Bibliometric Analysis of the Implementation of Character Education in the School Curriculum

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ABSTRACT

This bibliometric analysis investigates the evolution and thematic structuring of research concerning the implementation of character education in school curricula. Utilizing data sourced from major academic databases from 1893 to 2024, this study maps out the academic discourse through VOSviewer. Our findings identify distinct thematic clusters such as curriculum integration, ethical considerations, and the role of character education within religious and civic education. Temporal trends indicate a shift from foundational discussions to a focus on the implicit dimensions of character education, such as the hidden curriculum and character-building across educational levels. Potential future research opportunities were identified in less explored areas such as independent and culturally specific curricula. The analysis of the author collaboration network reveals a robust community with significant interconnections among key scholars, highlighting both dense clusters and emerging researchers. Overall, this study offers a comprehensive overview of the field, demonstrating its dynamic evolution and the collaborative nature of research that contributes to ongoing debates and educational practices in character education. This work not only charts historical and current trends but also provides direction for future scholarly endeavors in this vital area of educational research.

Keywords: Character Education, School Curriculum, Bibliometric Analysis

1. INTRODUCTION

In recent years, the integration of character education into school curricula has garnered significant attention globally [1], [2]. Educators and policymakers alike emphasize the development of moral values alongside academic competencies to foster holistic student growth [3]. This shift reflects a broader understanding that character education can significantly influence various aspects of societal well-being, including reducing behavior issues and promoting social harmony [4]. Despite the increasing incorporation of character education, assessments of its prevalence and impact within educational research remain fragmented [5].

Bibliometric analysis offers a robust approach to mapping the landscape of academic research and understanding the evolution of specific fields [6]. Applied to character education, this method can reveal the dynamics of scholarly discussions, key thematic concentrations, and pivotal publications that shape the discourse [7]. It provides an empirical foundation to gauge the penetration and diversity of character education themes within the academic sector [8]. However, the extensive body of literature on character education in school curricula presents a challenge in discerning impactful studies and emerging trends without the aid of systematic review methodologies like bibliometrics [9], [10].

As the importance of character education continues to rise, it becomes crucial to critically analyze how it is being implemented across different educational systems and cultural contexts. This
necessitates a comprehensive bibliometric study to not only encapsulate the global research trajectory but also to identify gaps and concentrations in the existing literature. Such an analysis will support educators, curriculum developers, and policymakers in making informed decisions that align with educational goals and societal needs.

While character education is increasingly recognized as a vital component of comprehensive education, there is a lack of clarity regarding its implementation effectiveness and the extent of its integration into various educational systems. This study seeks to address the ambiguity surrounding the academic discourse on character education by employing bibliometric analysis to systematically explore the distribution, impact, and evolution of research in this field. The primary objective of this research is to conduct a bibliometric analysis of the literature on the implementation of character education in school curricula. This analysis aims to identify major themes, influential works, and temporal trends that have shaped the discourse, providing a clear picture of the academic landscape surrounding character education.

2. LITERATURE REVIEW

2.1 The Concept and Importance of Character Education

Character education is defined as the explicit and implicit educational activities that help young people develop positive personal strengths called virtues. According to [11], character education is a deliberate effort to cultivate virtue—understood as objectively good human qualities that are beneficial to the individual and society. Research consistently supports the notion that well-implemented character education can lead to improved academic performance, lower incidence of behavioral problems, and enhanced social and emotional welfare of students [12], [13].

Furthermore, character education programs are not a singular model but vary widely in terms of content and delivery methods across different cultures and educational systems [14]. For instance, while Western models often emphasize individual virtues such as integrity and responsibility, Eastern approaches might incorporate more community-oriented values like respect and harmony [15].

2.2 Implementation of Character Education in Curricula

The integration of character education into school curricula involves various strategies and methodologies. One prevalent model is the whole-school approach, which integrates character development into every aspect of the school experience, from classroom management to extracurricular activities [16]. Another approach is the standalone curriculum, where specific periods are allocated to teaching character, often using predefined programs such as Character Counts or the Virtues Project.

The effectiveness of these approaches has been a subject of debate. Some studies indicate that holistic models tend to produce more substantial and lasting impacts [17], whereas others suggest that targeted programs can effectively address specific character deficits [18]. Despite these insights, there remains a need for comprehensive reviews that compare and contrast the outcomes of different implementation methods across diverse educational settings.

2.3 Bibliometric Studies on Education and Character Education
Bibliometric analysis has increasingly become a critical tool in educational research to map out the development and focus areas of scholarly discourse [19]. Within the domain of character education, however, bibliometric studies are relatively scarce. Early works in the area have focused on identifying leading authors, institutions, and countries contributing to the field [20]. More recent studies have employed advanced techniques like co-citation analysis and keyword mapping to uncover emerging trends and gaps in the literature [21].

These bibliometric analyses have highlighted a growing interest in interdisciplinary approaches that connect character education with other areas of educational research, such as educational technology and teacher education. Yet, the scope and depth of these studies vary significantly, often limited by geographical focus or methodological constraints.

3. METHODS

3.1 Data Collection

The primary data for this bibliometric analysis were collected from several major academic databases: Web of Science, Scopus, and Google Scholar. These databases were chosen due to their comprehensive coverage of educational and social sciences literature. The search was conducted using a combination of keywords related to "character education," "school curriculum," and "implementation." The search parameters were set to include articles published from 1893 to 2024, capturing over two decades of scholarly work in this field.

Inclusion criteria were defined to ensure the relevance and quality of the data. Only peer-reviewed journal articles and conference papers written in English were included. Editorials, book reviews, and non-academic publications were excluded to maintain the focus on scholarly contributions. Additionally, a manual screening was conducted to remove any duplicates and irrelevant entries based on abstracts and keywords.

3.2 Data Analysis

The collected data were analyzed using bibliometric software tool such as VOSviewer. This tool is instrumental in performing co-citation analysis, co-authorship patterns, and keyword occurrence mapping. The analysis was structured into several key phases:

1. Co-citation Analysis: This phase involved identifying the most frequently cited articles, authors, and journals in the domain of character education. It helps in recognizing foundational studies and central themes that have influenced the field.
2. Co-authorship Analysis: This part of the analysis examined the collaboration networks between authors. It provided insights into the leading contributors to the research area.
3. Keyword Analysis: Trending and emerging topics within the research on character education were identified through keyword frequency analysis. This helped in determining the evolution of research themes over the years and pinpointing gaps in the current literature.

3.3 Visualization

Data visualization was performed to enhance the interpretation of the results and provide a graphical representation of the bibliometric data. Network maps were created to illustrate the relationships between key authors, institutions, and keywords. These visualizations facilitate easier understanding of complex patterns and trends within the research community.
4. RESULTS AND DISCUSSION

4.1 Research Data Matriks

Table 1. Research Data Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Publication years</td>
<td>1893-2024</td>
</tr>
<tr>
<td>Citation years</td>
<td>131 (1893-2024)</td>
</tr>
<tr>
<td>Paper</td>
<td>980</td>
</tr>
<tr>
<td>Citations</td>
<td>144154</td>
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<tr>
<td>Cites/year</td>
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</tr>
<tr>
<td>Cites/paper</td>
<td>147.10</td>
</tr>
<tr>
<td>Cites/author</td>
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</tr>
<tr>
<td>Papers/author</td>
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</tr>
<tr>
<td>Author/paper</td>
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<tr>
<td>h-index</td>
<td>160</td>
</tr>
<tr>
<td>g-index</td>
<td>373</td>
</tr>
<tr>
<td>hI,norm</td>
<td>141</td>
</tr>
<tr>
<td>hI,annual</td>
<td>1.08</td>
</tr>
<tr>
<td>hA-index</td>
<td>46</td>
</tr>
<tr>
<td>Papers with ACC</td>
<td>1,2,5,10,20,662,534,344,237,127</td>
</tr>
</tbody>
</table>

Source: Publish or Perish Output, 2024

Table 1 provides an extensive bibliometric summary of the research data concerning the implementation of character education in school curricula, covering publications from the years 1893 to 2024. A total of 980 papers have been identified, accumulating an impressive 144,154 citations over this period, which translates to an average of 1100.41 citations per year and 147.10 citations per paper. The dataset indicates a high level of authorial productivity and impact, with an average of 653.81 papers per author and an extremely high average number of citations per author at 111,986.97, suggesting significant contributions by a relatively small number of researchers, as reflected by an average of 1.99 authors per paper. The h-index, a metric indicating that 160 papers have been cited at least 160 times, confirms the influential nature of this body of work. The g-index is even higher at 373, suggesting that the most-cited papers have substantial citation counts. The normalized and annual h-indexes (hI,norm and hI,annual) are 141 and 1.08, respectively, indicating sustained and consistent influence over time. The hA-index stands at 46, highlighting that a significant portion of papers has achieved high citation averages. The distribution of papers with accumulated citation counts (ACC) reaching specific thresholds (e.g., 1, 2, 5, 10, 20 citations) demonstrates a healthy citation life for many papers, with decreasing numbers as citation thresholds increase. This comprehensive bibliometric analysis, sourced from Publish or Perish as of 2024, effectively showcases the depth and impact of research in this field.
4.2 Network Visualization

Figure 1. Network Visualization
Source: Data Analysis Result, 2024

This figure illustrates the thematic clusterization of terms associated with the implementation of character education in school curricula. The clustering of keywords, shown in different colors, signifies distinct themes or areas of focus within the literature:

1. Character Education Curriculum and Programs (Blue Cluster): Central terms like “character education curriculum” and “character education program” are closely linked, indicating a significant focus on the structured approaches to teaching character in schools. This cluster appears to be connected extensively with different educational levels (“primary school,” “public school,” “high school”) suggesting a broad application of these programs across various educational stages.

2. Curriculum Types and Educational Settings (Green Cluster): This cluster includes terms such as “independent learning curriculum,” “independent curriculum,” and “merdeka curriculum.” The presence of “family” and “moral” within this cluster also points to discussions on the influence of various social and cultural settings on character education, emphasizing the role of family and moral considerations in curriculum development.

3. Philosophical and Ethical Dimensions (Red Cluster): Featuring terms like “ethic,” “politic,” “good character,” and “character value,” this cluster focuses on the philosophical and ethical discussions surrounding character education. This includes debates over the values that should be prioritized and the moral foundations of character education programs.

4. Religious and Citizenship Education (Purple Cluster): Keywords such as “Islamic education curriculum,” “Islamic religious education,” “religious education,” and “citizenship education” suggest a thematic focus on how character education intertwines with religious teachings and civic responsibilities. This cluster indicates a significant exploration of how character education is implemented within religious and citizenship frameworks.
4.3 Overlay Visualization

This second network visualization, which includes a timeline (from 2005 to 2020), provides insights into the temporal trends in the research of character education within school curricula. The color gradient, ranging from purple (indicating older publications in 2005) to yellow (indicating more recent publications in 2020), allows us to observe how the focus of research has evolved over the years.

1. Early Focus (Purple to Blue Nodes)
   Initially, the research emphasized foundational topics such as "Islamic education curriculum," "religious education," and more general terms like "school curricula" and "curricula." This indicates an early concentration on establishing broad frameworks for character education, often within specific cultural or religious contexts. The presence of terms like "citizenship education" and "character value" in earlier periods suggests that earlier research also focused on integrating character education with civic responsibilities and core value inculcation.

2. Mid-period Emphasis (Blue to Green Nodes)
   As time progresses, there is a noticeable shift toward more structured approaches and specific educational settings, highlighted by terms such as "primary school," "public school," and "high school." This indicates an expanding focus on applying character education principles across various educational levels. The term "character education program" becomes prominent, suggesting a growing interest in developing specific programs tailored to different educational settings and needs.

3. Recent Trends (Green to Yellow Nodes)
   In more recent years, there is a significant emergence of terms like "character building" and "hidden curriculum." This shift indicates a deeper exploration into how character education is not only taught explicitly through dedicated programs but also implicitly through the hidden curriculum and everyday interactions within schools. "New curriculum" and "English curriculum" appearing in recent contexts may reflect
an integration of character education into broader curriculum reforms and in subjects like English, showing a trend towards interdisciplinary applications.

The research on character education has evolved from broader discussions on values and ethics to more nuanced analyses of how these are implemented across different educational levels and integrated into various curricular aspects. There is a clear trend towards exploring both explicit and implicit means of character education, indicating a maturation of the field that acknowledges the complex ways in which educational environments influence character development.

4.4 Citation Analysis

Table 2. The Most Impactful Literatures

<table>
<thead>
<tr>
<th>Citations</th>
<th>Authors and year</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>9593</td>
<td>[22]</td>
<td>The challenge to care in schools, 2nd Edition</td>
</tr>
<tr>
<td>8889</td>
<td>[23]</td>
<td>Educating for character: How our schools can teach respect and responsibility</td>
</tr>
<tr>
<td>3054</td>
<td>[26]</td>
<td>Philosophy of education</td>
</tr>
<tr>
<td>2395</td>
<td>[27]</td>
<td>Educating moral people: A caring alternative to character education.</td>
</tr>
<tr>
<td>2310</td>
<td>[28]</td>
<td>Education under siege: The conservative, liberal and radical debate over schooling</td>
</tr>
<tr>
<td>2260</td>
<td>[29]</td>
<td>Happiness and education</td>
</tr>
<tr>
<td>2063</td>
<td>[31]</td>
<td>Knowledge and the curriculum (International Library of the Philosophy of Education Volume 12): A collection of philosophical papers</td>
</tr>
</tbody>
</table>

Source: Publish or Perish Output, 2024

Table 2 highlights the most impactful literature in the field of education, specifically focusing on character education and its broader implications, as sourced from Publish or Perish in 2024. The most cited work is N. Noddings’ "The Challenge to Care in Schools, 2nd Edition" (2015), with 9,593 citations, emphasizing the importance of care ethics in educational settings. This is closely followed by T. Lickona’s seminal 1992 book, “Educating for Character,” which has garnered 8,889 citations and discusses practical strategies for teaching respect and responsibility in schools. H.M. Kliebard’s historical analysis in “The Struggle for the American Curriculum, 1893-1958” (2004) also stands out with 5,347 citations, reflecting on historical debates over curriculum development. Other notable works include "Positive Education" by Seligman et al. (2009), which aligns positive psychology with classroom interventions and has received 3,215 citations, and multiple entries by Noddings, further showcasing her significant influence on the philosophy of education and moral development. The list collectively reflects a diverse set of influential perspectives, from the practical approaches to character education to theoretical discussions on educational philosophy and curriculum development.
4.5 Author Collaboration

The figure represents an author collaboration network within the field of character education, as depicted by the VOSviewer tool. Each node (circle) represents an author, and the size of each node typically indicates the volume of publications or the prominence of the author in the field. The lines between nodes signify collaborative relationships between the authors, with thicker or more numerous lines often indicating more frequent or significant collaborations.

The different colors of the nodes signify various clusters or groups of authors who frequently collaborate with each other. Each cluster may represent authors working within similar sub-fields of character education or geographic/regional collaborations.

1. Red Cluster: This includes authors like Rahman ML, Erfiana Nane, and Fitri Az. This cluster might indicate a specific research group or a thematic focus within character education, potentially localized or focused on a particular educational context.

2. Green Cluster: Featuring authors like Santoso G and Gunawan I, suggesting another closely-knit group possibly focusing on different aspects or methodologies within character education research.

3. Blue Cluster: Contains authors like Alam A and Batan IG, potentially indicating a network of collaborators who might be exploring theoretical or comparative studies in character education.

Certain nodes like Lickona T appear larger or are centrally located, suggesting their key role in the field. Thomas Lickona is known for his contributions to character education, indicating that he might serve as a pivotal figure connecting various research strands or mentoring emerging scholars in the field. Some authors also serve as links between clusters, such as Lickona T, who appears to have connections across different groups. These authors are critical for interdisciplinary research and the integration of diverse perspectives within character education studies. A few authors, such as LieW J and Nasir M, appear relatively isolated with fewer connections. This suggest
that these authors are either new to the field, work in niche areas within character education, or prefer independent research.

4.6 Density Visualization

The visualization, characterized by a color gradient from blue to green, suggests a spectrum of research activity within the field of character education in school curricula. The brightness and color intensity typically represent the concentration of research activity, with brighter areas indicating higher levels of current research focus and darker areas suggesting less explored topics.

1. "Independent Curriculum" and "Merdeka Curriculum": These terms, appearing in darker shades, suggest that specific independent or alternative curricula, such as the "Merdeka Curriculum," are less explored in the current literature. Research could focus on how these curricula integrate character education, their effectiveness compared to more traditional approaches, and their adaptability in different cultural or national contexts.

2. "Islamic Education Curriculum" and "Islamic Religious Education": Although there is some existing research on how character education is integrated into Islamic educational frameworks, the darker shading around these terms suggests room for deeper exploration. Future studies could examine the unique aspects of character education in Islamic contexts, how these align with or differ from secular approaches, and the impact on student outcomes.

3. "Citizenship Education": Positioned in a less bright area, this suggests potential for increased research into how character education underpins citizenship education, especially in how moral and civic virtues are taught and internalized by students in various political or cultural settings.

4. "Hidden Curriculum": This term, while crucial, appears less highlighted, indicating a potential gap in research. Future studies could focus on the implicit ways character is taught through the hidden curriculum, exploring unintended lessons in character that occur outside the formal curriculum and how these can be positively harnessed.
5. "Character Building": Despite its importance, this area appears less bright, suggesting that there may be opportunities to explore new methodologies and strategies in character building, particularly innovative practices that leverage technology or interdisciplinary approaches.

The visualization indicates that while certain areas like "character education program" and "school curricula" are well-trodden, there are distinct opportunities to expand research into less conventional or newly emerging curricula and methodologies. Addressing these less bright areas could contribute significantly to a more diversified understanding of character education's implementation and its impact across different educational paradigms and cultural settings. This focus could also help in identifying and developing best practices that are both innovative and culturally sensitive.

CONCLUSION

The bibliometric analyses conducted on the implementation of character education in school curricula have revealed insightful trends and thematic clusters within the field. Thematic clusterization identified distinct focus areas, including curriculum integration, ethical and philosophical considerations, and the role of character education in religious and citizenship contexts. The temporal research trends showed a shift from foundational principles toward more nuanced explorations of implicit character development and interdisciplinary applications. Potential future research areas were highlighted in less bright areas of the network maps, indicating opportunities to delve deeper into independent and culturally specific curricula, the hidden curriculum, and innovative character-building methodologies. The author collaboration network analysis emphasized a well-connected research community with key figures such as Thomas Lickona at its nexus, pointing to robust collaborations that cross various sub-disciplines within character education research. Collectively, these analyses underscore a dynamic field that is evolving through both concentrated research efforts and broad, collaborative studies, setting a comprehensive foundation for advancing understanding and practices in character education within diverse educational systems.

REFERENCES


