

Educational Service Quality as a Mediator Between Principal Leadership and Teacher Job Satisfaction

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ABSTRACT

This study aimed to examine the mediating role of educational service quality in the relationship between principal leadership and teacher job satisfaction in disadvantaged educational settings. A quantitative explanatory research design was employed involving 310 junior high school teachers from rural area. Data were collected using a structured questionnaire measuring principal leadership, educational service quality, and teacher job satisfaction. The proposed relationships were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) to examine both direct and indirect effects among the constructs. The results revealed that principal leadership had significant positive effects on both teacher job satisfaction and educational service quality. Educational service quality also significantly enhanced teacher job satisfaction. Furthermore, educational service quality partially mediated the relationship between principal leadership and teacher job satisfaction, indicating that effective school leadership improves teacher satisfaction both directly and indirectly by fostering higher-quality educational services. These findings highlight the importance of service-oriented leadership practices in strengthening teacher well-being and enhancing school performance in disadvantaged educational settings. The study contributes to the educational leadership literature by demonstrating the mediating mechanism through which principal leadership influences teacher job satisfaction and provides empirical evidence to support leadership development strategies aimed at improving educational service quality and sustainable school effectiveness in rural area.

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Introduction

Teacher job satisfaction has become a critical concern in educational research due to its substantial influence on instructional quality, teacher retention, organizational commitment, and student achievement. Satisfied teachers are more likely to demonstrate

greater motivation, engagement, and professional dedication, whereas dissatisfaction may contribute to burnout, absenteeism, and turnover intentions. Recent international studies indicate that maintaining teacher job satisfaction remains a persistent challenge across educational systems, particularly in contexts characterized by resource limitations, increasing workloads, and organizational pressures (Levkovich et al., 2024; Abdulpatta et al., 2024; Diagne, 2023). Research has also shown that teacher satisfaction is shaped not only by personal factors but also by school-level conditions, including leadership practices, work environments, and organizational support (Long, 2026; Özkan & Akgenç, 2022).

The issue becomes even more significant in disadvantaged educational settings. Schools located in remote and underdeveloped regions often face challenges such as inadequate infrastructure, limited access to professional development, shortages of educational resources, and difficulties in attracting and retaining qualified teachers. These conditions may negatively affect teachers' perceptions of their work environment and consequently reduce their job satisfaction (da Silva et al., 2026; Cuervo, 2025; Fang & Qi, 2023). Given the strategic role of teachers in improving educational quality, understanding the organizational factors that contribute to teacher job satisfaction is essential for strengthening school effectiveness and educational outcomes in disadvantaged regions.

Among the organizational factors associated with teacher job satisfaction, principal leadership has consistently been identified as one of the most influential. School leaders play a central role in shaping school culture, establishing a supportive work environment, promoting collaboration, and facilitating professional growth among teachers. Recent reviews of educational leadership research suggest that leadership remains one of the most extensively studied determinants of school effectiveness and organizational performance (Sam et al., 2025; Mendoza Vega et al., 2023). Furthermore, emerging trends in leadership research emphasize the importance of adaptive, service-oriented, and people-centered leadership approaches that respond to increasingly complex educational challenges (Gurr et al., 2025; Ribeiro et al., 2024).

Empirical evidence has consistently demonstrated that effective leadership practices contribute positively to teachers' motivation, commitment, and job satisfaction (Fadillah et al., 2024; Leal & Baniel, 2024; Nanjundeswaraswamy, 2023). Educational leaders who provide clear direction, professional support, recognition, and opportunities for participation are more likely to foster positive workplace experiences among teachers (Leal & Baniel, 2024; Nanjundeswaraswamy, 2023). Consequently, principal leadership is increasingly viewed not only as an administrative function but also as a strategic mechanism for enhancing teacher well-being and organizational effectiveness. Despite extensive evidence supporting the positive relationship between leadership and teacher outcomes, scholars continue to call for further investigation into the processes through which leadership influences teacher attitudes and perceptions within different educational contexts.

In addition to leadership, educational service quality has emerged as an important dimension of educational management and organizational effectiveness. Educational service quality refers to the extent to which educational institutions are able to provide reliable, responsive, empathetic, and supportive services that meet the expectations of stakeholders. Recent studies have highlighted the growing importance of service quality in educational settings, demonstrating its contribution to institutional performance, stakeholder satisfaction, and educational improvement (Rozak et al., 2022; Farhudi et al., 2024). As educational institutions increasingly adopt service-oriented management approaches, service quality has become an important indicator of how effectively schools respond to the needs of their stakeholders.

From an organizational perspective, high-quality educational services contribute to the creation of supportive working conditions that enhance teachers' professional experiences. Educational environments characterized by responsiveness, reliability, assurance, empathy, and adequate facilities are more likely to promote positive perceptions among teachers and strengthen their satisfaction with their work. Previous studies have reported significant associations between service quality and satisfaction outcomes in educational institutions (Ciarko, 2022; Pallavi & Swati, 2024; Dzakwan & Ubit, 2025). These findings suggest that educational service quality may represent an important organizational mechanism through which school leadership contributes to teacher job satisfaction.

Although previous studies have established the importance of principal leadership in enhancing teacher job satisfaction and highlighted the contribution of educational service quality to stakeholder satisfaction, limited attention has been given to understanding the mechanisms that connect these variables. Existing research has predominantly examined leadership and teacher job satisfaction through direct-effect models, focusing on how leadership behaviors influence teacher attitudes and organizational outcomes (Ahmed, 2025; Xiang & Ullah, 2024). Similarly, studies on educational service quality have generally emphasized its relationship with institutional effectiveness, student satisfaction, and service performance. As a result, empirical evidence explaining whether educational service quality serves as a mediating mechanism through which principal leadership influences teacher job satisfaction remains limited.

Furthermore, the contextual dimension of educational leadership research has received comparatively less attention. Most empirical studies have been conducted in urban or relatively well-resourced educational environments (Assefa, 2026; Kule et al., 2025; Mitwally, 2024), where organizational conditions differ substantially from those found in disadvantaged regions. Schools located in Indonesia's rural area (Frontier, Outermost, and Disadvantaged) face unique challenges, including geographical isolation, limited educational infrastructure, shortages of professional support, and unequal access to educational resources. These conditions may shape how leadership practices are implemented and how teachers perceive service quality and job satisfaction. Consequently, findings derived from more developed educational settings cannot be assumed to fully represent the realities of schools operating in disadvantaged contexts.

This study addresses these gaps by examining educational service quality as a mediating variable in the relationship between principal leadership and teacher job satisfaction. The study contributes to the educational leadership literature in three important ways. First, it extends existing knowledge by investigating the indirect pathway through which principal leadership affects teacher job satisfaction. Second, it integrates principal leadership, educational service quality, and teacher job satisfaction into a single explanatory framework, providing a more comprehensive understanding of teacher workplace experiences. Third, it provides empirical evidence from schools located in Indonesia's rural area, a context that remains underrepresented in the international literature on educational leadership and school management.

Therefore, this study aims to examine the effect of principal leadership on teacher job satisfaction, the effect of principal leadership on educational service quality, the effect of educational service quality on teacher job satisfaction, and the mediating role of educational service quality in the relationship between principal leadership and teacher job satisfaction. By addressing these objectives, the study is expected to contribute both theoretically and practically to the development of effective leadership and service-oriented management practices that support teacher well-being and school effectiveness in disadvantaged educational settings.

Method

This study employed a quantitative approach with an explanatory research design (Creswell & Creswell, 2017) to examine the relationships among principal leadership, educational service quality, and teacher job satisfaction, as well as the mediating role of educational service quality in these relationships. An explanatory design was considered appropriate because the study aimed to test a theoretically derived model and evaluate both direct and indirect effects among latent variables. The research was conducted in Rokan Hilir Regency, Riau Province, Indonesia, a region characterized by educational challenges commonly associated with disadvantaged areas. The target population consisted of all teachers working in public and private junior high schools within the regency.

A total of 310 teachers from 50 junior high schools participated in the study. The sample was selected using stratified random sampling to ensure adequate representation across school status (public and private schools) and geographical distribution. This sampling technique was employed to minimize sampling bias and to ensure that the characteristics of the selected respondents reflected those of the broader population. The sample size was considered sufficient for Partial Least Squares Structural Equation Modeling (PLS-SEM), which is appropriate for analyzing complex relationships among latent constructs and testing mediation effects.

Data were collected using a structured questionnaire consisting of closed-ended statements measured on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The questionnaire assessed three latent constructs: principal leadership, educational service quality, and teacher job satisfaction. Principal leadership was conceptualized as a multidimensional construct comprising self-leadership, service leadership, and spiritual leadership dimensions. Educational service quality was measured using an adaptation of the SERVQUAL framework developed by Parasuraman et al. (1988), encompassing tangibles, reliability, responsiveness, assurance, and empathy. Teacher job satisfaction was operationalized through dimensions related to achievement, interpersonal relationships, compensation, working conditions, professionalism, and autonomy.

The questionnaire items were adapted from established theoretical frameworks and relevant empirical studies to ensure content validity and contextual relevance. The measurement constructs, dimensions, and indicators used in this study are presented in **Table 1**. The measurement model comprises multidimensional constructs representing principal leadership, educational service quality, and teacher job satisfaction. All questionnaire items were designed to capture respondents' perceptions of leadership practices, service quality, and workplace experiences within their respective schools.

Table 1. Measurement Constructs, Dimensions, and Indicators

Dimension	Indicator	Indicator Dimension
Self	Self-Awareness	The principal is able to recognize personal strengths and weaknesses in leadership.
	Self-Control	The principal is able to manage emotions and actions in difficult situations.
	Personal Reflection	The principal regularly evaluates his or her leadership behavior and decisions
Spirit	Spiritual values	Leadership is based on sincerity, honesty, and exemplary behavior.
	Transcendental Vision	The principal has a goal orientation that transcends personal interests.
	Faith-Based Motivation	Decision-making is based on ethical and religious values.
Service	Caring for the school community	The principal actively listens to and serves the needs of teachers, students, and parents.

Dimension	Indicator	Indicator Dimension
Innovation	Participatory Leadership	The principal involves the entire school community in the decision-making process.
	Collective Service	The principal encourages a spirit of mutual cooperation and collaboration.
	Creative problem-solving	The principal seeks innovative solutions to school problems.
	Adaptation to Change	The principal quickly responds to changes in educational policies and contexts.
	Learning Innovation	The principal encourages teachers to develop new, context-appropriate learning methods.

Prior to the main survey, the instrument underwent validity and reliability assessment. Construct validity was evaluated using factor loadings, Average Variance Extracted (AVE), and discriminant validity criteria within the PLS-SEM framework. Indicators with factor loadings above 0.70 were considered acceptable, while AVE values exceeding 0.50 indicated adequate convergent validity. Reliability was assessed using Cronbach's Alpha and Composite Reliability (CR), with values greater than 0.70 considered satisfactory for research purposes (Hair et al., 2022). The results demonstrated that all constructs met the recommended thresholds for validity and reliability, confirming the suitability of the instrument for subsequent analysis.

Data analysis was performed using PLS-SEM with SmartPLS software. PLS-SEM was selected because it is suitable for testing complex causal relationships among latent variables and simultaneously examining mediation effects. The analysis was conducted in two stages. First, the measurement model was evaluated to assess the validity and reliability of the constructs. Second, the structural model was examined to test the proposed relationships among variables by analyzing path coefficients, coefficients of determination (R^2), effect sizes (f^2), and predictive relevance (Q^2). The mediating role of educational service quality was assessed using the bootstrapping procedure recommended in PLS-SEM. Indirect effects were evaluated based on path coefficients, t-statistics, and p-values generated through resampling procedures. Statistical significance was determined at the 0.05 level.

This study adhered to established ethical principles in educational research. Participation was voluntary, and respondents were informed about the objectives of the study before completing the questionnaire. Confidentiality and anonymity were maintained throughout the research process, and all collected data were used solely for academic purposes. Permission to conduct the study was obtained from the relevant educational authorities and participating schools prior to data collection. Respondents were also assured that their participation would not affect their professional status and that they could withdraw from the study at any stage without consequence.

Results and Discussion

Results

Descriptive Statistics

The descriptive analysis revealed positive perceptions across all major constructs investigated in this study. Principal leadership obtained a mean score of 4.12, indicating that teachers generally perceived school leaders as demonstrating effective leadership practices. Educational service quality achieved a mean score of 4.06, suggesting that teachers viewed the services provided by schools as satisfactory. Similarly, teacher job satisfaction recorded a mean score of 4.09, reflecting generally positive evaluations of teachers' professional experiences. These findings indicate that respondents perceived favorable conditions regarding leadership practices, educational service quality, and workplace satisfaction.

Measurement Model Assessment

Before evaluating the structural relationships among variables, the measurement model was assessed to examine the reliability and convergent validity of the constructs. Reliability was evaluated using Cronbach's Alpha and CR, while convergent validity was assessed using the AVE. As shown in **Table 2**, all constructs demonstrated satisfactory reliability, with Cronbach's Alpha and Composite Reliability values exceeding the recommended threshold of 0.70. Furthermore, all AVE values were above 0.50, indicating adequate convergent validity. These results confirm that the measurement model possesses acceptable psychometric properties and is suitable for further structural model analysis.

Table 2. Reliability and Convergent Validity Assessment

	Cronbach's Alpha	Composite Reliability (Rho_A)	Composite Reliability (Rho_C)	Average Variance Extracted (AVE)
Empathy	0.811	0.835	0.889	0.728
Interpersonal Relationships	0.889	0.889	0.931	0.818
Assurance	0.902	0.902	0.939	0.836
Reliability	0.930	0.933	0.955	0.877
Truthbility	0.886	0.889	0.929	0.815
Independence	0.833	0.839	0.900	0.749
Holistic Leadership	0.978	0.980	0.980	0.736
Teacher Job Satisfaction	0.964	0.966	0.967	0.623
Responsiveness	0.923	0.924	0.951	0.867
Compensation	0.857	0.870	0.913	0.778
Working Conditions	0.817	0.830	0.890	0.731
Service Quality	0.967	0.969	0.970	0.688
Work Performance	0.880	0.881	0.926	0.808
Professionalism	0.915	0.918	0.946	0.855
Self	0.923	0.930	0.940	0.723
Service	0.952	0.955	0.962	0.809

Structural Model Assessment

Following the confirmation of measurement model adequacy, the structural model was evaluated. The explanatory power of the model was assessed using the coefficient of determination (R^2). The results are presented in **Table 3**.

Table 3. Coefficient of Determination (R^2)

Endogenous Construct	R^2
Educational Service Quality	0.410
Teacher Job Satisfaction	0.560

The results indicate that principal leadership explained 41.0% of the variance in educational service quality. Furthermore, principal leadership and educational service quality jointly explained 56.0% of the variance in teacher job satisfaction. These values indicate a moderate level of explanatory power according to commonly accepted PLS-SEM guidelines. This substantial variance highlights educational service quality as a crucial operational mechanism through which effective school leadership translates into heightened teacher satisfaction. Consequently, strategic leadership interventions should focus on optimizing administrative service delivery to foster a supportive work environment and sustain educator morale. To test the proposed hypotheses, direct path relationships among the constructs were examined. The results are presented in **Table 4**.

Table 4. Direct Effects and Hypothesis Testing

Hypothesis	Structural Path	β	t-value	p-value	Decision
H1	Principal Leadership $\rightarrow$ Teacher Job Satisfaction	0.567	4.009	0.000	Supported
H2	Principal Leadership $\rightarrow$ Educational Service Quality	0.773	9.841	0.000	Supported
H3	Educational Service Quality $\rightarrow$ Teacher Job Satisfaction	0.420	2.778	0.005	Supported

All hypothesized direct relationships were statistically significant. Principal leadership had a significant positive effect on teacher job satisfaction ($\beta = 0.567$, $p < 0.001$), indicating that stronger leadership practices are associated with higher levels of teacher satisfaction. Principal leadership also significantly influenced educational service quality ($\beta = 0.773$, $p < 0.001$), suggesting that leadership plays an important role in shaping service quality within schools. In addition, educational service quality significantly affected teacher job satisfaction ($\beta = 0.420$, $p = 0.005$), demonstrating the importance of service quality in supporting positive teacher work experiences.

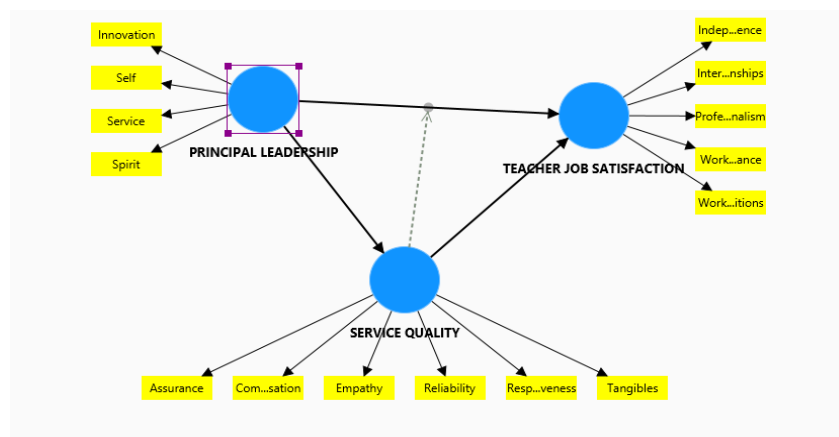
Mediation Analysis

The mediating role of educational service quality in the relationship between principal leadership and teacher job satisfaction was examined using the bootstrapping procedure in SmartPLS. The results are presented in **Table 5**.

Table 5. Indirect Effects and Mediation Analysis

Indirect Path	β	t-value	p-value	Result
Principal Leadership $\rightarrow$ Educational Service Quality $\rightarrow$ Teacher Job Satisfaction	0.324	2.959	0.003	Significant

The results indicate that the indirect effect of principal leadership on teacher job satisfaction through educational service quality was statistically significant ($\beta = 0.324$, $t = 2.959$, $p = 0.003$). Since both the direct effect of principal leadership on teacher job satisfaction and the indirect effect through educational service quality were significant, educational service quality functions as a partial mediator. This finding suggests that principal leadership enhances teacher job satisfaction not only directly but also indirectly by improving the quality of educational services provided within schools. A mediation model that is developed in which educational service quality is expected to explain the relationship between principal leadership and teacher job satisfaction. The conceptual model guiding this study is presented in **Figure 1**.

**Figure 1.** Conceptual Model of Research

Discussion

Principal Leadership and Teacher Job Satisfaction

The results indicate that principal leadership has a significant positive effect on teacher job satisfaction. This finding suggests that teachers are more likely to experience positive work attitudes when school leaders demonstrate effective leadership practices. In educational organizations, principals play a central role in shaping working conditions, facilitating professional growth, and creating supportive school environments (Soim et al., 2026; Zhang et al., 2025). Consequently, teachers who perceive their principals as competent, supportive, and service-oriented are more likely to report higher levels of job satisfaction. Therefore, strengthening principal leadership capacity emerges as a critical strategic imperative for enhancing teacher retention and driving long-term organizational effectiveness.

This finding is consistent with previous studies demonstrating that leadership is one of the most influential school-level factors affecting teacher satisfaction and well-being (Abdulpatta et al., 2024; Diagne, 2023; Özkan & Akgenç, 2022). Recent studies have also emphasized that effective educational leadership contributes not only to organizational performance but also to teacher motivation, commitment, and retention (Sam et al., 2025; Gurr et al., 2025; Mendoza Vega et al., 2023). From a theoretical perspective, the result supports transformational leadership theory, which argues that leaders can inspire followers by creating a shared vision, providing individualized support, and fostering professional development. The finding also aligns with servant leadership principles, which emphasize leaders' commitment to serving organizational members and addressing their professional needs.

The significance of leadership may be even greater in disadvantaged regions such as rural area in Rokan Hilir. Schools located in geographically isolated or resource-constrained areas often face shortages of educational resources, limited professional development opportunities, and administrative challenges. Under such conditions, principals become critical agents who connect teachers with institutional support and create a positive organizational climate. Therefore, effective leadership may compensate for structural limitations that commonly characterize schools in disadvantaged regions. Consequently, targeted leadership capacity-building in these peripheral settings serves as a vital catalyst for mitigating institutional disparities and sustaining educational equity.

Principal Leadership and Educational Service Quality

The findings also reveal that principal leadership significantly influences educational service quality. This result indicates that leadership is not only associated with teachers' personal satisfaction but also contributes directly to the quality of services provided within schools. Educational service quality reflects how effectively schools respond to stakeholder needs through reliability, responsiveness, assurance, empathy, and tangible support (Alnnale, 2026; Xiang, W & Ullah, 2024). Because principals are responsible for coordinating school operations, allocating resources, and monitoring service delivery, their leadership practices strongly influence how educational services are experienced by teachers.

This finding supports previous research suggesting that leadership is a key determinant of service quality in educational institutions (Dzakwan & Ubit, 2025; Firdaus et al., 2025; Farhudi et al., 2024). Studies on educational leadership have increasingly emphasized that modern school leaders must move beyond administrative functions and adopt a service-oriented perspective that prioritizes stakeholder needs (Gurr et al., 2025; Sam et al., 2025). In this regard, principals function not only as managers but also as facilitators who ensure

that teachers receive adequate support to perform their professional responsibilities effectively.

The strong relationship observed in this study may reflect the realities of schools in disadvantaged regions. In such settings, teachers frequently depend on school leaders for access to teaching resources, professional guidance, and organizational support. Therefore, leadership practices that emphasize responsiveness, empathy, and reliability may directly shape teachers' perceptions of educational service quality. Ultimately, fostering these socio-empathic leadership behaviors serves as a vital operational buffer that safeguards educational service delivery against persistent structural inequities.

Educational Service Quality and Teacher Job Satisfaction

Another important finding is that educational service quality significantly influences teacher job satisfaction. This result suggests that teachers' workplace experiences are not determined solely by leadership behaviors but also by the quality of services and support they receive within the school environment. When schools provide reliable administrative services, responsive support systems, and professional working conditions, teachers are more likely to experience satisfaction in their work (Assefa, 2026; Mitwally, 2024). Consequently, embedding service excellence into daily school operations functions not merely as an administrative routine, but as a vital strategic lever for sustaining teacher morale and institutional efficacy.

This finding is consistent with service quality literature, which emphasizes the relationship between perceived service quality and stakeholder satisfaction (Pallavi & Swati, 2024; Vargas Gutiérrez et al., 2023; Rozak et al., 2022). Although many studies have focused on students as service recipients, the present study extends this perspective by positioning teachers as internal stakeholders whose satisfaction is influenced by service quality. The findings therefore contribute to the growing recognition that educational institutions should view teachers not merely as service providers but also as recipients of organizational services.

From a practical perspective, the findings imply that improving teacher satisfaction requires more than financial incentives. While compensation remains important, schools must also ensure effective communication, administrative responsiveness, professional recognition, and supportive working conditions. These aspects collectively contribute to teachers' perceptions of service quality and ultimately influence their job satisfaction. Accordingly, school administrators and policy makers must integrate these non-monetary support mechanisms into holistic institutional strategies to foster long-term retention and workforce resilience.

The Mediating Role of Educational Service Quality

The most important contribution of this study lies in the finding that educational service quality partially mediates the relationship between principal leadership and teacher job satisfaction. This result indicates that leadership influences teacher satisfaction through two pathways. First, principal leadership exerts a direct influence on teacher satisfaction (Nanjundeswaraswamy, 2023). Second, leadership indirectly affects satisfaction by improving educational service quality, which subsequently enhances teachers' work experiences (Ahmed, 2025). This dual-pathway mechanism effectively unpacks the operational 'black box' of school leadership, demonstrating that maximizing teacher satisfaction requires a synchronized approach that combines supportive leadership behaviors with systemic service excellence.

The identification of partial mediation is theoretically significant because it demonstrates that educational service quality represents one, but not the only, mechanism through which leadership affects teacher satisfaction (Fadillah et al., 2024;

Nanjundeswaraswamy, 2023). Even after accounting for service quality, the direct relationship between leadership and teacher satisfaction remained significant (Soim et al., 2026; Fadillah et al., 2024). This suggests that teachers respond not only to improvements in service quality but also to other leadership-related factors such as trust, recognition, empowerment, communication, and emotional support. Consequently, this dual operational-relational reality underscores the necessity for integrated leadership frameworks that harmoniously balance systemic service delivery with socio-emotional interpersonal engagement.

This finding extends previous research on educational leadership by providing empirical evidence that service quality functions as an important explanatory mechanism linking leadership practices and teacher outcomes (Alnnale, 2026). While earlier studies generally examined direct relationships between leadership and satisfaction (Zhang et al., 2025; Xiang & Ullah, 2024; Ribeiro et al., 2024b), the present study demonstrates that educational service quality serves as an intervening process through which leadership generates positive organizational outcomes. The finding therefore contributes to the literature by integrating leadership theory and service quality perspectives within a single explanatory framework.

The practical implications are particularly relevant for schools in disadvantaged regions. Efforts to improve teacher satisfaction should not focus exclusively on leadership development or material resources. Instead, policymakers should encourage principals to adopt leadership practices that simultaneously strengthen educational service quality. Performance evaluation systems for school principals may therefore benefit from incorporating indicators related to service quality, responsiveness, teacher support, and organizational climate. Such an approach would recognize that teacher satisfaction is shaped not only by leadership itself but also by the quality of services that leadership helps create and sustain.

Limitations and Future Research

Despite its contributions, this study has several limitations. The research was limited to junior high school teachers in one disadvantaged region of Indonesia, which may affect the external validity of the findings. In addition, the cross-sectional nature of the study prevents the examination of changes in leadership practices, service quality perceptions, and job satisfaction over time. The reliance on self-reported data may also introduce response bias. Furthermore, the proposed model focused exclusively on educational service quality as a mediating variable, while other organizational and psychological factors may also explain the relationship between principal leadership and teacher job satisfaction. Future studies should consider longitudinal designs, comparative studies across different regions and educational levels, and the inclusion of variables such as school climate, organizational commitment, teacher efficacy, and work motivation. Such efforts would contribute to a deeper understanding of how leadership practices influence teacher well-being and organizational effectiveness in diverse educational settings.

Conclusion

The findings revealed that principal leadership significantly and positively influences both educational service quality and teacher job satisfaction. Educational service quality was also found to significantly affect teacher job satisfaction and partially mediate the relationship between principal leadership and teacher job satisfaction. These findings suggest that effective school leadership contributes to teacher satisfaction both directly and indirectly through the improvement of educational service quality. The study extends the educational leadership literature by highlighting the role of service quality as an important

mechanism linking leadership practices and teacher well-being, particularly in disadvantaged educational contexts. Nevertheless, this study was limited to junior high schools in a single region and employed a cross-sectional design. Future research is encouraged to examine this model in different educational settings, incorporate longitudinal approaches, and explore additional mediating or moderating variables that may further explain the relationship between leadership and teacher outcomes.

Author Contributions

Conceptualization was contributed by EK and AK; methodology by EK, DS, and Sur; and formal analysis by EK, DS, Sur, and Sup. Investigation was conducted by AK and DS, with the original draft written by EK, AK, and DS. Review and editing were performed by EK, Sur, and Sup, while supervision of the project was provided by AK, DS, and Sur.

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Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Use of Artificial Intelligence

The authors used generative AI tools (Gemini) to assist with language editing, programming, and manuscript preparation. All AI-generated content was reviewed, corrected, and verified by the authors, who take full responsibility for the accuracy and originality of the published work.

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