



Examining the Relationship Between Principal Management and Teachers' Pedagogical Competence

Paiman*, Eva Farihah, Ahmad Ahdian Faizal

Universitas Islam Negeri Sultan Maulana Hasanuddin Banten, Indonesia

Email : paiman@uinbanten.ac.id

DOI: <https://doi.org/10.61987/jemr.v4i5.1962>

ABSTRACT

Keywords:

Principal
Management,
Pedagogical
Competence,
Instructional
Leadership

*Corresponding Author

This study aims to examine the extent to which principal management influences teachers' pedagogical competence within a secondary school context. Employing a quantitative correlational design, data were collected from 15 teachers through structured questionnaires measuring four dimensions of principal management (planning, organizing, actuating, and controlling) and five indicators of pedagogical competence. The data were analyzed using descriptive statistics, normality testing, Pearson correlation, and simple linear regression in IBM SPSS Statistics 24. The findings reveal a strong positive and statistically significant relationship between principal management and teachers' pedagogical competence ($R = .745$, $R^2 = .555$, $p < .05$), indicating that principal management explains 55.5% of the variance in pedagogical competence. The regression model ($\hat{Y} = 48.98 + 0.59X$) suggests that improvements in managerial practices are associated with meaningful gains in teachers' instructional capacity. These results underscore the pivotal role of effective school leadership in enhancing instructional quality and highlight the importance of strengthening principals' managerial and instructional leadership competencies to support sustainable teacher professional development.

Article History:

Received: August 2025; Revised: September 2025; Accepted: October 2025

Please cite this article in APA style as:

Paiman, Farihah, E., & Faizal, A. A. (2025). Examining the Relationship Between Principal Management and Teachers' Pedagogical Competence. *Journal of Educational Management Research*, 4(5), 2565-2578.

INTRODUCTION

Improving teachers' pedagogical competence remains a central issue in contemporary education systems because instructional quality is a primary determinant of student learning outcomes. When teachers demonstrate strong pedagogical competence, they are better able to design meaningful learning experiences, differentiate instruction, and foster higher-order thinking skills. Conversely, weak pedagogical competence contributes to disengagement, low academic achievement, and inequitable learning opportunities. Empirical research consistently confirms that teacher competence significantly affects instructional effectiveness and student development (As'ari et al., 2025; Badrudin et al., 2025; Bahiyah & Juhji, 2023; Juhji & Nuangchalem, 2020). Therefore, strengthening pedagogical competence is not merely an institutional concern but

a societal necessity, as education shapes human capital and long-term socio-economic progress. In this regard, identifying strategic factors that enhance teachers' pedagogical capacity is crucial. Among these factors, school leadership management emerges as a potentially transformative mechanism that warrants systematic empirical investigation.

Despite widespread acknowledgment of its importance, many schools continue to face persistent challenges in improving teachers' pedagogical competence. Teachers often encounter difficulties in aligning instructional design with student characteristics, integrating assessment effectively, and adapting teaching strategies to diverse classroom contexts. These challenges are frequently compounded by limited professional development opportunities, insufficient instructional supervision, and fragmented school management practices. In many cases, principals are burdened with administrative responsibilities, leaving limited space for sustained instructional leadership. As a result, efforts to improve teaching quality may become sporadic rather than systemic. While teacher-centered interventions such as training programs are common, they often overlook the broader organizational context that shapes professional growth. This situation highlights a fundamental problem: improvements in pedagogical competence may not be sustainable without strong and coherent principal management that systematically supports teacher development.

In practical school settings, variations in pedagogical competence are often closely associated with differences in leadership practices. Schools led by principals who actively conduct instructional supervision, facilitate collaborative planning, and monitor curriculum implementation tend to demonstrate more consistent teaching quality. Conversely, schools where managerial functions are weak or disconnected from classroom realities frequently experience inconsistent instructional practices. Observations in secondary school contexts reveal that teachers respond positively when principals provide constructive feedback, set clear academic goals, and encourage professional learning communities. However, these practices are not uniformly implemented, leading to disparities in instructional standards. Such field-based phenomena suggest that principal management may play a decisive role in shaping pedagogical outcomes. Nevertheless, systematic quantitative evidence that directly measures this relationship remains limited, particularly within Indonesian school contexts.

A substantial body of international literature has examined the influence of school leadership on educational outcomes. Studies have shown that leadership practices emphasizing supervision, professional learning, and collaboration significantly contribute to teacher performance and student achievement (Abenoja et al., 2024; Jiménez-Vivas & Parraguez-Núñez, 2024; Joni et al., 2025; Nurjaya et al., 2025; Villagra Bravo et al., 2025). The instructional leadership framework proposed by Philip Hallinger (2018) underscores the principal's role in aligning school vision with instructional practices. Similarly,

Robinson et al. (2008) demonstrate that leadership actions directly focused on teaching and learning exert stronger effects than purely administrative tasks. Leithwood et al. (2008) further argue that effective leaders cultivate organizational conditions that foster teacher motivation and collaboration. These studies collectively affirm the strategic role of leadership in educational improvement.

However, previous research often concentrates on broad outcomes such as student achievement or general teacher performance rather than explicitly examining pedagogical competence as a distinct professional construct. Moreover, leadership studies in emerging educational settings frequently employ generalized organizational indicators that do not directly capture how managerial dimensions such as planning, organizing, actuating, and controlling translate into classroom-level instructional capacity (Faizin et al., 2024; Haryanti et al., 2025; Nisaul Fadhilah et al., 2024). Consequently, the specific predictive contribution of principal management to pedagogical competence remains underexplored. This gap is particularly significant in local Indonesian contexts, where institutional characteristics and leadership dynamics may differ from those documented in Western-based studies. Addressing this gap is essential for developing contextually grounded and empirically robust models of instructional leadership.

The present study responds to this need by positioning pedagogical competence as the primary outcome variable and principal management as its predictor within a quantitative regression framework. Unlike studies that rely solely on qualitative descriptions or broad performance indicators, this research operationalizes principal management into measurable managerial dimensions and statistically estimates its contribution to pedagogical competence. This approach extends instructional leadership theory into a localized context while offering empirical precision. By focusing on the direct relationship between managerial practices and classroom-level competence, the study contributes to refining theoretical understanding and informing leadership development strategies. The novelty lies not merely in contextual application but in the analytical emphasis on predictive modeling, thereby strengthening the empirical foundation of leadership competence relationships in secondary education.

Based on the identified gaps, this study addresses the following research problem: To what extent does principal management predict teachers' pedagogical competence? The central argument proposed is that effective principal management characterized by strategic planning, systematic supervision, coordinated implementation, and consistent evaluation positively and significantly enhances teachers' pedagogical competence. It is hypothesized that stronger managerial practices create supportive organizational conditions that facilitate instructional improvement. By empirically testing this argument through regression analysis, the study seeks to provide statistical evidence of

leadership influence while contributing to evidence-based educational policy. The findings are expected to clarify the magnitude of principal management's contribution and offer practical implications for strengthening instructional leadership as a sustainable pathway toward improving teaching quality and student learning outcomes.

RESEARCH METHODS

This study employed a quantitative correlational design to examine the predictive relationship between principals' management and teachers' pedagogical competence. A quantitative approach was selected because the research aimed to measure variables objectively, test hypotheses statistically, and determine the magnitude of influence between independent and dependent variables (Ghanad, 2023; Gul, 2023; Sardana et al., 2023). The correlational design was considered appropriate as the study did not intend to manipulate variables but rather to analyze naturally occurring relationships within an educational setting. Furthermore, regression analysis was utilized to estimate the extent to which principals' management predicts pedagogical competence. This design allows for empirical generalization within the studied context and supports evidence-based conclusions regarding leadership effectiveness. By applying statistical procedures, the study ensures systematic measurement, replicability, and analytical rigor in assessing the relationship between managerial practices and instructional competence.

The research was conducted in a private secondary school during the 2023 academic year. The site was selected purposively based on observable institutional development and stable organizational management, which provided a relevant context for examining leadership practices and instructional competence. The school demonstrated structured managerial systems and ongoing professional activities, making it suitable for investigating how principal management functions relate to teachers' pedagogical competence. Additionally, accessibility considerations and institutional willingness to participate supported the feasibility of data collection. Selecting a single-site setting enabled in-depth contextual analysis while maintaining methodological focus. Although the study was context-specific, the chosen site provided meaningful variability in managerial practices and teaching competence, allowing for statistical examination of relationships between the studied variables.

Data were collected using structured questionnaires as the primary instrument. Two separate scales were administered to measure principals' management (independent variable) and teachers' pedagogical competence (dependent variable). The questionnaires employed a four-point Likert scale ranging from "always" to "never," with reverse scoring applied to negatively

worded items. The instrument for principal management covered four managerial dimensions: planning, organizing, actuating/coordinating, and controlling. The pedagogical competence instrument encompassed five indicators: understanding learners, instructional design, instructional implementation, student development, and learning evaluation. Questionnaires were distributed electronically to teachers who voluntarily participated in the study. In addition to survey data, limited observations and informal interviews were conducted to provide contextual understanding and support data interpretation. All responses were compiled, coded, and prepared systematically prior to analysis.

Data analysis followed systematic stages to ensure analytical clarity. First, data condensation was conducted by screening responses, checking completeness, coding items, and scoring according to the established Likert scale. Incomplete or inconsistent responses were excluded to maintain data integrity. Second, data display involved organizing results into descriptive statistical tables, including means, standard deviations, minimum and maximum scores, and frequency distributions. Third, inferential statistical analysis was performed using IBM SPSS Statistics 24. Normality testing was conducted using the Liliefors procedure to verify parametric assumptions. Hypothesis testing employed Pearson correlation to examine the strength and direction of relationships and simple linear regression to estimate predictive influence. Statistical significance was assessed using ANOVA (F-test) and t-tests at a 0.05 significance level. Finally, data verification was performed by rechecking statistical outputs, ensuring consistency between correlation, regression, and coefficient of determination (R^2) results before drawing conclusions.

To ensure the credibility and trustworthiness of findings, instrument validity and reliability were carefully examined. Content validity was established through alignment of questionnaire items with theoretical constructs of managerial functions and pedagogical competence. Empirical validity was tested using item-total Pearson correlation analysis, retaining items that exceeded the critical value at $\alpha = .05$. Reliability testing was conducted using Cronbach's alpha coefficient to confirm internal consistency of both instruments. Additionally, data accuracy was strengthened through systematic coding procedures and double-checking statistical calculations. The use of standardized analytical software further enhanced reliability and minimized computational error. Although the study relied primarily on self-reported data, supplementary observations and informal interviews provided contextual triangulation to support interpretation and enhance overall data credibility.

RESULTS AND DISCUSSION

Results

This study involved 15 teachers from SMP Bina Insani Kota Tangerang. Data were analyzed using IBM SPSS Statistics 24 through descriptive analysis, normality testing, simple linear regression, and correlation analysis.

A general overview of the characteristics of the research data for the principal management variables and teachers' pedagogical competence at SMPI Bina Insani, Tangerang City, is shown in Table 1 below.

Table 1. Descriptive Statistics

		Principal Management (X)	Teachers' Pedagogical Competence (Y)
N	Valid	15	15
	Missing	0	0
Mean		106.93	98.23
Std. Deviation		8.43	11.63
Minimum		89	83
Maximum		123	122

Descriptive statistics revealed that principals' management scores ranged from 89 to 123, with a mean of 106.93 (SD = 8.43), indicating an overall adequate level of school management. Teachers' pedagogical competence scores ranged from 83 to 122, with a mean of 98.23 (SD = 11.63), indicating moderate pedagogical performance. These results suggest sufficient variability across respondents while maintaining relatively high central tendencies for both variables.

The principal management variable had an average of 106.93 and a standard deviation of 8.43, while the teacher pedagogical competence had an average of 98.23 and a standard deviation of 11.63. The reasonably wide range of scores on both variables indicates variation in respondents' perceptions of management quality and pedagogical competence. Substantively, the relatively high mean values indicate that respondents generally assess the principal's management practices and teacher pedagogical competence as moderate to good, warranting further analysis using a parametric approach.

The results of the normality test indicate that the calculated L values for both variables are smaller than the L Table values at the 0.05 significance level. More details are shown in Table 2 below.

Table 2. Tests of Normality

Variable	N	Statistic	Sig. Level	L Table	Decision
Principal Management (X)	15	5.11	0.05	8.55	Normal
Pedagogical Competence (Y)	15	8.45	0.05	8.55	Normal

Normality testing using the Liliefors procedure confirmed that both principals' management ($L = 5.11 < 8.55$) and teachers' pedagogical competence ($L = 8.45 < 8.55$) were normally distributed, fulfilling parametric assumptions. Table 2 of the normality test above shows that the calculated L values for both variables are smaller than the L table at a significance level of 0.05. This finding confirms that the distributions of principal management data and teacher pedagogical competency follow a normal distribution. By meeting the normality assumption, the use of linear regression analysis and Pearson correlation in this study is declared statistically valid.

The results of the Model Summary in this study are shown in Table 3 below.

Table 4. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.745	.555	.521	8.01

a. Predictors: (Constant), Principal Management (X)

The regression model summary shows a correlation coefficient (R) of 0.745, indicating a strong relationship between principal management and teacher pedagogical competence. The R Square value of 0.555 indicates that 55.5% of the variation in teacher pedagogical competence is explained by principal management, while other factors outside the model influence the remaining 44.5%. This finding confirms that principal management has a substantive contribution to improving teacher pedagogical competence.

The ANOVA Model Summary shows that the calculated F value (7.20) exceeds the F table value at the 0.05 significance level, so the regression model is significant. In full, the ANOVA results are shown in Table 5 below. The results of this study are shown in Table 3 below.

Table 5. ANOVA of Variable X against Y

Model		Sum of Squares	df	F	Sig.
1	Regression	761.69	1	7.20	.000 ^b
	Residual	611.24	13		
	Total	1372.93	14		

a. Dependent Variable: Pedagogical Competence (Y)

b. Predictors: (Constant), Principal Management (X)

The ANOVA results show that the calculated F value (7.20) exceeds the F table value at the 0.05 significance level, so the regression model is declared significant. This indicates that the constructed regression equation can meaningfully explain the relationship between the variables. In other words, principal management has been statistically shown to predict teacher pedagogical competence.

The results of the coefficients in this study are shown in Table 6 below.

Table 6. Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	48.98				
	Principal Management (X)	0.59	0.077	.745	7.70	.000

a. Dependent Variable: Pedagogical Competence (Y)

The regression coefficient table shows a constant value of 48.98 and a regression coefficient of 0.59. The regression equation $\hat{Y} = 48.98 + 0.59X$ indicates that a one-point increase in principal management is associated with a 0.59-point increase in teachers' pedagogical competence. The significant t-value of 7.70 strengthens the finding that the effect is positive and meaningful. Thus, the more effective the principal's management, the higher the teachers' pedagogical competence.

Simple linear regression analysis demonstrated a strong positive relationship between principals' management and teachers' pedagogical competence ($R = .745$). The coefficient of determination ($R^2 = .555$) indicates that principals' management explains 55.5% of the variance in teachers' pedagogical competence, while the remaining 44.5% is attributable to other unexamined factors. The regression model was statistically significant ($F = 7.20$, $p < .05$), confirming the independent variable's predictive power. The resulting regression equation was expressed as:

$$\hat{Y} = 48.98 + 0.59X$$

This model implies that every one-unit increase in principals' management is associated with a 0.59-point increase in teachers' pedagogical competence, representing a moderate effect size. Further significance testing using the t-test yielded a t value of 7.70 ($p < .05$), reinforcing the robustness of this relationship. These findings provide empirical evidence that principals' management exerts a substantial and statistically significant influence on teachers' pedagogical competence. Effective school leadership practices thus play a critical role in strengthening teachers' instructional capacities within the studied context.

Discussion

The findings of this study demonstrate that principals' management exerts a strong and statistically significant influence on teachers' pedagogical competence ($R = 0.745$; $R^2 = 0.555$), indicating that more than half of the variance in pedagogical competence is explained by school leadership practices. This result reinforces the instructional leadership framework advanced by Philip Hallinger (2018), who conceptualizes principals as key agents in shaping teaching quality through strategic planning, supervision, and professional support. Within this perspective, leadership is not merely administrative but directly connected to classroom-level outcomes, a pattern clearly reflected in the regression model ($\hat{Y} = 48.98 + 0.59X$).

The standardized coefficient ($\beta = 0.745$) further indicates a strong practical effect, suggesting that improvements in principals' managerial competence substantially enhance teachers' pedagogical performance. This aligns with the meta-analytic evidence reported by Robinson et al. (2008), which shows that leadership practices focused on establishing goals, coordinating curriculum, and promoting teacher learning have the most considerable impact on instructional effectiveness. In the present study, the significant F value (7.20, $p < 0.05$) and t statistic (7.70, $p < 0.05$) confirm that principals' management functions as a meaningful predictor of pedagogical competence, supporting the argument that leadership quality is a critical lever for improving teaching practices.

Furthermore, the results corroborate the transformational and instructional leadership perspectives articulated by Leithwood et al. (2008), who emphasize that effective principals create professional climates that foster teacher motivation, collaboration, and continuous improvement. Through mechanisms such as systematic supervision, constructive feedback, and facilitation of professional learning, principals can directly influence teachers' instructional strategies and classroom management (Baharuddin et al., 2025; Kurniawan et al.,

2024; Pujilestari et al., 2025; Royhatudin et al., 2020; Wijaya et al., 2025). The moderate-to-strong effect observed in this study suggests that such leadership behaviors are likely present and impactful within the investigated context.

Nevertheless, although principals' management accounted for 55.5% of the variance in pedagogical competence, a substantial proportion (44.5%) remains unexplained. This finding indicates that pedagogical competence is multidimensional and influenced by additional factors, including teacher self-efficacy, organizational culture, access to professional development, and intrinsic motivation. Prior studies have consistently highlighted that sustainable improvements in teaching quality require integrated leadership approaches that combine managerial effectiveness with ongoing teacher professional learning and supportive school cultures (Hallinger, 2018; Leithwood et al., 2008; Robinson et al., 2008). Therefore, while principals' management emerges as a dominant predictor, it should be understood as part of a broader ecosystem of educational quality.

From a practical perspective, these findings underscore the strategic importance of strengthening principals' managerial and instructional leadership capacities. School leaders who actively engage in planning, monitoring instruction, and supporting teacher development are better positioned to elevate pedagogical standards. Consequently, educational stakeholders are encouraged to prioritize leadership development programs that emphasize instructional supervision, data-informed decision-making, and collaborative professional learning. Such efforts are likely to yield meaningful gains in teachers' pedagogical competence and, ultimately, student learning outcomes.

CONCLUSION

This study confirms that principals' management significantly predicts teachers' pedagogical competence, explaining 55.5% of its variance and demonstrating a strong positive relationship between leadership effectiveness and instructional quality. The most important lesson derived from this finding is that pedagogical improvement is not solely an individual teacher responsibility but is structurally shaped by the quality of school leadership. Effective managerial practices such as systematic planning, instructional supervision, coordination, and evaluation create organizational conditions that directly support teachers' instructional growth. The academic contribution of this study lies in its empirical modeling of principal management as a measurable predictor of pedagogical competence within a quantitative regression framework, thereby extending instructional leadership theory into a context-specific secondary school setting and strengthening its statistical evidence base.

Nevertheless, several limitations must be acknowledged. The relatively small sample size and single-site context restrict the generalizability of findings, while the cross-sectional design limits the ability to infer causal relationships over time. In addition, reliance on self-reported questionnaire data may introduce perceptual bias. Future research should therefore involve larger and multi-site samples to enhance external validity and adopt longitudinal or mixed-method designs to capture dynamic leadership effects. Further studies are also encouraged to incorporate additional explanatory variables such as teacher motivation, self-efficacy, organizational culture, and professional development access in order to develop a more comprehensive and integrative model of pedagogical competence development.

REFERENCES

- Abenoja, J. B., Blase, D. J. C., & Almagro, R. E. (2024). Organizational Culture and Leadership Style Among Local Government Unit of Davao del Norte, Philippines. *Tarbawi: Jurnal Keilmuan Manajemen Pendidikan*, 10(2), 169–184. <https://doi.org/10.32678/tarbawi.v10i02.10449>
- As'ari, A., Juhji, J., Apud, A., & Samson, N. A. T. (2025). Pedagogical Pathways on Entrepreneur and Religious Culture to Madrasah Graduate Quality. *Nidhomul Haq: Jurnal Manajemen Pendidikan Islam*, 10(3), 682–697. <https://doi.org/10.31538/ndhq.v10i3.236>
- Badrudin, B., Juhji, J., & Kurni, W. (2025). Spiritual Education as a Catalyst for Quality Learning: Empirical Evidence from Madrasahs. *Nazhruna: Jurnal Pendidikan Islam*, 8(3), 699–713. <https://doi.org/10.31538/nzh.v8i3.213>
- Baharuddin, B., Bumbungan, B., Kamisi, M., Efendi, A. S., Nuha, U., Busa, Y., & Hatta, M. (2025). Transformational Leadership in Managing AI-Based Early Childhood Education: A Study in South Sulawesi. *Tarbawi: Jurnal Keilmuan Manajemen Pendidikan*, 11(1), 77–86. <https://doi.org/10.32678/tarbawi.v11i01.11329>
- Bahiyah, K., & Juhji, J. (2023). Teacher Professional Development of Public Elementary School: A Phenomenological Approach. *Journal of Asian Islamic Educational Management*, 1(1), 42–47. <https://doi.org/10.53889/jaiem.v1i1.243>

- Cordero, J. M., & Gil-Izquierdo, M. (2018). The Effect of Teaching Strategies on Student Achievement: An Analysis Using TALIS-PISA-Link. *Journal of Policy Modeling*, 40(6), 1313–1331. <https://doi.org/10.1016/j.jpolmod.2018.04.003>
- Faizin, R. N., Rofiq, A., Wafa, A., & Salsabila, R. N. (2024). Improving Madrasah Quality Through Leadership and Capacity Building. *Tarbawi: Jurnal Keilmuan Manajemen Pendidikan*, 10(1), 113–134. <https://doi.org/10.32678/tarbawi.v10i01.9896>
- Ghanad, A. (2023). An Overview of Quantitative Research Methods. *International Journal of Multidisciplinary Research and Analysis*, 6(8), 3794–3803. <https://doi.org/10.47191/ijmra/v6-i8-52>
- Gul, Y. E. (2023). A Theoretical Perspective on Survey Method from Quantitative Research Methods. *Universum: Психология и Образование*, 4(106), 64–68. <https://doi.org/10.32743/UniPsy.2023.106.4.15254>
- Hallinger, P. (2018). Principal Instructional Leadership. In *The Wiley Handbook of Teaching and Learning* (pp. 505–528). Wiley. <https://doi.org/10.1002/9781118955901.ch21>
- Haryanti, N., Soebiantoro, S., & Permanasari, E. Y. (2025). Transformational Leadership and Lecturer Performance: The Mediating Role of Organizational Learning and Decision-Making. *Tarbawi: Jurnal Keilmuan Manajemen Pendidikan*, 11(2), 193–202. <https://doi.org/10.32678/tarbawi.v11i02.11326>
- Heller, J. I., Daehler, K. R., Wong, N., Shinohara, M., & Miratrix, L. W. (2012). Differential Effects of Three Professional Development Models on Teacher Knowledge and Student Achievement in Elementary Science. *Journal of Research in Science Teaching*, 49(3), 333–362. <https://doi.org/10.1002/tea.21004>
- Jiménez-Vivas, A., & Parraguez-Núñez, P. (2024). Implicación del Liderazgo Pedagógico en el Desarrollo Profesional Docente: Un Estudio en Latinoamérica. *Estudios Sobre Educación*, 47, 101–123. <https://doi.org/10.15581/004.47.005>
- Joni, Y. I., Kartiwi, A. P., & Somantri, M. (2025). Leadership and Teacher Engagement in Collaborative Curriculum Implementation: Evidence from Indonesia. *Tarbawi: Jurnal Keilmuan Manajemen Pendidikan*, 11(3), 441–452. <https://doi.org/10.32678/tarbawi.v11i03.12043>
- Juhji, J., & Nuangchalerm, P. (2020). Interaction Between Science Process Skills and Scientific Attitudes of Students Toward Technological Pedagogical Content Knowledge. *Journal for the Education of Gifted Young Scientists*, 8(1), 1–16. <https://doi.org/10.17478/jegys.600979>

- Kunter, M., Klusmann, U., Baumert, J., Richter, D., Voss, T., & Hachfeld, A. (2013). Professional Competence of Teachers: Effects on Instructional Quality and Student Development. *Journal of Educational Psychology*, 105(3), 805–820. <https://doi.org/10.1037/a0032583>
- Kurniawan, I., Syarifudin, E., & Zohriah, A. (2024). Exploring Visionary and Transformational Leadership Among Islamic Leaders and Its Impact on Job Satisfaction in Indonesian Pesantren. *International Journal of Science Education and Cultural Studies*, 3(2), 38–45. <https://doi.org/10.58291/ijsecs.v3i2.245>
- Leithwood, K., Harris, A., & Hopkins, D. (2008). Seven Strong Claims About Successful School Leadership. *School Leadership & Management*, 28(1), 27–42. <https://doi.org/10.1080/13632430701800060>
- Nisaul Fadhilah, M. W. S., Margatama, P., & Nubail, A. (2024). School Leadership Transformation: Improving Teacher Performance Through Strategic Decision-Making. *Tarbawi: Jurnal Keilmuan Manajemen Pendidikan*, 10(1), 11–18. <https://doi.org/10.32678/tarbawi.v10i01.9910>
- Nurjaya, N., Mu'ti, A., Sapiudin, S., Herlanti, Y., Suwendi, S., & Budiman, S. A. (2025). Contextual Mapping of Students' Leadership Traits for School Character Development Programs in Indonesia. *Tarbawi: Jurnal Keilmuan Manajemen Pendidikan*, 11(3), 477–488. <https://doi.org/10.32678/tarbawi.v11i03.12002>
- Pujilestari, Y., Marasabessy, A. C., & Utami, I. S. (2025). The Influence of Transformational Leadership and OCB on Teachers' Professional Commitment in Early Childhood Education Institutions in Serpong, Indonesia. *Tarbawi: Jurnal Keilmuan Manajemen Pendidikan*, 11(2), 245–256. <https://doi.org/10.32678/tarbawi.v11i02.11338>
- Robinson, V. M. J., Lloyd, C. A., & Rowe, K. J. (2008). The Impact of Leadership on Student Outcomes: An Analysis of the Differential Effects of Leadership Types. *Educational Administration Quarterly*, 44(5), 635–674. <https://doi.org/10.1177/0013161X08321509>
- Royhatudin, A., Supardi, S., & Juhji, J. (2020). Transformational Leadership Style in Implementing Madrasa-Based Management. *Tarbawi: Jurnal Keilmuan Manajemen Pendidikan*, 6(1), 69. <https://doi.org/10.32678/tarbawi.v6i01.2187>
- Sardana, N., Shekoohi, S., Cornett, E. M., & Kaye, A. D. (2023). *Qualitative and Quantitative Research Methods*. In *Substance Use and Addiction Research* (pp. 65–69). Elsevier. <https://doi.org/10.1016/B978-0-323-98814-8.00008-1>
- Sindelar, P. T., McCray, E. D., Brownell, M. T., & Lignugaris/Kraft, B. (Eds.). (2014). *Handbook of Research on Special Education Teacher Preparation*. Routledge. <https://doi.org/10.4324/9780203817032>

- Villagra Bravo, C., Aravena Kenigs, O., & Torres Zamora, M. P. (2025). Examining the Role of Curriculum Evaluation in Schools: A Challenge for Pedagogical Leadership. *International Electronic Journal of Elementary Education*. <https://doi.org/10.26822/iejee.2025.413>
- Wijaya, S. R., El Khuluqo, I., & Istaryatiningtias, I. (2025). School Quality Improvement Through Transformational Leadership and Teacher Performance: A Study in Cengkareng District. *Tarbawi: Jurnal Keilmuan Manajemen Pendidikan*, 11(2), 223–234. <https://doi.org/10.32678/tarbawi.v11i02.11332>