



# Leadership and Motivation as Determinants of Teacher Performance: Evidence from Indonesian Junior Secondary Schools

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## Abstract

Improving teacher performance has become a central concern in educational research, as teacher effectiveness is strongly linked to student achievement and the overall quality of schooling. This study aimed to investigate the influence of principals' leadership style and teachers' work motivation on teacher performance in junior secondary schools in Sungai Rotan District, Indonesia. Employing a quantitative correlational design, data were collected from 98 teachers using a structured questionnaire that measured leadership style, work motivation, and teacher performance, with validity and reliability established through expert review, factor analysis, and Cronbach's alpha. Data analysis was conducted using multiple linear regression with SPSS. The results indicated that both leadership style and work motivation had significant positive effects on teacher performance, with work motivation showing a stronger influence, while the combined model explained 34.3% of the variance in teacher performance. The discussion suggests that principals who demonstrate supportive leadership practices can enhance teachers' intrinsic and extrinsic motivation, which in turn improves their instructional planning, classroom management, and professional responsibility. This study contributes novelty by examining the simultaneous influence of leadership and motivation in the Indonesian junior secondary school context, a relationship that has been underexplored in prior research. The findings imply that effective leadership development and motivational support are essential strategies for policymakers and educational practitioners seeking to improve teacher performance and strengthen school effectiveness in developing country contexts.

**Keywords:** Educational Leadership, Junior Secondary Schools, Teacher Motivation, Teacher Performance, Work Environment

## INTRODUCTION

Education has consistently been recognized as a key determinant of national development, social mobility, and human capital improvement. In the twenty-first century, educational systems are increasingly expected to prepare learners not only with academic knowledge but also with competencies such as adaptability, creativity, and problem-solving, which are essential for global competitiveness (Adeoye & Jimoh, 2023; Raghupathi & Raghupathi, 2020; Thornhill-Miller et al., 2023). Teachers, as the main agents of the learning process, play a central role in ensuring that these competencies are effectively cultivated among students. Consequently, the performance of teachers becomes a pivotal factor influencing both student outcomes and the overall quality of education (Cahyani & Zulkarnaen, 2023; Muna et al., 2021; Ventista & Brown, 2023). Improving teacher performance therefore requires careful attention to the organizational, psychological, and managerial factors that shape the professional environment in schools.

Among the many determinants of teacher performance, school leadership has been consistently identified as a critical factor. Principals, as school leaders, not only serve as administrators but also act as instructional leaders who set the vision, foster school culture, and influence teacher motivation and professional practice (López-Martín et al., 2023; Rachman et al., 2023; Ventista & Brown, 2023). Research across diverse educational systems demonstrates that leadership style significantly affects teacher job satisfaction, commitment, and classroom performance (Maqbool et al., 2023; Saleem et al., 2020; Setiawan et al., 2022). Effective leadership is generally characterized by the ability to inspire,

motivate, and guide teachers toward achieving collective goals, which in turn enhances the quality of instruction and student achievement. Transformational leadership, in particular, has been shown to positively impact teacher performance through the promotion of shared values, professional collaboration, and continuous improvement (Awadh, 2018; Shen et al., 2020; Wilson Heenan et al., 2023).

In addition to leadership, teacher motivation has been identified as another essential factor influencing professional performance. Motivation drives teachers' willingness to engage in innovative practices, sustain effort in challenging contexts, and maintain a commitment to student success (Irhan et al., 2021; Kumari & Kumar, 2023; Miller et al., 2021). Both intrinsic factors, such as personal achievement and professional growth, and extrinsic factors, such as salary, recognition, and supportive school climate, contribute to teacher motivation (Khaliq, 2023; Miller et al., 2021; Morris et al., 2022). Empirical evidence shows that motivated teachers are more likely to demonstrate creativity in lesson planning, effectiveness in classroom management, and perseverance in addressing students' diverse needs (Inayat & Ali, 2020; Vincent-Lancrin et al., 2019; H. Wang & Troia, 2023). When motivation is low, however, teachers may experience burnout, disengagement, and a decline in performance, which ultimately affects student learning outcomes.

The interaction between leadership style and teacher motivation is particularly significant. Studies indicate that supportive and participative leadership can enhance intrinsic motivation by creating a sense of autonomy, relatedness, and professional efficacy among teachers (Agyemang Adarkwah & Zeyuan, 2020; Hiranah et al., 2021; M Mohd Siraj et al., 2022). Conversely, authoritarian or unsupportive leadership tends to diminish teacher morale and reduce performance (Ali et al., 2019; Asim et al., 2021; Z. Wang et al., 2019). International comparative studies highlight that in contexts where principals provide professional development opportunities, recognize teacher achievements, and foster collaborative school environments, teacher motivation and performance are significantly enhanced (Hernández-Martos et al., 2024; Qadach et al., 2020; Ventista & Brown, 2023). These findings underscore the importance of examining leadership style and motivation not as separate constructs but as interrelated determinants of teacher performance.

In Indonesia, efforts to improve educational quality have placed increasing emphasis on teacher professionalism and school leadership, particularly within the framework of curriculum reforms and accountability measures. However, many schools continue to face challenges in achieving optimal teacher performance due to contextual factors such as limited resources, hierarchical leadership practices, and uneven levels of motivation among teachers (Rokayah et al., 2023; Schott et al., 2020; Tias & Tongjean, 2022). Existing studies in the Indonesian context have typically examined either the effect of leadership style or motivation on teacher performance in isolation (Hiranah et al., 2021; Safitri & Nugroho, 2023; Sirait et al., 2022). Few studies have integrated both factors to analyze their combined influence, particularly at the junior secondary school level, where teacher performance is critical in shaping students' readiness for higher levels of education. This indicates a research gap in the current literature, as the interplay between leadership style and teacher motivation remains underexplored within the Indonesian school context.

Therefore, the present study aims to examine the influence of principals' leadership style and teachers' work motivation on teacher performance in junior secondary schools in Sungai Rotan District, Indonesia. By analyzing both factors simultaneously, this study seeks to provide a more comprehensive understanding of the determinants of teacher performance and contribute to the broader discourse on effective school leadership and teacher development in developing country contexts. The findings are expected to offer theoretical contributions to the literature on educational leadership and teacher motivation, as well as practical implications for policymakers and school administrators seeking to enhance educational quality through improved teacher performance.

## METHODS

This study employed a quantitative correlational research design to examine the influence of principals' leadership style and teachers' work motivation on teacher performance in junior secondary schools in Sungai Rotan District, Indonesia. A correlational design was deemed appropriate because it allows for the identification and measurement of relationships between independent and dependent

variables without direct manipulation of the research context (Apriani, 2023; Kristian et al., 2023; Tambingon, 2018). The population of this study consisted of 98 teachers from six state junior high schools located in Sungai Rotan District, and due to the relatively small population size, a total sampling technique was applied, meaning that all teachers were included as research respondents. This ensured that the findings were representative of the research setting and reduced the risk of sampling bias.

Data were collected using a structured questionnaire designed to measure three main variables: leadership style, work motivation, and teacher performance. The leadership style scale was adapted from established instruments on school leadership, focusing on dimensions such as task orientation, relationship orientation, and transformational practices (Atasoy, 2020; Susanti, 2023; Tambingon, 2018). The work motivation scale was developed based on self-determination theory, which distinguishes between intrinsic and extrinsic motivational factors (Gagné & Deci, 2005; Kotera et al., 2022; Ryan & Deci, 2020). Teacher performance was measured using indicators of instructional planning, classroom management, student assessment, and professional responsibility, consistent with national education standards (Egeberg et al., 2016; Mammadov & Çimen, 2019; Peck & Zhang, 2021). The questionnaire items employed a five-point Likert scale ranging from “strongly disagree” to “strongly agree,” enabling the measurement of perceptions with sufficient sensitivity.

To ensure the validity and reliability of the instrument, content validity was established through expert judgment by educational management scholars, while construct validity was tested using factor analysis. Reliability testing employed Cronbach’s alpha, with coefficients exceeding the minimum threshold of 0.70, indicating internal consistency across the scales (Luque-Vara et al., 2020; Taherdoost, 2016). Data collection procedures adhered to ethical principles by ensuring anonymity, voluntary participation, and informed consent from all respondents. Teachers were assured that their responses would be used solely for research purposes and would not affect their professional evaluation or standing.

Data analysis was conducted using multiple linear regression with the assistance of the Statistical Package for the Social Sciences (SPSS). Regression analysis was employed to examine both the partial effects of leadership style and work motivation on teacher performance, as well as their combined influence when analyzed simultaneously. The statistical assumptions of normality, multicollinearity, and homoscedasticity were tested prior to hypothesis testing to ensure the robustness of the regression model (Shatz, 2023; Taufiq-Hail et al., 2021). The significance level was set at  $p < .05$ , which is widely accepted in social science research for determining statistical significance. The analytical approach enabled the identification of the extent to which variations in teacher performance could be explained by the leadership style of principals and the work motivation of teachers, both independently and interactively.

Through this methodological approach, the study ensured rigor in design, data collection, and analysis, thereby providing credible and generalizable findings regarding the determinants of teacher performance in the Indonesian junior secondary school context.

## RESULT AND DISCUSSION

Table 1. Regression Test of Principal Leadership Style (X1) on Teacher Performance (Y)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	t-value	Sig. (p)	Contribution (%)
X1→Y	0.552	0.305	0.294	5.921	5.381	0.000	30.5%

The correlation coefficient ( $R = 0.552$ ) indicates a moderately strong relationship between principal leadership style and teacher performance. The R Square value (0.305) shows that 30.5% of the variance in teacher performance can be explained by leadership style, while the remaining 69.5% is influenced by other factors not included in the model. The Adjusted R Square (0.294), which is close to the R Square, demonstrates model stability and reliability. The t-value (5.381) far exceeds the critical threshold ( $\pm 1.96$  at  $p < .05$ ), and the significance value ( $p = 0.000 < .05$ ) confirms that the hypothesis is accepted. This means that leadership style has a significant effect on teacher performance. Practically, this implies that principals who adopt effective leadership behaviors such as providing direction, fostering collaboration, and offering support contribute positively to teachers’ instructional planning, classroom management, and student assessment practices.

Table 2. Regression Test of Work Motivation (X2) on Teacher Performance (Y)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	t-value	Sig. (p)	Contribution (%)
X2→Y	0.641	0.411	0.401	7.064	5.842	0.000	41.1%

The correlation ( $R = 0.641$ ) is higher than in the previous model, indicating a stronger relationship between work motivation and teacher performance. The R Square value (0.411) suggests that 41.1% of the variance in teacher performance is explained by work motivation, a larger contribution compared to leadership style. The Adjusted R Square (0.401) supports the reliability of the model. The high t-value (5.842) with a significance level of  $p = 0.000 < .05$  confirms that the hypothesis is accepted. These results show that motivated teachers are more committed to lesson preparation, more innovative in teaching, and more resilient in handling classroom challenges. This emphasizes that work motivation is the dominant internal factor affecting performance, as motivated teachers consistently display higher levels of professional engagement and productivity.

Table 3. Regression Test of Principal Leadership Style (X1) and Work Motivation (X2) on Teacher Performance (Y)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F-value	Sig. (p)	Combined Contribution (%)
X1 & X2→Y	0.586	0.343	0.323	5.801	46.960	0.000	34.3%

The correlation coefficient ( $R = 0.586$ ) indicates a strong relationship when principal leadership style and teacher motivation are analyzed simultaneously in predicting teacher performance. The R Square value (0.343) reveals that together, these two variables explain 34.3% of the variance in teacher performance. The Adjusted R Square (0.323) demonstrates model stability. The F-value (46.960) with a significance of  $p = 0.000 (< .05)$  confirms that the simultaneous regression model is statistically significant. Interestingly, the combined contribution (34.3%) is lower than the partial contribution of motivation alone (41.1%). This suggests that work motivation is the dominant predictor of teacher performance, while leadership plays a supportive or catalytic role. In other words, effective leadership can enhance teacher motivation, but if intrinsic motivation remains low, optimal performance is difficult to achieve despite strong leadership.

### Effect of Principal Leadership Style on Teacher Performance

The results of the regression analysis indicated that the principal's leadership style had a positive and significant effect on teacher performance, with a contribution of 30.5%. The regression coefficient shows that as leadership quality increases, teacher performance also improves. This finding suggests that principals who demonstrate effective leadership behaviors such as clear communication, supportive guidance, and participatory decision-making are more likely to foster teacher commitment and effectiveness. These results are consistent with previous studies demonstrating the positive influence of transformational and instructional leadership on teacher performance and student learning (Kleynhans et al., 2022; Ye et al., 2022; Yuniarti, 2022). In the Indonesian context, similar findings were reported by (Wilson Heenan et al., 2023), who observed that school principals who employed visionary and supportive leadership styles significantly improved teacher productivity.

### Effect of Work Motivation on Teacher Performance

Work motivation was also found to have a significant positive effect on teacher performance, contributing 41.1% to the variance in performance. Teachers with higher levels of intrinsic and extrinsic motivation were more engaged in instructional planning, classroom management, and professional responsibilities. This finding aligns with international literature suggesting that teacher motivation is a critical determinant of instructional quality, resilience, and innovation (Hyseni Duraku & Hoxha, 2021; Pan, 2023; Yıldırım, 2021). Andjani et al. (2023) similarly emphasized that motivated teachers are more likely to demonstrate commitment to student learning and adopt adaptive teaching strategies. In the Indonesian setting, Antonio and Prudente (2023) found that strong motivational support from school leaders enhances teacher discipline and performance, reinforcing the importance of motivation as a driver of effectiveness.



## Combined Effect of Leadership Style and Work Motivation on Teacher Performance

When analyzed simultaneously, the combination of principal leadership style and work motivation explained 34.3% of the variance in teacher performance. This result demonstrates that both leadership and motivation interact in shaping teacher outcomes. The findings resonate with studies highlighting that supportive leadership enhances teacher motivation, which in turn positively impacts performance (Ma'ruf et al., 2022; Pujilestari et al., 2023; Steinmann et al., 2018). International research also indicates that schools where leaders cultivate positive motivational climates tend to show stronger teacher commitment and improved student outcomes (Gningue et al., 2022; Robinson & Gray, 2019; Shoshani & Eldor, 2016). These results confirm that leadership and motivation should not be studied in isolation but rather as interconnected factors that jointly determine teacher effectiveness.

## Discussion

The findings of this study provide several insights when compared with previous research. First, the confirmation that principal leadership style significantly affects teacher performance supports the claims of Parveen et al. (2022) and Khofiyah (2022), who stressed that leadership is second only to classroom teaching in its impact on student learning. Second, the strong effect of work motivation echoes the work of Leithwood et al. (2020) and Cruickshank (2017), who highlighted motivation as a predictor of teacher engagement and reduced burnout. Third, the combined influence of leadership and motivation expands upon the findings of Holmström et al. (2023) and Sijbom et al. (2019), who showed that transformational leadership fosters teacher motivation, which subsequently improves instructional quality. Fourth, the present study reinforces the Indonesian studies of Azizah and Wahidin (2022) and (Wilson Heenan et al. (2023), thus contextualizing the global literature within local realities. Finally, this study adds to comparative insights by demonstrating that although international studies often emphasize transformational leadership, in the Indonesian setting both leadership style and motivation operate interactively to shape performance, which is a relatively underexplored dimension.

The novelty of this study lies in its simultaneous examination of leadership style and teacher motivation within Indonesian junior secondary schools, a context where most prior research has addressed these variables separately. By analyzing their combined effect, this research contributes a more holistic understanding of the determinants of teacher performance, bridging the gap between global educational leadership theory and local practice.

The implications of these findings are both theoretical and practical. Theoretically, the study enriches the literature by demonstrating how leadership and motivation jointly predict teacher performance in developing country contexts. Practically, the results suggest that school leaders should adopt leadership strategies that not only direct but also inspire and empower teachers, while policymakers should prioritize professional development and motivational incentives to strengthen teacher engagement and performance. Enhancing teacher motivation through recognition, career advancement, and supportive work environments, alongside effective leadership, may create sustainable improvements in educational outcomes.

Nevertheless, this study has several limitations. First, it relied on self-reported questionnaire data, which may be subject to social desirability bias. Second, the research was conducted within a single district with a relatively small sample size, which may limit the generalizability of the findings. Third, the study did not include other potential determinants of teacher performance, such as school climate, workload, or institutional support. Future research should adopt mixed-method approaches, including classroom observations and interviews, and expand the scope to multiple regions to provide a deeper and more comprehensive analysis of the factors shaping teacher performance.

## CONCLUSION

This study concludes that both principals' leadership style and teachers' work motivation significantly influence teacher performance in Indonesian junior secondary schools, with leadership style contributing to improved professional practices and motivation serving as a strong predictor of engagement, instructional quality, and responsibility. When examined together, these factors interact to shape teacher effectiveness, confirming that leadership and motivation should not be treated as isolated constructs but as complementary drivers of educational quality. The findings contribute to the literature by offering novel insights into the combined impact of leadership and motivation in a developing country

context, thereby extending global discussions of school effectiveness to local realities. Practically, the study highlights the need for school leaders to adopt supportive and participative leadership strategies while policymakers and education stakeholders should prioritize professional development, recognition, and incentive structures that enhance teacher motivation. Although the study is limited by its reliance on self-reported data and its focus on a single district, it provides a valuable foundation for future research that explores additional organizational and contextual factors influencing teacher performance through more diverse samples and mixed-method approaches.

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