



## Principal Leadership and Teacher Performance in Primary Education: A Bibliometric Analysis and Systematic Literature Review

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### ARTICLE INFO

#### Keywords:

Principal leadership  
Teacher performance  
Primary education  
Bibliometric analysis  
Systematic literature review  
School leadership

### ABSTRACT

**Purpose** - This study aims to map the evolution of research trends and integrate empirical evidence about the relationship between principal leadership and teacher performance.

**Methodology** - This study used bibliometric analysis and a systematic literature review (SLR). Bibliometric data were retrieved from Google Scholar using Publish or Perish, then analyzed with VOSviewer for keyword co-occurrence, citation networks, and thematic clusters. The SLR followed PRISMA procedures to identify and synthesize relevant journal articles. Inclusion criteria required articles to be (1) published in peer-reviewed journals; (2) focus on principal leadership and teacher performance as main variables; and (3) address primary education.

**Findings** - The findings show that (1) research on principal leadership and teacher performance has increased significantly in recent years. Dominant themes include performance, motivation, trust, and professional development. (2) Transformational, visionary, and instructional leadership are the most frequently examined models. (3) Principal leadership influences teacher performance mainly through mediating factors such as organizational commitment, job satisfaction, and professional learning. In conclusion, principal leadership plays a strategic and multidimensional role in enhancing teacher performance. An integrative perspective is essential to strengthen future research and policy development.

**Contribution** - This study offers an integrative, multi-layered framework. The framework connects bibliometric trends with empirical synthesis. It clarifies how various principal leadership models systematically shape teacher performance in primary education through psychological, professional, and organizational pathways.

Received 09 January 2026; Received in revised form 18 January 2026; Accepted 15 April 2026

Jurnal Eduscience (JES) Volume 13 No. 2 (2026)

Available online 30 April 2026

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## INTRODUCTION

Primary education plays a central role in shaping students' knowledge, skills, and character, thereby serving as a key foundation for human resource development (Irawatie et al., 2019; Tutkun et al., 2017). At this level, students begin to develop foundational academic and social competencies that prepare them for subsequent stages of education (Sulistyarini et al., 2022; Temiz, 2019; Yolcu & Sari, 2018). The learning process in primary schools not only introduces foundational knowledge but also shapes students' thinking patterns, learning attitudes, and character (Syahrial et al., 2022). The quality of this process is strongly influenced by teachers who interact directly with students throughout instructional activities (Diocos, 2023; Hanafi, 2021). Consequently, teacher quality has become a critical issue in efforts to improve primary education (Baharuddin & Agustang, 2022).

Teacher performance is often used as a primary indicator of the success of the instructional process in schools (Lestari et al., 2021). The concept of teacher performance refers to teachers' capacity to fulfill their professional responsibilities, encompassing lesson planning and instructional delivery, as well as the evaluation of student learning outcomes (Gyun & Joo, 2019). Teacher performance is measured in multiple ways beyond just lesson delivery. Classroom management skills, the ability to develop effective instructional strategies, and willingness to reflect critically on teaching practices all factor into how performance is assessed (Weran & Kuswando, 2021). Teachers' performance has real consequences for classroom outcomes (Adegbola, F., 2019; Adriantoni et al., 2023). Strong performers tend to create learning experiences that students find more engaging and meaningful (Mustikawati & Qomariah, 2020), and that quality shows up in student learning outcomes and broader measures of school effectiveness (Anggraini et al., 2023; Fajari et al., 2020; Syofyan et al., 2022). Schools where teachers consistently perform well generally maintain more stable instructional quality and achieve better student results over time (Escobar, 2023; Sarwono et al., 2020).

Teacher performance is influenced by multiple factors, most notably principal leadership (Andriadi & Sulistiyo, 2024; Bildag & Pilli, 2024; Ibrahim et al., 2020; Rais et al., 2022; Sergiovanni, 1993). Principals act as both managers and leaders, going beyond administrative duties to support teacher growth and foster academic culture (Berkovich & Hassan, 2025; Kavgacı, 2023; Istiqamah Hayati, 2024; Serin & Akkaya, 2020). Effective leadership affects teacher motivation, school climate, and staff collaboration (Chukwuemeka & Sarah, 2021; Samancioglu et al., 2019). Research highlights principal leadership as a central driver of school success or failure (Ağalday, 2022; Berkovich & Hassan, 2025).

Attention to principal leadership is also reflected in various educational policies that explicitly position principals as catalysts for improving instructional quality (Lei et al., 2024; Nguyen et al., 2017). In Indonesia, this emphasis is evident in policies such as *Permendiknas* Number 13 of 2007 and national programs such as *Guru Penggerak* and *Sekolah Penggerak*, which position principals in a strategic role in improving instructional quality and teacher professionalism (Siraj et al., 2022; Wote & Sero, 2021). These policies show that principal leadership is not only a conceptual issue in the literature, but also a practical concern in educational improvement efforts.

What happens in actual schools does not always match what educational policies envision. Leadership practices in many primary schools still fall short of what would be needed to genuinely improve teacher performance (Balaban & Tinmaz Kazancı, 2024; Ekmen & Okçu, 2021). Research by Ağalday & Dağlı (2021), Berkovich & Hassan (2025), Mert & Özgenel (2020), and Zeleke et al. (2025) consistently finds that principals often stay more involved in administrative work than in supporting teachers' professional growth. Academic supervision programs exist on paper but frequently are not implemented in ways that actually help teachers develop stronger instructional practices (Cylve et al., 2021; Xu et al., 2020). Taken together, these realities suggest that principal leadership has not yet achieved its potential as a driver of teacher performance improvement across the range of educational contexts where it matters (Ahmet, 2016).

Researchers have paid considerable attention to how principal leadership relates to teacher performance. Studies by Hariri et al. (2024), Kallapadee et al. (2017), Karakose et al. (2023), and Rais et al. (2022) approach the question from multiple angles, examining leadership styles, transformational and visionary leadership

models, and various school management practices. This body of work spans diverse educational settings and has produced findings that deepen understanding of what school leadership actually does. However, previous studies have largely examined the relationship between principal leadership and teacher performance in specific contexts, using separate analytical approaches. As a result, there is still limited understanding of broader research trends, thematic development, and the overall pattern of findings in primary education.

This study addresses that gap by combining bibliometric analysis with a systematic literature review. The bibliometric component maps publication trends, tracks thematic development over time, and reveals collaboration networks among authors and countries working on principal leadership and teacher performance. The systematic review component then pulls together research findings that speak directly to how these two variables relate to one another. Bringing these two methods together enables a more integrated picture of how principal leadership and teacher performance actually connect in primary education settings. Accordingly, the novelty of this study lies in the integration of bibliometric mapping and systematic literature review to provide not only a synthesis of findings, but also a structured overview of the development of research on principal leadership and teacher performance in primary education.

Research on school leadership matters more now than ever before, largely because expectations for the quality of primary education continue to rise. Principals are no longer seen simply as administrators who keep schools running. They are increasingly understood as agents capable of driving real change in how teaching happens. A clearer and more comprehensive account of how principal leadership shapes teacher performance is something the field genuinely needs at this point. Findings from studies of this nature are expected to provide a theoretical foundation for further research, serve as a reference for the development of educational policy, and support the strengthening of school leadership practices to enhance instructional quality.

This study aims to (1) analyze research trends in principal leadership and teacher performance in primary education using bibliometric analysis; and (2) examine an integrative framework of their relationship via systematic literature review.

## METHODOLOGY

### Research Design

Two methods anchor this study: bibliometric analysis and systematic literature review (SLR). The decision to combine them was deliberate, aimed at producing a comprehensive picture of how research on principal leadership and teacher performance in primary education has developed over time. Bibliometric analysis involves mapping, tracking publication trends, and identifying how themes in the field have evolved (Aria & Cuccurullo, 2017; Donthu et al., 2021). The systematic review then goes deeper, examining what the relevant research has actually found (Mackenzie et al., 2012; Zhu et al., 2018). Using both methods together produces a more complete understanding of how principal leadership and teacher performance relate to one another than either approach could offer alone.

### Data Sources & Search Strategy

Google Scholar was selected as the primary database for both the bibliometric analysis and the SLR in this study. Its broad scholarly coverage makes it widely used for review-based research in educational leadership, facilitating access to relevant studies dispersed across multiple sources.

The search focused on studies related to principal leadership, teacher performance, and primary education. To identify relevant publications, the search strategy combined keywords such as “**principal leadership**” OR “school leadership” AND “teacher performance” AND “primary education.” These terms were chosen to capture studies examining the relationship between school leadership and teacher performance in elementary or primary school settings. The search process was limited to publications indexed within the selected review period.

The inclusion criteria in this study were as follows: (1) articles discussing principal leadership and teacher performance; (2) studies conducted in primary or elementary education settings; (3) publications available in

full text; (4) articles published in scholarly journals or conference proceedings; and (5) publications released between 2016 and 2026. Furthermore, the exclusion criteria were: (1) studies not directly related to principal leadership or teacher performance; (2) studies conducted outside the primary education context; (3) duplicate records; (4) publications without accessible full text; and (5) papers lacking sufficient bibliographic information for analysis.

### Bibliometric Analysis Procedure

The bibliometric analysis focused on publications from 2016 to 2026. The period 2016–2026 was chosen to capture the most recent development of research on principal leadership and teacher performance in primary education over the last decade. This time span was considered appropriate for identifying contemporary trends, thematic developments, and recent empirical patterns in the field. Data from the search were exported in CSV and RIS formats to facilitate processing, then fed into VOSviewer for analysis. The resulting visualizations were employed to examine relationships among keywords, citation networks, and thematic interconnections. Keyword co-occurrence analysis was conducted to identify research topics frequently appearing in the field of school leadership. Citation analysis was employed to examine the influence of frequently cited articles or authors. This process helped reveal how research has developed and how different topics in the literature connect.

### Systematic Literature Review Procedure

For the systematic review component, article selection followed PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) procedures. Articles retrieved from searches across multiple academic databases were first identified, then screened based on whether their titles and abstracts aligned with the research focus. Those who passed the initial screening moved to an eligibility assessment stage where full texts were read to confirm content relevance. Articles that did not meet the inclusion criteria were excluded from the analysis. Articles that passed the selection stage were subsequently analyzed to identify principal findings regarding the relationship between principal leadership and teacher performance. The article selection process flow is presented in a PRISMA diagram to clarify the stages of the literature screening. The article selection process followed the PRISMA guidelines to ensure a transparent and systematic review. The flow of identification, screening, eligibility, and inclusion is presented in Figure 1, which shows the number of articles retained and excluded at each stage of selection.

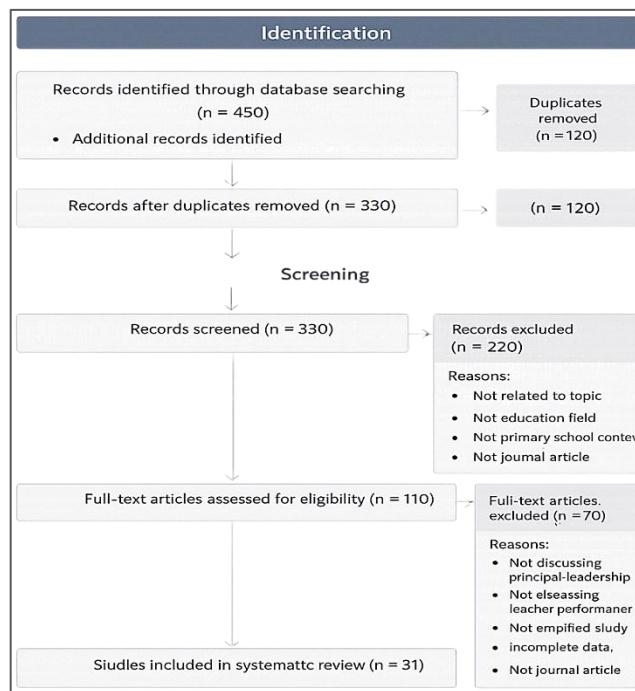
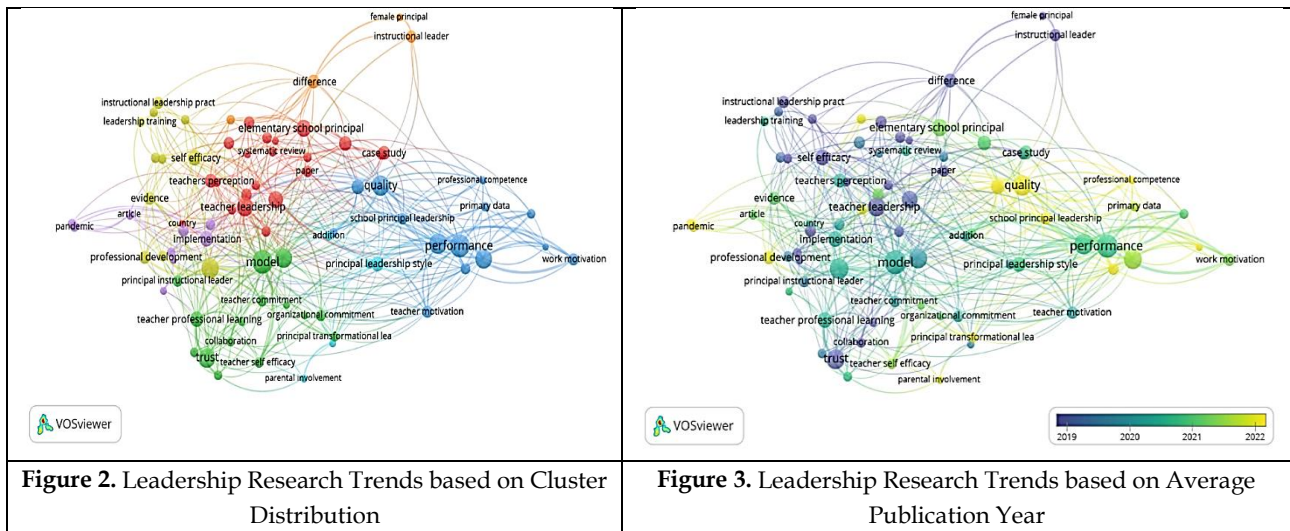


Figure 1. PRISMA Diagram

## FINDINGS

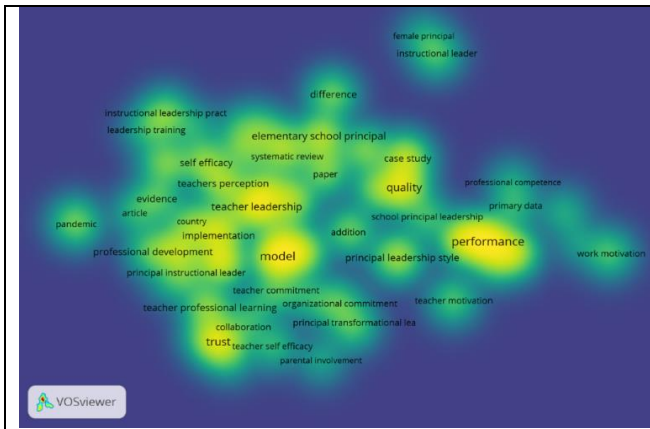
### Analysis of Research Trends on Leadership and Teacher Performance in Primary Schools

Research on principal leadership and teacher performance has grown alongside the rising focus on instructional quality in primary schools. This scholarship highlights the principal's leadership role in teacher performance and explores factors that mediate this relationship, such as work motivation, professionalism, and organizational culture. To trace these connections and the direction of research, literature mapping clarifies the development of topics and the relationships among themes in academic publications. Figure 2 shows leadership research trends by cluster distribution.

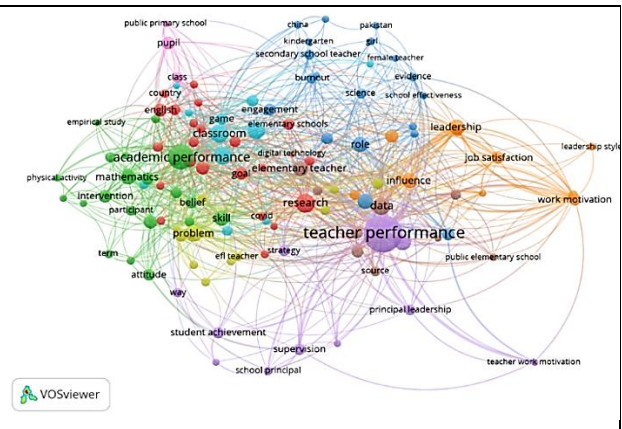


The bibliometric visualization in Figure 2 indicates that research on principal leadership and teacher performance is divided into several interconnected thematic clusters. The blue cluster centers on the keyword performance, which relates to teacher performance, work motivation, and the quality of principal leadership. The green cluster highlights concepts of teacher professional development, such as teacher professional learning, trust, and organizational commitment, which are frequently associated with transformational leadership practices. The red cluster depicts research on the role of principals in primary schools and their connections to teacher leadership and teachers' perceptions of leadership. The yellow cluster demonstrates the relationship among leadership training, teacher self-efficacy, and instructional leadership practices. Meanwhile, other clusters reveal additional themes, including policy implementation, school leadership case studies, and the influence of the pandemic on educational leadership practices. Taken together, these clusters show that the literature does not treat principal leadership as a single variable, but as a theme connected to performance, professional development, and school context. The subsequent analysis presents leadership research trends based on the distribution of publications over recent years, as shown in Figure 3.

The visualization in Figure 3 illustrates the development of principal leadership research topics based on the average publication year in the analyzed literature. Color coding in the visualization reflects how recent different research topics are. Blue marks topics that appeared earlier in the literature, while yellow signals more recent themes. Teacher leadership, self-efficacy, and instructional leadership are shown in darker colors, indicating they have been discussed extensively in earlier research. Performance, quality, and work motivation appear in lighter colors, suggesting a recent shift toward examining how principal leadership and teacher performance connect. This shift suggests that recent studies have moved beyond discussing leadership as a general school factor and have become more focused on its implications for teacher-related outcomes. Beyond tracking clusters and publication timelines, the bibliometric analysis also used keyword density visualization to identify which research themes dominate the study of principal leadership and teacher performance, as shown in Figure 4.



**Figure 4.** Leadership Research Trends based on Research Topic Density



**Figure 5.** Teacher Performance Research Trends based on Cluster Distribution

Figure 4 presents a density visualization map illustrating the intensity of keyword occurrence and interconnection in the analyzed literature. Yellow areas mark high research density, while green to blue areas indicate lower intensity. Performance, model, quality, and trust all emerge as high-density areas, meaning these themes sit at the center of research attention. Keywords such as teacher leadership, implementation, and professional development appear in relatively bright areas as well, indicating strong connections among school leadership, teacher professional development, and the actual implementation of teacher leadership practices. Topics such as instructional leadership, female principals, and work motivation appear with lower intensity, suggesting room for future research to further develop these themes. The density pattern indicates that the strongest concentration of studies still lies in broad leadership-performance themes, whereas more specific topics remain less explored.

In addition to mapping research trends in principal leadership, a bibliometric analysis was conducted to identify patterns of research development specifically related to teacher performance. Through keyword cluster mapping, groups of the most frequently occurring research themes and the relationships among topics that structure teacher performance scholarship become visible. The mapping results are presented in Figure 5, which shows trends in teacher performance research by cluster distribution.

Figure 5 demonstrates how research on teacher performance clusters within the educational literature. At its core, teacher performance is influenced by factors such as leadership, work motivation, job satisfaction, and school organization. In addition, other clusters highlight links between teacher performance and instructional areas—such as academic performance, classroom engagement, and the use of technology. Clusters that tie teacher performance to leadership, principal leadership, and supervision are also apparent, reinforcing the meaningful impact of principals in shaping teacher performance. This multidimensional pattern suggests that teacher performance is influenced by both individual and organizational matters. Further, research topics can be tracked by average publication year, revealing how themes evolve over time, as illustrated in Figure 6.

Figure 6 shows how teacher performance research topics have developed over time based on average publication year. Blue marks topics that appeared earlier, while green to yellow indicates more recent themes. Teacher performance, work motivation, and leadership all appear in lighter colors, pointing to growing research emphasis on how these three factors relate to one another. Academic performance, engagement, and digital technology have also started emerging as developing themes in recent scholarship on teacher performance. These patterns suggest that current research is becoming more attentive to how teacher performance is shaped not only by leadership, but also by changing instructional demands and learning environments. Subsequently, Figure 7 displays trends in teacher performance research by research topic density level to identify the most dominant themes in the analyzed literature.

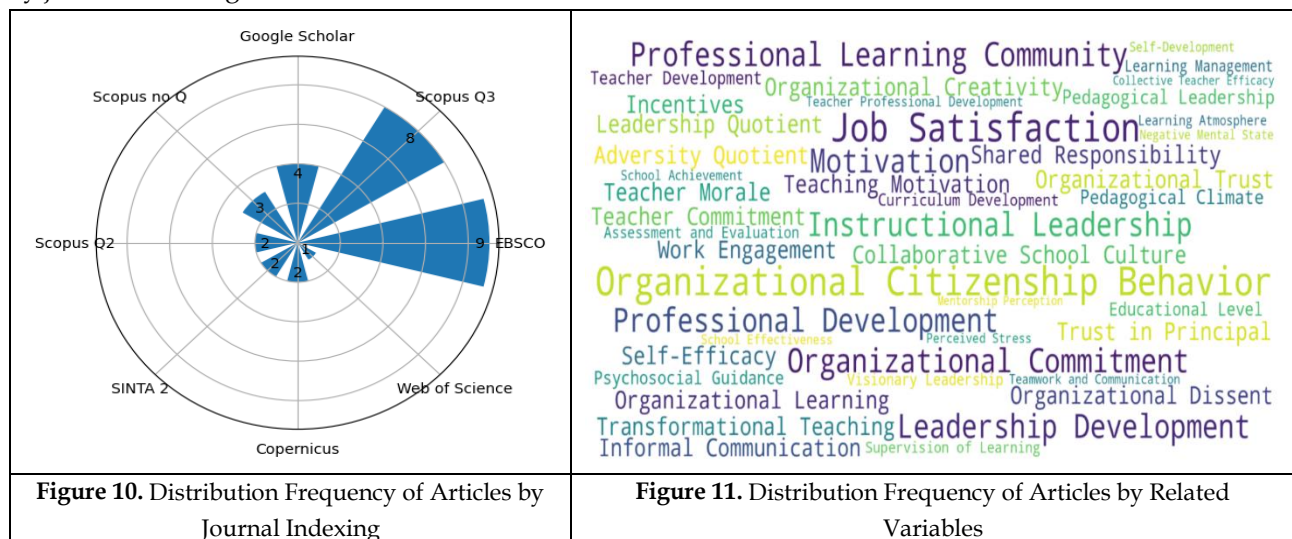


the United States, and Greece each contributed a single study. The pattern suggests that interest in principal leadership and teacher performance is growing globally, but remains concentrated in particular countries. This uneven distribution indicates that the evidence base is still shaped by a limited number of national contexts. Table 1 breaks down the distribution of the reviewed articles by research method.

**Table 1.** Distribution Frequency of Articles by Research Method

Method	Types	Frequency
Quantitative	Descriptive	5
	Survey	13
	Correlational	4
	Quasi Experiment	2
Qualitative	Descriptive	1
	Case-Study	3
Mixed Method	Explanatory Sequential	1
	Exploratory Sequential	2

Most articles in Table 1 used quantitative approaches, mainly surveys. Descriptive and correlational studies followed, while quasi-experimental approaches appeared less often, reflecting attempts to test leadership's influence on teacher performance more causally. In addition, qualitative research includes descriptive designs and case studies that explore leadership practices in specific school contexts. However, mixed-methods approaches—both explanatory and exploratory sequential models—remain relatively underused. Overall, this distribution shows the field is dominated by studies of measurable relationships, with fewer examining leadership processes in depth. Finally, Figure 10 shows the distribution of reviewed articles by journal indexing.



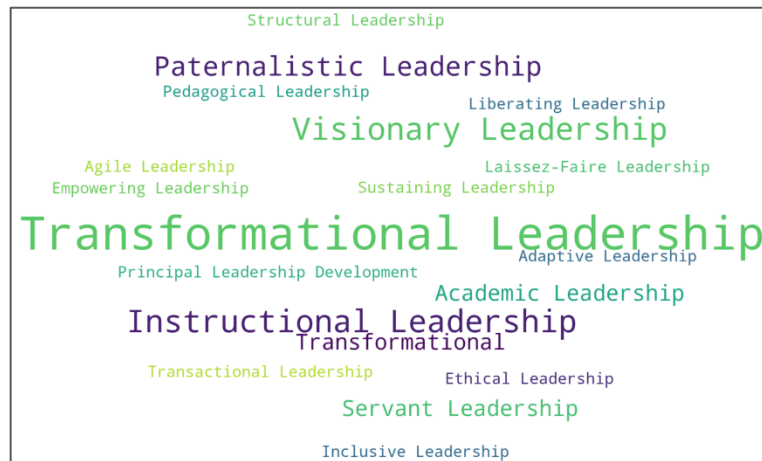
**Figure 10.** Distribution Frequency of Articles by Journal Indexing



**Figure 11.** Distribution Frequency of Articles by Related Variables

The journal indexing data in Figure 10 shows that most reviewed publications appeared in the EBSCO and Scopus Q3 databases. Research on principal leadership and teacher performance is frequently published in mid-tier, reputable journals, though higher-tier outlets such as Scopus Q2 and Web of Science remain less common. Articles also appear in national indices such as SINTA 2 and on platforms like Google Scholar, suggesting the topic carries relevance at both international and national levels. This index distribution suggests that the topic has established academic visibility, although its presence in higher-tier international journals remains relatively limited. This index distribution pattern provides an overview of publication quality and reach, which can be further understood by examining the distribution of reviewed articles across related variables in Figure 11.

Figure 11 displays the distribution of variables most frequently associated with teacher performance in the 31 reviewed articles. Variables such as Organizational Citizenship Behavior, Organizational Commitment, Professional Development, Instructional Leadership, Job Satisfaction, and Motivation appear dominant, indicating that dimensions of commitment, professional development, and psychological and organizational factors constitute the primary focus in the literature. A number of other variables such as Trust in Principal, Self-Efficacy, Work Engagement, and Collaborative School Culture also emerge as supporting factors that enrich understanding of teacher performance dynamics in primary schools. This distribution indicates that the literature has largely approached teacher performance through mediating and supporting variables rather than through direct leadership effects alone. This variable mapping provides a comprehensive conceptual overview before proceeding to a discussion of the types of leadership examined in the research, as displayed in Figure 12.



**Figure 12.** Types of Leadership Examined

Figure 12 displays the distribution of leadership types examined across the 31 articles through an elliptical word cloud visualization that shows the proportion of occurrences for each leadership type. Transformational Leadership appears most dominant, followed by Visionary Leadership, Instructional Leadership, and Paternalistic Leadership, which are also relatively frequently studied. Other leadership types, such as Servant, Academic, Adaptive, Ethical, Agile, Transactional, Liberating, Sustaining, and Laissez-Faire Leadership, still appear, though with more limited frequency, indicating conceptual diversity in the literature. Transformational perspectives still dominate scholarship on principal leadership in primary education, though the field is beginning to explore more varied, contextually grounded models. This suggests that while transformational leadership remains the main explanatory model, the literature is gradually opening space for alternative approaches that may be more sensitive to context.

Across the 31 synthesized articles, a relational pattern emerges showing that principal leadership does not influence teacher performance through a single direct route. Instead, it operates through three main pathways: psychological (motivation, job satisfaction, organizational commitment, self-efficacy, trust), professional (professional development, professional learning community, instructional practice, collective efficacy), and organizational-cultural (collaborative school culture, organizational citizenship behavior, school climate, organizational creativity). The most frequently studied leadership models, transformational, instructional, visionary, servant, paternalistic, empowering, academic, and adaptive, all act as initial catalysts. They shape teachers' psychological states, build professional capacity, and create supportive school cultures. These effects eventually show up as improved teacher performance in areas such as instructional quality, teaching effectiveness, classroom engagement, and extra-role contributions, such as organizational citizenship behavior. The model also reveals that some leadership types, particularly toxic and laissez-faire, create negative pathways that increase stress and reduce satisfaction, thereby undermining teacher performance. The integrative framework that emerges positions Principal Leadership Styles as the primary exogenous variable, followed by three mediating mechanisms: Psychological Mechanisms, Professional Capacity

Building, and Organizational Culture Dynamics, all of which shape Teacher Performance Outcomes. Notably, several studies demonstrate patterns of partial or full mediation; for instance, professional learning community mediates transformational leadership, organizational commitment mediates empowering leadership, and professional development mediates instructional leadership toward collective efficacy. Taken together, these findings show that the influence of leadership is systemic and multi-layered, not a simple linear relationship. In summary, this framework affirms that enhancing teacher performance requires integrating appropriate leadership styles with the simultaneous strengthening of psychological, professional, and school cultural factors. The following visualization presents the conceptual framework synthesized from the 31 articles:

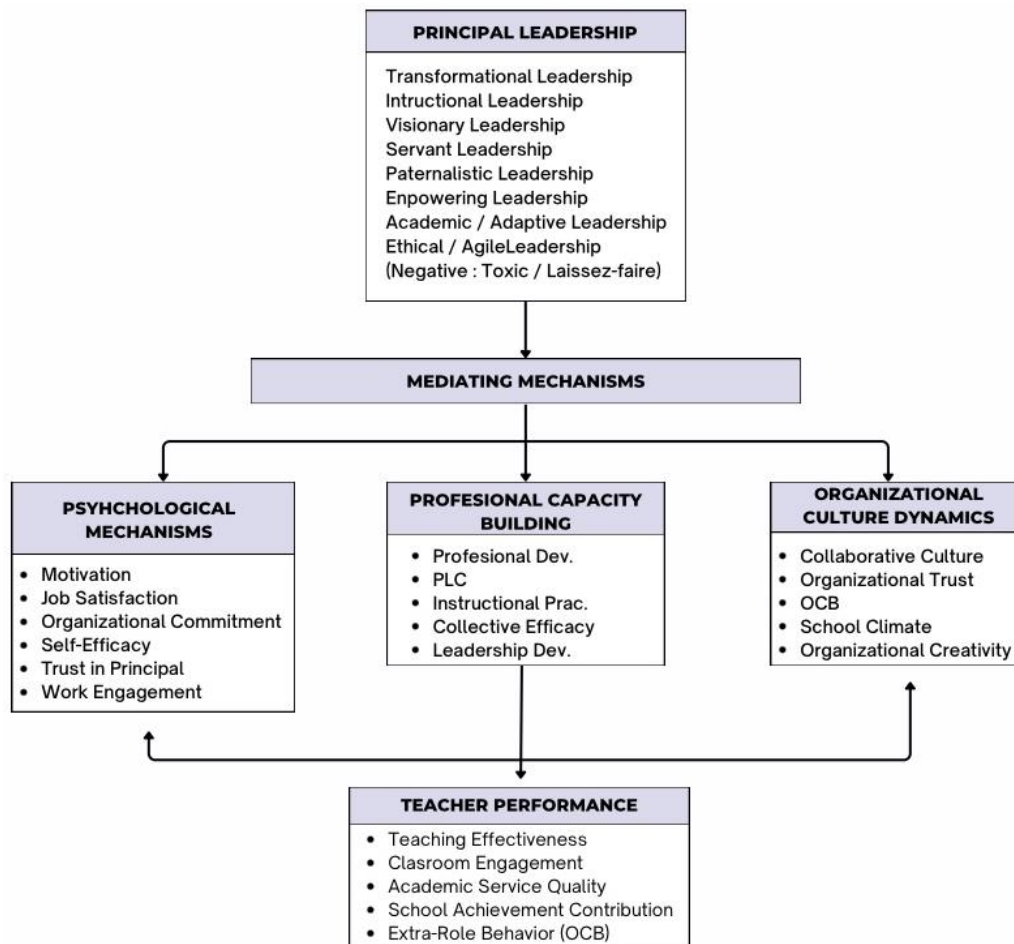


Figure 13. Conceptual Framework

## DISCUSSION

The bibliometric findings of this study show that principal leadership is no longer merely an administrative function but is increasingly understood as a factor closely associated with the quality of teaching and learning in primary education. Researchers increasingly frame it as a pedagogical force that directly shapes the quality of teaching and learning (Mert & Özgenel, 2020; Zeleke et al., 2025). This perspective aligns with the concept of instructional leadership, which positions principals as directors of academic vision and guardians of instructional focus (Hallinger, 2011; Myende et al., 2024). Transformational leadership theory also affirms that changes in teacher behavior are profoundly influenced by leaders' capacity to build shared vision and collective commitment (Azar & Adnan, 2020; Firmansyah et al., 2022; Leithwood et al., 2020). The interconnections among keywords such as performance, trust, and professional development in the cluster map reinforce the argument that leadership operates through relational pathways and capacity-building rather than mere formal instruction. In this study, the interconnections among keywords such as performance,

trust, and professional development in the cluster map indicate that the influence of principal leadership tends to operate through relational processes and teacher capacity building rather than through formal authority alone. This pattern aligns with social learning theory, which emphasizes that teachers' professional behavior is shaped through social interaction, modeling, and supportive school environments (Parveen et al., 2022; Sliwka et al., 2024; Tan, 2024). This interpretation is also supported by the systematic review, which shows that principal leadership is repeatedly associated with trust, professional development, and school culture in relation to teacher performance. This finding is consistent with previous studies showing that leadership contributes to teacher performance not only through supervision but also by fostering a supportive professional environment (Mert & Özgenel, 2020; Zeleke et al., 2025).

The sharp increase in publications since 2023 highlights the growing concern with principal leadership and teacher performance in educational research. Notably, Turkey, Indonesia, and Thailand account for a large share of these publications, as all three countries are actively pursuing educational reforms to improve teacher quality. In these contexts, research frequently discusses improving teacher quality alongside strengthening principal leadership, underscoring their interrelatedness. Professional capital as a foundation for school quality also emerges as a prominent theme (Siska & Japar, 2020). Studies reviewed consistently place leadership within broader school improvement efforts, reaffirming that principal leadership is central to educational reform, especially in reform-oriented systems (Koçak, 2021; Siraj et al., 2022; Istiqamah Hayati, 2024; Mert & Özgenel, 2020; Nguyen et al., 2017).

The dominance of quantitative surveys in the methodological composition reflects a broader pattern: many researchers are working to map relationships among variables at scale (Creswell, 2014). This fits squarely within the school effectiveness research tradition, which prioritizes identifying determinants of school success through empirical measurement (Ahmadi et al., 2019; Lukman et al., 2021). Correlational studies and quasi-experiments also appear, signaling a move toward testing effects in more causal terms (Kempner et al., 2019; Reichardt, 2020). In the context of this study, this methodological pattern shows that the field has been more concerned with identifying statistical associations than with explaining how leadership is practiced in everyday school life. What remains limited, however, are qualitative and mixed-methods studies, which means the dynamics of daily leadership practices in primary schools have not been explored as deeply as they could be (Adriantoni et al., 2023; Patrick, 2022). Leadership practice is a complex interaction among individuals and contexts, and understanding it fully requires methodological approaches that can capture that complexity (Limon & Dilekçi, 2025; Yalçın & Özgenel, 2021). This finding also helps explain why the literature is already rich in evidence about the relationship between principal leadership and teacher performance, but still relatively limited in showing how that relationship is formed in practice.

Variables such as Organizational Commitment, Job Satisfaction, Motivation, and Professional Development appear most frequently, suggesting that leadership influences teacher performance through psychological mechanisms and school culture rather than through direct command (Buckman & Pittman, 2021; Lestari et al., 2021; O'Shea, 2021). Herzberg's two-factor theory offers a useful lens here, emphasizing how job satisfaction drives individual performance, and the findings consistently show that job satisfaction and teacher performance move together (Ibrahim et al., 2020; Mert & Özgenel, 2020). Bandura's (1999) self-efficacy theory also applies, as teachers' professional confidence often mediates the relationship. The connection between trust and performance echoes the concept of relational trust, which holds that the quality of relationships within schools is a precondition for better learning outcomes (Asimiran et al., 2020). The findings of this study reinforce those arguments. The recurring appearance of these variables suggests that principal leadership affects teacher performance indirectly, by shaping teachers' motivation, confidence, commitment, and professional support. Teacher performance is ultimately not merely a matter of technical competence but also a reflection of a healthy organizational ecosystem (Zhao & Zhang, 2022). The systematic review also shows that leadership rarely works as a single direct predictor, but more often through mediating professional, psychological, and organizational factors. This is consistent with previous empirical studies that

identify job satisfaction, motivation, and professional development as important mediating factors in the relationship between leadership and performance (Limon & Dilekçi, 2025; Yalçın & Özgenel, 2021).

Transformational Leadership remains the leading model for explaining improvements in teacher performance in primary schools (Asimiran et al., 2020; Roesminingsih & Windasari, 2025; Sirait, 2021). Its four core components—idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration—are closely linked to professional development (Sahin, 2017; Zhang & Tan, 2021). Visionary and Instructional Leadership also feature as important models, highlighting the need to balance strategy with classroom practice (Agustin et al., 2023; Huang, 2023). Servant, Adaptive, and Academic Leadership models are increasingly discussed, suggesting literature now values more context-sensitive and humanistic approaches (Kaewsritthong et al., 2024; Nandedkar et al., 2023). While transformational leadership remains dominant, the presence of other models shows that leadership is no longer viewed through a single framework. Collectively, these findings suggest principal leadership drives vision, shapes school culture, and supports professional learning, ultimately enhancing teacher performance and primary education quality (Ali, 2022; Makirimani & Naicker, 2025; Saleem et al., 2020). Leadership's influence is not uniform; it depends on specific pathways in schools and on teachers' contexts. This broadens previous findings, showing that primary education leadership is now seen as multidimensional, even though transformational leadership is still the most common model.

Theoretically, these findings support the view that the relationship between principal leadership and teacher performance is not linear, but is shaped through interconnected psychological, professional, and organizational mechanisms. In this respect, the conceptual framework developed in this study contributes to the literature by showing how different leadership styles may yield distinct performance outcomes under different mediating conditions in schools. Practically, the findings suggest that efforts to improve teacher performance should not rely solely on administrative supervision or formal evaluation. Greater attention needs to be given to strengthening teacher motivation, professional learning, trust, and collaborative school culture, because these are the conditions through which leadership is more likely to influence performance. The framework proposed in this study may therefore serve not only as an analytical reference for future research, but also as a practical guide for principals and policymakers seeking to improve instructional quality in primary education.

This study has several limitations that need to be acknowledged. First, the bibliometric analysis relied on documents indexed in the selected database, so relevant studies not included in that database may not have been captured. Second, the analysis was limited by the keywords and search strategy used, so some studies discussing similar issues with different terminology may have been excluded. Third, the publication period covered in this study also shapes the trends identified, meaning that the patterns reported here should be read within the dataset's time frame rather than as a complete representation of the field's development. Finally, although the systematic literature review helps strengthen interpretation, the findings still rely on the scope and availability of published studies, so they should be interpreted with appropriate caution.

## CONCLUSION

Over the past five years, research on principal leadership and teacher performance in primary schools has grown substantially, with thematic attention increasingly focused on how leadership, motivation, organizational commitment, and teacher performance relate to one another. The systematic review confirms that principal leadership, especially transformational, visionary, and instructional forms, drives teacher performance primarily through mediating mechanisms like job satisfaction, trust, professional development, and school culture. This finding is consistent with previous studies that identify principal leadership as an important factor in improving teacher performance through both organizational and psychological pathways. At the same time, this review extends earlier studies by showing, through bibliometric mapping and systematic synthesis, that the relationship has developed into a broader research agenda in primary education. Strengthening principals' leadership capacity is a strategic priority for improving the quality of primary

education. For future research, the range of database sources should be expanded to include literature from more diverse indices to broaden the review's scope. Mixed-methods and longitudinal approaches need to be used more frequently to better understand the causal mechanisms linking leadership and teacher performance. Integrating contextual variables, such as national policies and primary school characteristics, would substantially enrich understanding. Testing the integrative model through structural equation modeling or multilevel approaches would help validate the conceptual relationships proposed here.

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