

The Influence of Principals' Managerial Competence, Organizational Climate, and Digital Literacy on Teacher Performance in Gaung District, Indragiri Hilir Regency, Riau Province

Nurmila^{1*}, Yuni Astuti², Slamet Lestari³

¹ Master's Program in Educational Management, Graduate School, Universitas Negeri Yogyakarta, Yogyakarta, Special Region of Yogyakarta, Indonesia.

Email: nurmila.2025@student.uny.ac.id

² Master's Program in Educational Management, Graduate School, Universitas Negeri Yogyakarta, Yogyakarta, Special Region of Yogyakarta, Indonesia.

Email: yuniastuti@uny.ac.id

³ Master's Program in Educational Management, Graduate School, Universitas Negeri Yogyakarta, Yogyakarta, Special Region of Yogyakarta, Indonesia.

Email: slamet_lestari@uny.ac.id

*Corresponding Author

Email: nurmila.2025@student.uny.ac.id

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Abstract

Teacher performance is a key indicator of educational quality. However, suboptimal principals' managerial competence, an uncondusive organizational climate, and limited teachers' digital literacy remain important challenges associated with teacher performance, particularly in Gaung District, Indragiri Hilir Regency, Riau Province. This study aimed to examine the relationships between principals' managerial competence, organizational climate, and digital literacy and teacher performance, both individually and simultaneously. A quantitative survey design was employed involving 206 elementary school teachers selected through total sampling. Data were collected using validated and reliable Likert-scale questionnaires and analyzed using multiple linear regression. The regression model was statistically significant ($F(3, 202) = 75.975, p < .001$), with an Adjusted R^2 of .523 and an R^2 of .530, indicating that the model explained 53.0% of the variance in teacher performance. Partially, principals' managerial competence ($\beta = .426$), organizational climate ($\beta = .377$), and digital literacy ($\beta = .278$) were positively and significantly associated with teacher performance. Based on the standardized beta coefficients, principals' managerial competence emerged as the strongest predictor in the model. These findings indicate that teacher performance is positively associated with principals' managerial competence, a supportive organizational climate, and teachers' digital literacy. Given the cross-sectional design, the results should be interpreted as predictive associations rather than causal relationships. Strengthening these three aspects may support efforts to improve the quality of teaching and learning in elementary schools.

Keywords: principals' managerial competence; organizational climate; digital literacy; teacher performance; elementary schools.



Introduction

Improving the quality of education remains a key priority in developing competitive human resources. Achieving this goal depends not only on government policies, curriculum implementation, and the availability of educational facilities, but also on the quality of teaching and learning processes within schools. In this context, teachers play a strategic role as the primary agents of instruction and educational change, directly influencing students' achievement of expected learning competencies. Consequently, improving teacher performance has become one of the most important indicators of achieving high-quality and sustainable education (Dewi dkk., 2023; Putri Rahminda dkk., 2023).

Teacher performance reflects teachers' ability to carry out their professional responsibilities, including lesson planning, instructional implementation, student assessment, and continuous professional development. Teachers with high levels of performance are capable of creating active, innovative, creative, effective, and student-centered learning environments that contribute to improved student learning outcomes. Conversely, poor teacher performance reduces instructional quality and ultimately affects overall educational quality. According to (Robbins & Judge, 2017), employee performance is influenced by individual ability, work motivation, and the organizational environment. Therefore, improving teacher performance requires not only the enhancement of individual competencies but also effective school leadership and a supportive organizational environment.

In recent years, digital transformation has substantially reshaped educational practices. The integration of information and communication technology into teaching and learning requires teachers not only to possess pedagogical and professional competencies but also to demonstrate the ability to utilize digital technologies effectively. Digital literacy has become an essential competency that enables teachers to access, evaluate, manage, and produce digital information responsibly to support effective learning (Inayah dkk., 2024; Suherdi dkk., 2021). This competency has become increasingly important with the rapid development of digital learning platforms, online educational resources, and twenty-first-century learning demands emphasizing creativity, collaboration, communication, and critical thinking.

Beyond teachers' individual competencies, school principals' leadership plays a pivotal role in determining educational effectiveness. Principals are responsible for managing all school resources through planning, organizing, implementing, supervising, and evaluating educational activities to ensure that institutional goals are achieved efficiently. Effective principals serve as educators, managers, administrators, supervisors, leaders, innovators, and motivators who contribute to educational quality by fostering teachers' professional development, managing school programs, strengthening disciplinary culture, and promoting instructional innovation aimed at improving student learning outcomes (Mahzum dkk., 2022).

Organizational climate is another critical determinant of teacher performance. Organizational climate refers to school members' perceptions of the working environment, including interpersonal relationships, internal communication, leadership support, reward systems, and organizational culture (Prastiawan dkk., 2020). A positive organizational climate enhances teachers' motivation, job satisfaction, organizational commitment, and collaboration, thereby improving the quality of professional practice. Conversely, an unfavorable organizational climate may reduce motivation, weaken collaboration, and diminish instructional effectiveness.

Previous studies have demonstrated that principals' managerial competence, organizational climate, and digital literacy are associated with teacher performance. (Zuhro dkk., 2024) reported that

principals' managerial competence significantly contributes to improved teacher performance. Similarly, (Mulyono dkk., 2023) argued that principals who effectively perform managerial functions create productive working environments that enhance teachers' motivation. From an organizational perspective, (Suhayat dkk., 2023) found that a positive organizational climate improves teacher performance through effective communication and collaborative organizational culture. Meanwhile, (Dharma, 2022) reported that digital literacy positively contributes to instructional quality because teachers are better able to utilize technology as an innovative teaching medium.

Despite these findings, previous studies have not reached consistent conclusions. Some studies have identified principals' managerial competence as the strongest predictor of teacher performance, whereas others have suggested that organizational climate or digital literacy exerts a greater influence. These inconsistencies indicate that the relative contribution of each factor may depend on school characteristics, human resource capacity, organizational culture, and regional context. Therefore, further investigation in different educational settings is required to provide more comprehensive empirical evidence regarding the relationships among principals' managerial competence, organizational climate, digital literacy, and teacher performance.

Several research gaps remain. First, most previous studies have examined principals' managerial competence, organizational climate, and digital literacy separately rather than simultaneously, limiting the understanding of how these factors jointly predict teacher performance. In practice, teachers' professional performance results from the interaction between school leadership, organizational conditions, and teachers' capacity to adapt to technological change. Investigating these variables in isolation may therefore provide an incomplete explanation of teacher performance.

Second, previous findings remain inconsistent regarding the most influential predictor of teacher performance. While some studies identify principals' managerial competence as the strongest predictor, others emphasize organizational climate or digital literacy. These inconsistencies suggest that the relative importance of each predictor varies according to school characteristics, organizational culture, human resource readiness, and geographical context. Consequently, further studies in different educational contexts are needed to provide stronger empirical evidence regarding the relative contributions of these variables.

Third, most previous research has been conducted in urban areas or regions with relatively advanced educational and technological infrastructure, such as Medan, Bandung, Banda Aceh, and Gowa. Research conducted in geographically distinct regions, particularly areas with limited technological access, remains relatively scarce. Consequently, existing findings cannot be readily generalized to schools operating under different contextual conditions. Studies conducted in such contexts are therefore important for expanding empirical evidence concerning factors associated with teacher performance.

These research gaps are highly relevant to elementary schools in Gaung District, Indragiri Hilir Regency, Riau Province. According to the 2025 Education Report Card, several elementary schools in the district remain at a moderate level of instructional quality. This condition suggests that teaching quality has not yet reached its full potential and that systematic efforts are needed to strengthen teachers' professionalism. Given that instructional quality is closely associated with teachers' professional performance, these findings indicate that several factors affecting teacher performance warrant further investigation.

Preliminary evidence was also obtained through interviews conducted during Teacher Working Group meetings in the Raja Bujang and Hang Tuah clusters in October 2025. Eleven teachers reported

that academic supervision had not been implemented regularly by school principals. Fourteen teachers acknowledged difficulties in developing digital learning media, while nine teachers indicated that communication and collaboration among teachers remained suboptimal. Furthermore, interviews with the district education coordinator and school supervisory coordinator revealed that some principals had not consistently implemented academic supervision and had yet to optimize school planning, implementation, and evaluation processes. These findings indicate that strengthening principals' managerial competence, fostering a supportive organizational climate, and enhancing teachers' digital literacy remain critical priorities for improving instructional quality in Gaung District.

These empirical findings suggest that teacher performance cannot be adequately explained by a single factor. Limited academic supervision reflects the need to strengthen principals' managerial competence, weak communication among teachers highlights the importance of a healthy organizational climate, and teachers' difficulties in developing digital instructional media indicate insufficient digital literacy. These three aspects are interconnected and collectively contribute to teachers' professional performance. Therefore, an integrated model incorporating these variables is expected to provide a more comprehensive explanation than studies examining each variable independently.

Based on these theoretical, methodological, and empirical gaps, this study offers three primary contributions. First, it develops an integrated model that simultaneously examines principals' managerial competence, organizational climate, and digital literacy as predictors of teacher performance, thereby providing a more comprehensive understanding of their interrelationships. Second, the study is conducted in elementary schools located in Gaung District, Indragiri Hilir Regency, a geographical context that differs from those investigated in previous research, thereby expanding the contextual evidence available in the literature. Third, by employing a quantitative approach to examine both the individual and joint predictive relationships among these variables, the study provides empirical evidence that may inform educational policy and school improvement strategies.

Accordingly, this study aims to examine the relationships between principals' managerial competence, organizational climate, and digital literacy and the performance of elementary school teachers in Gaung District, Indragiri Hilir Regency, Riau Province, both individually and simultaneously. The findings are expected to enrich the literature on educational management while providing empirical recommendations for school principals, teachers, and policymakers in developing strategies to improve educational quality through strengthened school leadership, a supportive organizational climate, and enhanced teachers' digital literacy.

Research Method

This study employed a quantitative approach using a survey method to examine the relationships between principals' managerial competence, organizational climate, digital literacy, and teacher performance. The study was conducted in public elementary schools in Gaung District, Indragiri Hilir Regency, Riau Province, Indonesia, in 2026. The study population comprised 206 elementary school teachers. Given the manageable population size, a total sampling technique was employed, whereby all members of the population were included as research participants.

Data were collected using a structured questionnaire with a five-point Likert scale, developed based on the theoretical indicators of each research variable. The instrument measuring principals' managerial competence was constructed based on the dimensions of planning, organizing, supervision implementation, and instructional quality control. The organizational climate instrument included the

dimensions of workplace relationships, internal communication, leadership support and appreciation, and participatory organizational culture. The digital literacy instrument assessed teachers' ability to operate digital technologies, utilize digital learning platforms, and access and use digital information effectively and ethically. Meanwhile, the teacher performance instrument measured teachers' competencies in instructional planning, instructional implementation, learning evaluation, professional responsibility, and continuous professional development. All questionnaire items were developed based on the theoretical constructs underpinning the study.

Instrument quality was evaluated through content validity assessed by expert judgment, construct validity, and empirical validity using item-total correlation analysis. The reliability of each instrument was examined using Cronbach's alpha coefficient, with a minimum acceptable value of 0.70, indicating satisfactory internal consistency. Detailed information regarding the number of questionnaire items, validity testing results, and Cronbach's alpha coefficients for each variable is presented in Chapter III. Since all variables were measured using self-report questionnaires completed by the same respondents, the study recognized the potential for common method bias (CMB). To minimize this risk, questionnaire responses were collected anonymously, participants were informed that there were no right or wrong answers, and questionnaire items were constructed from theoretically distinct constructs to reduce response bias.

Data collection was conducted through the distribution of questionnaires to all respondents using both face-to-face and online administration. The collected data were analyzed using descriptive and inferential statistics with IBM SPSS Statistics version 31. Prior to hypothesis testing, several statistical assumptions were examined, including residual normality, linearity, multicollinearity using Tolerance and Variance Inflation Factor (VIF) values, and heteroscedasticity, to ensure that the assumptions of multiple linear regression were satisfied. In addition, influential observations and outliers were examined to verify that no individual cases exerted an undue influence on the regression model.

Hypothesis testing was performed using multiple linear regression analysis. Model adequacy was evaluated using the Model Summary and ANOVA outputs, reporting the values of R , R^2 , Adjusted R^2 , Standard Error of the Estimate, the F -statistic, degrees of freedom, and the overall model significance. Subsequently, t -tests were employed to examine the relationship between each independent variable and the dependent variable through both the unstandardized regression coefficients and standardized beta coefficients, whereas the F -test was used to assess the overall significance of the regression model. Statistical significance was established at $\alpha = 0.05$, and probability values were reported following conventional academic practice, with $p < 0.001$ reported whenever the software generated significance values smaller than 0.001.

Results and Discussion

This study aims to analyze the effects of principals' managerial competence, organizational climate, and digital literacy on the performance of elementary school teachers in Gaung District, Indragiri Hilir Regency. Prior to hypothesis testing, descriptive statistical analysis was conducted to provide an overview of the general conditions of each research variable.

Table 1. Descriptive Statistics of Research Variables

Variable	N	Minimum	Maximum	Mean	Std. Deviation	Category
Principals' managerial competence	206	15.00	60.00	36.5728	12.38103	Moderately Good
Organizational climate	206	15.00	60.00	38.5146	12.26525	Good
Digital literacy	206	15.00	60.00	38.9515	12.45313	Good
Teacher performance	206	15.00	60.00	38.0340	13.45249	Good

Based on Table 1, all variables involved 206 respondents, with empirical score ranges between 15 and 60. The categorization of scores for each variable was determined based on score intervals developed from the ideal minimum and maximum scores using the class interval formula. The resulting categories consisted of very low, low, moderate, high, and very high levels (or according to the classification applied in the study). Therefore, the mean score of principals' managerial competence was 36.57, which was classified as moderately good, while organizational climate (38.51), digital literacy (38.95), and teacher performance (38.03) were categorized as good.

In addition to the mean scores, the standard deviations of each variable ranged from 12.27 to 13.45, indicating that respondents' perceptions of all variables remained relatively diverse. The magnitude of the standard deviations compared with the score ranges indicates the existence of heterogeneity among respondents' characteristics. Thus, although the average scores reflected good or moderately good categories, some respondents still provided relatively low or very high assessments. This condition suggests that the quality of principals' managerial competence, organizational climate, digital literacy, and teacher performance has not been evenly distributed across all elementary schools in Gaung District.

Furthermore, digital literacy obtained the highest mean score, namely 38.95 (categorized as good), indicating that teachers have adequate abilities in utilizing digital technology to support the learning process. Meanwhile, teacher performance obtained a mean score of 38.03 (categorized as good), suggesting that teachers have carried out their professional responsibilities effectively, although variations in performance among teachers still exist, as reflected by the relatively higher standard deviation value.

Overall, the descriptive statistical results indicate that three variables, namely organizational climate, digital literacy, and teacher performance, were in the good category, whereas principals' managerial competence was still categorized as moderately good. This finding indicates that improving principals' managerial competence should receive greater attention, as it has the potential to strengthen organizational climate, enhance teachers' digital literacy, and ultimately contribute to improving teacher performance. Subsequently, multiple linear regression analysis was conducted to determine the effects of each independent variable on teacher performance. A summary of the hypothesis testing results is presented in the following table.

Table 2. Summary of Hypothesis Testing Results

		Coefficients ^a			t	Sig.
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta		
1	(Constant)	-6.493	3.042		-2.135	.034
	Principals' managerial competence	.463	.053	.426	8.658	.000
	Organizational climate	.413	.055	.377	7.582	.000
	Digital literacy	.300	.054	.278	5.548	.000

a. Dependent Variable: Teacher performance

Based on Table 2, all independent variables have significance values of $p < 0.001$, indicating that the model demonstrates that principals' managerial competence, organizational climate, and digital literacy are positively and significantly associated with teacher performance. The regression equation obtained is as follows:

$$Y = -6.493 + 0.463X_1 + 0.413X_2 + 0.300X_3$$

Where Y represents teacher performance, X_1 represents principals' managerial competence, X_2 represents organizational climate, and X_3 represents digital literacy.

The unstandardized regression coefficients indicate that each one-unit increase in the scores of principals' managerial competence, organizational climate, and digital literacy is estimated to be followed by an increase in teacher performance scores of 0.463, 0.413, and 0.300 units, respectively, assuming that other variables remain constant. The model constant of -6.493 does not have practical meaning because a value of zero for all predictor variables is outside the measurement range of the study. Therefore, interpretation of the model is primarily focused on the direction and magnitude of the regression coefficients of each predictor.

The relative contribution dominance of each predictor was determined based on the standardized beta coefficients rather than the unstandardized regression coefficients. Based on the standardized beta values, principals' managerial competence was the predictor with the largest relative contribution to variations in teacher performance ($\beta = 0.426$), followed by organizational climate ($\beta = 0.377$) and digital literacy ($\beta = 0.278$). These findings indicate that principals' managerial competence has a relatively stronger association with teacher performance compared to the other two predictors, although all three variables simultaneously contribute to the regression model.

The Effect of Principals' Managerial Competence on Teacher Performance

The hypothesis testing results indicate that principals' managerial competence has a positive and significant effect on teacher performance. The regression coefficient value (β) of 0.463 with a significance level of 0.000 (<0.05) demonstrates that the better the principals' managerial competence, the higher the level of teacher performance. This finding indicates that teachers' success in carrying out their professional responsibilities is not only influenced by individual capabilities but is also strongly determined by the quality of school management implemented by principals.

To provide an overview of the condition of principals' managerial competence, a descriptive analysis was conducted on all indicators constituting the variable. The recapitulation of respondents' assessment results is presented in Table 3.

Table 3. Recapitulation of Principals' Managerial Competence

No.	Description	Score	Category
1	The principal develops a school work program in a planned and systematic manner.	524	Good
2	The principal involves teachers in developing school programs.	507	Moderately Good
3	The school work program is developed according to the school's needs.	492	Moderately Good
4	The principal utilizes school facilities and infrastructure effectively.	498	Moderately Good
5	The principal manages school time and activities effectively.	476	Moderately Good
6	The principal utilizes school resources to improve learning quality.	501	Moderately Good
7	The principal assigns tasks to teachers clearly.	509	Moderately Good
8	Teacher task assignments are distributed fairly according to individual abilities.	489	Moderately Good
9	The principal coordinates school activities effectively.	496	Moderately Good
10	The principal supervises teachers' learning activities.	495	Moderately Good

11	The principal monitors the implementation of school programs periodically.	506	Moderately Good
12	The principal evaluates the implementation of teachers' duties.	489	Moderately Good
13	The principal is able to make appropriate decisions.	503	Moderately Good
14	The principal involves teachers in important decision-making processes at school.	507	Moderately Good
15	The principal is able to solve problems occurring at school.	505	Moderately Good
Mean Score		499.8	Moderately Good

Based on Table 3, principals' managerial competence obtained an average score of 499.8 and was categorized as moderately good. Among the fifteen measured indicators, only one indicator was categorized as good, namely the principal's ability to develop a school work program in a planned and systematic manner. Meanwhile, the remaining indicators were categorized as moderately good, indicating that the implementation of principals' managerial functions has been carried out but has not yet reached an optimal level. Several aspects that obtained relatively lower scores include the ability to manage school time and activities, task distribution according to teachers' abilities, implementation of learning supervision, and evaluation of teachers' task performance. This condition indicates that there is still room for improving the quality of principals' managerial leadership in order to provide stronger support for enhancing teacher performance.

These findings demonstrate that principals' managerial functions are not only related to school administration but also directly influence the effectiveness of teachers' professional duties. Principals who are able to systematically plan programs, manage resources efficiently, conduct coordination, supervision, and continuous evaluation will create a more structured work environment, enabling teachers to have clear guidance in implementing learning activities. Conversely, when these managerial functions have not been optimally implemented, the learning process may encounter obstacles because teachers do not receive adequate guidance and support.

This finding supports the view of (Mulyasa, 2022), who stated that principals' competence is reflected in their ability to integrate professional knowledge, skills, and attitudes in managing schools. Principals are not merely administrators but also instructional leaders who are capable of guiding teachers, facilitating professional development, and creating conditions that support educational quality improvement. Therefore, managerial competence represents one of the key competencies determining the effectiveness of educational implementation in schools. Furthermore, (Mahfuz dkk., 2022) explained that teacher competence is an inseparable component of educator professionalism because it encompasses pedagogical, personal, social, and professional abilities in carrying out educational responsibilities. This perspective reinforces the notion that competence development within the school environment serves as an essential foundation for improving learning quality.

When associated with the empirical conditions in Gaung District, the findings show that principals have been able to develop school work programs effectively. However, several aspects of management implementation still require improvement. The management of school time and activities obtained the lowest score compared with other indicators. In addition, learning supervision and evaluation of teachers' duties were also still categorized as moderately good. These findings indicate that academic guidance for teachers has not yet been implemented intensively and continuously. In fact, academic supervision is an important instrument for improving the quality of learning processes through feedback provision, mentoring, and evaluation of teachers' instructional practices.

Another aspect requiring improvement is the distribution of tasks according to teachers' abilities and the involvement of teachers in developing programs and making school decisions. Although these indicators were categorized as moderately good, increasing teacher participation would strengthen their sense of ownership toward school programs and encourage shared responsibility in achieving organizational goals. Teacher involvement in decision-making processes can also strengthen organizational communication and increase teachers' commitment to implementing various school programs.

The findings of this study are consistent with previous studies summarized in the thesis literature review. Research by (May dkk., 2020) demonstrated that principals' managerial competence has a positive and significant effect on teacher performance. (Muhibbuddin dkk., 2025) also concluded that this influence becomes stronger when supported by teacher commitment. Studies by (Azainil dkk., 2021; Kulsum dkk., 2024; Nuraini, 2022; Y. P. Permana dkk., 2025; Prihatanti, 2024) further revealed that principals' abilities in carrying out planning, organizing, implementation, and evaluation functions can improve teacher productivity, motivation, and professionalism.

Overall, the results of this study indicate that principals' managerial competence is an important factor contributing to improved teacher performance. Although managerial competence was categorized as moderately good, several aspects require further strengthening, particularly time management, academic supervision, evaluation of teachers' duties, and more proportional task distribution. Therefore, improving principals' managerial competence through leadership education and training, strengthening academic supervision practices, and developing capacity in school organizational management represent strategic steps to enhance teacher performance and educational quality in Gaung District, Indragiri Hilir Regency.

The Effect of Organizational Climate on Teacher Performance

The second hypothesis testing results indicate that organizational climate has a positive and significant effect on teacher performance. The regression analysis results show a regression coefficient (β) of 0.413 with a significance value of 0.000 (<0.05). This finding indicates that the more conducive the organizational climate created within the school, the higher the level of teacher performance in carrying out their professional responsibilities. Therefore, the second hypothesis, which states that organizational climate affects teacher performance, is accepted.

To obtain an overview of the organizational climate conditions in elementary schools in Gaung District, a descriptive analysis was conducted on each indicator of the variable. The recapitulation results are presented in the following table.

Table 4. Recapitulation of Organizational Climate Indicators

No.	Statement	Score	Category
1	I have a good working relationship with my fellow teachers at this school.	528	Good
2	Teachers at this school support one another in carrying out their duties.	532	Good
3	The relationship between teachers and the principal is well established.	531	Good
4	The principal pays attention to the difficulties encountered by teachers.	517	Good
5	The principal motivates teachers to improve their performance.	524	Good
6	The principal provides recognition for teachers with good performance.	513	Fairly Good
7	School work regulations are well communicated to teachers.	530	Good
8	School policies are clearly formulated and easy to understand.	515	Fairly Good
9	Teachers are aware of the work procedures that must be followed in carrying out their duties.	515	Fairly Good

10	School facilities assist teachers in conducting teaching and learning activities.	533	Good
11	The school environment is safe and comfortable for work.	538	Good
12	The school's facilities and infrastructure are adequate to support teaching and learning activities.	515	Fairly Good
13	Teachers are given opportunities to express their opinions during school meetings.	525	Good
14	Teachers are involved in planning school programs.	510	Fairly Good
15	Every teacher has an equal opportunity to participate in school activities.	541	Good
Mean Score		526.3	Good

Based on Table 4, the organizational climate variable obtained a mean score of 526.3, which falls within the good category. This result indicates that, in general, the working environment in elementary schools in Gaung District has effectively supported teachers in carrying out their professional responsibilities. Relationships among school members are harmonious, organizational communication functions effectively, and teachers are provided with adequate opportunities to participate in various school activities.

The indicator with the highest score was "Every teacher has an equal opportunity to participate in school activities" (541). This finding suggests that schools have implemented a participatory approach in conducting various organizational activities. Equal opportunities for participation reflect the presence of organizational justice, which enhances teachers' motivation, sense of belonging, and commitment to achieving school goals. Teachers who feel valued and actively involved in organizational activities are more likely to demonstrate greater enthusiasm for their work and assume stronger responsibility for fulfilling their professional duties.

The next highest-scoring indicators were "The school environment is safe and comfortable for work" (538), "School facilities support teaching and learning activities" (533), "Teachers support one another in carrying out their duties" (532), and "The relationship between teachers and the principal is well established" (531). These findings indicate that the schools have successfully created a conducive working environment from both physical and social perspectives. A safe and comfortable work environment enables teachers to concentrate on instructional activities, while harmonious interpersonal relationships foster collaboration among teachers in addressing instructional challenges.

The culture of mutual support among teachers further indicates that collaboration has become an integral part of the schools' organizational culture. Rather than working individually, teachers share experiences, discuss instructional strategies, and provide assistance when colleagues encounter difficulties in carrying out their responsibilities. These conditions demonstrate that a positive organizational climate promotes collegial learning, which ultimately contributes to the improvement of teachers' competencies and job performance.

Although the overall organizational climate was classified as good, several indicators were rated as fairly good, including "The principal provides recognition for teachers' performance" (513), "School policies are clearly formulated and easy to understand" (515), "Teachers are aware of work procedures" (515), "The availability of educational facilities and infrastructure" (515), and "Teachers are involved in planning school programs" (510). The last indicator received the lowest score, indicating an area requiring particular attention.

The relatively low level of teacher involvement in school program planning suggests that decision-making processes remain largely centralized at the leadership level. However, teacher participation in planning constitutes a fundamental characteristic of a learning organization. Teachers who are involved

in developing school programs tend to develop a stronger sense of responsibility for program implementation because they perceive themselves as active participants in the decision-making process. Therefore, increasing teacher participation in school program planning may serve as an effective strategy to strengthen organizational commitment while simultaneously improving the quality of educational program implementation.

In addition, greater attention should be given to the provision of teacher recognition and appreciation. Recognition does not necessarily have to be financial in nature; it may take the form of acknowledging achievements, providing opportunities for professional development, or entrusting teachers with greater responsibilities. Such forms of recognition are likely to enhance teachers' intrinsic motivation, encouraging them to continuously improve instructional quality and demonstrate higher levels of professional performance.

These findings are consistent with the organizational climate theory proposed by (Robbins & Judge, 2021), which argues that organizational members' perceptions of their work environment influence their attitudes, motivation, and work behavior. A positive organizational climate enhances job satisfaction, organizational loyalty, and employee productivity. Within the school context, teachers' perceptions of workplace relationships, communication, leadership support, and opportunities for participation significantly influence the quality of their professional performance.

Furthermore, previous studies by (Dzulfah, 2022; Prihatanti, 2024; Sholihah & Marzuki, 2025; Sumarsono, 2023) concluded that organizational climate has a positive effect on teacher performance. A supportive organizational climate enhances work motivation, strengthens organizational commitment, facilitates communication, and fosters a collaborative culture that contributes to improved instructional quality. The findings of the present study reinforce these conclusions by demonstrating that teachers' professional performance is influenced not only by their individual competencies but also by the quality of the organizational environment in which they work.

Overall, the findings indicate that organizational climate is a critical determinant of teacher performance. The stronger the workplace relationships, communication, principal support, work environment, and opportunities for organizational participation, the higher the level of teacher performance. Therefore, school principals should continue to strengthen a participatory organizational culture, improve teacher recognition systems, clarify organizational policies and work procedures, and provide broader opportunities for teachers to participate in school program planning. These efforts will enable the already favorable organizational climate to become even more effective in supporting continuous improvements in educational quality.

Effect of Digital Literacy on Teacher Performance

The results of the third hypothesis test indicate that digital literacy has a positive and statistically significant effect on the performance of elementary school teachers in Gaung District, Indragiri Hilir Regency. Multiple linear regression analysis produced a regression coefficient of $\beta = 0.300$ with a significance value of $0.000 (< 0.05)$, indicating that the third hypothesis was supported. This finding demonstrates that higher levels of teachers' digital literacy are associated with better professional performance. Although its contribution is smaller than that of principals' managerial competence and organizational climate, digital literacy remains an important factor in supporting educational transformation in the digital era.

To describe the level of teachers' digital literacy, a descriptive analysis was conducted on 15 indicators, as presented in Table 5.

Table 5. Summary of Digital Literacy Indicators

No.	Statement	Score	Category
1	I am able to operate a computer or laptop to support my work as a teacher.	522	Good
2	I can use applications to develop teaching materials or manage instructional administration.	532	Good
3	I can use technological devices, such as projectors or other digital equipment, during classroom instruction.	521	Good
4	I use digital media to explain learning materials to students.	538	Good
5	I utilize videos or images from the internet to support teaching and learning activities.	529	Good
6	I use digital media to make learning more engaging for students.	514	Fairly Good
7	I utilize digital learning resources to enhance my teaching knowledge.	529	Good
8	I am able to find relevant instructional information through the internet.	529	Good
9	I use digital technology to obtain the latest information on education.	541	Good
10	I respect copyright when using materials obtained from the internet.	544	Good
11	I use digital technology in accordance with applicable norms and ethical standards.	535	Good
12	I teach students to use digital technology wisely and responsibly.	544	Good
13	I regularly access the <i>Rumah Pendidikan</i> platform to improve the quality of teaching and learning.	558	Good
14	I use various digital applications to enhance my digital literacy.	520	Good
15	I develop teaching materials that integrate digital technology.	527	Good
Mean Score		532.2	

Based on Table 5, the digital literacy variable achieved a mean score of 532.2, which falls within the good category. This finding indicates that teachers have generally demonstrated the ability to utilize digital technology for instructional activities, administrative tasks, information retrieval, and professional development. The highest-scoring indicator was regular access to the Rumah Pendidikan Platform (558), followed by respecting copyright and teaching students to use digital technology responsibly (544), as well as using digital technology to obtain the latest educational information (541). These findings suggest that teachers have not only mastered the technical aspects of technology use but have also adopted digital ethics and utilized technology as a means of professional development.

Nevertheless, the indicator using digital media to create more engaging learning experiences received the lowest score (514), although it remained within the fairly good category. This finding indicates that some teachers continue to use technology primarily at an operational level, while the integration of technology into interactive, collaborative, and innovative learning environments still requires improvement through continuous training and professional support.

These findings confirm that digital literacy is an essential competency for improving teacher performance, particularly in designing instruction, developing instructional materials, managing administrative tasks, and enhancing the overall quality of teaching and learning. The results are consistent with the concept of digital literacy, which emphasizes that digital literacy extends beyond the ability to operate technological devices to include the capacity to access, evaluate, utilize, and communicate information effectively, critically, and responsibly.

The findings are also consistent with the study conducted by (Putra dkk., 2023), which reported that teachers in *Raudhatul Athfal* were able to adapt effectively to changes in instructional models following the COVID-19 pandemic, resulting in relatively low levels of work-related stress. Although that study did not directly examine digital literacy or teacher performance, its findings provide contextual

evidence that successful adaptation to changes in instructional practices reflects teachers' readiness to utilize technology and adjust their teaching approaches to emerging educational demands.

The present findings further reinforce previous empirical studies. (May dkk., 2020) found that digital literacy enhances teachers' professional competence through the effective integration of technology into instructional practices. Similarly, (Azainil dkk., 2021; Nuraini, 2022) concluded that teachers' ability to utilize digital technology positively influences instructional effectiveness, teacher creativity, and professional performance. Furthermore, (Kulsum dkk., 2024; Y. P. Permana dkk., 2025; Prihatanti, 2024) emphasized that digital literacy represents a core competency for twenty-first-century teachers and should be supported through adequate infrastructure, continuous professional training, and sustainable professional development to foster more innovative and high-quality learning.

Empirically, teachers in Gaung District have demonstrated a satisfactory level of readiness to respond to digital transformation, particularly through their use of the Rumah Pendidikan Platform, digital instructional media, and access to educational information. However, their ability to design more creative and innovative digital learning experiences still requires further enhancement. Therefore, strengthening teachers' digital literacy through continuous professional development, collaborative learning communities, and the optimization of educational technology should remain a strategic priority for improving teacher performance and enhancing the quality of elementary education.

Simultaneous Effect of Principals' Managerial Competence, Organizational Climate, and Digital Literacy on Teacher Performance

The results of the fourth hypothesis test indicate that principals' managerial competence, organizational climate, and digital literacy simultaneously have a positive and statistically significant effect on the performance of elementary school teachers in Gaung District, Indragiri Hilir Regency. The F-test yielded a significance value of 0.000 (< 0.05), indicating that the fourth hypothesis was supported. These findings suggest that improvements in teacher performance result from the synergy among effective school leadership, a supportive organizational climate, and teachers' ability to utilize digital technology. To describe the condition of teacher performance, a descriptive analysis was conducted using 15 indicators, as presented in Table 6.

Table 6. Summary of Teacher Performance Indicators

No.	Statement	Score	Category
1	I prepare lesson plans before conducting classroom instruction.	542	Good
2	I establish clear learning objectives in every lesson plan.	542	Good
3	I plan instructional methods and learning media that are appropriate for the learning materials.	514	Fairly Good
4	I implement instruction in accordance with the prepared lesson plans.	532	Good
5	I use a variety of instructional methods during the teaching process.	520	Good
6	I actively engage students in learning activities.	523	Good
7	I use various assessment techniques to measure students' learning outcomes.	510	Fairly Good
8	I provide feedback to students on their learning outcomes.	513	Fairly Good
9	I use assessment results to improve the teaching and learning process.	532	Good
10	I carry out my teaching responsibilities with a strong sense of responsibility.	494	Good
11	I complete instructional administrative tasks in accordance with established procedures.	518	Good
12	I comply with the rules and policies implemented by the school.	522	Good
13	I regularly participate in online and offline professional development programs to enhance my professional competence as a teacher.	508	Fairly Good

14	I utilize a variety of learning resources to improve the quality of instruction.	519	Good
15	I reflect on my teaching practices to improve subsequent instructional processes.	518	Good
Mean Score		519.3	Good

Based on Table 6, teacher performance was classified as good, with a mean score of 519.3. Teachers demonstrated satisfactory performance in planning, implementing, evaluating, and reflecting on instructional activities. The highest scores were obtained for preparing lesson plans and establishing clear learning objectives (542), followed by implementing instruction according to the lesson plan and using assessment results to improve instruction (532). In contrast, participation in professional development programs (508), the use of various assessment techniques (510), providing feedback to students (513), and planning instructional methods and learning media (514) were rated as fairly good, indicating that these areas require further strengthening through continuous professional development.

These findings indicate that improvements in teacher performance are determined not only by individual competence but also by organizational support and effective school leadership. Principals with strong managerial competence are able to establish a conducive working environment through effective planning, organizing, supervision, and evaluation. Such conditions encourage teacher motivation, collaboration, and professionalism in carrying out their responsibilities.

Furthermore, a harmonious organizational climate, open communication, and supportive work systems have been shown to strengthen the effectiveness of teachers' professional practices. At the same time, digital literacy enables teachers to utilize technology to develop instructional media, access learning resources, and enhance instructional quality in accordance with the demands of twenty-first-century education. Thus, these three variables complement one another in improving teacher performance.

The findings of this study are also consistent with those reported by (Putra dkk., 2021), who found that teachers' job satisfaction is influenced by characteristics of the work environment and represents an important factor supporting teachers' professional performance. Accordingly, strengthening principals' managerial competence, fostering a supportive organizational climate, and continuously improving teachers' digital literacy have the potential to create a more favorable working environment in which teachers can perform their professional duties more effectively.

The present findings are also consistent with previous studies demonstrating that principals' managerial competence, organizational climate, and digital literacy are key determinants of teacher performance. From the perspective of managerial competence, (Papilaya & Nanda, 2024; N. S. Permana & Maliki, 2026) found that principals' managerial competence significantly enhances teacher professionalism and performance through effective supervision, communication, and teacher empowerment. Likewise, regarding organizational climate, the findings of this study are consistent with those of (Najmul Hidayat dkk., 2022; Seniwati dkk., 2022; Suhayat dkk., 2023), who concluded that a conducive working environment enhances teacher motivation, collaboration, organizational commitment, and work effectiveness.

Overall, this study confirms that teacher performance is the result of the interaction among principals' managerial competence, organizational climate, and digital literacy. Therefore, improving the quality of education requires an integrated approach that strengthens school leadership capacity, fosters a supportive organizational climate, and promotes the continuous development of teachers' digital literacy. Such an integrated strategy is expected to enhance teacher professionalism while improving the quality of teaching and learning in elementary schools, particularly in Gaung District, Indragiri Hilir Regency.

Conclusion

The findings indicate that principals' managerial competence, organizational climate, and digital literacy are positively associated with teacher performance among elementary school teachers in Gaung District, Indragiri Hilir Regency. Based on the standardized beta coefficients, principals' managerial competence emerged as the strongest predictor of teacher performance, followed by organizational climate and digital literacy. Collectively, the three independent variables accounted for 52.3% of the variance in teacher performance (Adjusted $R^2 = 0.523$), while the remaining 47.7% may be explained by other factors not included in the present model. Given that this study employed a cross-sectional survey design, the findings should be interpreted as evidence of predictive associations rather than causal relationships. These findings suggest that efforts to improve teacher performance should prioritize strengthening principals' managerial competence, fostering a supportive organizational climate, and enhancing teachers' digital literacy through systematic professional development programs, continuous capacity-building initiatives, and integrated school policies. Such strategies are expected to contribute to improving the quality of teaching and learning as well as the overall effectiveness of elementary education management. Future research is recommended to employ longitudinal or experimental designs and to incorporate additional variables such as teacher motivation, job satisfaction, organizational commitment, instructional leadership, or self-efficacy to provide a more comprehensive understanding of the factors influencing teacher performance.

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