The Impact of Transformational Leadership on Educational Environments: A Systematic Review

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ABSTRAK

Kepala sekolah memiliki peran sentral dalam mengatur lingkungan pendidikan melalui kebijakan yang diterapkannya. Kepemimpinan transformasional kepala sekolah berfokus pada pemberdayaan guru, peningkatan motivasi siswa, serta pembentukan budaya sekolah yang positif untuk mencapai tujuan pendidikan yang lebih baik. Penelitian ini bertujuan untuk melakukan tinjauan literatur sistematis mengenai dampak kepemimpinan transformasional kepala sekolah terhadap lingkungan pendidikan. Penelitian ini mengkaji artikel-artikel yang relevan dalam lima tahun terakhir dari database Scopus dan ERIC menggunakan pendekatan Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA). Temuan penelitian ini menunjukkan bahwa mayoritas penelitian berfokus pada jenjang SMP, yang dianggap sebagai fase transisi penting bagi siswa. Kepemimpinan transformasional kepala sekolah dapat meningkatkan kinerja guru, baik dalam kreativitas, inovasi, maupun self-efficacy, yang pada gilirannya berkontribusi pada hasil belajar siswa. Selain itu, strategi keberhasilan kepala sekolah meliputi penciptaan iklim sekolah yang kondusif, peningkatan kolaborasi antar guru, serta penguatan hubungan dengan orang tua dan pembangunan budaya sekolah yang positif. Temuan ini menyimpulkan perlunya melibatkan seluruh elemen dalam lingkungan pendidikan untuk menciptakan ekosistem yang mendukung perkembangan siswa secara menyeluruh.

ABSTRACT

School principals play a central role in shaping the educational environment through the policies they implement. Transformational leadership by school principals focuses on empowering teachers, enhancing student motivation, and fostering a positive school culture to achieve better educational outcomes. This study aims to provide a systematic literature review of the impact of transformational leadership by school principals on the educational environment. The research reviews relevant articles published in the past five years from the Scopus and ERIC databases, using the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) approach. The findings of this study show that the majority of research focuses on the junior high school level, which is considered a critical transitional phase for students. Transformational leadership by school principals can improve teacher performance in areas such as creativity, innovation, and self-efficacy, which in turn contribute to student learning outcomes. Moreover, successful strategies employed by school principals include creating a conducive school climate, enhancing collaboration among teachers, strengthening relationships with parents, and fostering a positive school culture. These findings conclude the necessity of involving all elements within the educational environment to create an ecosystem that supports the holistic development of students.

1. INTRODUCTION

Education is one of the essential aspects of character formation and individual development. As the primary foundation for shaping future generations, education plays a significant role in preparing students to face life's challenges (Salian & Kumar, 2023; Sharma & Ankit, 2023; Sriatun, Sugiono, Kurniasih, & Hendrizal, 2024). It provides academic knowledge and develops social, emotional, and moral skills, which are crucial for community life. Therefore, a healthy and supportive educational environment is a critical

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factor in the success of the educational process itself (Nasrine et al., 2023; Yar & Shaheedzooy, 2024). A good educational environment involves various elements, including students, teachers, and parents. As the centre of educational activities, students require a safe, comfortable, and supportive atmosphere to develop optimally. Teachers are facilitators in learning, guiding, teaching, and mentoring students. Parents also play a crucial role in supporting their children's academic and emotional development (Gautam, Agarwal, & Scholar, 2023; Hadar & Brody, 2021; Kwarteng, Frimpong, Asare, & Wiredu, 2024; Yusuf, Siana, Dasria, Darwia, & Mutmainah, 2023). When working together in a harmonious environment, these three elements can create ideal conditions for student growth.

The school principal's leadership plays a very central role in creating a conducive educational environment for learning and student development (Farid, Kaleem, & Khan, 2020; Tedla & Kilango, 2022; Utami, Nelitawati, & Al-Kadri, 2024). One leadership style widely discussed in educational literature is transformational leadership. Transformational leadership focuses on the ability of the principal to inspire, motivate, and facilitate positive change in the school environment. Another researcher revealed that, principals who adopt this leadership style can create a school climate that fosters the engagement of all parties, including students, teachers, and parents, in the educational process. A good educational environment is essential for improving the quality of learning. A positive, inclusive, supportive atmosphere can influence students' learning outcomes and social and emotional development. Principals have the power to design and implement policies, values, and practices that shape an educational environment conducive to the development of all learners. Another researcher revealed that, transformational leadership significantly influences followers by enhancing motivation, morale, and performance (Mbua, 2023; Zahrah, Susanto, Pratama, Aisyah, & Kurniawan, 2024).

Various studies show that principals who practice transformational leadership can create a supportive school culture, which, in turn, contributes to improved student learning outcomes. Research revealed that transformational leadership positively impacts students' academic achievements. Consistent with previous studies, principal leadership was also found to have a positive influence on students' reading achievement through parental involvement. Additionally, principals practicing transformational leadership can enhance teachers' and students' commitment to the school, thereby contributing to students' social and emotional development. This highlights that effective leadership focuses not only on academic aspects but also on other factors supporting students' overall well-being. Moreover, on a global scale, evidence shows that transformational leadership improves school performance in various countries. For instance, principals who apply transformational leadership principles successfully increased teacher participation and motivation in the teaching-learning process, positively impacting student learning outcomes. Similarly, transformational leadership practices, coupled with fostering a positive school culture, enhanced students' academic achievements. These studies underscore that implementing transformational leadership can provide broad benefits for developing the school environment (Özdemir, Gün, & Yirmibeş, 2023; Yulianti, Denessen, Droop, & Veerman, 2021a).

Although various studies have demonstrated the positive impact of transformational leadership on school climate and student learning outcomes, there has not yet been a comprehensive review examining its effects on the educational environment through a systematic literature review. Therefore, this study aims to conduct a systematic literature review on the impact of principals' transformational leadership on the educational environment. By collecting and analyzing existing studies, this research is expected to provide deeper insights into how transformational leadership influences various aspects of the educational environment, including school climate, community engagement, and student learning outcomes. Additionally, this study will identify best practices that principals can apply to create a positive and supportive educational environment for all school stakeholders.

2. METHOD

This study employed a systematic review of relevant literature concerning the impact of school principals' transformational leadership on educational environments. A systematic review enables researchers to collect, analyze, and synthesize findings from various existing studies, providing a more comprehensive overview of the studied topic. The article screening process was conducted using the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) approach, which provides a systematic method for reviewing and selecting articles (Ligthart, Catal, & Tekinerdogan, 2021; Paul & Barari, 2022). PRISMA involves several stages: identification, screening, eligibility, and inclusion. The detailed article selection flow using PRISMA is depicted in Figure 1. After selecting relevant articles, the obtained data were thematically analyzed to identify patterns and themes emerging from the literature. This approach categorized findings based on the dimensions of transformational leadership and its impact on educational environments. The results of this analysis were then presented in the form of a narrative

synthesis, combining findings from various studies to provide deeper insights into the relationship between school principals' transformational leadership and effective educational environments. With this approach, the study aims to significantly contribute to developing leadership practices in education. Diagram of the flow of article selection using the PRISMA method is presented in Figure 1.
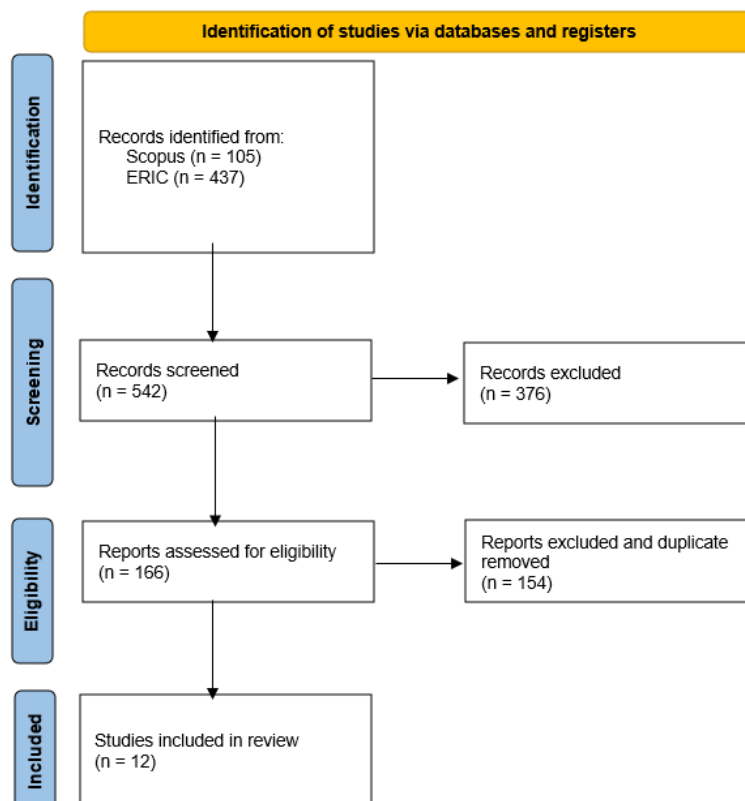

Figure 1. Article Selection Flow Using PRISMA

Stages of Article Selection

The first stage of this research process was Identification, where articles were selected as research data. SCOPUS and ERIC databases were chosen for their high credibility and relevance to the research focus, namely education. The search was conducted using keywords such as "School Principals' Transformational Leadership" OR "Transformational Leadership" and "Educational Environments" OR "School Climate" OR "Learning Environment" OR "School Culture". The selection was performed at the end of 2024, with a five-year publication limit. In this stage, 542 articles were collected, comprising 105 from SCOPUS and 437 from ERIC.

The next stage was Screening, where the collected articles were filtered based on inclusion and exclusion criteria. The inclusion criteria included articles published within the last five years from scientific journals, categorized as research articles, written in English, and with open access. Conversely, articles not meeting these criteria, such as those published more than five years ago, from proceedings or non-journal articles, review articles, written in non-English languages, and with closed access, were excluded. Of the initial 542 articles, 166 passed this stage, while the rest were excluded for not meeting the criteria. The Eligibility stage involved removing duplicate articles obtained from the two databases. Before conducting the eligibility screening, duplicate articles from the screening stage were removed, totaling four duplicates and leaving 162 articles. At this stage, the inclusion and exclusion criteria focused more on the substance of the articles, differing from the previous stage, which emphasized external characteristics. Articles relevant to the research focus and addressing the research questions were selected for the next stage. Out of the remaining 162 articles, only 12 met all the selection criteria at this stage. At the Inclusion stage, the 12 articles that passed the eligibility process were collected for further analysis. These articles were then briefly summarized and visualized in table form to provide a clear initial overview, as shown in Table 1. Subsequently, a more in-depth analysis was conducted by thoroughly discussing each article in the results and discussion section. This discussion was structured to answer the proposed research questions, offering a more focused and relevant understanding of the study's objectives.

**Table 1**. Articles Obtained through the PRISMA Flow

Author & Year	Educational Level	Target	Impact	Strategy
(Hidayat & Patras, 2024)	High School	Educators	Teacher performance	Creating a conducive school climate
(Sliwka, Klopsch, Beigel, & Tung, 2024)	Middle School	Educators	Teacher motivation	Teacher collaboration, assessment regulation, and effective use of time and space
(Alzoraiki, Ahmad, Ateeq, & Milhem, 2024)	High School	Educators	Teacher performance	Building a positive school culture among school members
(Botha & Aleme, 2023)	Middle School	Students	Student learning outcomes	Teacher collaboration
(Ronksley-pavia & Neumann, 2022)	Middle School	Educators	Student learning outcomes	Development of teaching team skills
(Magaña-Medina, Aquino-Zúñiga, Valdés-Cuervo, & Parra-Pérez, 2021)	Middle School	Educators	Teacher performance	Enhancing school climate and fostering commitment among teachers
(Chang, Hsieh, Chou, & Huang, 2021)	Middle School	Educators	Teacher performance	Creating a conducive school climate
(Kalkan, Altınay Aksal, Altınay Gazi, Atasoy, & Dağlı, 2020)	High School	School Organization	Organizational image	Building a positive school culture among school members
(Polatcan, Özkan, & Bellibaş, 2024)	Middle School	Educators	Teacher performance	Establishing trust within the school
(Yulianti, Denessen, Droop, & Veerman, 2021b)	Elementary School	Parents	Student learning outcomes	Fostering good relationships with parents
(Yulianti, Denessen, Droop, & Veerman, 2022)	Elementary School	Parents	Student learning outcomes	Fostering good relationships with parents
(Sastrawan, Ghafur, & Fauzan, 2024)	Elementary School	Educators	Teaching facilities	Creating child-friendly schools

3. RESULT AND DISCUSSION

Result

Trends in the Impact of Transformational Leadership Across Education Levels

Trends in the impact of transformational leadership across educational levels are presented in Figure 2.
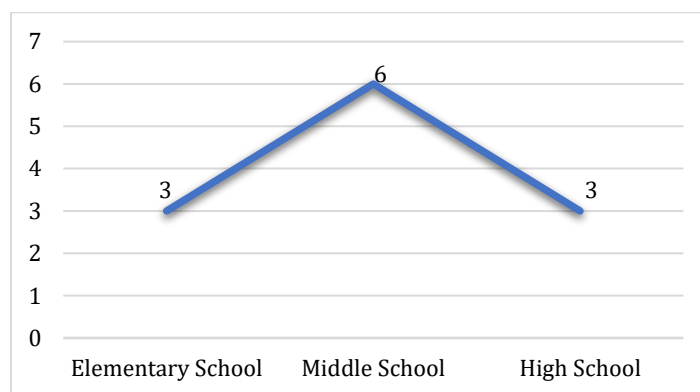

Figure 2. Trends in the Impact of Transformational Leadership Across Education Levels

This section examines trends in the education levels focused on in this study. Based on Figure 3, the application of transformational leadership by school principals is evident across various education levels, from elementary to high school. The majority of studies address its implementation at the middle school level, with six studies (Botha & Aleme, 2023; Chang et al., 2021; Magaña-Medina et al., 2021; Polatcan et al., 2024; Ronksley-pavia & Neumann, 2022; Sliwka et al., 2024). Subsequently, elementary schools and high school are each discussed in three studies. The trend highlighting the focus on middle schools reflects the unique characteristics of this critical transitional phase, where students shift from foundational learning in elementary school to the more complex and challenging education in high school (Alzoraiki et al., 2024; Hidayat & Patras, 2024; Kalkan et al., 2020; Muhaimin, Sholikhakh, & Yulianti, 2024; Sastrawan et al., 2024; Yulianti et al., 2021b, 2022). This phase often becomes crucial for students' academic and socio-emotional development, necessitating strategic leadership interventions, such as transformational leadership, to create a supportive learning environment.

Bass & Riggio's transformational leadership theory emphasizes the importance of principals in building a strong vision, providing motivation, and fostering a school culture adaptable to change. At the middle school level, principals face challenges such as varying student readiness levels, declining learning motivation, and increasingly complex curriculum demands. Previous studies also indicate that leadership interventions at this level can have long-term impacts. Principals who adopt transformational leadership at the middle school level successfully enhance teacher and student motivation and create a more inclusive learning environment. This underscores the relevance of research at this level compared to other levels, given its potential to address unique educational challenges at middle schools. The relatively few studies on elementary and high schools are also worth noting. At the elementary level, principals may focus more on managing foundational learning and relationships with parents, making transformational leadership less relevant than managerial approaches. On the other hand, students are more independent at the high school level, shifting principals' focus toward strategies to improve academic achievement and prepare students for higher education or the workforce, rather than developing a transformational culture. These trends can be understood as responses to the unique educational needs at each level, reflecting different challenges and opportunities in applying transformational leadership (Goldring, 2019; Hariyadi, Darmuki, Shofwani, M Auruma, & Sasmita, 2022).

Targets of Transformational Leadership by School Principals

Targets of tansformational ladership by school principals are presented in Figure 3.
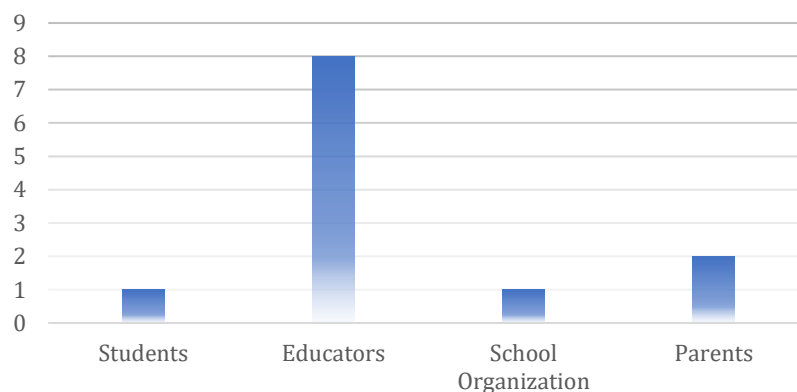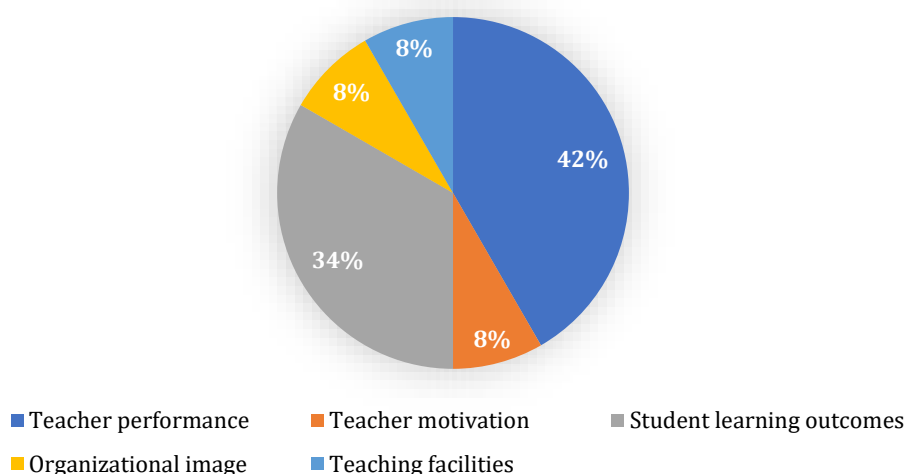

Figure 3. Visualization of the Targets of Transformational Leadership by School Principals

Based on Figure 3, the application of transformational leadership by school principals targets diverse groups, highlighting their critical role in shaping policies in the educational environment. The primary target is educators, discussed in nine studies (Alzoraiki et al., 2024; Chang et al., 2021; Hidayat & Patras, 2024; Magaña-Medina et al., 2021; Polatcan et al., 2024; Ronksley-pavia & Neumann, 2022; Sastrawan et al., 2024; Sliwka et al., 2024). Parents are the focus of two studies, while students and school organizations are each discussed in one study. These findings indicate that educators are the primary target of transformational leadership by school principals. Transformational leadership aims to inspire and motivate organizational members to achieve higher goals, which is highly relevant to educators as the primary drivers of learning. This can be explained by the strategic role of teachers as change agents in schools. In learning, teachers play a vital role in facilitating students both in terms of knowledge and their rights to education. Furthermore, transformational leadership significantly enhances teacher performance individually and collectively. Principals using this approach often focus on mentoring, capacity building, and

inspiring teachers to address complex educational challenges. Although less frequently discussed, targeting parents reflects efforts to build synergy between schools and families. Parental involvement is critical in supporting student success. Establishing strong relationships between schools and parents through principal-led policies can serve as an effective alternative to supporting student learning processes. Increasing parental involvement requires a more systematic approach, as student success is determined by internal school factors and family support. Additionally, the limited focus on school organizations as a target may be due to structural complexities requiring different implementation strategies. Therefore, while the focus on educators is understandable, there is an opportunity to expand the application of transformational leadership more holistically, involving all elements within the educational ecosystem (Bass & Riggio, 2005; Botha & Aleme, 2023; Yulianti et al., 2021b, 2022).

The Impact of Transformational Leadership on Educational Environments

The impact of transformational leadership on educational environments are presented in Figure 4.

Figure 4. Visualization of the Impact of Transformational Leadership on Educational Environments

This study examines the impact of principals' transformational leadership on educational environments. We categorized the stakeholders within the educational environment based on the review articles we gathered. As shown in Figure 4, the impact of transformational leadership by principals encompasses various aspects of education. The majority of studies focus on teacher performance, discussed in five studies (Alzoraiki et al., 2024; Chang et al., 2021; Hidayat & Patras, 2024; Magaña-Medina et al., 2021; Polatcan et al., 2024). Student learning outcomes are the primary topic in four studies, with most research focusing on the impact of principals' transformational leadership on teacher performance (Botha & Aleme, 2023; Ronksley-pavia & Neumann, 2022; Yulianti et al., 2021b, 2022). Meanwhile, teacher motivation, organizational image, and teaching facilities are each discussed in only one study. Teacher performance in this context refers to creativity, innovation, and self-efficacy. Principals who implement transformational leadership often emphasize teacher empowerment, increased motivation, and professional development support. Transformational leadership can enhance teacher performance by inspiring and serving as a role model, encouraging teachers to innovate and improve their teaching quality. Therefore, studies on teacher performance highlight the principal's role in fostering an environment that promotes professionalism and personal growth, which in turn enhances creativity, innovation, and self-confidence in teaching.

Findings from the four studies on student learning outcomes further indicate that the influence of transformational leadership by principals extends beyond teachers to students. Transformational leadership can affect student learning outcomes by increasing teacher motivation, altering teaching methods, and creating a supportive school climate. When teachers feel supported and motivated, they can provide better teaching, ultimately leading to improved student learning outcomes. Meanwhile, the limited research on teacher motivation, organizational image, and teaching facilities suggests that, although these aspects are important, their relationship with transformational leadership has not been extensively explored. Transformational leadership theories primarily emphasize individual performance improvement, while their impact on organizational image or teaching facilities is more indirect and requires further investigation. Changes in organizational structure or the availability of teaching facilities are more influenced by overall school administrative policies rather than solely by the principal's leadership approach (Bardach & Klassen, 2021; Putro, Akhyak, & Sujianto, 2023).

Strategies for Successful Transformational Leadership by Principals

The findings reveal various strategies that principals consider crucial for the success of transformational leadership. These strategies include creating a conducive school climate, fostering teacher collaboration, and effectively managing time and space. Principals employing transformational leadership focus on building a positive school culture, enhancing teaching team skills, and strengthening teacher commitment. Additionally, they prioritize trust among school members, maintaining good relationships with parents, and creating child-friendly schools (Alzoraiki et al., 2024; Hidayat & Patras, 2024; Kalkan et al., 2020; Magaña-Medina et al., 2021; Polatcan et al., 2024; Sastrawan et al., 2024; Yulianti et al., 2021b, 2022). Transformational leadership by principals emphasizes empowerment and motivation for both teachers and students. Creating a conducive climate involves fostering an atmosphere that supports achieving educational goals and providing opportunities for teachers and students to grow. Teacher collaboration is highly emphasized, as working together allows teachers to support one another and share knowledge to improve teaching quality. Furthermore, by effectively managing time and space, principals can help create a more efficient teaching and learning environment (Chan-anteza, 2020; Sliwka et al., 2024).

Building a positive school culture is also crucial, as a supportive culture encourages all school members to work together and contribute to shared goals. Teacher commitment to the school is a key factor in achieving educational success. When teachers feel valued and supported, they are more motivated to deliver their best in teaching. The trust principals establish among school members fosters a more harmonious and productive work environment. Good relationships with parents are another essential aspect of transformational leadership. Principals who can build strong relationships with parents can create mutually beneficial collaborations in supporting student development. Finally, creating child-friendly schools ensures that students' physical and emotional well-being is prioritized, enabling them to learn in a safe environment that supports their continuous growth. Research from other researchers reveals that principals' transformational leadership strategies can realize child-friendly schools by adopting transformational leadership typologies and building communication and trust through the active involvement of teachers, parents, and the community in various meetings (Arkam, 2024; Kilag, Marsha, Ibañez, Gliezel, & Sasan, 2023).

Discussion

The trend of school principals integrating transformational leadership has varied impacts depending on the educational level, from elementary to high school. Most studies focus on middle school, reflecting a critical transitional phase in students' academic and socio-emotional development (Bass & Riggio, 2005; Botha & Aleme, 2023; Yulianti et al., 2021b, 2022). At this stage, principals face challenges such as differences in student readiness and declining learning motivation, making transformational leadership interventions essential to creating a supportive learning environment. School principals' target of transformational leadership implementation encompasses various elements within the educational environment, including teachers, students, parents, and educational organizations. Research findings indicate that such leadership primarily focuses on educators, aiming to enhance teacher performance and foster a more supportive learning environment. Although attention is also given to parents and school organizations, research in these areas is relatively limited. This suggests that while educators are the main priority, there remains an opportunity to involve all elements of the educational ecosystem in implementing transformational leadership (Bardach & Klassen, 2021; Putro et al., 2023).

The impact of transformational leadership by school principals on the educational environment primarily focuses on teacher performance. Most studies examine its influence on teachers' creativity, innovation, and self-efficacy, with principals playing a role in empowering and developing teachers professionally. The leadership also indirectly benefits students, as increased teacher motivation improves student learning outcomes. While fewer studies explore areas such as teacher motivation, organizational image, and teaching facilities, these findings highlight the importance of engaging all educational elements to investigate the broader impact further. Key strategies for school principals' success in transformational leadership include creating a conducive school climate, enhancing teacher collaboration, and managing time and space effectively. Principals also focus on building a positive school culture, strengthening teacher commitment, and fostering trust and good relationships with parents (Botha & Aleme, 2023; Chang et al., 2021; Magaña-Medina et al., 2021; Polatcan et al., 2024; Ronksley-pavia & Neumann, 2022; Sliwka et al., 2024). Additionally, prioritizing child-friendly schools supports students' physical and emotional well-being, ultimately contributing to a supportive educational environment for student development and teaching success (Ligthart et al., 2021; Paul & Barari, 2022).

This study is limited to searching articles through the Scopus and ERIC databases, focusing on the past five years. It is also constrained by the availability of open-access articles due to access limitations. Furthermore, the scope is restricted to examining the impact of transformational leadership by school

principals on the educational environment, explicitly involving students, teachers, parents, and other educational stakeholders. Future research could expand beyond the limitations of open-access articles and include a broader range of databases to obtain more diverse perspectives. Additionally, extending the research time frame to include older studies may provide a more comprehensive understanding of the long-term effects of transformational leadership. Further studies could explore the impact of transformational leadership on other aspects of the educational ecosystem, such as school culture, administrative staff, and community involvement. Lastly, comparative studies across different educational contexts and regions would offer valuable insights into how transformational leadership strategies vary in effectiveness across diverse settings.

This research highlights that applying transformational leadership by school principals can impact various aspects of the educational environment. With a primary focus on improving teacher performance, it encourages enhanced teacher creativity, innovation, and motivation, which, in turn, positively influence student learning outcomes. When principals succeed in creating a conducive school climate and fostering teacher collaboration, a more productive and supportive learning environment emerges. Furthermore, increased parental involvement through principals' policies can strengthen support for students' academic and socio-emotional development. However, the study also indicates that while educators remain the main focus, there are opportunities to expand transformational leadership practices to involve the entire educational ecosystem, including school organizations, to enhance overall effectiveness.

4. CONCLUSION

The integration of transformational leadership by school principals demonstrates a multifaceted impact on the educational environment, primarily emphasizing improvements in teacher performance, including creativity, innovation, and self-efficacy. This leadership approach fosters a supportive school climate that not only enhances teacher motivation and professional development but also indirectly benefits student learning outcomes by creating a more engaging and effective educational experience. While most research concentrates on middle school settings critical for students' academic and socio emotional transitions, there is a notable gap in exploring the broader effects on parents, school organizations, and teaching facilities. The success of transformational leadership lies in strategies such as cultivating a positive school culture, promoting teacher collaboration, and encouraging parental involvement, all of which contribute to a cohesive educational ecosystem.

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