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Analyzing the Interplay of School Culture and Teacher Communication in Enhancing School Effectiveness through Parental Involvement: A Bibliometric Study

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ABSTRACT. This research examines trends in published works on school cultural openness and teacher communication skills, specifically how they contribute to enhancing school effectiveness when parents are actively involved. We aimed to chart citation patterns within Scopus and Google Scholar, identifying both key research themes and fresh insights through bibliometric data. Starting with 2086 initial records, we carefully selected 124 articles directly relevant to our inquiry. To achieve our research goals, we conducted a descriptive analysis of publication and citation trends from 2015 to 2025 using Excel, and also performed a citation analysis to identify the most influential authors. Additionally, a VOSviewer-based keyword co-occurrence analysis helped us visualise topic clusters and their relationships, revealing dominant themes and the direction research is moving. The results demonstrate a strong link between a school's open culture, teachers' communication skills, and improved school dynamics, particularly with active parent involvement. This makes a significant theoretical contribution to Education, underscoring the importance of prioritising inclusive, culturally responsive communication and structured parent engagement in school policies and programs. Our research also points out that the integrated connection between school cultural openness and teacher communication in enhancing school effectiveness through parent involvement is rarely discussed comprehensively. Therefore, we propose parental involvement as a moderating variable that can strengthen this relationship. It also opens avenues for future research that are more integrative and consider various contexts, aiming to create learning environments that are both inclusive and competitive.

Keywords: *School culture openness, Teacher communication skills, School dynamic effectiveness, Parental involvement*

INTRODUCTION

School effectiveness is no longer evaluated solely through academic achievements, but increasingly through the internal dynamics that reflect active participation from all school stakeholders. The concept of School Dynamic Effectiveness (SDE) has been developed as a holistic

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framework for assessing school performance through three main pillars: (1) student engagement, which evaluates the extent to which schools foster active student participation in learning; (2) student learning strategies, which refer to how schools facilitate the development of students' independent learning strategies; and (3) school society academic emphasis, which highlights the collective awareness and support from the school community in establishing a favourable academic climate (Lee & Shute, 2010; Wayne et al., 2023). The concept of Dynamic School Effectiveness is essential for improving educational outcomes by integrating theory-informed and evidence-based approaches to school development (Creemers & Kyriakides, 2010). The Dynamic Model of Educational Effectiveness, proposed by Creemers and Kyriakides (2015), emphasises the need for a comprehensive school-wide approach that prioritises high-quality teaching and the contextual factors that support improvement at various levels, including classroom practices and school policies. This model has been validated through research connecting Educational Effectiveness Research (EER) with improvement strategies, such as the Dynamic Approach to School Improvement (DASI), which has shown positive impacts on student learning outcomes under specific conditions.

This concept aligns with the views of educational experts who argue that equitable access to Education is a critical prerequisite for sustainably improving teaching quality and infrastructure (Greenhow et al., 2020; Pudyastuti & Mulyaningsih, 2021). Within this framework, School Dynamic Effectiveness is influenced by key internal determinants, including teacher competence and school culture (Ertem et al., 2021; Monroe et al., 2019; Sujarwo et al., 2021). The dynamic effectiveness of schools is significantly shaped by both global and local contexts, which encompass a range of real-world factors that influence educational outcomes. Research highlights that the environment in which a school operates—such as urban versus rural settings, socioeconomic status, and demographic diversity—can lead to differing levels of effectiveness in educational practices and policies (Lupton & Thrupp, 2007; Teddlie et al., 2000). For instance, local socio-political elements, including student characteristics and community resources, play a crucial role in determining school performance and student achievement (Lupton & Thrupp, 2007; Vesely & Crampton, 2007). Additionally, global educational frameworks, such as the Bologna Process and PISA assessments, reveal how international standards intersect with local practices, reinforcing the importance of context-sensitive approaches in teacher Education and policy development (Helgetun, 2023). Cultural identity and social capital also significantly contribute to building effective learning environments, especially for multicultural students with disabilities in urban settings, where contextual challenges are more pronounced (Vesely & Crampton, 2007; Zajda, 2021).

In the 21st-century Education landscape, success increasingly depends on the mastery of 21st-century skills, commonly known as the 4Cs (Creativity, Communication, Collaboration, and Critical Thinking) by both students and educators (Wrahatnolo & Munoto, 2018). Among these, teacher communication skills play a pivotal role in shaping SDE, as they bridge interaction between schools, students, parents, and the wider community. These skills are not limited to content delivery but extend to the ability to collaborate with parents and engage the broader school ecosystem (Claro et al., 2018; Kozikoğlu, 2017; Siregar et al., 2022). Practical communication skills—both verbal and nonverbal—have a significant impact on student motivation, learning attitudes, collaboration, and independence (Brynko & Kravchenko, 2023). An empathetic and respectful communication style, characterised by responsiveness and positive language, is crucial for fostering student responsibility and self-confidence (Fitri & Diana, 2023; Ibrahim et al., 2024). Moreover, a teacher's ability to adapt their communication approach according to different audiences and situations contributes to a supportive classroom environment and strengthens connections between teachers, students, and parents (Novitasari et al., 2023; Stavropoulou & Stamatis, 2017).

Another essential component is School Culture Openness (SCO), which reflects a school's openness to collaboration, participatory decision-making, and inclusive practices. SCO is typically indicated by three key dimensions: (1) intimate school behavior, which reflects a warm and

supportive interpersonal climate among school members; (2) supportive principal behavior, which denotes leadership that empowers and supports staff; and (3) positive workloads, which aim to ensure balanced task distribution and prevent excessive stress (Tarter & Hoy, 2004; Wayne K et al., 2023).

However, several studies reveal that internal school factors, such as culture and teacher competence, may not be sufficient to achieve full school effectiveness. These elements often fail to address the needs of external stakeholders, particularly parents, who play a crucial role in supporting students' learning trajectories. Thus, Parental Involvement (PI) emerges as a vital moderating factor that connects SCO and teacher communication with SDE (Gorfinkel et al., 2021; Rusdiana et al., 2020; Yulianti et al., 2019). Research on parental involvement has shown that it includes monitoring students' home learning, providing financial support for school-related needs, supervising behaviour, and encouraging regular school attendance and academic motivation (Đurišić & Bunijevac, 2017; Pavalache-Ilie & Țîrdia, 2015). Despite its significance, a notable gap remains in comprehensive studies that explore the interrelations among SCO, teacher communication skills, and SDE, particularly through the lens of parental involvement and utilising bibliometric approaches.

Therefore, this study aims to address this gap by integrating three key constructs-School Culture Openness, Teacher Communication Skills, and Parental Involvement—in the formation of School Dynamic Effectiveness, through a bibliometric analysis based on the Scopus database. Specifically, the objectives of this study are to: (1) describe the trends of scientific publications related to School Culture Openness and Teacher Communication Skills in supporting School Dynamic Effectiveness through Parental Involvement by year of publication; (2) map the citation trends of research on this topic within the Scopus database; and (3) identify the research focus and novelty in this thematic area using bibliometric indicators. This study contributes to the existing body of literature by providing a comprehensive synthesis of research patterns and knowledge development surrounding the dynamic interplay of school culture, teacher communication, and parental engagement. From a theoretical standpoint, it enriches the discourse on school effectiveness by highlighting the interconnectedness of socio-relational factors. From a policy perspective, the findings provide strategic insights for educational leaders and policymakers to design more context-sensitive school improvement frameworks that emphasise open school environments, strong teacher communication, and inclusive parental engagement as foundational pillars for sustainable educational outcomes.

METHOD

This study employs a descriptive bibliometric analysis method. In this approach, various indicators and metrics are used to assess the quantity, quality, and impact of research outputs (Kurdi & Kurdi, 2021). The study adheres to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines to ensure transparency and rigour in the process of literature identification, selection, and analysis, which comprises four main steps: identification, screening, eligibility, and inclusion (Shamseer et al., 2015). To address potential limitations related to scholarly credibility—particularly the risks of publication bias and reliance on a single database—this study adopts several mitigation strategies. These include: (1) the use of carefully designed and refined search keywords to maximize the relevance and accuracy of the retrieved literature; (2) citation analysis to evaluate the academic influence and interconnectivity of the sources; and (3) a critical review of thematic clusters to ensure that the findings are not only quantitatively valid but also theoretically grounded. These strategies are intended to enhance the robustness and reliability of the analysis, ensuring that the bibliometric results reflect both the breadth and depth of scholarly engagement in the field of school dynamic effectiveness.

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In the identification phase, literature was retrieved based on keywords relevant to the research topic, namely: ("school culture openness" AND "teacher communication skills") and ("parental involvement" OR "parental involvement" OR "parental engagement" AND "school dynamic effectiveness"). The literature search was conducted in the Scopus and Google Scholar databases, covering publications from 2015 to 2025, using the Publish or Perish software. This search identified 2,086 potentially relevant publications.

The next step was screening, in which the collected data were filtered based on predefined criteria: (1) publications in the form of journal articles or conference papers, (2) publications written in English, and (3) articles that included relevant titles, abstracts, and keywords. Based on these criteria, 1,920 publications were excluded, leaving 166 articles that met the requirements for the next phase. During the eligibility stage, the remaining 166 articles were evaluated for accessibility and relevance. Following this assessment, 124 publications were identified that explicitly discuss topics related to School Culture Openness, Teacher Communication Skills, School Dynamic Effectiveness, and Parental Involvement. These 124 publications were thus included in the inclusion phase of the review. The entire data collection process is summarised in Figure 1.
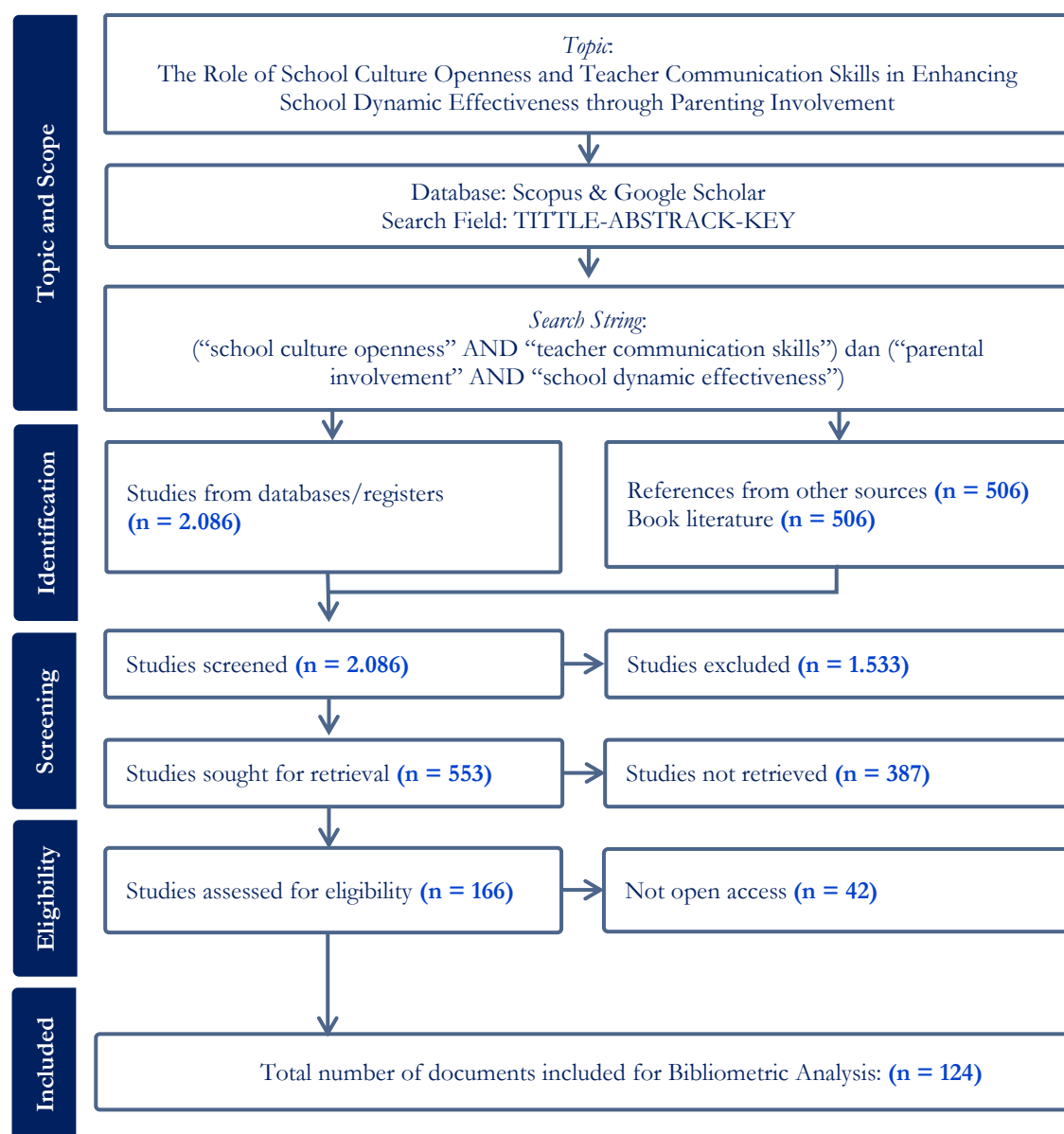

Figure 1. Data Collection Process

The final dataset was compiled on March 17, 2025, after completing the inclusion stage, and served as the basis for both descriptive and bibliometric analyses using the Scopus database. This study aims to explore scientific trends and conceptual linkages related to School Culture Openness and Teacher Communication Skills within the framework of School Dynamic Effectiveness through Parental Involvement. To ensure coherence with these objectives, the analysis was structured to address both temporal and conceptual dimensions of the literature. First, a descriptive analysis was conducted to examine publication trends and citation growth from 2015 to 2025. These trends were visualised using Microsoft Excel, which featured frequency distributions and linear trend lines to provide a clear overview of the development of scholarly interest over time.

Additionally, citation analysis was used to identify the most influential authors in the field, based on the total number of citations within the dataset. To capture the conceptual structure of the research landscape, a keyword co-occurrence analysis was performed using VOSviewer. It allowed for the visualisation of clusters and interrelationships among key terms, thereby revealing dominant themes, emerging topics, and the intellectual organisation of the field.

RESULT AND DISCUSSION

Result

A total of 124 publications related to School Culture Openness and Teacher Communication Skills within the framework of School Dynamic Effectiveness through Parental Involvement were identified through a systematic data collection process. These publications, spanning the period from 2015 to 2025 and meeting the established inclusion criteria, were subsequently analysed using descriptive bibliometric techniques.

Publication Trends (2015-2025)

The trend of publications from 2015 to 2025 concerning School Culture Openness and Teacher Communication Skills in School Dynamic Effectiveness through Parental Involvement is illustrated by grouping the publications based on their year of publication, as shown in Figure 2.
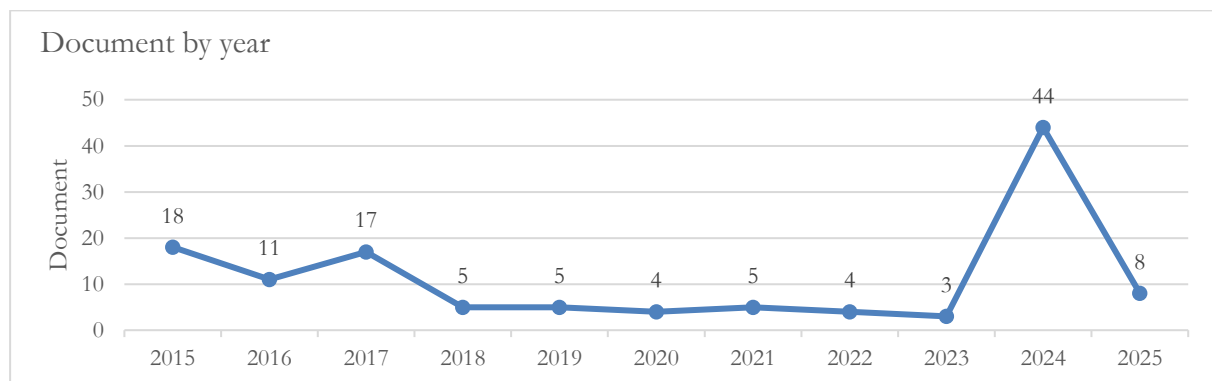

Figure 2. Publication Trends

Based on Figure 2, it can be observed that the highest number of article publications occurred in 2024, with a total of 44 articles. The most significant increase was recorded between 2023 and 2024, with a rise of 41 publications. Meanwhile, from 2015 to 2017, the number of publications was relatively high, beginning with 18 publications in 2015. In 2016, the number of publications declined to 11, followed by an increase to 17 in 2017. From 2018 to 2023, no significant changes were observed in the number of publications. However, in 2025, only eight articles were published, which is considerably fewer than in 2024, likely because 2025 is still ongoing. The significant surge in 2024 suggests a rapidly growing interest in research on this topic. It indicates that the topic of School Culture Openness and Teacher Communication Skills in School Dynamic Effectiveness through Parental Involvement experienced a significant development in 2024. In addition, the

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limited number of studies in previous years presents an opportunity to fill research gaps through more in-depth studies. The trend in citation counts is illustrated in Table 1.

Table 1. Citation Trends

Year	TP	NCP	TC	C/P	H	G
2025	8	3	26	3,25	1	5
2024	44	12	41	0,93	4	5
2023	3	3	591	19,70	3	3
2022	4	4	1.201	30,20	4	4
2021	5	4	2.503	50,06	5	5
2020	4	4	5.708	142,70	4	4
2019	5	5	2.759	55,10	5	5
2018	5	5	4.130	82,60	5	5
2017	17	17	8.202	42,84	17	17
2016	11	11	8.163	74,30	11	11
2015	29	29	16.120	55,58	28	29

Notes: TP: total of publication, NCP: number of cited publications, TC: total citations, C/P: average citations per publication, H: h-index, G: g-index

Table 1 shows that the highest total citations (TC) were recorded in 2015, reaching 16,120 citations from a total of 29 articles. It suggests that articles published in that year became key references in the field. Publications from 2016 to 2017 also showed a significant influence, although the number of articles was not as high as in 2015. It implies that each publication made a positive contribution to the development of the topic. These findings suggest that research on School Culture Openness and Teacher Communication Skills in School Dynamic Effectiveness through Parental Involvement has been significantly influenced by articles published in those years, as they were frequently cited by other researchers, indicating their importance in advancing the understanding in this area.

In contrast, during 2018 to 2020, there were fewer published articles and a relatively small number of citations, with the number of cited publications (NCP) ranging from 4 to 5. Nevertheless, the total number of citations remained high, which continues to reflect the topic's relevance. However, between 2021 and 2023, a notable decline in citation numbers occurred, with TC decreasing from 2,503 to 591. The number of cited publications (NCP) stagnated between 3 and 4, suggesting that academic attention to this topic had diminished during that period.

In bibliometric analysis, the h-index represents the number of publications that have had a significant impact on citations. According to the table presented, the h-index peaked in 2015 with a value of 28 and a total of 16,120 citations, followed by an h-index of 11 in 2016 and 17 in 2017. A shift in publication trends was observed in 2024–2025, with the total number of publications (TP) increasing significantly to 44 in 2024, although the number of citations remained low. It may indicate a resurgence of interest in this research area, with the impact likely to become visible in the coming years. Therefore, further research is needed to deepen the understanding of School Culture Openness and Teacher Communication Skills in School Dynamic Effectiveness through Parental Involvement. The researcher also presents the top ten most-cited studies discussing the related topic in 2018.

Table 2. Author with the Most Citations

No	Author(s)	Title	Journal Name	Citations
1.	Aronson & Laughter (2015)	The Theory and Practice of Culturally Relevant Education: A Synthesis of Research Across Content Areas	Review of Educational Research https://journals.sagepub.com/home/RER	1.719
2.	Ronfeldt et al. (2015)	Teacher Collaboration in Instructional Teams and Student Achievement	American Educational Research Journal https://journals.sagepub.com/home/aer	1.284

No	Author(s)	Title	Journal Name	Citations
3.	(Arifin, 2015)	The Influence of Competence, Motivation, and Organisational Culture to High School Teacher Job Satisfaction and Performance	International Education Studies https://www.ccsenet.org/journal/index.php/ies	612
4.	Liu et al. (2021)	The Effect of Instructional Leadership and Distributed Leadership on Teacher Self-efficacy and Job Satisfaction: Mediating Roles of Supportive School Culture and Teacher Collaboration	Educational Management Administration & Leadership https://journals.sagepub.com/home/EMA	602
5.	Ma et al. (2015)	A Meta-Analysis of the Relationship Between Learning Outcomes and Parental Involvement During Early Childhood Education and Early Elementary Education	Educational Psychology Review https://link.springer.com/journal/10648	577
6.	Hornby & Blackwell (2018)	Barriers to Parental Involvement in Education: An Update	Educational Review https://www.tandfonline.com/journals/cedr20	540
7.	Barger et al. (2019)	The Relation Between Parents' Involvement in Children's Schooling and Children's Adjustment: A Meta-Analysis.	Psychological Bulletin https://www.apa.org/pubs/journals/bul	523
8.	Miller et al. (2023)	Creativity, Critical Thinking, Communication, and Collaboration: Assessment, Certification, and Promotion of 21st Century Skills for the Future of Work and Education	Journal of Intelligence https://www.mdpi.com/journal/jintelligence	480
9.	Agostinelli et al. (2022)	When the Great Equalizer Shuts down: Schools, Peers, and Parents in Pandemic Times	Journal of Public Economics https://www.sciencedirect.com/journal/journal-of-public-economics	351
10.	Park & Holloway (2016)	The Effects of School-Based Parental Involvement on Academic Achievement at the Child and Elementary School Level: A Longitudinal Study	The Journal of Educational Research https://www.tandfonline.com/journals/vjer20	286

Table 2 Citation Trends shows that the most frequently cited research was conducted by Aronson & Laughter (2015), titled The Theory and Practice of Culturally Relevant Education: A Synthesis of Research Across Content Areas, with 1,719 citations. This study enhanced understanding of how an open school culture can influence the quality of Education. The second most cited article was by Ronfeldt et al. (2015), with 1,284 citations, discussing teacher collaboration and its relationship with academic performance and students' communication skills. Additionally, the third article, by Arifin (2015) with 612 citations, investigated the influence of competence, motivation, and organizational culture on teacher job satisfaction—topics related to school culture and effective communication in academic settings.

Meanwhile, Liu et al. (2021) ranked fourth, with 602 citations, emphasizing the importance of teacher collaboration and instructional leadership in supportive school cultures. Ma et al. (2015) ranked fifth, examining parental involvement in children's learning outcomes with 577 citations. It highlights the crucial role of parental involvement in educational research. Based on this data, it is evident that open school culture, teacher communication, and parental involvement are among the most widely studied topics, demonstrating significant academic impact. However, more attention should be paid to integrating these three elements of school effectiveness.

Research Focus and Novelty

At this stage, the researcher established a minimum threshold of five publications for keywords to be included in the analysis. In other words, keywords that co-occurred in more than five different documents were selected for visualization. It was done to ensure that the research

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focus aligns with consistent trends in the literature. By setting these thresholds, the researcher was able to identify key concepts relevant to determining the novelty of the discussed topic. The researcher utilized the VOSviewer software to display these keywords. The keywords were extracted from article titles and abstracts, resulting in a refined set of 20 keywords from the initial 781, as shown in Figure 3.
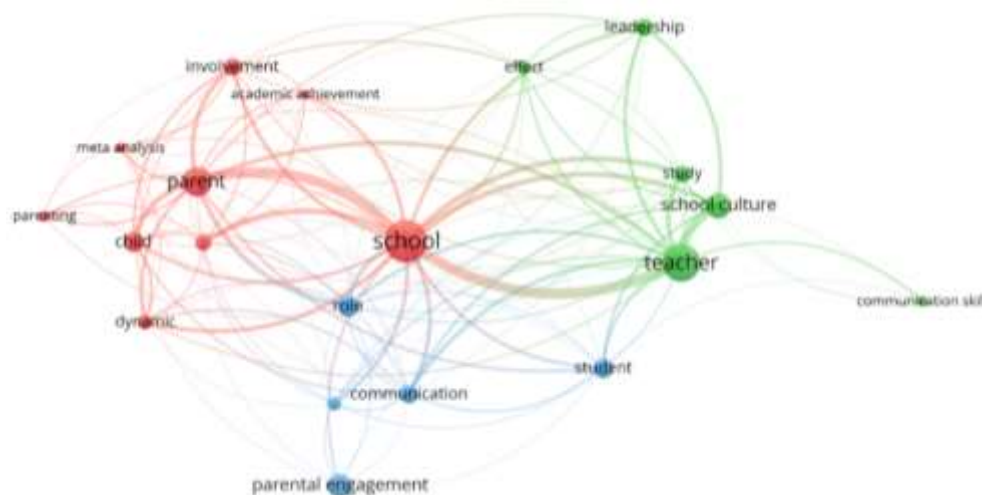

Figure 1. Research Focus

Based on Figure 3, the analysis results using VOSviewer indicate that the clusters or connection links displayed illustrate the primary research focus. The different colors represent research clusters associated with School Culture Openness and Teacher Communication Skills within the context of School Dynamic Effectiveness. There are three identified clusters, with the largest being red, followed by green and blue. It suggests that the research focus is divided into three groups: (1) the first cluster (red) consists of nine items, where the keywords "school," "parent," and "involvement" are the most prominent. These keywords represent the primary focus of the first cluster; (2) the second cluster (green) comprises six items, with "teacher," "school culture," and "study" emerging as the dominant keywords. These define the second research focus, and (3) the third cluster (blue) includes five items, where "role," "communication," and "parental engagement" are the most significant keywords. These form the third focus area. By analyzing trends using bibliometric techniques, this study helps identify conceptual linkages that have been extensively explored, making these three focus areas a valuable reference for future research in selecting more specific and relevant topics.
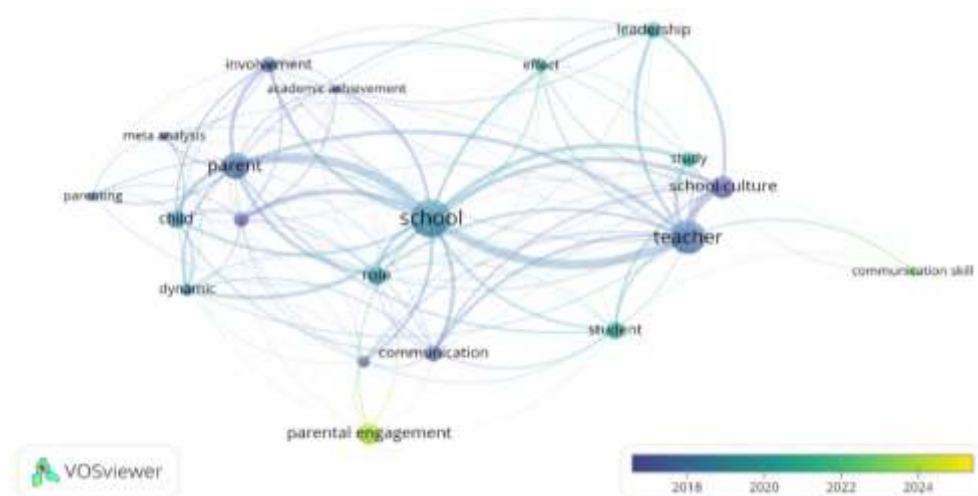

Figure 2. Overlay Visualization

Figure 4 presents an overlay visualization showing the publication timeline based on keyword usage. Yellow-colored lines or links indicate the most recent research topics in terms of publication year. Conversely, darker-colored links represent topics that have been studied for a more extended period. This visualization highlights the most recent research trends, organized by publication date. Understanding these temporal patterns allows researchers to trace emerging ideas and identify potential research gaps, particularly concerning School Culture Openness and Teacher Communication Skills within the framework of School Dynamic Effectiveness through Parental Involvement.
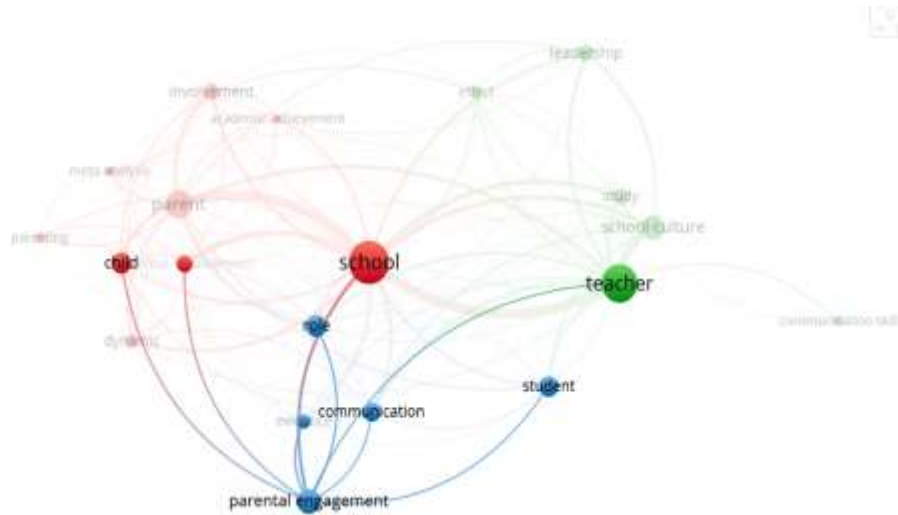

Figure 3. Keyword Co-Occurance

The novelty of this research on School Culture Openness and Teacher Communication Skills in enhancing School Dynamic Effectiveness through Parental Involvement is reflected in the bibliometric keyword co-occurrence visualization. The analysis shows that the core keyword "parental engagement" is a central component within this research theme. In this context, parental involvement or engagement appears as a crucial element, demonstrating strong connections with keywords such as "parent," "child," and "school." However, the visualization also indicates that communication skills and school culture are not yet strongly linked with the keywords "parental engagement" or "dynamic." Therefore, positioning parental involvement as a moderating variable introduces a novel contribution that aids in the development of school management theory and practice, particularly in fostering responsive, collaborative, and adaptive school environments. This approach opens opportunities to examine further how family-school collaboration can enhance teachers' roles and contribute to a more dynamic and effective school culture.

Discussion

This study focuses on the role of open school culture (SCO) and teacher communication skills (TCS) in enhancing school dynamic effectiveness (SDE) through parental involvement (PI), using a bibliometric analysis approach to explore trends and research developments related to this topic. The findings of this study provide new insights in the education literature, especially in integrating the three important elements of open school culture —teacher communication and parental involvement—into a complex framework. The bibliometric analysis successfully identified 124 publications spanning the period from 2015 to 2025, with 2024 recorded as the peak year of publication activity. This increase may indicate growing scholarly interest in integrated approaches that combine school culture, teacher communication, and parental involvement as critical levers for enhancing educational effectiveness. Citation analysis also revealed a concentration of influential authors who are frequently cited in this field, suggesting the emergence of a core academic community actively developing the discourse on SCO and TCS. Meanwhile, the keyword

co-occurrence analysis using VOSviewer showed clusters centered around concepts such as "school climate," "parental involvement," "teacher-student relationships," and "educational leadership." These findings suggest that academic discourse in this area is not only grounded in traditional school management themes but is also increasingly intertwined with relational and participatory dimensions within educational practice.

The findings of this study also reinforce previous research that has examined open school culture and teacher communication skills separately. For example, Tarter & Hoy (2004) highlight the importance of a school culture that supports positive interpersonal relationships among staff and empowering leadership, while Claro et al. (2018) focus more on teacher communication skills that enable productive relationships between teachers, parents, and students. However, this study fills the gap by combining the openness of school culture, teachers' communication skills, and parental involvement into a single, interrelated conceptual model to improve SDE.

In contrast to previous studies that focused more on a single variable or the direct effect of each element, this study suggests that parental involvement acts as a moderating variable, strengthening the relationship between open school culture and teacher communication in improving the effectiveness of school dynamics. Ma et al. (2015) and Hornby & Blackwell (2018) have previously emphasized the importance of parental involvement in supporting students' academic development. This study adds a new dimension by linking the three factors in the context of SDE, which distinguishes it from previous studies.

While this research offers valuable insights, several limitations should be noted. One potential bias is in the selection of keywords used in the literature search. This study limited the search to particular keywords, such as "school culture openness", "teacher communication skills", and "parental involvement". This bias in keyword selection may have overlooked relevant research that used slightly different terms or approaches. It may limit the scope of the literature obtained and reduce the representativeness of the analysis results.

Additionally, the selection of databases may also impact the results of this study. Although Scopus and Google Scholar are two very valuable data sources, they do not cover the entire spectrum of academic publications available. For example, articles published in non-Scopus educational journals or those from developing countries may not be captured in these searches. Therefore, the results of the bibliometric analysis may not fully reflect the development of this topic beyond the scope of Scopus-indexed journals. As this study is descriptive, the results primarily focus on mapping trends rather than providing an in-depth assessment of the quality or context of each publication. It may limit our understanding of how and why this topic is evolving in the literature, as well as the factors that influence such developments.

The findings of this study have several important implications for Education policy and practice in the field. First, policies that support more inclusive two-way communication between schools and parents are crucial. Open communication between schools and parents not only helps improve parents' understanding of Education policies and goals but also creates synergies that strengthen students' learning environment. Therefore, Education policies should encourage the development of platforms and mechanisms that enable more open and participatory communication, especially in diverse cultural contexts (Siregar et al., 2022). Second, this study revealed that developing teachers' communication skills should be a priority in professional training programs. Given the important role teachers play in building relationships with parents, communication skills training should include aspects of cross-cultural communication and the development of emotional intelligence. It will enable teachers to be more effective in interacting with parents and create better relationships between schools and families (Claro et al., 2018; Wrahatnolo & Munoto, 2018). Third, parental involvement should be seen as a core element in Education policy. Education policy should facilitate parental involvement, not just as a voluntary activity but as an integral part of Education planning and school evaluation. Schools need to design

programs that encourage parents to be more actively involved in supporting students' learning and social-emotional development (Hornby & Blackwell, 2018; Yulianti et al., 2019). Additionally, parental involvement programs should be relevant to the local context and tailored to the specific needs of the community.

Thus, this study contributes to the educational management literature by mapping how scholarly attention is increasingly focused on the interconnections between school culture openness, teacher communication skills, and parental involvement as key drivers of school dynamic effectiveness. Future research could further deepen the understanding of the relationship between these three variables in a broader context by examining contextual factors that may influence the effectiveness of parental involvement in schools. Research that integrates quantitative and qualitative analysis could provide deeper insights into how parental involvement influences the relationship between open school culture and teachers' communication skills. Furthermore, additional research is needed to explore open school culture and teacher communication in a broader context, as the current literature primarily focuses on educational contexts in Western countries. Research conducted in developing countries or more culturally diverse contexts can provide invaluable new insights into the application of this policy in various settings.

CONCLUSION

This study concludes that parental involvement plays a vital moderating role in enhancing the influence of school culture openness and teacher communication skills on school dynamic effectiveness. Although individual variables, such as school culture and parental involvement, have garnered scholarly attention, their integration into a cohesive conceptual model remains underexplored. Bibliometric analysis reveals a peak in academic interest in 2015, indicated by the highest h-index of 28 and 16,120 citations, highlighting the theoretical importance of this domain. However, the literature has yet to comprehensively address the direct relationships among school culture openness, teacher communication competencies, and school dynamics about parental engagement. This research, therefore, offers a novel perspective by proposing a framework in which parental involvement strengthens the synergy between an open school culture and effective teacher communication, thereby fostering a more collaborative, adaptive, and inclusive educational environment. Practically, these insights emphasize the urgency of implementing educational policies and programs that prioritize inclusive communication, culturally responsive practices, and structured parental engagement. Ultimately, the study lays a strong foundation for future integrative and contextually relevant research to enhance managerial and pedagogical practices and support school-family collaboration in building competitive learning climates.

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