

Investigating the Role of Holistic Education in Global Learning: A Bibliometric Approach

Loso Judijanto¹, Desty Endrawati Subroto², Dumiyati Dumiyati³, Yuyun Dwi Haryanti⁴, Najdah Thalib⁵

¹ IPOSS Jakarta

² Universitas Bina Bangsa

³ Universitas PGRI Ronggolawe

⁴ Universitas Majalengka

⁵ Universitas Musamus Merauke

Article Info

Article history:

Received Nov, 2024

Revised Nov, 2024

Accepted Nov, 2024

Keywords:

Bibliometric Analysis

Global Learning

Holistic Education

Sustainability

ABSTRACT

This study investigates the role of holistic education in global learning using a bibliometric analysis approach. Drawing data from 1,000 articles published between 1970 and 2024, this analysis identifies key themes, influential authors, and collaboration patterns in the field of holistic education. The findings reveal that holistic education research is centered on themes like higher education, sustainability, and transformative learning, reflecting the field's response to global challenges. Collaboration networks show strong international partnerships, with notable contributions from the United States, United Kingdom, and emerging interest in Asian countries. The analysis also highlights the application of holistic education in specialized areas such as medical and nursing education, emphasizing its relevance to fostering well-rounded professionals. However, challenges persist in assessment methods, cultural adaptability, and technological integration, indicating areas for future research. This study provides a comprehensive overview of holistic education, underscoring its potential to address the educational needs of a globalized world while identifying critical directions for further development.

This is an open access article under the [CC BY-SA](#) license.



Corresponding Author:

Name: Loso Judijanto

Institution: IPOSS Jakarta

Email: losojudijantobumn@gmail.com

1. INTRODUCTION

Holistic education has attracted much attention in the educational sector for its capacity to cultivate well-rounded individuals prepared to navigate the difficulties of a globalized environment. Holistic education underscores the interrelation of all facets of learning, fostering not only cognitive talents but also emotional, social, and ethical elements of the learner [1].

This educational methodology is based on the conviction that education must beyond conventional academic limits to cultivate a wider array of knowledge and competencies pertinent to a swiftly evolving world [2]. In the realm of global learning, holistic education is especially relevant as it equips learners to comprehend and interact with cultural, environmental, and economic systems from an integrated viewpoint. As the world grows

more interconnected, the capacity to navigate various global situations becomes essential. Holistic education fosters critical thinking, empathy, and the ability to work across various cultures and disciplines, which are vital competencies in the 21st century [3].

Studies demonstrate that educational establishments employing holistic methodologies frequently have enhanced results in student engagement, mental health, and overall well-being [4]. The results are ascribed to the focus on student-centered learning environments that prioritize creativity, personal development, and emotional support in conjunction with academic success [5]. Nonetheless, despite its increasing prevalence, holistic education has obstacles in assessment and execution. Conventional educational measurements and practices may inadequately reflect the comprehensive abilities and competencies fostered by holistic approaches, resulting in challenges in evaluating program efficacy and incorporating holistic methods into current educational frameworks [6].

There is a gap in understanding how holistic education can be effectively integrated into global learning environments to enhance educational outcomes. While anecdotal and case study evidence suggests benefits, there is a need for a more structured analysis to evaluate the impact of holistic education across different cultural and educational contexts. The lack of a comprehensive data-driven approach hinders the ability of policymakers and educators to formulate strategies that harness the full potential of holistic education in promoting global competencies. This study seeks to address the current research gap by a bibliometric analysis examining the role of holistic education in international learning contexts. The study aims to delineate the academic landscape of holistic education by examining trends, publishing patterns, and thematic concentrations in the literature, thereby identifying key issues and research gaps. This methodology will establish a data-driven basis for subsequent empirical research and assist in the development of

policies that promote comprehensive educational practices worldwide.

2. LITERATURE REVIEW

2.1 *Holistic Education: Foundations and Philosophical Underpinnings*

Holistic education is a strategy that aims to meet the comprehensive educational needs of the child, promoting intellectual, emotional, social, and spiritual growth. The roots of holistic education can be attributed to the philosophies of educators such as Dewey, Montessori, and Steiner, who promoted educational frameworks that address comprehensive developmental areas rather than solely cognitive achievements [7]. [1] posits that holistic education transcends a conventional methodology; it represents a perspective on life that emphasizes the connection of individuals, the planet, and the living ecosystem. Recent studies, such as those by [2], emphasize the role of holistic education in fostering global citizenship and sustainability. These studies argue that a holistic approach encourages learners to understand and think critically about complex global issues like climate change, cultural diversity, and global economics, promoting a sense of global responsibility and interconnectedness [8].

2.2 *Holistic Education and Global Learning Outcomes*

Global learning is a critical component of 21st-century education, aimed at preparing students to live and work in a globalized society. It involves developing skills such as cultural awareness, language proficiency, and the ability to engage in complex problem-solving across diverse settings [9]. Holistic education supports these objectives by integrating these skills into a broader educational framework that

also includes emotional and ethical development. Research by [3] indicates that students educated in holistic environments often demonstrate higher empathy and adaptability in multicultural environments compared to their peers in traditional learning settings. Moreover, [5] highlights that holistic education can significantly impact mental health and well-being, offering a more supportive and engaging learning environment. This is increasingly relevant in global education frameworks, where the pressure of adapting to rapidly changing contexts can affect student health and performance.

2.3 Challenges in Implementing Holistic Education in Diverse Contexts

While holistic education presents numerous benefits, its implementation across diverse educational systems worldwide faces significant challenges. [6] discusses the difficulty in measuring outcomes associated with holistic education, as traditional testing and assessment methods do not adequately capture growth in areas such as creativity, empathy, or emotional resilience. Additionally, [4] point out the disparities in resources among schools globally, which can affect the feasibility of adopting holistic practices universally. In different cultural contexts, the interpretation and practice of holistic education can vary widely. A study by [10] comparing holistic education in Eastern and Western settings found that cultural values significantly influence how educational practices are implemented and the outcomes they prioritize. This variation suggests that a one-size-fits-all approach to holistic education may not be practical or effective in promoting global learning outcomes.

2.4 The Role of Technology in Holistic Education

The integration of technology in education has opened new avenues for enhancing holistic education practices. Digital tools and online platforms can facilitate global learning by providing access to diverse resources, connecting learners across geographical boundaries, and fostering collaborative learning environments [11]. However, as pointed out by Forbes (2018), while technology can enhance access and engagement, it also presents challenges such as digital divide and the potential for reduced face-to-face interactions, which are crucial for developing some of the social skills that holistic education promotes. Recent studies also highlight the potential of virtual reality (VR) and augmented reality (AR) technologies in providing immersive learning experiences that can enhance both cognitive and emotional learning [12]. These technologies can simulate complex global scenarios that require learners to apply multiple skills simultaneously in a controlled yet realistic environment.

3. METHODS

This study utilizes a bibliometric analysis to investigate the role of holistic education in global learning. The primary data for this analysis will be sourced from peer-reviewed academic articles published between 1970 and 2024, collected from Scopus database. The selection criteria include articles that focus on holistic education, global learning competencies, and their outcomes. Using VOSviewer software, we will conduct citation and co-citation analysis to identify the most influential studies, authors, and journals in this field. Thematic analysis will also be performed to discern prevalent research themes, trends over time, and gaps in the literature. The bibliometric data will be complemented by a content analysis of

selected articles to deepen the understanding of the contextual applications and

effectiveness of holistic education strategies worldwide.

4. RESULTS AND DISCUSSION

4.1 Results

a. Bibliometric Overview

Table 1. Bibliometric Overview

Metrics Data	Information
Publication years	1970-2024
Citation years	54
Papers	1000
Citations	11119
Cites/year	205.91
Cites/paper	11.12
Cites/author	6654.42
Papers/author	633.02
Authors/paper	2.36
h-index	44
g-index	85
hI,norm	34
hI,annual	0.63
hA, index	16
Paper with ACC >=	1,2,5,10,20:340,181,71,25,15

Source: Output Publish or Perish, 2024

Table 1 provides a comprehensive bibliometric overview of research on holistic education and global learning. Spanning from 1970 to 2024, the data captures 54 years of citations, reflecting the long-standing academic interest in this field. The dataset includes 1,000 papers, which have collectively garnered 11,119 citations, averaging 205.91 citations per year and 11.12 citations per paper. The average number of citations per author is 6,654.42, with each author contributing, on average, 633.02 papers and an average of 2.36 authors per paper, indicating significant collaboration in this research area. Key bibliometric indicators, such as the h-index of 44 and g-

index of 85, show a strong citation impact and influence, with a relatively high h-index suggesting that at least 44 publications have each received 44 or more citations. The hI,norm of 34 and hI,annual of 0.63 indicate the sustained impact of authors' contributions, while the hA index of 16 points to the average citation strength of the authors' highly cited works. Additionally, there is notable research quality and engagement, with 340 papers having at least one citation, 181 with two or more, 71 with five or more, 25 with ten or more, and 15 with at least twenty citations, reflecting varying levels of influence within the academic community.

b. Citation Analysis

Table 2. Most Cited Article from Scopus (Based on Title Search)

Citations	Author and Year	Title
72	[13]	Holistic education: An Approach for 21 Century
42	[14]	Integrating undergraduate research into engineering: A communications approach to holistic education

Citations	Author and Year	Title
39	[15]	Learning areas for holistic education: kindergarten teachers' curriculum priorities, professional development needs, and beliefs
24	[16]	Nurturing spirituality: A rationale for holistic education
20	[17]	Towards an understanding of holistic education in the middle years of education
17	[18]	Can Holistic Education Solve the World's Problems: A Systematic Literature Review
13	[19]	The postmodern application of holistic education
13	[20]	Over the Edge: Can Holistic Education Contribute to Experiential Education?
12	[1]	International handbook of holistic education
11	[21]	The cultivation of university students' spiritual wellbeing in holistic education: longitudinal mixed-methods study

Source: Output Publish or Perish, 2024

c. Co-Authorship Analysis

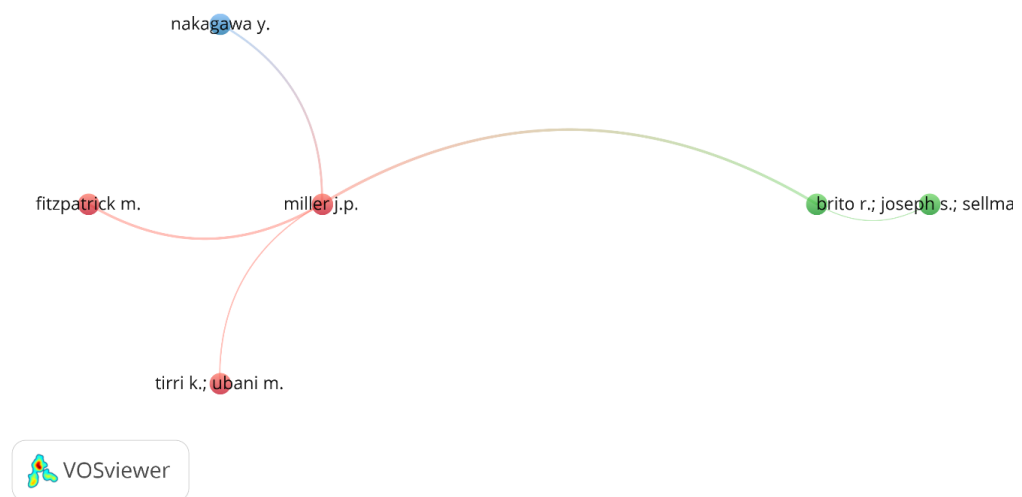


Figure 1. Author Collaboration
Source: Data Analysis, 2024

This VOSviewer graphic depicts the network of co-authorship connections among leading scholars in holistic education. Each circle symbolizes an author, with the dimensions and proximity of the nodes reflecting the intensity of their collaborative ties. The primary author, "Miller J.P.," serves as a nexus, linking with several authors including "Fitzpatrick M.," "Nakagawa Y.," "Tirri K.,"

and "Ubani M." The key positioning of Miller J.P. indicates a crucial function in connecting diverse research groups within the discipline. The color-coded clusters delineate distinct collaborative groups, with the green cluster comprising "Brito R.," "Joseph S.," and "Sellman E.," who are intimately interconnected yet somewhat separated from Miller's network.

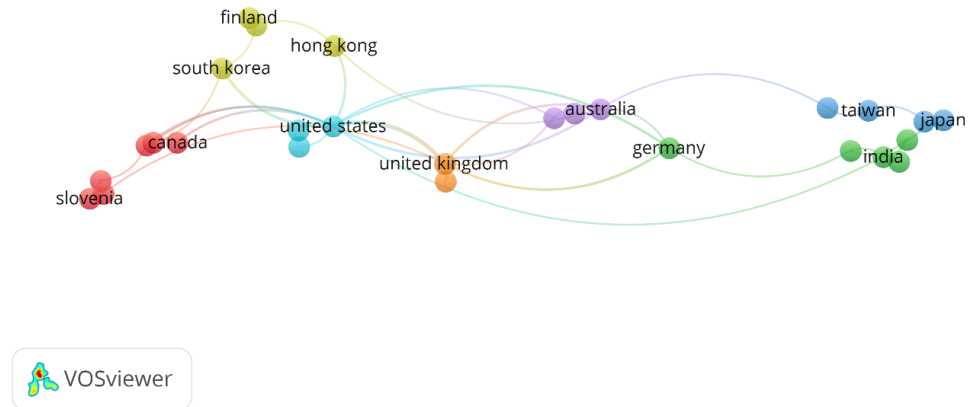


Figure 2. Country Collaboration
Source: Data Analysis, 2024

This VOSviewer visualization displays the network of international collaborations in holistic education research, with each node representing a country. The size of each node reflects the volume of research output, while the lines connecting nodes indicate collaborative relationships between countries. The United States appears central, connecting with multiple countries, indicating its significant role in facilitating international collaborations. Clusters in different colors suggest regional groupings and

shared research interests, with Canada and Slovenia forming a close-knit collaboration in red, while countries like India, Japan, and Taiwan are grouped in blue, suggesting active partnerships within Asia. European countries, such as the United Kingdom and Germany, show connectivity with both Western and Asian countries, reflecting their collaborative reach. Australia also shows connections to multiple countries, underscoring its engagement in global research networks.

d. Keyword Co-Occurrence Analysis

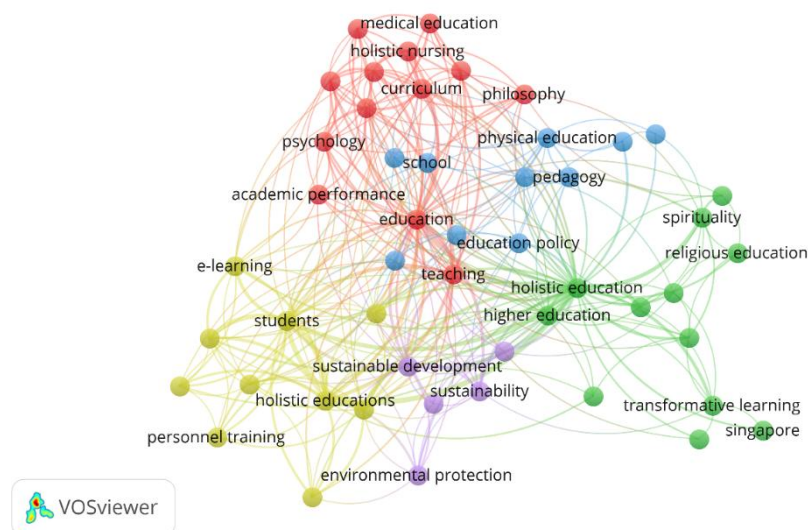


Figure 3. Network Visualization
Source: Data Analysis, 2024

This VOSviewer visualization illustrates the co-occurrence of keywords in research pertaining to holistic education, highlighting the thematic linkages and clusters within this domain. Each node signifies a keyword, with the node's size indicating its frequency of occurrence in the literature. The connections between nodes signify the frequency of co-occurrence of keywords in research articles, with thicker lines denoting greater correlations. The clusters are color-coded to represent groups of closely linked themes, indicating significant thematic areas in holistic education research.

The red cluster encompasses terms like "medical education," "holistic nursing," "curriculum," "psychology," and "academic performance," indicating a concentration on the convergence of holistic education with health and psychology. This cluster indicates that holistic education is progressively implemented in health-related domains, highlighting the cultivation of comprehensive medical and nursing practitioners. This integration presumably seeks to augment empathy, communication, and emotional intelligence within healthcare environments, along with holistic ideas that account for the mental and emotional aspects of education alongside academic success.

The green cluster encompasses terms such as "spirituality," "religious education," "transformative

learning," and "higher education," signifying a thematic domain centered on the spiritual and transformative dimensions of holistic education. This cluster indicates that considerable research investigates how holistic education promotes human growth, ethical development, and transformative experiences. The presence of "Singapore" in this cluster suggests geographically focused research or significant contributions from this region in the integration of spirituality and holistic principles in education.

The yellow and purple clusters contain keywords such as "sustainable development," "environmental protection," "sustainability," and "personnel training." These clusters emphasize a theme connecting holistic education with sustainability and environmental consciousness. This research investigates the role of holistic approaches in fostering environmental awareness and sustainable actions, thereby equipping students to tackle global ecological issues. The emphasis on "personnel training" signifies a commitment to equipping individuals with abilities that are both professionally advantageous and congruent with sustainable development objectives, highlighting the wider societal implications of comprehensive education. Collectively, these clusters offer an extensive perspective on the varied applications and thematic focuses within holistic education research.

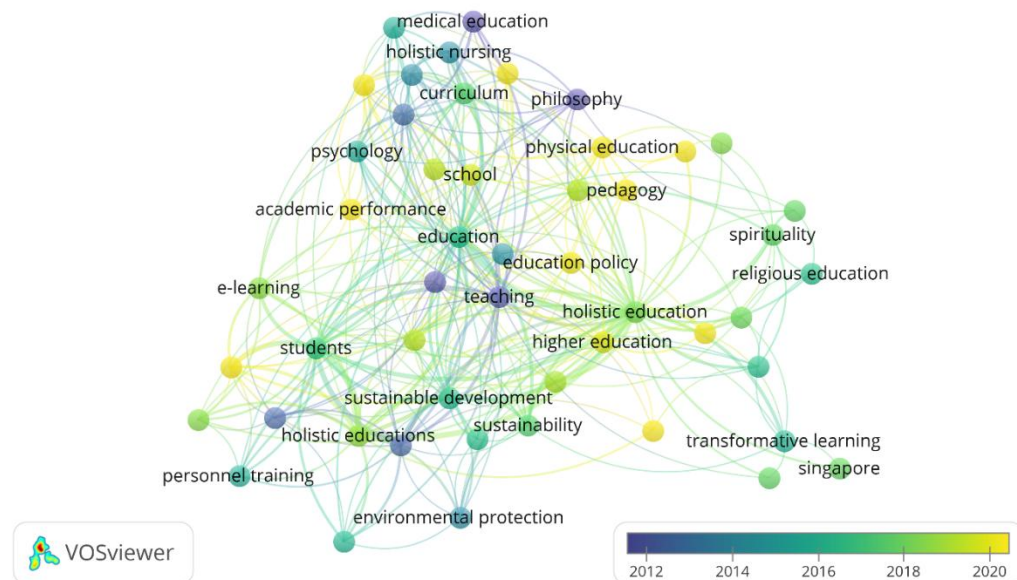


Figure 4. Overlay Visualization

Source: Data Analysis, 2024

This overlay visualization, illustrates the temporal co-occurrence of keywords in holistic education research. Each node signifies a keyword, with colors denoting the average publication year linked to each term. The color gradient, transitioning from blue (early years) to yellow (more recent years), elucidates the progression of study issues in the subject. Keywords highlighted in blue, such as "philosophy" and "medical education," denote prior focal topics, signifying that first investigations in holistic education concentrated on core theories and particular applications in domains such as health and philosophy.

As we progress towards green and yellow nodes, emerging research interests indicate alterations in the field's emphasis. Terms such as "sustainability," "transformative learning," and "religious education" are emphasized in green, indicating their emergence as significant subjects following

the foundational phase. These terms signify an enlargement in the domain of holistic education research, linking it to global concerns like sustainability and spiritual growth. The inclusion of "Singapore" in this cluster suggests recent scholarly contributions or case studies in holistic education from this area, indicating the worldwide embrace and modification of holistic ideas.

The yellow nodes, indicative of the latest research issues, feature phrases such as "sustainable development," "curriculum," and "students," highlighting contemporary goals in the discipline. These phrases underscore a trend of integrating holistic education into sustainability practices and curriculum creation, accentuating the learner's involvement in these processes. Recent emphasis on "students" and "e-learning" indicates a growing scholarly interest in the student-centered and digital dimensions of holistic education.

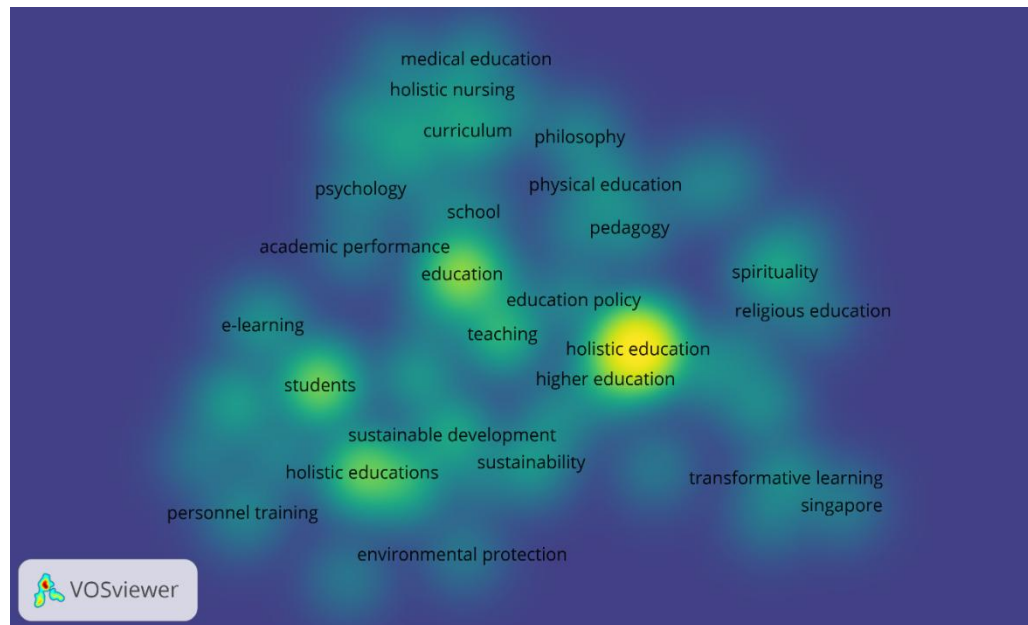


Figure 5. Density Visualization
Source: Data Analysis, 2024

This heatmap visualization depicts the concentration of research emphasis on diverse keywords associated with holistic education. The location and luminosity of each keyword signify its frequency and prominence in the literature. The luminous yellow regions denote keywords with increased co-occurrence, indicating a concentrated research focus on these subjects. The concepts of "holistic education," "higher education," "teaching," "education policy," and "sustainable development" are fundamental to the domain of holistic education study. The emphasis on "holistic education" in conjunction with "higher education" signifies a substantial concentration on integrating holistic ideas inside tertiary education, largely driven by the increasing desire in cultivating well-rounded, internationally conscious graduates. The outer area, depicted in darker green and blue, signify phrases that are

pertinent yet less commonly co-occurring, such "environmental protection," "transformative learning," and "personnel training." These keywords signify specialized domains within the broader discipline, highlighting specific applications or nascent issues that are currently evolving in academic discourse. Terms such as "spirituality," "psychology," and "sustainability" are positioned in marginally brighter areas, indicating a reasonable level of interest, while they are not as central as the primary themes.

4.2 Discussion

a. Core Themes and Shifts in Holistic Education

The central themes identified in this study (holistic education, higher education, teaching, education policy, and sustainable development) reflect a growing interest in applying holistic approaches beyond primary and secondary schools and into higher education and specialized areas. This focus aligns with the increasing

recognition of the importance of preparing students with a broad set of skills, including critical thinking, emotional intelligence, and global awareness, which are essential for navigating today's complex, interconnected world [1]. The prominence of terms such as "sustainable development" and "education policy" underscores the role of holistic education in fostering not only individual growth but also responsible citizenship and environmental stewardship.

Interestingly, the shift toward sustainability and transformative learning, as shown by the time-based overlay visualization, highlights the responsiveness of holistic education research to global issues like climate change, resource scarcity, and social inequality. As the educational landscape continues to evolve, this shift suggests that holistic education is increasingly seen as a framework that can contribute to broader societal goals, aligning with the United Nations Sustainable Development Goals (SDGs) [2]. By integrating sustainability into education, institutions can encourage students to think critically about their impact on the world and develop solutions to complex global problems.

b. Collaboration Patterns and Geographic Influence

The co-authorship analysis reveals significant international collaboration within holistic education research, with countries like the United States, the United Kingdom, Canada, and Australia serving as central hubs. This reflects the global nature of educational challenges and the need for collaborative

approaches to address them. The involvement of countries from Asia, such as Japan, Taiwan, and Singapore, suggests an emerging interest in holistic education in regions traditionally associated with more structured and examination-focused educational systems. These collaborations offer an opportunity for cross-cultural learning and the adaptation of holistic educational principles to different cultural and educational contexts [10].

Moreover, the geographic distribution of research in this field indicates a promising trend: holistic education is not limited to Western countries but is expanding to diverse regions, including Asia and Europe. This expansion could lead to richer, more varied perspectives in holistic education research. For instance, the inclusion of spirituality and religious education in the Asian context, as seen in the keyword analysis, highlights the potential for holistic education to incorporate local cultural and spiritual values, providing a more comprehensive, culturally relevant approach to student development.

c. Application of Holistic Education in Specialized Fields

The analysis of keywords such as "medical education," "holistic nursing," "psychology," and "academic performance" points to the application of holistic principles in specific professional and academic fields. In medical education and nursing, the integration of holistic approaches reflects a growing emphasis on the emotional and ethical dimensions of healthcare training. This shift is significant in professions that require empathy,

communication, and a deep understanding of the human condition, as it can lead to better patient care and more compassionate healthcare professionals [7].

Furthermore, the keyword "psychology" suggests an intersection between holistic education and mental health. With rising awareness of mental health issues among students, especially in high-stress professional programs like medicine, the inclusion of holistic education in curricula could help address these concerns by fostering resilience, self-awareness, and emotional regulation [22]. However, more empirical research is needed to measure the effectiveness of holistic approaches in improving mental health outcomes in these fields.

d. Challenges in Implementing Holistic Education Globally

Despite its benefits, implementing holistic education on a global scale faces several challenges. The bibliometric analysis highlights certain limitations, such as the difficulty in measuring outcomes associated with holistic approaches, as noted in the keyword "academic performance." Traditional assessment metrics are often inadequate for evaluating competencies like empathy, creativity, and ethical reasoning, which are central to holistic education [6]. This issue suggests a need for innovative assessment methods that can capture the full scope of student development beyond academic grades.

Additionally, differences in cultural values and educational systems pose

challenges to the universal adoption of holistic education. In some regions, education systems prioritize standardized testing and academic performance, which may conflict with the less structured, student-centered approaches favored in holistic education. For example, studies in East Asia have shown that the implementation of holistic education may require significant adjustments to fit within a highly competitive, examination-oriented context [10]. Future research should explore ways to adapt holistic principles to different cultural and systemic contexts, ensuring that the approach is both effective and culturally sensitive.

e. The Role of Technology in Holistic Education

The presence of keywords such as "e-learning" and "students" in recent years reflects the impact of digital technology on holistic education. Digital platforms and online learning tools offer new ways to engage students holistically, allowing for interactive, personalized, and accessible learning experiences [11]. Technologies like virtual reality (VR) and augmented reality (AR) also have the potential to simulate real-world scenarios, helping students develop emotional and social skills in a controlled environment [12].

However, the integration of technology into holistic education also raises concerns. The digital divide could limit access to these tools for students in under-resourced regions, potentially creating inequalities in holistic learning opportunities. Furthermore, excessive reliance on digital platforms may hinder

the development of face-to-face interpersonal skills, which are essential for holistic development. Thus, while technology offers promising avenues for holistic education, it must be implemented thoughtfully to avoid unintended consequences.

4.3 Future Directions for Holistic Education Research

The findings from this bibliometric analysis point to several promising directions for future research. First, more empirical studies are needed to assess the impact of holistic education on non-cognitive skills, such as resilience, empathy, and ethical reasoning, particularly in higher education and professional training programs. Such studies could help bridge the gap between theoretical advocacy and measurable outcomes, providing stronger evidence for the benefits of holistic approaches. Second, research should focus on developing and testing new assessment methods that can effectively evaluate holistic competencies. Tools such as reflective journals, peer assessments, and project-based evaluations could provide alternative ways to capture student growth in areas beyond traditional academics [5]. Additionally, longitudinal studies tracking students over time could offer insights into the long-term impact of holistic education on personal and professional development. Last, as holistic education gains traction globally, further exploration of culturally

specific approaches is essential. Studies examining how different regions adapt holistic principles to fit local contexts can offer valuable lessons for international implementation. Research on the role of spirituality and values-based education, particularly in non-Western countries, could contribute to a richer understanding of holistic education and enhance its applicability worldwide.

5. CONCLUSION

This study provides a comprehensive bibliometric analysis of holistic education, revealing key themes, collaborative networks, and evolving research interests within the field. The findings underscore the central role of holistic education in fostering broad-based skills, particularly in higher education, sustainability, and professional fields such as medical and nursing education. The analysis also highlights the influence of global collaborations, with contributions from diverse cultural contexts, enriching the understanding and application of holistic principles. Despite the demonstrated benefits, challenges in assessment methods, cultural adaptability, and digital integration remain barriers to widespread implementation. Addressing these challenges through innovative, context-sensitive approaches can enhance the impact of holistic education, ensuring it prepares learners for the complexities of a globalized world. This study contributes to the growing body of knowledge and provides a foundation for future research that can further develop holistic education into a transformative approach across global educational systems.

REFERENCES

- [1] J. P. Miller, K. Nigh, M. J. Binder, B. Novak, and S. Crowell, *International handbook of holistic education*. Routledge New York, NY, 2019.
- [2] A. O'Hare, R. B. Powell, M. J. Stern, and E. P. Bowers, "Influence of educator's emotional support behaviors on environmental education student outcomes," *Environ. Educ. Res.*, vol. 26, no. 11, pp. 1556–1577, 2020.
- [3] C. W. Anderson *et al.*, "Designing educational systems to support enactment of the Next Generation Science Standards," *J. Res. Sci. Teach.*, vol. 55, no. 7, pp. 1026–1052, 2018.
- [4] K. Thompson, L. Casimiro, and S. Wa-Mbaleka, "Past, Present, and Future Perspectives of Online Education," *Online*

- High. Educ.*, p. 602, 2023.
- [5] A. Watson, *Care in mathematics education: Alternative educational spaces and practices*. Springer Nature, 2021.
- [6] J. Jackson, *Interculturality in international education*. Routledge, 2018.
- [7] R. Forbes, B. Clasper, A. Ilango, H. Kan, J. Peng, and A. Mandrusiak, "Effectiveness of patient education training on health professional student performance: a systematic review," *Patient Educ. Couns.*, vol. 104, no. 10, pp. 2453–2466, 2021.
- [8] C. Chapleo and H. O'Sullivan, "Contemporary thought in higher education marketing," *Journal of Marketing for Higher Education*, vol. 27, no. 2. Taylor & Francis, pp. 159–161, 2017.
- [9] W. Zhao *et al.*, "Education and lifestyle factors are associated with DNA methylation clocks in older African Americans," *Int. J. Environ. Res. Public Health*, vol. 16, no. 17, p. 3141, 2019.
- [10] H. Li, D. Bottrell, and D. Armstrong, "Understanding the pathways to resilience: Voices from Chinese adolescents," *Young*, vol. 26, no. 2, pp. 126–144, 2018.
- [11] A. P. Ragan, G. B. Aikens, M. Bounthavong, K. Brittain, and A. Mirk, "Academic detailing to reduce sedative-hypnotic prescribing in older veterans," *J. Pharm. Pract.*, vol. 34, no. 2, pp. 287–294, 2021.
- [12] K.-H. Cheng and C.-C. Tsai, "A case study of immersive virtual field trips in an elementary classroom: Students' learning experience and teacher-student interaction behaviors," *Comput. Educ.*, vol. 140, p. 103600, 2019.
- [13] S. Mahmoudi, E. Jafari, H. A. Nasrabadi, and M. J. Liaghatdar, "Holistic education: An approach for 21 century," *Int. Educ. Stud.*, vol. 5, no. 2, pp. 178–186, 2012.
- [14] N. S. Thompson, E. M. Alford, C. Liao, R. Johnson, and M. A. Matthews, "Integrating undergraduate research into engineering: A communications approach to holistic education," *J. Eng. Educ.*, vol. 94, no. 3, pp. 297–307, 2005.
- [15] A. Bautista, S.-C. Ng, D. Múñez, and R. Bull, "Learning areas for holistic education: Kindergarten teachers' curriculum priorities, professional development needs, and beliefs," *Int. J. Child Care Educ. Policy*, vol. 10, pp. 1–18, 2016.
- [16] G. Taggart, "Nurturing spirituality: A rationale for holistic education," *Int. J. Child. Spiritual.*, vol. 6, no. 3, pp. 325–339, 2001.
- [17] J. Hare, "Towards an understanding of holistic education in the middle years of education," *J. Res. Int. Educ.*, vol. 5, no. 3, pp. 301–322, 2006.
- [18] B. Miseliunaite, I. Kliziene, and G. Cibulskas, "Can holistic education solve the world's problems: A systematic literature review," *Sustainability*, vol. 14, no. 15, p. 9737, 2022.
- [19] E. Broekaert, S. Vandeveld, and D. Briggs, "The postmodern application of holistic education," *Ther. Communities*, vol. 32, no. 1, pp. 18–34, 2011.
- [20] D. Hutchison and S. Bosacki, "Over the edge: Can holistic education contribute to experiential education?," *J. Exp. Educ.*, vol. 23, no. 3, pp. 177–182, 2000.
- [21] H.-K. Pong, "The cultivation of university students' spiritual wellbeing in holistic education: longitudinal mixed-methods study," *Int. J. Child. Spiritual.*, vol. 26, no. 3, pp. 99–132, 2021.
- [22] K. Thompson, "The cruel optimism of educational technology teacher ambassador spaces," *Power Educ.*, vol. 16, no. 2, pp. 150–165, 2024.