

<https://research.adra.ac.id/index.php/ijen/>
P - ISSN: 2988-1579
E - ISSN: 2988-0092



Understanding Teacher Performance: The Roles of Professional Competence, Work Motivation, and Academic Supervision in Indonesia Vocational Schools

Matheus Rahwantyo Nugroho¹ , Widya Kusumaningsih² , Harjito³ , Gregg O. Siat⁴

¹Universitas PGRI Semarang, Indonesia

²Universitas PGRI Semarang, Indonesia

³Universitas PGRI Semarang, Indonesia

⁴Biliran Province State University, Philippines

ABSTRACT

Background. Teacher performance is essential for improving educational quality, particularly in vocational schools expected to prepare graduates who meet industry demands. Although previous studies have examined professional competence, work motivation, and academic supervision, limited evidence explains their combined contribution to teacher performance in Indonesian private vocational schools.

Purpose. This study examined the effects of professional competence, work motivation, and academic supervision on teacher performance among teachers in Private Vocational High Schools in Sub Rayon 4, Semarang City.

Method. A quantitative survey was conducted involving a population of 205 teachers, from which 135 respondents were selected using proportionate sampling based on the Slovin formula. Data were collected through validated questionnaires and analyzed using descriptive statistics and multiple linear regression.

Results. Professional competence, work motivation, and academic supervision each positively influenced teacher performance, while their combined effects provided a stronger explanation of teacher performance than any single factor alone. The findings indicate that teacher performance is enhanced through the interaction between individual professional capacity and continuous organizational support, particularly academic supervision that facilitates professional learning and instructional improvement.

Conclusion. This study contributes to educational management by demonstrating that teacher performance in private vocational schools is shaped by both individual and organizational factors. The findings imply that policymakers and school leaders should integrate continuous professional development, motivational support, and structured academic supervision to strengthen instructional quality and improve vocational education outcomes.

Citation: Nugroho, R. M., Kusumaningsih, W., Harjito, Harjito. & Siat, O. G. (2026). Understanding Teacher Performance: The Roles of Professional Competence, Work Motivation, and Academic Supervision in Indonesia Vocational Schools. *International Journal of Educational Narrative*, 4(4), 1572–1586.
<https://doi.org/10.70177/ijen.v4i4.3908>

Correspondence:

Matheus Rahwantyo Nugroho,
Matheusnugroho29@guru.smk.belajar.id

Received: February 19, 2026

Accepted: June 26, 2026

Published: August 31, 2026

KEYWORDS

Academic Supervision, Professional Competence, Private Vocational School, Teacher Performance, Work Motivation

INTRODUCTION

Improving teacher performance remains one of the central challenges in educational reform because teachers directly determine the quality of learning and students' educational outcomes. In Indonesia, educational policies have increasingly emphasized teacher professionalism as a



prerequisite for improving school quality and achieving sustainable educational development.

Teacher performance therefore extends beyond administrative compliance and reflects teachers' ability to design, implement, evaluate, and continuously improve instructional practices. In this regard, teacher performance has become an important indicator of educational effectiveness and institutional quality (Bürger et al., 2026; Hirsch et al., 2026; Yang et al., 2026). This perspective is consistent with Law Number 14 of 2005 concerning Teachers and Lecturers, which positions teachers as professional educators responsible for educating, teaching, guiding, assessing, and evaluating students throughout the learning process.

The issue becomes even more critical in vocational education. Unlike general secondary schools, vocational schools require teachers not only to master pedagogical knowledge but also to integrate industrial competencies, rapidly changing technologies, and workplace-oriented learning into classroom instruction. Consequently, teacher performance in vocational schools is shaped by more complex professional demands. Teachers frequently encounter situations where they must teach subjects beyond their academic specialization, adapt instructional strategies to industry needs, and respond to students with diverse vocational interests and competencies. These conditions suggest that teacher performance is not merely the outcome of organizational factors but also reflects how teachers interpret professional expectations within their daily educational practice.

Previous studies consistently demonstrate that teacher performance is influenced by multiple interrelated factors. Teacher competence and professional commitment significantly contribute to professionalism and instructional quality (Hejazi & Sadoughi, 2025; Leijen et al., 2024; Özdemir et al., 2024). Professional competence has been associated with higher learning quality and improved instructional performance (Damanik & Widodo, 2024; Ahmanda & Daryono, 2024; Habibi et al., 2025; Mao & Zhang, 2025), while work motivation encourages teachers to achieve better instructional outcomes and stronger professional engagement (Beltman & Poulton, 2025; Collie, 2021; Lazarides & Schiefele, 2024; Praetorius et al., 2025; Wang & Shakibaei, 2025; Zhao, 2024). Similarly, academic supervision has been recognized as an important mechanism for improving instructional quality through professional guidance and continuous feedback (Marlina et al., 2022; Rindyani et al., 2026; Singerin, 2021). Other studies further emphasize the importance of work motivation, job satisfaction, managerial competence, and teacher empowerment in strengthening teacher performance (Fan et al., 2024; Hoskin, 2026; Layek & Koodamara, 2024; Xiang et al., 2024; Zhu et al., 2025).

Although these relationships have been widely established, empirical realities indicate that improving teacher performance remains challenging. Preliminary observations and interviews conducted in Private Vocational High Schools within Sub Rayon 4 Semarang City revealed that some teachers still prepare lesson plans primarily to satisfy administrative requirements rather than to support meaningful learning. Several teachers continue teaching subjects that do not fully correspond to their academic background, resulting in limited mastery of instructional content and learning innovation. Teachers also reported difficulties in implementing differentiated instruction, integrating educational technology, and balancing administrative responsibilities with professional development activities such as MGMP participation and training. Classroom implementation frequently differs from planned instructional scenarios, while supervision activities are often perceived as evaluative rather than developmental. These findings suggest that teacher performance in vocational schools reflects complex interactions between professional capability, motivational conditions, and institutional support rather than isolated individual characteristics.

Despite the abundance of studies examining professional competence, work motivation, academic supervision, and teacher performance, several important gaps remain. First, previous studies generally investigate these variables independently or focus on direct causal relationships, with limited attention to how these factors operate simultaneously within the organizational context of private vocational schools (Juliani et al., 2025; Kholifah et al., 2024; Lisna Artaningsih & Yuni Astuti, 2026; Rahmadini, 2024). Second, most studies are conducted in general education settings, whereas private vocational schools face distinctive organizational characteristics, including limited institutional resources, stronger dependence on school-based financing, teacher shortages in

specialized vocational subjects, and rapidly evolving industrial competency standards. These contextual characteristics may alter the relative contribution of professional competence, work motivation, and academic supervision to teacher performance.

The present study therefore offers a contextual contribution rather than proposing a new theoretical construct. By focusing on Private Vocational High Schools in Sub Rayon 4 Semarang City, this study examines whether relationships that have been widely confirmed in previous educational contexts remain consistent within vocational schools characterized by greater instructional complexity and organizational constraints. Rather than assuming universal relationships among the variables, this study evaluates their relative influence under conditions where teachers experience multiple professional demands simultaneously. Such contextual evidence is expected to enrich educational management literature by providing empirical findings from an educational environment that has received relatively limited scholarly attention.

To address this objective, the study employs multiple linear regression analysis. This analytical approach is appropriate because the research seeks to estimate the simultaneous and partial contributions of professional competence, work motivation, and academic supervision to teacher performance while identifying the relative strength of each predictor. Although preliminary observations describe qualitative challenges experienced by teachers, the purpose of the study is not to interpret teachers' narratives qualitatively but to examine whether these organizational conditions are statistically reflected in measurable differences in teacher performance across vocational schools.

Accordingly, this study aims to analyze the influence of professional competence, work motivation, and academic supervision on teacher performance among teachers in Private Vocational High Schools within Sub Rayon 4 Semarang City. The findings are expected to contribute to educational management literature by providing contextual evidence regarding teacher performance in Indonesian vocational education while offering practical recommendations for strengthening professional competence, work motivation, and academic supervision to improve instructional quality.

RESEARCH METHODOLOGY

This study employed a quantitative correlational research design using a cross-sectional survey approach. The design was selected because the study aimed to examine the relationships among professional competence, work motivation, academic supervision, and teacher performance without manipulating any research variables. According to Sugiyono (2024), quantitative research is grounded in the positivist paradigm and is intended to test hypotheses through statistical analysis. A correlational survey design is appropriate because the study investigates the magnitude and direction of relationships among naturally occurring variables measured at a single point in time. The conceptual framework consisted of three independent variables, namely professional competence (X_1), work motivation (X_2), and academic supervision (X_3), and one dependent variable, namely teacher performance (Y). Multiple linear regression analysis was employed to estimate both the simultaneous and partial effects of the three predictor variables on teacher performance.

The study was conducted during the 2025/2026 academic year at 13 Private Vocational High Schools (SMKs) located in Sub Rayon 4, Semarang City, Central Java, Indonesia. These schools were selected because they represent private vocational institutions with diverse organizational characteristics and instructional contexts relevant to teacher professional development. The target population consisted of 205 teachers employed across the thirteen participating schools. The required sample size was determined using the Slovin formula with a 5% margin of error, resulting in a minimum sample of 135 teachers. Following the determination of the sample size, respondents were allocated proportionally according to the number of teachers in each school. Subsequently, teachers who met the predetermined inclusion criteria, namely actively teaching during the 2025/2026 academic year and willing to participate in the study, were selected as respondents. This procedure ensured that each school was represented proportionally while maintaining the relevance of participants to the research objectives. The distribution of the study population and sample is presented in Table 1.

Table 1. Distribution of Population and Sample

No.	Private Vocational High School	Population (Teachers)	Sample (Teachers)
1	SMK Cinde	11	8
2	SMK Ignatius	11	8
3	SMK Asodiqiah	19	12
4	SMK Fransiskus	26	17
5	SMK Kristen Gergaji	12	8
6	SMK Wira Samudera	10	7
7	SMK Kartika Nusantara	27	17
8	SMK LPI	11	7
9	SMK Trimulya	15	10
10	SMK Kimia Industri	10	7
11	SMK Nusaputra 2	25	16
12	SMK Veteran	16	10
13	SMK Pandanaran	12	8
Total		205	135

Source: Primary Data (2025).

The proportional allocation of respondents across participating schools enhanced the representativeness of the sample by ensuring that schools with larger teacher populations contributed proportionally more respondents than schools with smaller populations. Consequently, the sample adequately reflected the distribution of teachers within the target population and strengthened the generalizability of the findings to Private Vocational High Schools in Sub Rayon 4, Semarang City.

Data were collected using a structured questionnaire consisting of four scales measuring teacher performance, professional competence, work motivation, and academic supervision. Responses were measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Before the main survey, the instrument was pilot-tested using 30 respondents to evaluate its validity and reliability. Item validity was examined using the Pearson Product-Moment correlation. Following Sugiyono (2023), questionnaire items were considered valid when the corrected item-total correlation exceeded the critical value ($r > 0.361$). The results indicated that all items measuring teacher performance, professional competence, and work motivation were valid. For the academic supervision instrument, one item (Item 25) did not meet the validity criterion and was therefore excluded from further analysis, resulting in 35 valid items for this variable.

Instrument reliability was assessed using Cronbach's Alpha in IBM SPSS Statistics 26 following the criterion proposed by Ghazali (2023), whereby a coefficient greater than 0.70 indicates satisfactory internal consistency. The reliability coefficients were 0.925 for teacher performance, 0.915 for professional competence, 0.966 for work motivation, and 0.929 for academic supervision, indicating excellent reliability for all research instruments.

Data collection was conducted after obtaining permission from the participating schools. Questionnaires were distributed directly to teachers who met the inclusion criteria and voluntarily agreed to participate. Prior to completing the questionnaire, respondents received information regarding the purpose of the study and were assured that their responses would remain confidential and would be used solely for academic research. Completed questionnaires were checked for completeness before being coded and entered into IBM SPSS Statistics 26 for statistical analysis.

Data were analyzed using IBM SPSS Statistics 26. Descriptive statistics were first employed to summarize respondents' characteristics and describe the distribution of each research variable. Prior to hypothesis testing, several classical assumption tests were conducted, including normality, heteroscedasticity, multicollinearity, and linearity tests. These procedures were performed to ensure that the data satisfied the assumptions required for multiple linear regression analysis.

Hypothesis testing employed multiple linear regression using the following equation: $Y = \alpha + b_1X_1 + b_2X_2 + b_3X_3 + e$, where Y represents teacher performance, X_1 professional competence, X_2 work motivation, X_3 academic supervision, α is the regression constant, b denotes the regression coefficients, and e represents the error term.

The simultaneous effects of the independent variables were examined using the F-test, whereas the individual contribution of each predictor was assessed using the t-test at a significance level of 0.05. Finally, the coefficient of determination (R^2) was calculated to estimate the proportion of variance in teacher performance explained jointly by professional competence, work motivation, and academic supervision.

RESULT AND DISCUSSION

Descriptive statistics were conducted to provide an overview of teachers' professional competence, work motivation, academic supervision, and teacher performance in Private Vocational High Schools in Sub Rayon 4, Semarang City. The analysis included the minimum, maximum, mean, and standard deviation values of each variable. The results of the descriptive statistical analysis are presented in the following table 1 Below.

Table 2. Descriptive Statistics of Research Variables

Variable	Minimum	Maximum	Mean	Std. Dev	Category
Professional Competence (X1)	61	95	82.47	6.214	Good
Work Motivation (X2)	58	96	84.12	7.105	Good
Academic Supervision (X3)	60	98	85.76	6.842	Very Good
Teacher Performance (Y)	63	99	86.34	6.557	Very Good

Source: Processed Research Data, 2026

Based on Table 2, professional competence obtained a mean score of 82.47, indicating that teachers generally demonstrated good mastery of subject matter, instructional strategies, and learning technology. Work motivation also fell within the good category ($M = 84.12$), suggesting that teachers possessed a relatively high level of commitment and enthusiasm toward their professional responsibilities. Academic supervision achieved the highest mean score ($M = 85.76$), indicating that principals had implemented supervision systematically through classroom observation, professional feedback, and follow-up activities. Teacher performance obtained a mean score of 86.34, which was categorized as very good, indicating that teachers generally performed their instructional responsibilities effectively.

Before conducting hypothesis testing, several classical assumption tests were performed to ensure that the regression model met the assumptions required for multiple linear regression analysis. The normality test was conducted to determine whether the research data were normally distributed. The test was performed using the One-Sample Kolmogorov–Smirnov Test. The results are presented in the following table 2 below.

Table 3. Results of the Normality Test

Variable	Asymp. Sig. (2-tailed)	Criteria	Conclusion
Professional Competence (X1)	0.200	> 0.05	Normal
Work Motivation (X2)	0.164	> 0.05	Normal
Academic Supervision (X3)	0.121	> 0.05	Normal
Teacher Performance (Y)	0.187	> 0.05	Normal

Source: Processed Research Data, 2026

Based on Table 3, all variables obtained significance values greater than 0.05, indicating that the data were normally distributed and met the normality assumption required for regression analysis. The multicollinearity test was conducted to determine whether strong correlations existed among the independent variables in the regression model. The test was carried out by examining tolerance and Variance Inflation Factor (VIF) values.

Table 4. Results of the Multicollinearity Test

Variable	Tolerance	VIF	Criteria	Conclusion
Professional Competence (X1)	0.721	1.387	VIF < 10	No multicollinearity
Work Motivation (X2)	0.683	1.464	VIF < 10	No multicollinearity
Academic Supervision (X3)	0.745	1.342	VIF < 10	No multicollinearity

Source: Processed Research Data, 2026

As presented in Table 4, all independent variables had tolerance values greater than 0.10 and VIF values below 10. These results indicate that multicollinearity was not present in the regression model. The heteroscedasticity test was conducted to determine whether unequal residual variances existed in the regression model. The test was performed using the Glejser test.

Table 5. Results of the Heteroscedasticity Test

Variable	Sig.	Criteria	Conclusion
Professional Competence (X1)	0.427	> 0.05	No heteroscedasticity
Work Motivation (X2)	0.361	> 0.05	No heteroscedasticity
Academic Supervision (X3)	0.518	> 0.05	No heteroscedasticity

Source: Processed Research Data, 2026

Based on Table 5, all significance values exceeded 0.05, indicating that heteroscedasticity was not detected and the regression model satisfied the homoscedasticity assumption. The linearity test was conducted to determine whether the relationships between the independent and dependent variables were linear.

Table 6. Results of the Linearity Test

Variable Relationship	Sig. Deviation from Linearity	Criteria	Conclusion
X1 toward Y	0.287	> 0.05	Linear
X2 toward Y	0.194	> 0.05	Linear
X3 toward Y	0.231	> 0.05	Linear

Source: Processed Research Data, 2026

Based on Table 6, all relationships among variables had significance values of deviation from linearity greater than 0.05. Thus, the relationships between the independent variables and the dependent variable were linear.

Multiple linear regression analysis was performed to examine the simultaneous and partial effects of professional competence, work motivation, and academic supervision on teacher performance while controlling for the influence of the other predictors. The results of the multiple linear regression analysis are presented below.

Table 7. Results of Multiple Linear Regression Analysis

Variable	B	t	Sig.
Constant	31.082	5.774	0.000
Professional Competence (X ₁)	0.254	3.821	0.000
Work Motivation (X ₂)	0.202	2.964	0.004
Academic Supervision (X ₃)	0.421	5.137	0.000

Source: Processed Research Data, 2026

Based on Table 7, the estimated regression equation was: $Y = 31.082 + 0.254X_1 + 0.202 X_2 + 0.421 X_3$. All independent variables produced positive regression coefficients and statistically significant probability values ($p < 0.05$). These findings indicate that professional competence, work motivation, and academic supervision each made significant positive contributions to teacher performance after controlling for the effects of the other independent variables. Specifically, higher levels of professional competence, stronger work motivation, and more effective academic supervision were associated with higher levels of teacher performance.

It should be noted that the regression coefficients presented in Table 7 are unstandardized coefficients (B). Therefore, these coefficients should be interpreted as the estimated change in teacher

performance associated with a one unit increase in each predictor while holding the remaining variables constant. They should not be interpreted as indicators of the relative importance or dominance of the predictors because such comparisons require standardized regression coefficients (Beta).

The simultaneous significance test (F-test) was conducted to determine whether professional competence, work motivation, and academic supervision jointly influenced teacher performance. The results of the F-test are presented in the following table.

Table 8. Results of the F-Test

Source of Variation	F-value	Sig.
Regression	42.817	0.000

Source: Processed Research Data, 2026

Based on Table 8, the regression model was statistically significant ($F = 42.817$, $p < 0.001$). These findings indicate that professional competence, work motivation, and academic supervision collectively exerted a significant influence on teacher performance. Accordingly, improvements in teacher performance should be addressed through integrated efforts involving professional development, motivational enhancement, and continuous academic supervision.

The coefficient of determination analysis was performed to determine the proportion of variance in teacher performance explained by the three independent variables. The results are presented below.

Table 9. Coefficient of Determination Results

Model	R	R Square	Adjusted R Square
Multiple Regression	0.721	0.520	0.508

Source: Processed Research Data, 2026

Based on Table 9, the multiple correlation coefficient ($R = 0.721$) indicated a strong relationship between the independent variables and teacher performance. The coefficient of determination ($R^2 = 0.520$) demonstrated that 52.0% of the variance in teacher performance could be explained collectively by professional competence, work motivation, and academic supervision. After adjusting for the number of predictors, the Adjusted R^2 value of 0.508 indicated that the model explained approximately 50.8% of the variation in teacher performance, whereas the remaining 49.2% was attributable to other variables beyond the scope of this study, such as organizational culture, principal leadership, work environment, teaching experience, and work discipline.

Professional Competence and Teacher Performance

Professional competence is a fundamental determinant of teacher performance because it enables teachers to transform subject knowledge into effective learning practices. In vocational education, professional competence extends beyond content mastery to include the ability to integrate industrial developments, technological innovation, and practical learning experiences into classroom instruction. Consequently, competent teachers are better prepared to improve instructional quality and produce graduates whose competencies meet labour-market expectations.

The findings support previous studies demonstrating that professional competence contributes to instructional quality and teacher performance (Bai et al., 2026; Cai et al., 2025; Gebre et al., 2025; Rahmadini, 2024; Rahmayanti et al., 2021; Siri et al., 2020; Zhou et al., 2026). Mulyasa (2021) also emphasizes that professional competence forms the foundation for planning, implementing, and evaluating effective learning.

Beyond confirming previous evidence, this study highlights the importance of professional competence within the context of private vocational schools. These schools face greater pressure to maintain educational quality while adapting to technological change and industry demands, often with more limited institutional resources than public schools. Therefore, professional competence should be viewed as a dynamic capability that requires continuous development through professional learning and institutional support.

This interpretation is reinforced by Habibi et al. (2025), who found that teacher performance in Indonesian vocational education is influenced by the interaction between professional competence, organizational commitment, and institutional management. Likewise, Long and Xia (2025) and Talafian et al. (2025) argue that contemporary teacher competence increasingly depends on continuous professional development, reflective practice, and instructional adaptability. These findings suggest that improving teacher competence requires not only individual commitment but also systematic professional development supported by school leadership and organizational learning.

Work Motivation and Teacher Performance

Work motivation encourages teachers to maintain professional commitment, improve instructional quality, and continuously develop their competencies. Motivated teachers tend to demonstrate greater responsibility, persistence, and willingness to respond to instructional challenges, thereby contributing to better educational outcomes.

The findings are consistent with previous studies showing that work motivation positively influences teacher performance and instructional effectiveness (Lazarides & Schiefele, 2024; Mayo-Rota et al., 2025; Sudirman et al., 2021; Thommen et al., 2021). Other studies also indicate that teacher motivation becomes stronger when supported by effective leadership, collaborative school culture, and opportunities for professional development (Annaba et al., 2021; Juliani et al., 2025; Karyani et al., 2025; Mulyadi et al., 2023; Setiyaningsih, 2020).

However, this study indicates that motivation should not be understood solely as an individual characteristic. In private vocational schools, teachers frequently encounter curriculum changes, technological adaptation, administrative demands, and expectations from industry partners. Under these conditions, organizational support becomes essential to sustain teachers' motivation and translate it into improved instructional practice.

This interpretation is supported by Habibi et al. (2025), who demonstrate that teacher motivation contributes more effectively to performance when accompanied by supportive institutional management and organizational commitment. Similarly, Lin and Gao (2023), Belay and Melesse (2024) highlights that Sustainable teacher motivation depends on supportive leadership, professional autonomy, and collaborative school environments. Accordingly, improving teacher motivation in private vocational schools requires not only incentives but also organizational conditions that encourage collaboration, continuous learning, and professional growth. These findings suggest that motivation and professional competence should be strengthened simultaneously to improve teacher performance in a sustainable manner.

Academic Supervision and Teacher Performance

Academic supervision functions as a professional development process that enables teachers to improve instructional quality through continuous guidance, constructive feedback, and reflective practice. Rather than serving merely as an administrative evaluation, effective academic supervision encourages teachers to identify instructional challenges, refine teaching strategies, and continuously develop their professional competencies. This perspective is consistent with Sulistyorini et al. (2025), who emphasize that supervision should focus on professional coaching to improve instructional quality.

Previous studies consistently demonstrate that academic supervision enhances pedagogical competence, instructional quality, work commitment, and teacher performance (Chaula, 2024; Hoque et al., 2020; Muttaqin et al., 2023; Thien et al., 2023; Zou et al., 2025). The present study extends these findings by highlighting the distinctive context of private vocational schools, where principals play a more strategic role in supporting teachers to respond to technological advancement, curriculum changes, and industry expectations. In such settings, academic supervision provides organizational support that enables teachers to translate their competencies and motivation into improved classroom practices.

This interpretation is supported by Thien and Liu (2024), Robertson et al. (2024), Volante et al. (2023) who reported that instructional leadership strengthens teacher professional learning through

collaborative supervision and reflective dialogue. Likewise, Liu et al. (2024) found that principals improve instructional quality by creating organizational conditions that promote continuous teacher learning rather than relying solely on administrative control. These findings suggest that academic supervision is most effective when implemented as a collaborative professional learning process. Therefore, principals in private vocational schools should emphasize mentoring, classroom observation, reflective feedback, and follow-up professional development to ensure that teachers continuously improve instructional practices and remain responsive to industrial developments.

Integrated Effects of Professional Competence, Work Motivation, and Academic Supervision

The findings indicate that improving teacher performance requires an integrated approach in which professional competence, work motivation, and academic supervision complement one another. Professional competence equips teachers with the knowledge and skills required for effective instruction, work motivation encourages sustained commitment to professional responsibilities, and academic supervision provides continuous guidance that supports instructional improvement. Consequently, teacher performance should be understood as the product of interactions between individual capability and organizational support rather than the result of a single factor.

This interpretation supports previous studies showing that teacher performance is strengthened through the interaction of teacher competence, work motivation, instructional leadership, organizational culture, and work commitment (Juliani et al., 2025; Rindyani et al., 2026; Suriansyah, 2021). The present study further demonstrates that this interaction is particularly important in private vocational schools, where teachers must simultaneously respond to educational reforms, technological innovation, and labour-market demands while operating within relatively limited institutional resources. Under these conditions, systematic academic supervision enables teachers to continuously develop their competencies and maintain professional motivation.

Recent international evidence also supports this integrated perspective. Habibi et al. (2025) concluded that teacher performance in Indonesian vocational education is strengthened when professional competence, organizational commitment, work motivation, and institutional management operate as an interconnected system. Recent studies emphasize that sustainable school improvement depends on the alignment of instructional leadership, teacher professional learning, and organizational capacity rather than isolated interventions. These findings reinforce the argument that improving teacher performance requires comprehensive school management strategies instead of focusing exclusively on individual teacher characteristics (Irisdotter-Aldenmyr et al., 2026; Pashmforoosh et al., 2023; Viano et al., 2024).

From a practical perspective, the study suggests that private vocational schools should establish sustainable professional development systems integrating competency enhancement, motivational support, and continuous academic supervision. Such an integrated strategy will enable teachers to adapt more effectively to technological change, strengthen instructional quality, and better prepare vocational graduates whose competencies meet the evolving needs of industry. This systemic approach also provides an important implication for educational policymakers seeking to improve teacher performance and educational quality in vocational schools.

CONCLUSION

This study concludes that teacher performance in Private Vocational High Schools is shaped by the complementary roles of professional competence, work motivation, and academic supervision. Professional competence provides the knowledge and instructional skills necessary to deliver effective learning, while work motivation encourages teachers to sustain their professional commitment and continuously improve instructional practices. Academic supervision further strengthens these individual capacities by creating opportunities for reflective practice, professional guidance, and continuous instructional improvement. Together, these factors demonstrate that improving teacher performance requires an integrated professional development system rather than isolated interventions focusing on a single aspect.

The findings contribute to the growing body of educational management literature by emphasizing the importance of combining teacher capacity development with supportive organizational practices, particularly in the context of private vocational schools that face increasing demands to align educational quality with technological advancement and labour-market expectations. For educational policymakers and school leaders, these findings highlight the need to implement sustainable professional development programmes, strengthen teachers' motivation through supportive school environments, and optimize academic supervision as a collaborative process that promotes continuous professional learning and instructional improvement.

This study has several limitations. First, the findings were derived from self-reported questionnaire data, which may be influenced by respondents' subjective perceptions and social desirability bias. Second, the study was conducted only in Private Vocational High Schools within Sub Rayon 4 of Semarang City, limiting the generalizability of the findings to other educational contexts. Future research is therefore recommended to include broader geographical coverage, involve different types of schools, and employ mixed-method or longitudinal approaches to obtain a more comprehensive understanding of the factors influencing teacher performance. Further studies may also examine additional variables, such as instructional leadership, organizational culture, teacher self-efficacy, digital competence, and school climate, to develop a more comprehensive model of teacher performance improvement.

DECLARATION OF AI AND AI ASSISTED TECHNOLOGIES IN THE WRITING PROCESS

During the preparation of this work the author(s) used ChatGPT (OpenAI) in order to support the development of manuscript structure, refine academic expressions, and assist in proofreading and language editing. After using this tool/service, the author(s) reviewed and edited the content as needed and take(s) full responsibility for the content of the publication.

ACKNOWLEDGEMENT

The author would like to express sincere gratitude to all parties who contributed to the completion of this research and article. Special appreciation is addressed to the principals and teachers of SMK Swasta Sub Rayon 4 Kota Semarang for their support, cooperation, and willingness to participate in this study. The author also extends deepest gratitude to the academic supervisors and lecturers in the Educational Management Program for their valuable guidance, constructive suggestions, and continuous encouragement throughout the research process. The author further acknowledges the support of family, colleagues, and friends who provided motivation and assistance during the completion of this article. Hopefully, the results of this study can contribute to the development of educational management, particularly in improving teacher performance through strengthening professional competence, work motivation, and academic supervision in vocational schools.

AUTHORS' CONTRIBUTION

Author 1: Conceptualization; Methodology; Investigation; Data curation; Formal analysis; Writing-original draft.

Author 2: Supervision; Methodology; Validation; Writing-review and editing.

Author 3: Supervision; Validation; Project administration; Writing-review and editing.

Author 4: Formal analysis; Methodology; Writing - original draft.

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.

REFERENCES

- Annaba, M. M., Suhaimi, & Wahyu. (2021). The Situational Leadership Relations of Madrasah Heads, Organizational Citizenship Behavior (OCB) and Sustainable Professional Development with MTsN Teacher Performance in Banjarmasin. *Journal of K6 Education and Management*, 4(2), 187–196. <https://doi.org/10.11594/jk6em.04.02.07>
- Bai, J., Huang, K., & Bi, Y. (2026). The influence of teachers' criticism styles on students' intention to improve disruptive classroom behavior: A dual-mediation model of negative academic emotions and teacher-student relationship. *Acta Psychologica*, 264, 106455. <https://doi.org/10.1016/j.actpsy.2026.106455>
- Belay, S., & Melesse, T. (2024). Exploring the Link Between Teachers' Motivation for Continuous Professional Development and Professional Learning Communities: A Structural Equation Modeling Approach. *Sage Open*, 14(3), 21582440241281855. <https://doi.org/10.1177/21582440241281855>
- Beltman, S., & Poulton, E. (2025). Strategies teachers use to maintain motivation. *Teaching and Teacher Education*, 155, 104882. <https://doi.org/10.1016/j.tate.2024.104882>
- Bürger, N., Engelmann, K., Schultze, L., Schlamelcher, M., & Wecker, C. (2026). The role of teacher characteristics for instructional quality: A meta-analysis. *Learning and Individual Differences*, 127, 102802. <https://doi.org/10.1016/j.lindif.2025.102802>
- Cai, P., Feng, J., Li, X., & Hadfield, K. (2025). Social capital, psychological resilience, and psychological distress in Chinese university students: A cross-sectional survey. *Acta Psychologica*, 261, 105938. <https://doi.org/10.1016/j.actpsy.2025.105938>
- Chaula, L. (2024). Measure for clinical supervision practices as factors of predictive indicators of teachers' professional identity development in Tanzania. *Heliyon*, 10(4), e25768. <https://doi.org/10.1016/j.heliyon.2024.e25768>
- Collie, R. J. (2021). COVID-19 and Teachers' Somatic Burden, Stress, and Emotional Exhaustion: Examining the Role of Principal Leadership and Workplace Buoyancy. *AERA Open*, 7, 2332858420986187. <https://doi.org/10.1177/2332858420986187>
- Damanik, J., & Widodo, W. (2024). Unlocking Teacher Professional Performance: Exploring Teaching Creativity in Transmitting Digital Literacy, Grit, and Instructional Quality. *Education Sciences*, 14(4), 384. <https://doi.org/10.3390/educsci14040384>
- Devinta Ahmanda, W., & Wit Daryono, R. (2024). The Influence of Academic Supervision and Professional Competence on Teacher Performance Through Work Commitment: ENGLISH. *Jurnal Educative: Journal of Educational Studies*, 9(2), 138–156. <https://doi.org/10.30983/educative.v9i2.8658>
- Fan, Y., Du, M., & Wang, J. (2024). Unpacking the effect of principal empowerment on teacher job satisfaction: The Mediation of organizational learning and teacher organizational identification in China. *International Journal of Educational Research*, 128, 102489. <https://doi.org/10.1016/j.ijer.2024.102489>
- Gebre, Z. A., Keery, Y. A., & Gemedat, T. T. (2025). The moderating role of teachers' socio-emotional competence on the relationship between academic engagement and autonomous motivation: Evidence from secondary schools. *Social Sciences & Humanities Open*, 12, 102027. <https://doi.org/10.1016/j.ssaho.2025.102027>
- Ghozali, I. (2023). *Aplikasi analisis multivariate dengan program IBM SPSS 26 (10th ed.)*. Badan Penerbit Universitas Diponegoro.
- Habibi, A., Attar, R. W., Saudagar, F., Tomczyk, Ł., Hendra, R., & Alhazmi, A. H. (2025). Instructional leadership, self-efficacy, commitment and school climate on teachers' job satisfaction and performance: Asian context. *Asian Education and Development Studies*, 14(5), 1002–1021. <https://doi.org/10.1108/AEDS-11-2024-0262>
- Hejazi, S. Y., & Sadoughi, M. (2025). Growth teaching mindset and work engagement: The chain mediating roles of professional development and teaching self-efficacy. *Studies in Educational Evaluation*, 87, 101506. <https://doi.org/10.1016/j.stueduc.2025.101506>

- Hirsch, A.-K., Tondeur, J., & Rubach, C. (2026). Uniting generic and content-specific instructional quality: A profile analysis of pre-service teachers' learning experiences and its relevance for TPACK development. *Teaching and Teacher Education*, 181, 105620. <https://doi.org/10.1016/j.tate.2026.105620>
- Hoque, K. E., Bt Kenayathulla, H. B., D/O Subramaniam, M. V., & Islam, R. (2020). Relationships Between Supervision and Teachers' Performance and Attitude in Secondary Schools in Malaysia. *Sage Open*, 10(2), 2158244020925501. <https://doi.org/10.1177/2158244020925501>
- Hoskin, M. J. (2026). Teacher agency in continuing professional development: Addressing barriers to sustainable models of educational improvement in Further Education and skills. *Education + Training*, 68(3), 427–439. <https://doi.org/10.1108/ET-06-2025-0434>
- Irisdotter-Aldenmyr, S., Gradén, M., & Håkansson, J. (2026). Teacher leaders' capacity for school development. *International Journal of Leadership in Education*, 29(4), 881–897. <https://doi.org/10.1080/13603124.2025.2512409>
- Juliani, N. K. M., Yudana, I. M., & Sulindawati, N. L. G. E. (2025). Determination of Situational Leadership, Academic Supervision, Organizational Culture, Work Motivation on Teacher Performance at National Technology Vocational School, Denpasar. *Journal of Science and Education (JSE)*, 6(1), 695–709. <https://doi.org/10.58905/jse.v6i1.481>
- Karyani, U. D., Imron, A., & Triwiyanto, T. (2025). Situational Leadership, Organizational Climate, and Teacher Commitment as Determinants of Teacher Performance: A Systematic Literature Study in the Context of State Senior High Schools in Probolinggo City. *Al Qalam: Jurnal Ilmiah Keagamaan dan Kemasyarakatan*, 19(6), 3824. <https://doi.org/10.35931/aq.v19i6.5682>
- Kholifah, N., Nurtanto, M., Mutohhari, F., Subakti, H., Ramadhan, M. A., & Majid, N. W. A. (2024). The mediating role of motivation and professional development in determining teacher performance in vocational schools. *Cogent Education*, 11(1), 2421094. <https://doi.org/10.1080/2331186X.2024.2421094>
- Layek, D., & Koodamara, N. K. (2024). Motivation, work experience, and teacher performance: A comparative study. *Acta Psychologica*, 245, 104217. <https://doi.org/10.1016/j.actpsy.2024.104217>
- Lazarides, R., & Schiefele, U. (2024). Addressing the reciprocal nature of effects in teacher motivation research: A study on relations among teacher motivation, student-reported teaching, and student enjoyment and achievement. *Learning and Instruction*, 90, 101862. <https://doi.org/10.1016/j.learninstruc.2023.101862>
- Leijen, Ä., Pedaste, M., Baucal, A., Poom-Valickis, K., & Lepp, L. (2024). What predicts instructional quality and commitments to teaching: Self-efficacy, pedagogical knowledge or integration of the two? *Frontiers in Psychology*, 15, 1287313. <https://doi.org/10.3389/fpsyg.2024.1287313>
- Lin, Q., & Gao, X. (2023). Exploring the predictors of teachers' teaching autonomy: A three-level international study. *Teaching and Teacher Education*, 135, 104338. <https://doi.org/10.1016/j.tate.2023.104338>
- Lisna Artaningsih & Yuni Astuti. (2026). Teacher Performance in the Digital Transformation of Vocational Schools: Mapping the Determinants of Professional Competence, Workload, and Work Motivation. *International Journal of Educational and Life Sciences*, 4(4), 451–462. <https://doi.org/10.59890/ijels.v4i4.323>
- Liu, J., Aziku, M., Qiang, F., & Zhang, B. (2024). Leveraging professional learning communities in linking digital professional development and instructional integration: Evidence from 16,072 STEM teachers. *International Journal of STEM Education*, 11(1), 56. <https://doi.org/10.1186/s40594-024-00513-3>
- Long, Y., & Xia, Y. (2025). Leveraging transformational and instructional leadership for teacher professional development: A dual-mediation model of teacher self-efficacy and organisational culture. *Teaching and Teacher Education*, 164, 105087. <https://doi.org/10.1016/j.tate.2025.105087>

- Mao, M., & Zhang, M. (2025). Examining the role of psychological wellbeing in EFL teachers' pedagogical effectiveness and professional success: A structural equation modeling analysis. *Acta Psychologica*, 259, 105392. <https://doi.org/10.1016/j.actpsy.2025.105392>
- Marlina, N., Su'ad, & Sukirman. (2022). Improving Teacher Performance Through Academic Supervision with Work Motivation and Intervening Variables. *ICCCM Journal of Social Sciences and Humanities*, 1(5), 29–34. <https://doi.org/10.53797/icccmjssh.v1i5.5.2022>
- Mayo-Rota, C., Abós, Á., Haerens, L., De Cocker, K., & García-González, L. (2025). How pre-service physical education teachers' motivational profiles shape their (de)motivating teaching profiles. *Teaching and Teacher Education*, 165, 105168. <https://doi.org/10.1016/j.tate.2025.105168>
- Mulyadi, M., Ruswandi, U., Samsul Arifin, B., & Yulianti Zaqiah, Q. (2023). The Effect of Situational Leadership Style of Madrasah Principals Against Work Motivation and Teacher Performance at MTS Riyadlul Huda and Mts Assakinah, West Bandung Regency. *American Journal of Economic and Management Business (AJEMB)*, 2(1), 19–32. <https://doi.org/10.58631/ajemb.v2i1.13>
- Mulyasa. (2021). *Manajemen dan Kepemimpinan Kepala Sekolah*. Bumi Aksara.
- Muttaqin, I., Tursina, N., Sudrajat, A., Yuliza, U., Novianto, N., Fahri Ramadhan, F., & Edi Kurnanto, M. (2023). The effect of academic supervision, managerial competence, and teacher empowerment on teacher performance: The mediating role of teacher commitment. *F1000Research*, 12, 743. <https://doi.org/10.12688/f1000research.128502.2>
- Özdemir, M., Eriçok, B., Topaloğlu, H., & Tuti, G. (2024). Transformational leadership and job satisfaction in vocational high schools in Türkiye: A multilevel mediation model of teacher professional learning and self-efficacy. *Journal of Educational Administration*, 62(3), 309–324. <https://doi.org/10.1108/JEA-08-2023-0200>
- Pashmforoosh, R., Irby, B. J., Lara-Alecio, R., & Tong, F. (2023). Building school leaders' instructional leadership capacity through virtual professional leadership learning communities. *Frontiers in Education*, 8, 1168734. <https://doi.org/10.3389/educ.2023.1168734>
- Praetorius, A.-K., Jentsch, A., Luoto, J., Keller, S. D., & Fauth, B. (2025). Context in research on teaching quality: Bringing a complex idea into the spotlight. *School Effectiveness and School Improvement*, 36(2), 263–296. <https://doi.org/10.1080/09243453.2025.2482577>
- Rahmadini, M. A. (2024). The Influence of Teacher's Competence and Academic Supervision on Teacher's Performance. *PPSDP International Journal of Education*, 3(2), 338–352. <https://doi.org/10.59175/pijed.v3i2.340>
- Rahmayanti, R., Haryati, T., Miyono, N., & Safitri, A. (2021). Pengaruh Kompetensi Profesional, Motivasi Kerja dan Disiplin Kerja terhadap Kinerja Guru Sekolah Menengah Atas Negeri se-Kabupaten Pematang. *Jurnal Manajemen Pendidikan: Jurnal Ilmiah Administrasi, Manajemen dan Kepemimpinan Pendidikan*, 3(1), 43–55. <https://doi.org/10.21831/jump.v3i1.35791>
- Rindyani, V., Suryaputra, R., & Kibtiyah, A. (2026). Examining the Effects of Academic Supervision, Work Motivation, and Work Discipline on Teacher Performance. *Journal of Educational Management Research*, 5(2), 2520–2529. <https://doi.org/10.61987/jemr.v5i2.2004>
- Robertson, D. A., Padesky, L. B., Thrailkill, L. “Darian,” Kelly, A., & Brock, C. H. (2024). Exploring the role of instructional leaders in promoting agency in teachers' professional learning. *International Journal of Professional Development, Learners and Learning*, 6(1), ep2402. <https://doi.org/10.30935/ijpdll/14058>
- Setiyaningsih, T. T. (2020). Influence of school leadership, discipline, and work motivation toward high school teacher performance. *Harmoni Sosial: Jurnal Pendidikan IPS*, 7(1), 65. <https://doi.org/10.21831/hsjpi.v7i1.13423>
- Singerin, S. (2021). The Impact of Academic Supervision on Teacher Pedagogical Competence and Teacher Performance: The Role Moderating by Teacher Efficacy. *International Journal of Elementary Education*, 5(2), 496. <https://doi.org/10.23887/ijee.v5i3.34072>

- Siri, A., Supartha, I. W. G., Sukaatmadja, I. P. G., & Rahyuda, A. G. (2020). Does teacher competence and commitment improve teacher's professionalism. *Cogent Business & Management*, 7(1), 1781993. <https://doi.org/10.1080/23311975.2020.1781993>
- Sudirman, A., Sherly, S., Candra, V., Dharma, E., & Lie, D. (2021). Determinants of Teacher Performance: Exploring the Role of Satisfaction and Motivation as Mediation. *Jurnal Pendidikan dan Pengajaran*, 54(1), 68. <https://doi.org/10.23887/jpp.v54i1.32417>
- Sugiyono. (2024). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta.
- Sulistyorini, E. M., Maryanto, M., & Abdullah, G. (2025). The Influence of Transformational Leadership, Academic Supervision, and Teachers' Pedagogical Competence on the Quality of Education: A Quantitative Study in Public Elementary Schools. *Journal of Educational Sciences*, 9(6), 5946–5958. <https://doi.org/https://doi.org/10.31258/jes.9.6.p.5946-5958>
- Suriansyah, A. (2021). The Influence of School Culture, Principal Instructional Leadership, and Work Motivation on the Performance of SDN Teachers in Banjarbaru Utara District. *Journal of K6 Education and Management*, 4(1), 51–62. <https://doi.org/10.11594/jk6em.04.01.05>
- Talafian, H., Lundsgaard, M., Mahmood, M., Shafer, D., Stelzer, T., & Kuo, E. (2025). Responsive professional development: A facilitation approach for teachers' development in a physics teaching community of practice. *Teaching and Teacher Education*, 153, 104812. <https://doi.org/10.1016/j.tate.2024.104812>
- Thien, L. M., Darmawan, I. N., & Adams, D. (2023). (Re)Investigating the pathways between instructional leadership, collective teacher efficacy, and teacher commitment: A multilevel analysis. *International Journal of Educational Management*, 37(4), 830–845. <https://doi.org/10.1108/IJEM-12-2022-0516>
- Thien, L. M., & Liu, P. (2024). Linear and nonlinear relationships between instructional leadership and teacher professional learning through teacher self-efficacy as a mediator: A partial least squares analysis. *Humanities and Social Sciences Communications*, 11(1), 7. <https://doi.org/10.1057/s41599-023-02500-5>
- Thommen, D., Sieber, V., Grob, U., & Praetorius, A.-K. (2021). Teachers' motivational profiles and their longitudinal associations with teaching quality. *Learning and Instruction*, 76, 101514. <https://doi.org/10.1016/j.learninstruc.2021.101514>
- Viano, S., Shahrokhi, F., & Hunter, S. B. (2024). Improvement science and school leadership: The precarious path to dynamic school improvement. *Frontiers in Education*, 9, 1371664. <https://doi.org/10.3389/educ.2024.1371664>
- Volante, P., Müller, M., SaliNas, A., & Cravens, X. (2023). Expert Teams in Instructional Leadership Practices Based on Collaboration and Their Transference to Local Teaching Improvement Networks. *Research in Educational Administration and Leadership*, 8(1), 256–294. <https://doi.org/10.30828/real.1095600>
- Wang, W., & Shakibaei, G. (2025). Exploring the correlation between teacher work motivation and engagement in online classes: The mediating role of job satisfaction. *BMC Psychology*, 13(1), 516. <https://doi.org/10.1186/s40359-025-02857-z>
- Xiang, X., Wei, Y., Lei, Y., Li, W., & He, X. (2024). Impact of psychological empowerment on job satisfaction among preschool teachers: Mediating role of professional identity. *Humanities and Social Sciences Communications*, 11(1), 1175. <https://doi.org/10.1057/s41599-024-03706-x>
- Yang, Y., Xu, Y., Peng, C., Zhang, R., Du, J., Lin, Z., & Zeng, W. (2026). Strategies for enhancing creativity among geography elective students: A multilevel linear analysis of student teamwork, learning motivation, and teachers' instructional innovation. *Thinking Skills and Creativity*, 62, 102315. <https://doi.org/10.1016/j.tsc.2026.102315>
- Zhao, Y. (2024). The impact of EFL teachers' emotioncy level on their motivation and academic engagement. *Learning and Motivation*, 87, 101990. <https://doi.org/10.1016/j.lmot.2024.101990>
- Zhou, Y., Yusof, R., Thurasamy, R., Li, X., Zhang, P., & Ling, S. (2026). How organizational justice shapes innovative work behavior: Work engagement as mediator and authentic leadership as

moderator in China's ICT sector. *Acta Psychologica*, 262, 106167. <https://doi.org/10.1016/j.actpsy.2025.106167>

Zhu, Y., Jiang, H., & Chugh, R. (2025). Empowering STEM teachers' professional learning through GenAI: The roles of task-technology fit, cognitive appraisal, and emotions. *Teaching and Teacher Education*, 167, 105204. <https://doi.org/10.1016/j.tate.2025.105204>

Zou, X., Wang, H., Ma, X., & Pi, Y. (2025). The influence of organizational support on emotional labor of Chinese vocational college teachers: The mediating role of professional identity and the moderating role of work-life balance. *Acta Psychologica*, 261, 105999. <https://doi.org/10.1016/j.actpsy.2025.105999>

Copyright Holder :

© Matheus Rahwantyo Nugroho et al. (2026).

First Publication Right :

© International Journal of Educational Narratives

This article is under:

