Research Article

A Bibliometric Comparative Study of Servant and Instructional Leadership and Their Influence on Teacher Motivation in Public and Private Schools

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ABSTRACT

This study addresses the growing interest in how leadership styles affect teacher motivation, a critical factor in improving educational quality. Leadership plays a central role in shaping school culture, teacher engagement, and instructional outcomes. Among the many approaches, servant leadership and instructional leadership have gained prominence due to their focus on teacher well-being and performance. However, a comprehensive comparison of these styles in different school settings remains limited.

To explore this gap, the study analyzed 99 peer-reviewed documents indexed in a major academic database from 1993 to 2025. A bibliometric method was used to map key trends, influential authors, and major themes. Visual and quantitative tools were applied to identify connections among publications and topics related to leadership and motivation.

The results show that both servant and instructional leadership positively influence teacher motivation, though they operate through different mechanisms. Instructional leadership focuses on academic goals and teaching strategies, while servant leadership emphasizes trust, empathy, and support. Cultural and institutional contexts influence the effectiveness of each style.

The study concludes that combining relational and instructional leadership elements can enhance teacher motivation, especially when adapted to specific school environments. These findings offer practical guidance for school leaders and policymakers aiming to improve teacher satisfaction and performance. The study also contributes to the global goal of promoting inclusive and high-quality education by highlighting leadership as a key driver of teacher motivation in both public and private schools.

Background

Motivated teachers are vital to the success of schools. When teachers feel inspired and supported, they are more likely to engage in creative teaching, build strong relationships with students, and persist through challenges. One key factor influencing teacher motivation is leadership. The way school leaders manage, support, and interact with their staff can directly affect how teachers feel about their work.

Two leadership styles are increasingly recognized in education: servant leadership and instructional leadership. Servant leadership emphasizes empathy, trust, and the leader's role in supporting the personal and professional growth of teachers. Instructional leadership, on the other hand, focuses on guiding teaching and learning through clear goals, feedback, and professional development. While both styles have shown promise, most research has studied them separately. There is still little comparative evidence on how each style influences teacher motivation, especially across different types of schools such as public and private institutions.

In recent years, interest in the quality of education has grown globally. This has led to a stronger focus on how to support and retain motivated teachers, particularly in alignment with international education goals such as those that promote inclusive and equitable learning for all. Understanding the impact of leadership on teacher motivation is essential for reaching these goals.

This article presents a comparative analysis of 99 academic publications to explore how servant and instructional leadership affect teacher motivation in both public and private schools.

Methods

This study employed a bibliometric research approach to examine the relationship between leadership styles—specifically servant and instructional leadership—and teacher motivation. Bibliometric analysis is a quantitative method used to explore the structure and development of academic literature through statistical and visual techniques. The following subsections describe the procedures for data collection and data analysis (Eyal, 2011).

1. Data Collection

The data for this study were sourced from the Scopus database, a widely recognized repository of peer-reviewed academic publications. A comprehensive search was conducted using keywords such as "leadership style," "motivation," and "teacher." The search focused on documents published between 1993 and 2025 and included only English-language articles within the field of education.

A total of 99 documents met the inclusion criteria and were selected for analysis. These criteria included a minimum of one citation per document, a minimum of ten citations for cited references, and at least two keyword occurrences per article. The dataset was exported in CSV format for further processing (Mahembe, 2014).

2. Data Analysis

The selected documents were analyzed using VOSviewer, a software tool designed for constructing and visualizing bibliometric networks. This included mapping author networks, citation patterns, and frequently occurring keywords.

Four types of analyses were performed:
- **Publication Trends**: Assessed the growth of literature over time.
- **Citation Analysis**: Identified the most influential publications and authors.
- **Keyword Co-Occurrence Analysis**: Revealed major research themes based on frequently paired terms.
- **Co-Citation Analysis**: Mapped the intellectual structure by identifying groups of studies frequently cited together.

These methods enabled the identification of prevailing research patterns and thematic developments in the study of leadership and teacher motivation (Afshari et al., 2009).

Result and Discussion

This section presents the main findings from the bibliometric analysis and discusses their relevance to understanding the influence of servant and instructional leadership on teacher motivation. The results are grouped into key themes identified through trends, citation analysis, and network visualizations.

1. Growth of Research on Leadership and Teacher Motivation

The number of publications on servant and instructional leadership in relation to teacher motivation has grown significantly since 1993. From minimal output in the early years, publication activity increased steadily after 2008, with a peak observed in 2023.

This growth reflects a rising global concern for improving educational outcomes through leadership practices, particularly those that support teacher well-being and professional development.
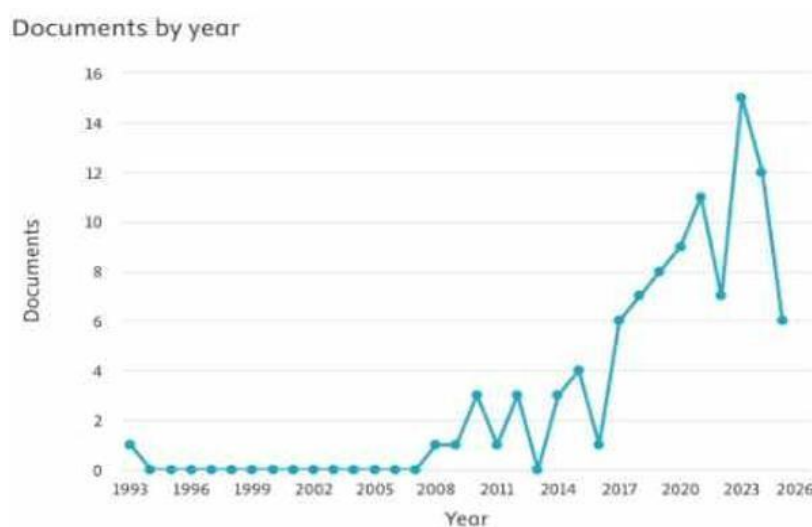

Figure I. Annual trend of publications and citations (1993–2025)
(Source: Scopus)

2. Citation Patterns and Key Influential Works

The most frequently cited works were related to motivational theory and transformational leadership. Among them, studies that explored Self-Determination Theory and its links to leadership styles received the highest citations.

Table I. Top 10 most-cited publications on leadership and teacher motivation

No	Authors	Title	Citations
1	Ryan R.M.; Deci E.L. (2020)	Intrinsic and extrinsic motivation from a self- determination theory perspective: Definitions, theory, practices, and future directions	2493
2	Eyal O. et. al (2011)	Principals' leadership and teachers' motivation: Self- determination theory analysis	211
3	Dörnyei Z.; Muir C. (2019)	Creating a Motivating Classroom Environment	87
4	Mahembe B.; Engel-brecht A.S. (2014)	The relationship between servant leadership, organisational citizenship behaviour and team effectiveness	38
5	Afshari M. et.al (2009)	Technology and school leadership	36

No	Authors	Title	Citations
6	Amels J. et al (2020)	The effects of distributed leadership and inquiry-based work on primary teachers' capacity to change: testing a model	32
7	Afshari M. et.al (2008)	School leadership and information communication technology	31
8	Naile I.; Selesho J.M. (2014)	The role of leadership in employee motivation	30
9	Bos E. et.al (2015)	Factors associated with student learning processes in primary health care units: A questionnaire study	29
10	Massry- Herzallah A.; Arar K. (2019)	Gender, school leadership and teachers' motivations: The key role of culture, gender and motivation in the Arab education system	24

These findings suggest that motivation-focused theories remain central to leadership research in education.

3. Thematic Clusters in Co-Citation Analysis The co-citation analysis revealed fourmajor clusters:
   a. Transformational Leadership and Motivation: Focused on how leaders inspire through support and vision.
   b. Instructional Leadership and Outcomes: Emphasized clear goals and teaching support.
   c. Servant Leadership and Empowerment: Highlighted trust and relational dynamics.
   d. Cultural and Contextual Factors: Addressed how leadership is affected by school type and culture.
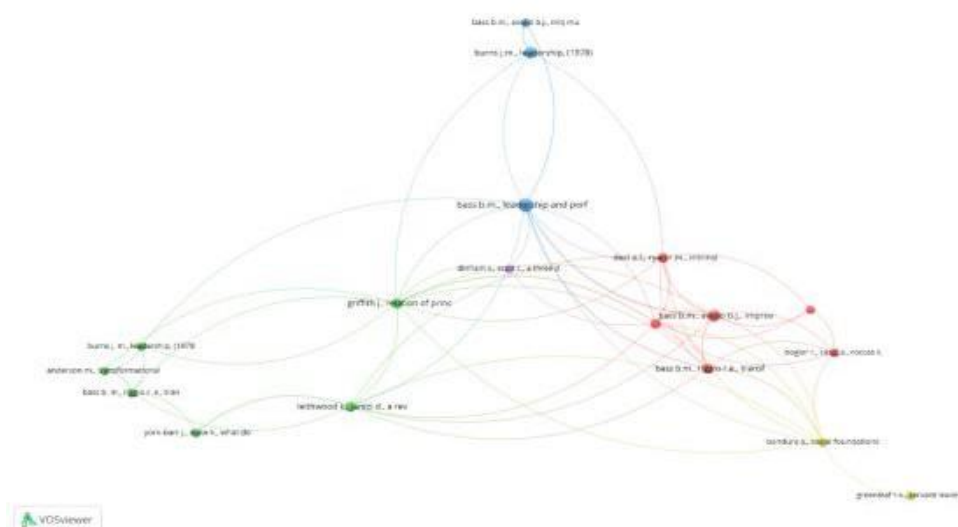

Figure II. Network visualization of co-cited literature

These clusters show that both servant and instructional leadership styles are embedded within broader theoretical frameworks that emphasize the emotional and practical needs of teachers.

Table II. Top 10 documents with the highest co-citation and total link strength.

Documents	Citation	Total link strength
Bass B.M., Leadership and performance beyond expectations, (1985)	8	16
Bass B.M., Avolio B.J., Improving organizational effectiveness through transformational leadership, (1994)	6	14
Griffith J., Relation of principal transformational leadership to school staff job satisfaction, staff turnover, and school performance, journal of educational administration, 42, 3, pp. 333-356, (2004)	4	13
Bogler R., The influence of leadership style on teacher job satisfaction, educational administration quarterly, 37, 5, pp. 662-683, (2001)	4	12
Bass B.M., Riggio R.E., Transformational leadership, (2006)	4	11
Bandura A., Social foundations of thought and action: a social cognitive theory, (1986)	3	10
Leithwood K., Jantzi D., A review of transformational school leadership research 1996-2005, leadership and policy in schools, 4, 3, pp. 177-199, (2005)	4	10
Deci E.L., Ryan R.M., Intrinsic motivation and self-determination in human behavior, (1985)	4	9
Bass B.M., Riggio R.E., Transformational leadership, (2006)	3	6
Bogler R., Caspi A., Roccas S., Transformational and passive leadership: an initial investigation of university instructors as leaders in a virtual learning environment, educational management administration & leadership, 41, 3, pp.372-392, (2013)	3	5

Source: Author interpretation based on VOSviewer analysis

4. Emerging Keywords and Research Themes

Co-word analysis highlighted frequently occurring terms such as "motivation," "leadership," "teacher performance," and "job satisfaction." These terms reflect the field's focus on understanding how leadership shapes teacher engagement and retention.

Table III. Top 15 keywords based on frequency and total link strength

Ranking	Keyword	Occurrence s	Total link strength
1	Leadership	25	128
2	Motivation	26	119
3	Human	9	90
4	Male	5	64
5	Education	9	61
6	Teacher	7	59
7	Adult	4	52
8	Female	4	52
9	Article	4	41
10	Humans	3	40
11	Middle aged	3	40
12	Psychology	3	33
13	Leadership style	16	32
14	Questionnair e	3	30
15	Curriculum	2	27

Source: Author interpretation based on VOSviewer analysis

The inclusion of terms such as "emotional intelligence" and "self-determination" indicates a strong interest in the psychological underpinnings of leadership effectiveness.

5. Comparison Between Public and Private School Settings

Although most studies did not directly compare school sectors, patterns suggest that leadership styles may function differently depending on institutional context. Private schools often favored servant leadership due to their flexible governance and emphasis on community, while public schools leaned toward instructional leadership given their structured accountability systems.

This observation implies that the impact of leadership on teacher motivation is not one-size-fits-all, and must be tailored to institutional needs and cultures.

These clusters show that both servant and instructional leadership styles are embedded within broader theoretical frameworks that emphasize the emotional and practical needs of teachers.

Conclusion

This study examined how servant and instructional leadership styles influence teacher motivation across public and private school contexts through a comprehensive bibliometric analysis of 99 academic publications. The findings reveal that both leadership styles play a significant role in enhancing teacher engagement, satisfaction, and performance, but through different pathways. Servant leadership promotes motivation by fostering trust, empathy, and supportive relationships, while instructional leadership enhances teaching quality through structured goals, feedback, and instructional support.

The results underscore the need for educational leaders to adopt flexible and context-sensitive leadership approaches that combine relational and instructional competencies. Tailoring leadership practices to the unique needs of different school environments can improve teacher motivation, reduce burnout, and promote student learning—core outcomes essential to the success of educational institutions. Moreover, these insights contribute to global efforts to achieve inclusive and quality education, as emphasized by Sustainable Development Goal 4.

By highlighting the intellectual trends and key contributors in this field, this study also provides a valuable roadmap for future researchers and policymakers seeking to understand and improve leadership practices in education.

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