; De' et al., 2020). Despite these fluctuations, the general trend indicates an upward trajectory in research output, reflecting the increasing recognition of the importance of quality and character education. Understanding these trends helps identify periods of heightened research activity and potential gaps for future research.

Figure 2. *Annual publication growth*
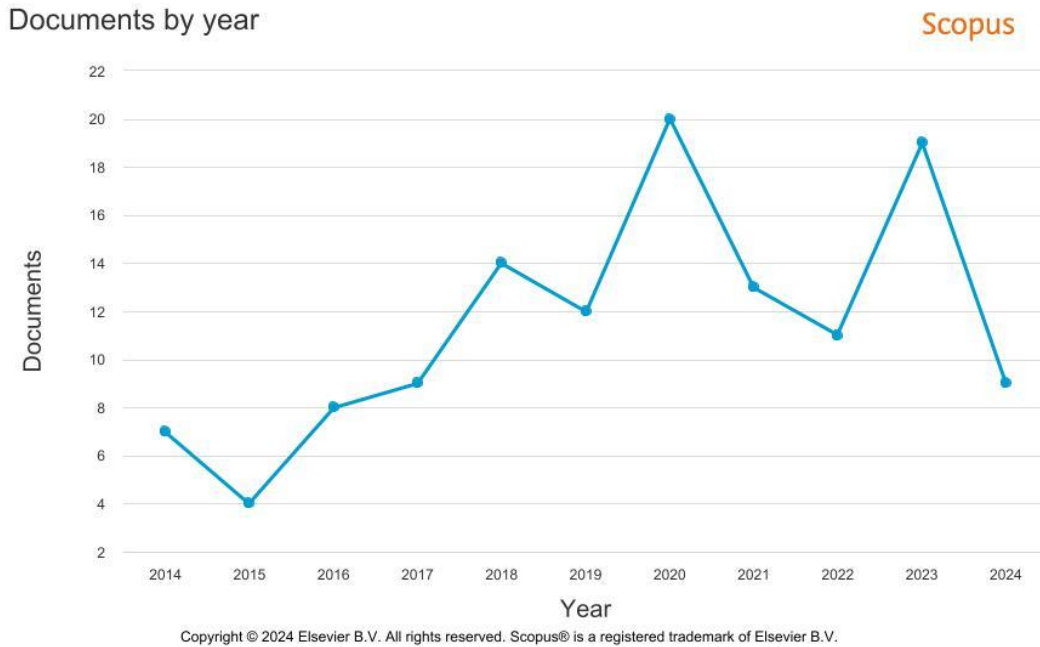
Documents by year — Scopus

Authorship and collaboration analysis

This analysis aimed to identify the most prolific authors and countries, as well as their collaboration networks. By examining co-authorship patterns, the researchers sought to determine the extent of collaboration among researchers and to identify the formation of distinct research clusters. This approach provides insights into the collaborative dynamics within the field, highlighting key contributors and the geographic distribution of research activities. To conduct an Authorship and Collaboration Analysis The first step the researchers take is to analyze the top ten most cited articles presented in Table 1 below.

Table 1. *Top ten most cited articles*

No	Author	Title	Total Citations	TC per Year
1	Cohen (2006)	Social, Emotional, Ethical, and Academic Education: Creating a Climate for Learning, Participation in Democracy, and Well-Being	401	21,11
2	Osher et al. (2016)	Advancing the Science and Practice of Social and Emotional Learning: Looking Back and Moving Forward	158	17,56

3	Sanderse (2013)	The meaning of role modelling in moral and character education	122	10,17
4	Campbell et al. (2007)	Adolescents' Expressed Meanings of Music in and out of School	113	6,28
5	Harrington et al. (2001)	Evaluation of the All-Stars Character Education and Problem Behavior Prevention Program: Effects on Mediator and Outcome Variables for Middle School Students	88	3,67
6	Latorre-Cosculluela et al. (2021)	Flipped Classroom model before and during COVID-19: using technology to develop 21st century skills	69	17,25
7	Çubukçu (2012)	The effect of hidden curriculum on character education process of primary school students	47	3,62
8	Cheung & Lee (2010)	Improving social competence through character education	39	2,60
9	Snyder et al. (2012)	Improving Elementary School Quality Through the Use of a Social-Emotional and Character Development Program: A Matched-Pair, Cluster-Randomized, Controlled Trial in Hawai'i	33	2,54
10	Retnawati et al. (2018)	Strategy and Implementation of Character Education in Senior High Schools and Vocational High Schools	30	4,29

Table 1 above presents the top ten most cited articles in quality and character education, highlighting their total and average citations per year. The article by Cohen (2006) leads the list with 401 total citations and an average of 21.11 citations per year. This high citation count underscores the significant impact and influence of Cohen's work in promoting a holistic approach to education. Following Cohen, the article by Osher et al. (2016) has 158 total citations and an average of 17.56 citations per year, indicating its substantial contribution to social and emotional learning practices.

The remaining articles also reflect diverse and influential contributions to the field. For instance, Sanderse's work on role modeling in moral and character education has garnered 122 citations with an average of 10.17 citations per year, highlighting the importance of role models in character development. The impact of innovative educational models is evident in Latorre-Cosculluela et al.'s research on the Flipped Classroom model during COVID-19, which has sixty-nine citations and an impressive 17.25 citations per year. Overall, the table illustrates a range of influential research that have shaped the discourse on quality and character education, emphasizing the multifaceted approaches and significant research efforts dedicated to improving educational outcomes through character development and social-emotional learning.

Figure 1 displays the top ten most productive authors in quality and character education, as measured by the number of articles they have published. Leading the list is Harrison, T., with three publications. It indicates Harrison's significant contribution to the research landscape, suggesting a focused and sustained engagement with topics related to quality and character education. Following closely are Seider, S., and Berkowitz, M.W., each with slightly fewer publications, demonstrating their active involvement and influential roles within the academic community.

The other authors, including Cruz, P.J.S., Feio, A.O., Gomez, J., Hur, Y., Linver, M.R., Novick, S., and Pinto, A., each have a similar number of publications, highlighting a collaborative and competitive research environment. This distribution of productivity suggests a well-established network of researchers contributing to the development and dissemination of knowledge in this field. The presence of multiple authors with comparable publication counts underscores the collaborative nature of research in quality and character education, fostering a diverse and dynamic academic discourse.
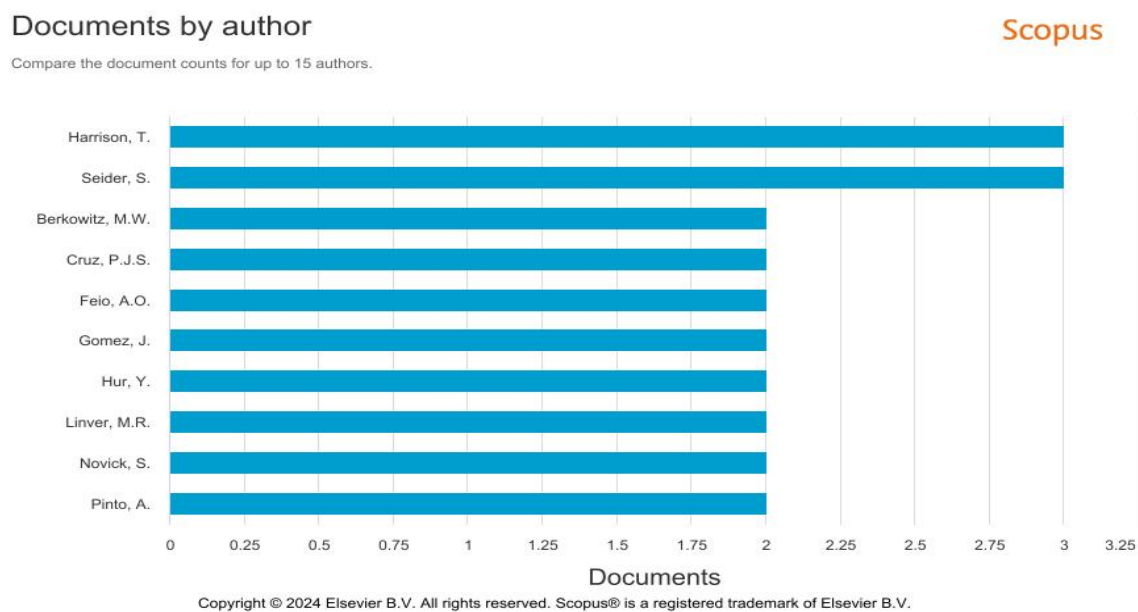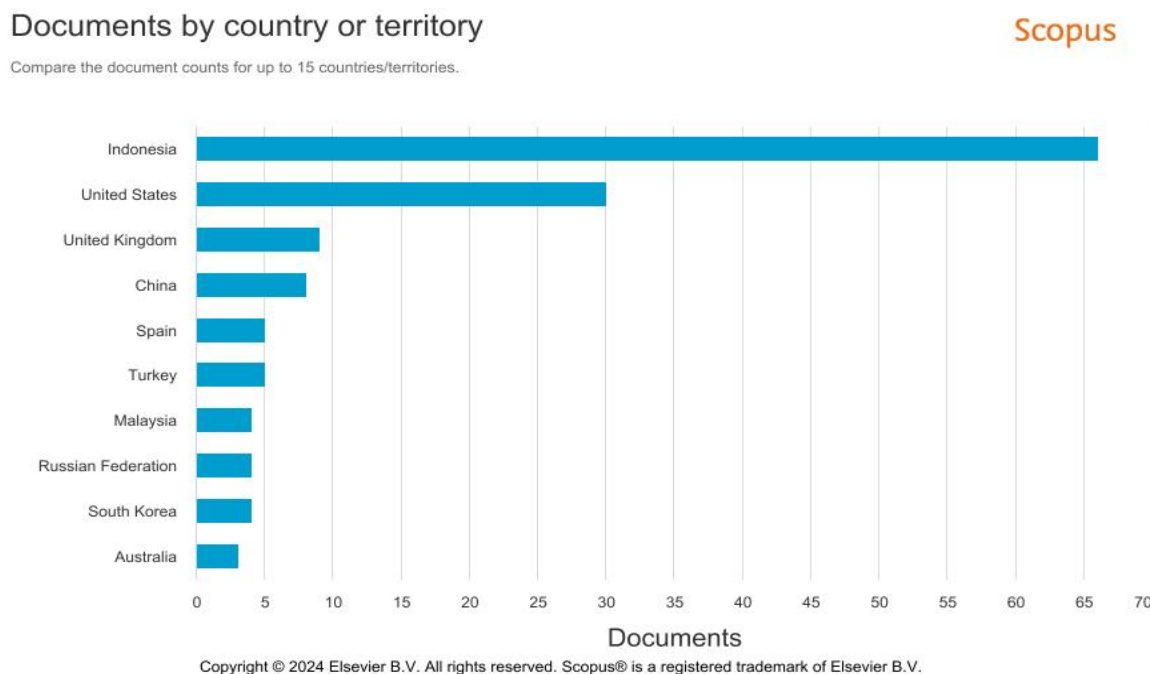
Figure 3. *Top 1o most productive author*

Figure 4 illustrates the top ten most productive countries in quality and character education, based on the number of documents published. Indonesia leads with approximately sixty-five publications, highlighting the country's significant research focus and commitment to advancing research in this area. This strong output suggests robust academic and institutional support for research in quality and character education within Indonesia, which aligns with the country's broader educational goals. The prominent role of Indonesian researchers in this field is noteworthy and reflects a dedicated effort to contribute to global academic discourse on quality and character education.

The United States follows with around fifty-five publications, indicating its influential role and substantial contributions to the research landscape. This reflects the well-established educational research infrastructure in the United States and the prioritization of character education within its academic community. Other countries like the United Kingdom, China, and Spain also contribute notably, demonstrating a global interest in these topics. This geographic diversity underscores the widespread recognition of the importance of quality and character education and the collaborative international efforts to explore and enhance these educational paradigms. Understanding the contributions from these various countries helps to identify key research hubs and potential areas for future international collaboration in quality and character education.

Figure 4. *Top ten most productive country*

Documents by country or territory — Scopus

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Keyword analysis

The Keyword co-occurrence analysis was conducted to identify prevalent themes and emerging topics in quality and character education. By examining the frequency and co-occurrence of keywords, the re reveals the key focus areas and the relationships between different research topics. Before further analyzing co-occurrence keywords, the researchers first analyze the most frequently used keywords as classified in Table 2 below.

Table 2. *Top ten most frequent keyword*

No	Keyword	occurrences
1	character education	29
2	Character	21
3	Education	10
4	character building	6
5	physical education	4
6	professionalism	4
7	values	4
8	curriculum	3
9	health	3
10	higher education	3

Table 2 lists the top ten most frequent keywords in quality and character education, highlighting the primary areas of focus within this research domain. "Character education" is the most frequently occurring keyword, with twenty-nine occurrences, indicating its crucial importance and widespread interest among researchers. This is closely followed by "character," which appears twenty-one times, underscoring the emphasis on personal virtues and moral qualities development within educational settings. The keyword "education" appears ten times, reflecting the broad scope of research that explores various aspects of the educational process of character development. Other notable keywords include "character building" with six occurrences, and "physical education," "professionalism," and "values," each appearing four times. These keywords suggest a diverse range of topics that intersect with character education, such as the role of physical activities in character development and the importance of instilling professional values. Additionally, "curriculum," "health," and "higher education" each appear three times, indicating specific areas of application and interest. The presence of these keywords highlights the multifaceted nature of character education research, encompassing various educational levels and contexts, and emphasizing the integration of character-building practices across distinct aspects of the educational system.

     After distinguishing the foremost as often as possible happening watchwords, the researchers encourage fortifying the talk by displaying a co-occurrence catchphrase investigation. This investigation outlines the connections between the different catchphrases. The co-occurrence investigation, prepared utilizing VOS viewer, is delineated in Figure 5. Figure 5 displays a keyword co-occurrence network visualization generated using VOS viewer, illustrating the relationships and connections between different research themes in quality and character education. The visualization reveals several prominent clusters, each representing a group of closely related keywords. The central nodes of "character education" and "character" are highly interconnected, indicating their significant prominence and vital role within the research domain. These nodes are linked to various other keywords, showing the broad scope and multidisciplinary nature of research in this field.

Figure 5. *Keyword co-occurrence network visualization*
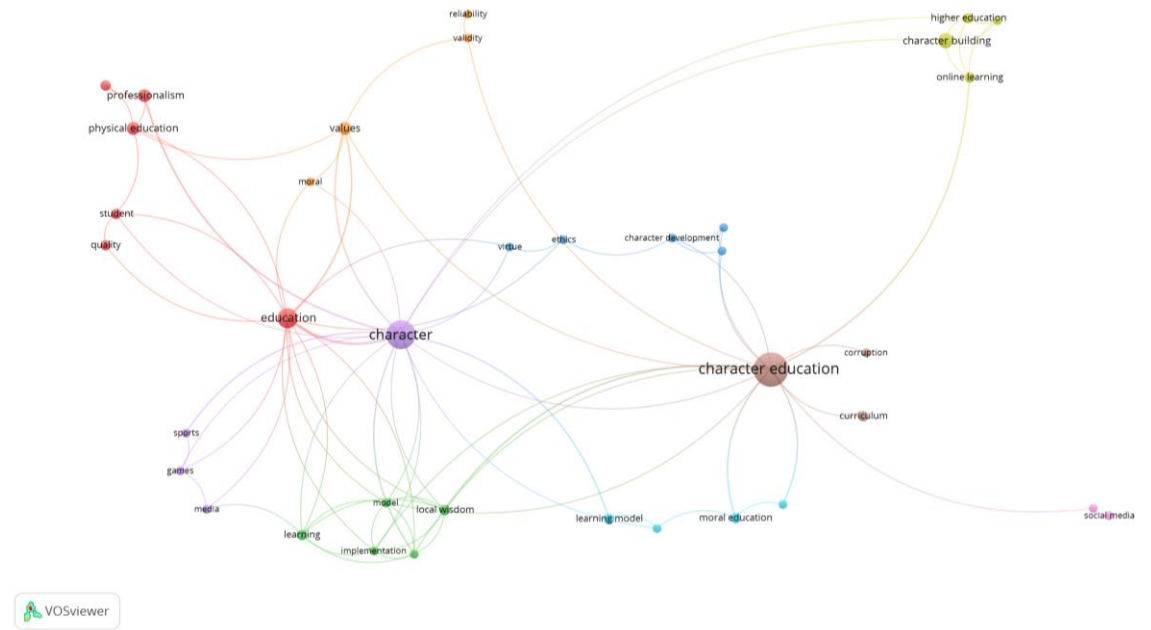
The cluster surrounding "character education" includes keywords such as "higher education," "curriculum," "character building," and "online learning." It suggests a strong focus on integrating character education into various educational levels and exploring different methodologies for its implementation. The presence of "online learning" highlights the growing interest in digital and remote education formats, especially in the context of character development.

The cluster associated with "character" connects to themes like "virtue," "ethics," "moral education," and "character development," emphasizing the philosophical and moral dimensions of character education. This cluster points to a significant research interest in the ethical and moral aspects of education and how these can be cultivated through educational practices. Other notable clusters include "education," linked with "professionalism," "physical education," "quality," and "values." This cluster indicates a diverse range of topics related to general educational practices and their impact on character development. Additionally, the keyword "values" forms a bridge between the clusters, connecting to both "character" and "education," underscoring its importance across distinct aspects of character education.

Despite the comprehensive mapping, the visualization also highlights gaps in the research. Notably, there appears to be a limited connection between "character education" and practical application themes, such as "implementation," "learning model," and "local wisdom." This gap suggests that while theoretical and philosophical discussions are well-represented, there may be a lack of research focusing on practical strategies and models for implementing character education in diverse cultural contexts. Moreover, the keyword "corruption,"

although linked to "character education," seems isolated, indicating that issues related to ethical behavior in the context of broader societal challenges may not be extensively explored. It presents an opportunity for future research to investigate how character education can address and mitigate unethical practices in various settings.

Implications

Based on the comprehensive analysis of the current research landscape in quality and character education, several future research recommendations can be made to advance the field. Firstly, there is a need to bridge the gap between theoretical discussions and practical character education. Future research should focus on developing and evaluating practical strategies and models for implementing character education in various educational contexts. It includes exploring effective teaching methods, curriculum integration, and assessment techniques that can be adapted to diverse cultural and institutional settings. Secondly, the emerging interest in digital and remote learning environments suggests a valuable area for exploration. Future research should investigate the effectiveness of character education programs in online and remote learning environments, particularly considering the increasing reliance on digital education due to the COVID-19 pandemic. Research can explore how digital tools and platforms foster character development, and the challenges associated with virtual character education.

Additionally, there is a need for more research on the role of character education in addressing broader societal and ethical challenges. The isolated keyword "corruption" indicates that this area is underexplored. Future research should examine how character education can be leveraged to promote ethical behavior and reduce corruption within educational institutions and in wider society. It includes studying the impact of character education on students' ethical decision-making and behavior in real-world contexts. Furthermore, future research should investigate how local cultural values, and wisdom can be integrated into character education programs. The gap between "character education" and themes like "local wisdom" suggests that the cultural context of character education is underexplored. Understanding how distinct cultures perceive and practice character education and developing culturally responsive character education curricula that respect and incorporate local traditions and values is crucial.

There is also a need for more longitudinal research to assess the long-term impact of character education on students' personal and academic development. Future research should track the outcomes of character education programs over extended periods to determine their effectiveness in fostering lasting character traits and ethical behavior. This research can provide valuable insights into the sustainability and long-term benefits of character education interventions. Lastly, future research should adopt interdisciplinary approaches, incorporating insights from psychology, sociology, education, and philosophy, to develop a more holistic understanding of character education. Collaborative research across disciplines can lead to more comprehensive and effective character education strategies. By addressing these areas, future research can contribute to a more robust and practical understanding of quality and character education, enhancing educational practices and outcomes globally.

Conclusion and Recommendations/Implications

In conclusion, the bibliometric analysis of 161 articles from the SCOPUS database provides a comprehensive overview of the research trends in quality and character education, highlighting the central themes, influential authors, and key publications within this field. The research reveals significant areas of focus, such as character education, ethical and moral development, and the integration of character-building practices across various educational contexts. Despite the extensive research activity, gaps were identified, particularly in the practical implementation of character education and its role in addressing broader societal issues like corruption. The analysis underscores the need for future research to develop practical strategies, explore digital and cultural dimensions, and adopt interdisciplinary approaches to enhance the effectiveness and impact of character education. By addressing these gaps and building on the identified trends, future research can contribute to a deeper understanding and more effective integration of quality and character education, aligning with improving educational outcomes and fostering holistic student development.

Disclosure statement

No potential conflict of interest was reported by the authors.

References

Abduloh, A., & Ahmad, Y. B. (2017). Management of quality-based education in facing Asian Economic community. *Proceedings of the 3rd International Conference on Education and Training (ICET 2017)* (pp. 172-175). https://doi.org/10.2991/icet-17.2017.28

Baas, J., Schotten, M., Plume, A., Côté, G., & Karimi, R. (2020). Scopus as a curated, high-quality bibliometric data source for academic research in quantitative science studies. *Quantitative Science Studies*, *1*(1), 377–386. https://doi.org/10.1162/qss_a_00019

Baxter, J., Floyd, A., & Jewitt, K. (2023). Pandemic, a catalyst for change: Strategic planning for digital education in English secondary schools, before during and post-Covid. *British Educational Research Journal*, *49*(2), 329 – 351. https://doi.org/10.1002/berj.3845

Bier, M. C., Funk, C. D., Berkowitz, M. W., Bruskewitz, N., & Samtani, S. (2023). *Implementing and evaluating PRIMED for character education in Colombian Schools Professional development: A Cross-Cultural Collaboration.* Springer International Handbooks of Education. https://doi.org/10.1007/978-3-031-24420-9_5

Campbell, P. S., Connell, C., & Beegle, A. (2007). Adolescents' expressed meanings of music in and out of school. *Journal of Research in Music Education*, *55*(3), 220–236. https://doi.org/10.1177/002242940705500304

Cheung, C., & Lee, T. (2010). Improving social competence through character education. *Evaluation and Program Planning*, *33*(3), 255–263. https://doi.org/10.1016/j.evalprogplan.2009.08.006

Cohen, J. (2006). Social, emotional, ethical, and academic education: Creating a climate for learning, participation in democracy, and well-being. *Harvard Educational Review*, *76*(2), 201–237. https://doi.org/10.17763/haer.76.2.j44854x1524644vn

Çubukçu, Z. (2012). The effect of hidden curriculum on character education process of primary school students. *Kuram ve Uygulamada Egitim Bilimleri*, *12*(2), 1526–1534.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-84865392117&partnerID=40&md5=caf4a79ddc1ded3a122dc64a3b90a6ec

De', R., Pandey, N., & Pal, A. (2020). Impact of digital surge during Covid-19 pandemic: A viewpoint on research and practice. *International Journal of Information Management*, *55*, 1-5. https://doi.org/10.1016/j.ijinfomgt.2020.102171

Godonoga, A., & Sporn, B. (2023). The conceptualisation of socially responsible universities in higher education research: A systematic literature review. *Studies in Higher Education*, *48*(3), 445–459. https://doi.org/10.1080/03075079.2022.2145462

Guarini, E., Mori, E., & Zuffada, E. (2021). New development: Embedding the SDGs in city strategic planning and management. *Public Money and Management*, *41*(6), 494–497. https://doi.org/10.1080/09540962.2021.1885820

Hadi, S., Fu'adi, I., Efendi, N., Maftukhin., & Akhyak. (2022). Character education management in improving madrasah quality. *International Journal of Social Science and Education Research Studies*, *2*(12), 864-872. https://doi.org/10.55677/ijssers/v02i12y2022-21

Harrington, N. G., Giles, S. M., Hoyle, R. H., Feeney, G. J., & Yungbluth, S. C. (2001). Evaluation of the all stars character education and problem behavior prevention program: Effects on mediator and outcome variables for middle school students. *Health Education & Behavior*, *28*(5), 533–546. https://doi.org/10.1177/109019810102800502

Khuram, S., Rehman, Ch. A., Nasir, N., & Elahi, N. S. (2023). A bibliometric analysis of quality assurance in higher education institutions: Implications for assessing university's societal impact. *Evaluation and Program Planning*, *99*. https://doi.org/10.1016/j.evalprogplan.2023.102319

Kiersch, C., & Gullekson, N. (2021). Developing character-based leadership through guided self-reflection. *International Journal of Management Education*, *19*(3). https://doi.org/10.1016/j.ijme.2021.100573

Latorre-Cosculluela, C., Suárez, C., Quiroga, S., Sobradiel-Sierra, N., Lozano-Blasco, R., & Rodríguez-Martínez, A. (2021). Flipped classroom model before and during COVID-19: using technology to develop 21st century skills. *Interactive Technology and Smart Education*, *18*(2), 189–204. https://doi.org/10.1108/ITSE-08-2020-0137

Lloyd-Jones, B. (2021). Developing competencies for emotional, instrumental, and informational student support during the Covid-19 pandemic: A human relations/human resource development approach. *Advances in Developing Human Resources*, *23*(1), 41–54. https://doi.org/10.1177/1523422320973287

Mastan, I. A., Sensuse, D. I., Suryono, R. R., & Kautsarina, K. (2022). Evaluation of distance learning system (e-learning): A systematic literature review. *Jurnal Teknoinfo, 16*(1), 132-137. https://jim.teknokrat.ac.id/index.php/teknoinfo/article/view/1736

Osher, D., Kidron, Y., Brackett, M., Dymnicki, A., Jones, S., & Weissberg, R. P. (2016). Advancing the science and practice of social and emotional learning: Looking back and moving forward. *Review of Research in Education*, *40*(1), 644–681. https://doi.org/10.3102/0091732X16673595

Panggabean, R. R., Astari, Y. P., Sari, I. P., Rohmadani, & Safrudin. (2022). Implementation of school-based management in improving the character quality of elementary school students. *Indonesian Values and Character Education Journal*, *5*(1), 1–8. https://doi.org/10.23887/ivcej.v5i1.42324

Pham-Duc, B., Tran, T., Huu Hoang, D., & Bao Do, C. (2022). Global scientific literature on human resource development: A bibliometric analysis using Scopus database. *European Journal of Training and Development, 47*(7/8), 846-861. https://doi.org/10.1108/EJTD-01-2022-0004

Retnawati, H., Arlinwibowo, J., & Apino, E. (2018). Strategy and implementation of character education in senior high schools and vocational high schools. *Journal of Social Studies Education Research*, *9*(3), 370–397. https://doi.org/10.17499/jsser.01008

Sanabria-Z, J., Alfaro-Ponce, B., González Peña, O. I., Terashima-Marín, H., & Ortiz-Bayliss, J. C. (2022). Engagement and social impact in tech-based citizen science initiatives for achieving the SDGs: A systematic literature review with a perspective on complex thinking. *Sustainability (Switzerland)*, *14*(17), 1-22. https://doi.org/10.3390/su141710978

Sanderse, W. (2013). The meaning of role modelling in moral and character education. *Journal of Moral Education*, *42*(1), 28 – 42. https://doi.org/10.1080/03057240.2012.690727

Snyder, F. J., Vuchinich, S., Acock, A., Washburn, I. J., & Flay, B. R. (2012). Improving elementary school quality through the use of a social-emotional and character development program: A matched-pair, cluster-randomized, controlled trial in Hawaii. *Journal of School Health*, *82*(1), 11–20. https://doi.org/10.1111/j.1746-1561.2011.00662.x

Sudadio, M. P. (2021). Policies contribution and integrated quality management to improve the quality of services in primary and secondary education in the Banten Province 21st century the era of the revolutionary 4.0. *Journal of Economics, Finance and Management Studies*, *4*(11), 2198-2203. https://doi.org/10.47191/jefms/v4-i11-11

Tambovtsev, V., & Rozhdestvenskaya, I. (2020). Higher education quality management: What is "quality" and what is "higher education"? *Upravlenets*, *11*(1), 2–14. https://doi.org/10.29141/2218-5003-2020-11-1-1

Teeple, S. K., & Benolken, A. (2022). Exploring the relationship between social-emotional competencies and student performance in online learning environments. *E-Learning and Digital Media*, 20(5), 460-472. https://doi.org/10.1177/20427530221117328

Zahra, A. G., & Maryanti, R. (2022). The effect of socialization regarding digital literacy to respond to challenges in the era of disruption to the knowledge of students at junior high school 12 Bandung. *International Journal of Research and Applied Technology, 2*(2), 41-48. https://ojs.unikom.ac.id/index.php/injuratech/article/view/7946

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