

The Influence of Principal Leadership and Infrastructure Facilities on Teacher Performance Mediated by Teacher Satisfaction (Case Study at Smpk 3 Penabur)

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ABSTRACT

Education is the main foundation in shaping the next generation of guality. In this context, teacher performance plays a central role in achieving the goal of quality education. However, teacher performance is not only influenced by individual factors, but also by external factors such as school leadership and the availability of infrastructure. Effective leadership and adequate infrastructure can positively influence teacher performance. Leadership that is visionary and able to provide clear direction can motivate and inspire teachers to give their best in learning. In the context of formal education, the principal leadership is an important element that determines the direction and success of the school. This research will delve deeper into the importance of human resources in schools, especially the principal leadership as a leader. Quality schools are not only determined by physical facilities and curriculum, but also the quality of teachers, staff and effective leadership.Principal leadership as an agent of change has a strategic role in managing school human resources. Visionary and inclusive leadership can form a positive work culture, increase teacher motivation and performance, and design development policies according to educational developments. This study aims to determine the effect of principal leadership and infrastructure facilities on teacher performance mediated by teacher satisfaction. Located in (Case Study at SMPK 3 PENABUR and totaling 30 (Thirty) people and all members of the population as well as samples so that this research is census research. The results of this analysis show that all indicators used in this study are valid and reliable. This study uses a Structural Equation Modeling (SEM) approach based on Partial Least Square (PLS) using SmartPLS 3.3 software. This study provides evidence of a positive and significant effect

Keywords: Leadership, facilities, infrastructure, teachers, principal

INTRODUCTION

Education is the main foundation in shaping the next generation of quality, where teacher performance plays a central role. Teacher performance is not only influenced by individual factors, but also by external factors such as school leadership and the availability of infrastructure. Effective leadership and adequate infrastructure support can positively influence teacher performance. Visionary leadership that provides clear direction can motivate teachers to be optimal in the learning process.

This research highlights the importance of human resources (HR) in schools, especially in the context of principal leadership. Visionary and inclusive Principal leadership is very strategic in managing human resources, forming a positive work culture, and increasing teacher motivation and performance. The focus of this research is on SMPK 3 PENABUR, with the aim of examining the influence of Principal leadership on teacher performance, teacher satisfaction, and infrastructure facilities. Researchers conducted pre-research using descriptive quantitative methods, analyzing data statistically to observe the relationship between the phenomena being investigated. The TCR technique was used to analyze the collected data, with respondents being ranked based on the traits being evaluated. This pre-study used a "Master Scale" rating scale with five levels for each trait evaluated. To measure the level of respondent achievement and relationship criteria, the formula formulated by

Sugiyono (Sugiyono, 2018) is used, namely TCR = (Average Score)/(Maximum Score) x 100. Researchers drew data by conducting pre-research using a survey of 25 teachers at SMPK 3 PENABUR and calculated the average percentage score of each item, so that the authors concluded that pre-research using the survey method regarding the Effect of Principal Leadership at SMPK 3 PENABUR fell into the Moderate - Moderately High category with a value of (71 - 84.8).

Based on pre-research using the survey method, it was found that the Principal's leadership at SMPK 3 PENABUR falls into the "Moderate - Moderately High" category with an average score of 71-84.8. This indicates that the Principal's leadership has a significant impact on school dynamics and teacher performance. This finding is in line with A'yun's research (2022) which states that leadership has a positive and significant effect on performance. School infrastructure, including classrooms, libraries, laboratories, sports facilities and teachers' rooms, play an important role in supporting learning activities and school operations. Adequate and quality facilities can improve the effectiveness of teaching and learning. Comfortable and well-equipped classrooms create a conducive learning environment, while comfortable teacher rooms can improve the welfare and motivation of teaching staff. This has a positive impact on creativity, productivity and collaboration among teachers, which ultimately improves teaching and learning performance.

At SMPK 3 PENABUR, school infrastructure has a close relationship with teacher performance. Good infrastructure, such as comfortable classrooms, a complete library, and modern technology facilities, allow teachers to teach effectively and students to learn well. With adequate infrastructure, teachers can focus on the learning process and maximize students' potential without being hampered by infrastructure constraints. This improves the overall quality of education.

In a pre-survey conducted on 25 teachers at SMPK 3 PENABUR, it was found that the facilities and infrastructure at the school fall into the "Moderate - Moderately High" category with an average score of 77.6-81.6. Pre-research conducted at SMPK 3 PENABUR using the survey method shows that the facilities and infrastructure at the school fall into the "Moderate - Moderately High" category with an average score of 77.6-81.6. This indicates that the available facilities have a significant impact on the school environment and teacher performance. Research by Saputri et al. (2023) also supports these findings, stating that infrastructure facilities have a positive and significant effect on performance.

Teacher satisfaction is defined as the condition in which teachers feel satisfied and happy with their jobs, work environment, and their experiences in carrying out educational tasks. It includes aspects such as recognition of their performance, support from leaders and colleagues, opportunities for professional development, and fulfillment of needs and expectations in the work environment. This satisfaction is very important as it affects their motivation, dedication and performance in educating students. Teacher satisfaction with performance at SMPK 3 PENABUR refers to teachers' positive evaluation of the quality and effectiveness of their colleagues' performance. This includes contribution, ability, dedication in teaching, interaction with students, and achievement of learning objectives. It also reflects their assessment of collaboration, support, communication and inter-staff cooperation in the school.

This study involved a survey of 25 teachers at SMPK 3 PENABUR, and the results showed that teacher satisfaction fell into the "Moderately High - High" category with an average score of 85.6-90.4. These positive evaluations have the potential to improve teachers' motivation, morale and psychological well-being, as well as strengthen the conducive working climate and overall effectiveness of the school. Pre-research using the survey method at SMPK 3 PENABUR showed that teacher satisfaction was in the "Moderately High - High" category with an average score of 85.6-90.4. This indicates that teacher satisfaction has a significant impact on their performance, in accordance with the findings of Murwaningsih (2022) who stated that teacher satisfaction has a positive and significant effect on performance. Teacher performance includes their ability, knowledge, skills and dedication in teaching. These aspects include effective delivery of subject matter, classroom management, student motivation, evaluation of student learning progress, collaboration with colleagues, and participation in professional development. At SMPK 3 PENABUR, teacher performance is

measured based on the ability to deliver material clearly and engagingly, effectiveness in classroom management, providing constructive feedback, and involvement in school activities and professional development. This performance evaluation is important to ensure high-quality education. A survey of 25 teachers at SMPK 3 PENABUR shows that their performance is in the "Fair - Moderately High" category with an average score of 71.3-84.8. This evaluation ensures that high standards of education are continuously maintained and improved.

Pre-research using the survey method at SMPK 3 PENABUR shows that teacher performance is in the "Moderate - Moderately High" category with an average score of 71.3-84.8. This indicates that teacher performance has a significant impact on schools, in line with the findings of Ideswal et al. (2020) who stated that teacher performance has a positive and significant effect. This study aims to dig deeper into the influence of school leadership, infrastructure availability, and teacher satisfaction on teacher performance at SMPK 3 PENABUR. An in-depth understanding of the relationship between these factors is expected to help develop better strategies and policies to improve teacher performance. Based on this background, a study was conducted with the title "The Effect of Principal Leadership and Infrastructure Facilities on Teacher Performance Mediated by Teacher Satisfaction (Case Study at SMPK 3 PENABUR)."

Performance is the tangible result of activities and efforts made by individuals or organizations, including the level of goal achievement, productivity, and effectiveness in carrying out certain tasks or jobs. Interpretations of performance may vary depending on the individual's point of view. Performance can be interpreted as the result of the process of completing work to achieve the expected goals (Mangkunegara, 2018).

Widya Cahyani, Herawati, and Subiyanto (Herawati et al., 2018) describe performance as work results involving quality and quantity dimensions, achieved by an employee in accordance with the responsibilities given to him. Sutrisno (Sutrisno, 2018) mentions several factors that affect employee performance, including effectiveness, efficiency, authority, responsibility, discipline, initiative, quality and quantity of work, job knowledge, teamwork, creativity, innovation, and work commitment.

Performance can be considered as a concrete result of individual or organizational activities and efforts in achieving goals, productivity, and effectiveness of task or job implementation. Factors such as job satisfaction, compensation, skills, abilities, and individual and organizational traits, including leadership, play an important role in shaping performance. Success in completing tasks can be measured by comparing work results with predetermined standards. The match between individual abilities and job demands can also improve performance. The six criteria used to measure employee performance include aspects of quality, quantity, timeliness, effectiveness, independence, and work commitment. Overall, performance can be evaluated through work results that meet organizational goals, involving different roles between implementers and leaders in the context of organizational activities.

Performance refers to the achievement of work results that can be obtained by individuals or groups of individuals within a company organization. In accordance with the explanation by Kasmir (Kasmir, 2018) that this performance includes the extent to which work objectives can be achieved by the individual or group.

According to Sugiyono (Sugiyono, 2018) there are six indicators of individual employee performance that need to be considered, namely:

- 1. Quality: Evaluate employees' performance based on their perception of the quality of work produced and the level of perfection in performing tasks.
- 2. Quantity: Refers to the amount of output produced by the employee, expressed in units such as the number of units or the number of cycles of activities successfully completed.
- 3. Timeliness: Indicates the extent to which employee activities can be completed in a timely manner, taking into account coordination with output results and optimization of time use for other activities.
- 4. Effectiveness: Describes the level of efficiency in the use of organizational resources (manpower, finance, technology, raw materials), with the aim of maximizing the results of each unit of use of these resources.

According to Sinambela (Sinambela, 2017) performance can be defined as the achievement of work results that are successfully achieved by a person, with reference to job requirements or criteria, including the job recruitment process. Thus, employee performance is the achievement or output of work that comes from individual or group capabilities, which are carried out based on skills, experience, capacity, and time given optimally.

According to Afandi (Afandi, 2018), factors that affect performance include:

- 1. Individual's abilities, personality, and job interests
- 2. Agility and acceptance of the role of a worker, which involves understanding and accepting the assigned tasks.
- 3. The level of employee motivation as a source of energy that drives, directs, and sustains behavior.
- 4. Competence, which is the skill possessed by an employee.
- 5. Work facilities, involving a number of supporting tools for the smooth operation of the company.
- 6. Work culture, including creative and innovative work behavior of employees.
- 7. Leadership, including the leader's behavior in directing employees.

Work discipline, refers to the company rules that must be followed by employees to achieve goals. Meanwhile, According to Mangkunegara (Mangkunegara, 2018), performance indicators involve:

- 1. Work quality, which reflects the quality produced in the work.
- 2. Work quantity, which involves the amount that needs to be completed and achieved in the job.
- 3. Work constraints, which involve the reliability of employees in following instructions, having initiative, caution, and discipline in work.
- 4. Work attitude, which includes an individual's attitude towards the company, colleagues, job, and cooperation.

Job satisfaction according to (Robbins & Judge, 2017), refers to an individual's attitude towards his job, where someone feels satisfied with every aspect of the job he is doing. A similar perspective is expressed by (Abdurrahman et al., 2019), which defines job satisfaction as a form of emotional attitude that is pleasant and loving towards work. Job satisfaction in the context of work includes pleasure obtained through goal achievement, proper placement, fair treatment, and a positive work environment. Employees who feel satisfaction in their jobs tend to prioritize the value of work compared to the financial rewards received. In addition, (Hasibuan & Malayu, 2017) asserts that job satisfaction involves an emotional attitude that is pleasant and loves work, reflected in work morale, discipline, and achievement. The importance of creating optimal job satisfaction is to increase employee morale, dedication, love, and discipline.

According to (Afrizal, 2017) infrastructure facilities are all physical components that can be used to support human activities with the aim of achieving a certain target. Infrastructure refers to all elements that can be used to support various activities or processes carried out by an organization or individual. In this context, infrastructure includes various physical facilities, equipment, and infrastructure needed to achieve various goals or carry out activities, including in the education, business, or public service sectors. Definitions given by experts, such as Bintoro Tjokroamidjojo and Sugiyono in (Aula & Nugraha, 2020) emphasize that infrastructure facilities involve everything that is physical and can be used to support human activities or facilitate organizational processes. The existence of these different views reflects the complexity and variety of uses of the concept of infrastructure facilities in various fields and research contexts.

According to Jemiyanto (Jemiyanto, 2018) Leadership is the application of power and influence to orient the activities of team members towards achieving goals. In this case, it refers to the implementation of power and influence as an effort to guide and direct the activities of team members towards achieving certain goals. In this context, a leader has a very important role in managing human resources and coordinating joint efforts to achieve predetermined goals.

According to Mie (Mi et al., 2019) More effective leadership can increase the intrinsic motivation of subordinates by describing the organization's vision, giving attention to subordinates, and being an example that is followed.

According to (Karundeng et al., 2022) leadership is the ability to influence a group to achieve a predetermined vision or set of goals. It is the way a leader directs, encourages, and organizes all elements in a group or organization to achieve the desired organizational goals, with the aim of improving employee performance.

According to Putra & Pasaribu (Putra & Pasaribu, 2022) Leaders who apply appropriate leadership styles can inspire subordinates to improve their quality and achievements. In addition to leadership style, work environment factors also have an impact on employee performance. The work environment refers to all aspects that surround employees within the company. Meanwhile, according to Putra Widyatmika & Riana (Putra Widyatmika & Riana, 2020) In principle, leadership has the potential to create an environment that motivates employees to achieve organizational goals and increase their interest in work.

According to Sasongko (Sasongko et al., 2021) Leadership is the role performed by a leader in providing support, guidance, and assistance to members of a team or organization to achieve common goals. The exercise of power and influence by a leader involves the ability to provide direction, motivate, and mobilize team members to contribute effectively. Leadership is not just about organizing tasks and responsibilities, but also creating a work environment that supports collaboration, creativity and productivity.

A leader needs to have good communication skills to be able to convey the organization's vision, mission and goals clearly to team members. In addition, the ability to understand and respond to the needs and expectations of team members is also an important aspect of effective leadership. Leadership is not just about control, but also about building positive relationships with team members. An effective leader must be able to understand individual differences within the team, motivate each member, and create an atmosphere that supports personal growth and development.

Thus, leadership is not only about achieving organizational goals, but also involves deep human aspects. A successful leadership combines power, influence, and sensitivity to individual needs to achieve optimal results in the context of teamwork.

METHOD

Model Konseptual

Leadership (x1) Uantitative Research The Conceptual Framework Model Examined Regarding the Effect of Leadership (X1) on Teacher Performance (Y), the Effect of Infrastructure Facilities (X2) on Teacher Performance (Y), the Effect of Leadership (X1) on Teacher Satisfaction (Y), the Effect of Infrastructure Facilities (X2) on Teacher Satisfaction (Y), Satisfaction (Z) on Teacher Performance (Y), Effect of Leadership (X1) Mediated by Job Satisfaction (Z) on Teacher Performance (Y), Effect of Infrastructure Facilities (X2) Mediated by Job Satisfaction (Z) on Teacher Performance (Y), Effect of Infrastructure Facilities (X2) Mediated by Job Satisfaction (Z) on Teacher Performance (Y), Conceptual Model of Research From This Research Can Be Seen in Figure 1 Below, Description:



H1 : Leadership has a positive effect on teacher performance

H2 : Infrastructure Facilities have a Positive effect on Teacher performance

- H3 : Leadership has a Positive Effect on Teacher Satisfaction
- H4 : Infrastructure Facilities have a Positive Effect on Teacher Satisfaction
- H5 : Satisfaction has a Positive Effect on Teacher Performance
- H6 : Leadership mediated by satisfaction has a positive effect on teacher performance H7: Sarana Prasarana yang dimediasi Kepuasan berpengaruh Positif terhadap Kinerja Guru

Population and Sample of the Study

The population under study is all teachers of SMPK 3 PENABUR. The sample size to be taken is the same as the population size. The total population is 30 people.

Data Analysis Technique

After the data for this research has been collected, the next step is data analysis. Data analysis in this study uses the structural equation modeling (SEM) method through Smartpls V.3. SEM is a statistical technique used to analyze the pattern of relationships between latent constructs and their indicators, latent constructs with each other, and can identify measurement errors directly, according to Sugiyono (Sugiyono, 2018). SEM itself can analyze the relationship between dependent and independent variables directly. This technique is used to explain the relationship between variables in the study. The main requirement in an SEM model is to build a Hypothesis model consisting of a structural model and a measurement model in a path diagram based on theory. Based on the formulated hypotheses, this study uses smart PLS (Partial Least Square) V3 software. The process starts from the measurement model, structural model, and hypothesis testing. The outer measurement model is used to assess validity and reliability, while the inner measurement model is used to assess the causal relationships between latent variables, whether exogenous or endogenous. The results of the analysis using Smartpls will be explained in the following table

Testing Convergent Validity

This test is conducted to determine the correlation between measurement instruments. It is usually used to examine the same construct values. The test will be considered to meet the criteria if it has a loading factor or standardized loading estimate greater than 0.5.

Discriminant Validity Test

Discriminant validity test is used to show that a latent construct discriminates itself from other latent constructs. It can also explain the variance of observed variables. The test value is considered valid if the square root of AVE is greater than the correlation value between latent variables (M. Makhrus Ali & Tri Hariyati, 2022).

AVE Average Test

The AVE value is used to test whether the square root of each AVE is correlated more than each latent construct. The AVE value as a condition for discriminant validity has been achieved. According to Nurul Ali and Wijayanto in.M.Makhrus Ali & Tri Hariyati, 2022AVE value that meets the requirements if the value is equal to 0.5 or higher, if it is below 0.5, it can be said that the indicator has a high level of error.

Test Construct Reliability

This test is conducted to determine the constraints and consistency of the data. Data is considered reliable if it has a value greater than 0.7. If the value is between 0.6 and 0.7, it can still be considered good. Ariyanto et al., 2023.

Reliability testing using Cronbach's alpha can be used as another reference besides using composite reliability. A variable can be considered reliable if it has a Cronbach's alpha value > 0.6 (Ariyanto et al., 2023).

Chi-Square Test.

This test is conducted to analyze the model's ability in explaining the influence of each variable. This test uses the following equation. Q2 is equal to one minus one multiplied by the quantity of one minus R squared multiplied by the quantity of one minus R squared.

Hypothesis Testing

Hypothesis testing is used to analyze data processing using critical ratio and alpha or error level seen with statistical boundaries of t-values and alpha values. The t-values> 2.06 and alpha <0.05. This test uses t-statistic and P-Value.

The path analysis is used to determine the type of relationship between independent variables when explaining the relationship with the dependent variable. This relationship can be either correlational or dependency relationship according to Dachlan. There are two techniques used in data analysis.

- 1. Creating a path diagram in the SMART PLS program.
- 2. Hypothesis testing of structural relationships in SMART PLS.

In the process of data processing and data analysis, several stages will be carried out as follows:

- 1. Examination of the questionnaire filled out by respondents to ensure the completeness of the content questionnaire.
- 2. Performing tabulation testing related to the calculation of questionnaire results.
- 3. Testing that has been conducted regarding validity testing to determine questions. The questionnaire is appropriate and relevant to the objective or not.
- 4. Testing conducted related to reliability testing to determine the stability of the questionnaire providing relatively consistent results when measuring the same subject.
- 5. Testing conducted related to hypothesis testing to determine the constructed model. Does it have an influence or not

RESULT AND DISCUSSION

Validity Testing.

Validity testing is conducted on this research instrument using convergent validity, discriminant validity, and average variance extracted. The first validity testing is done by examining the convergent validity of an instrument, which can be considered valid if it has a factor loading value greater than 0.5. If the value is greater than 0.5, then this instrument can be considered valid and can explain the relationship between indicators and latent variables in the hypothesis model. If there are indicators in the calculation results that are not valid or have a value less than 0.5, then those indicators will not be included in the analysis. The calculation results of the factor loading can be seen as follows.



Figure 2 Research Model. Source: Smart PLS Calculation.

Based on the research model that has been analyzed using Smart PLS, it can be said that all indicators are valid because they have factor loading values greater than 0.5, with the data shown as follows. It can be concluded that all indicators can be included in the further analysis process because there are no indicators that are removed with values less than 0.5.

Leadership.	Factor Loading.	Perfor mance.	Factor Loading.
X1.1.	0.851	Y1.	0.885
X1.2.	0.506	Y2.	0.853
X1.3.	0.702	Y3.	0.959
X1.4.	0.790	Y4.	0.811
X1.5.	0.66	Y5.	0.945
X1.6.	0.558	Y6.	0.612
X1.7.	0.908	Y7.	0.746

Source: Smart PLS Calculation

The table above shows the factor loading values for each variable in the factor analysis or path analysis model. Factor loading measures the strength of the relationship between each indicator variable and the latent factor or variable it represents. The higher the factor loading value, the stronger the relationship between the indicator variable and the latent factor. This indicates how strong the relationship is between each indicator variable and the latent factor it represents in the model. All Leadership indicator variables (X1.1 to X1.7) have relatively high factor loading values, ranging from 0.506 to 0.908. This indicates that all of these indicator variables have a strong relationship with the latent Leadership factor. Similarly, all Performance indicator variables (Y1 to Y7) have sufficiently high factor loading values, ranging from 0.746 to 0.959. This indicates that all of these indicator variables have a strong relationship with the latent Performance factor.

Facilities and Infrastructure	Factor Loading.	Satisfact ion	Factor Loading.
X2.1	0.547	Z1	0.787
X2.2	0.696	Z2	0.838
X2.3	0.746	Z3	0.872
X2.4	0.759	Z4	0.885
X2.5	0.643	Z5	0.89
X2.6	0.854	Z6	0.798
X2.7	0.868	Z7	0.852

Source: Smart PLS Calculation

The table above shows the loading factor values for each variable in the factor analysis model or path analysis. All indicator variables for Facilities and Infrastructure (X2.1 to X2.7) have relatively high loading factors, ranging from 0.547 to 0.868. This indicates that all these indicator variables have a strong relationship with the latent factor of Facilities and Infrastructure. Similarly, all indicator variables for Satisfaction (Z1 to Z7) have sufficiently high loading factors, ranging from 0.787 to 0.898. This indicates that all these indicator variables have a strong relationship with the latent factor of Satisfaction. In conclusion, based on the loading factor values, it can be inferred that all indicator variables for Facilities and Infrastructure and Satisfaction are sufficiently good in representing or measuring the latent factors they represent. Therefore, models or constructions that use these variables are likely to provide a good understanding of Facilities and Infrastructure and Satisfaction. Furthermore, the research instrument is analyzed using discriminant validity. Discriminant validity testing is conducted to see how much variance of the observed variables compared to the variance of other indicator variables. Discriminant validity testing is observed using cross-loading values, which should be greater than 0.5, and the dependent variable should be greater than the indicator for other variables. The following is the processed discriminant validity data in Smart PLS.

Table 3 Cross Loading				
	School Principal Leadership	Teacher Satisfaction	Teacher Performan ce	Facilities and Infrastructure
X1.1.	0.851	0.712	0.857	0.757
X1.2.	0.506	0.371	0.338	0.339
X1.3.	0.702	0.436	0.512	0.476
X1.4.	0.790	0.54	0.591	0.554
X1.5.	0.66	0.4	0.504	0.58
X1.6.	0.558	0.569	0.612	0.546
X1.7.	0.908	0.901	0.959	0.873
X2.1	0.387	0.473	0.488	0.547
X2.2	0.59	0.549	0.538	0.696
X2.3	0.686	0.583	0.703	0.746
X2.4	0.633	0.486	0.644	0.759
X2.5	0.413	0.449	0.499	0.643
X2.6	0.706	0.664	0.811	0.854
X2.7	0.856	0.865	0.945	0.868
Y1.	0.887	0.746	0.885	0.842
Y2.	0.793	0.841	0.853	0.745
Y3.	0.908	0.901	0.959	0.873
Y4.	0.706	0.664	0.811	0.854

Y5.	0.856	0.865	0.945	0.868		
Y6.	0.558	0.569	0.612	0.546		
Y7.	0.608	0.505	0.746	0.647		
Z1	0.746	0.787	0.769	0.783		
Z2	0.798	0.838	0.814	0.703		
Z3	0.622	0.872	0.708	0.578		
Z4	0.676	0.885	0.754	0.728		
Z5	0.758	0.89	0.789	0.676		
Z6	0.594	0.798	0.653	0.593		
Z7	0.656	0.852	0.718	0.732		
Source: Smart PLS Coloulation						

Source: Smart PLS Calculation

Based on the above data, it can be seen that all the construct values above are greater than 0.5 and meet the requirement of being greater than the values of other variables. Therefore, it can be said that the instrument has good discriminant validity. Validity testing can also be observed using the average variance extracted (AVE). This value is used to determine the correlation between each latent construct and the validity requirement is 0.5. If the AVE value is smaller than 0.5, it can be said that the indicator has a relatively high average error rate.

Table 4 Cronbach's Alpha, Composite Reliability, and AVE						
Variable	Cronbac h's Alpha	rho_ A	Composite Reliability	Average Variance Extracted (AVE)		
School Principal						
Leadership	0.843	0.897	0.881	0.524		
Teacher Satisfaction	0.934	0.936	0.947	0.717		
Teacher						
Performance	0.926	0.942	0.942	0.702		
Facilities and						
Infrastructure	0.857	0.891	0.891	0.545		
Source: Smart PLS Calculation						

Source: Smart PLS Calculation

The results of calculating the AVE value using Smart PLS can be seen in table 4.7. These results indicate that all indicators have an AVE value greater than 0.5, therefore, the instrument shows a fairly good validity result.

R-Square Test

R-Square testing is a step in regression analysis that measures how well the regression model explains the variation in the dependent variable (Y) by the independent variable (X). The R-Square value ranges from 0 to 1, where the closer it is to 1, the better the regression model is at explaining the variation in the dependent variable. R-Square testing is done using Smartpls. The calculation results can be seen in the following table.

Table 5 R-Square	Testing
	R
Variable	Square
Teacher	
Satisfaction (Z)	0.724
Teacher	
Performance (Y)	0.936
Source: Smart PLS (Calculation

Based on the above R-Square test results related to the variables Teacher Satisfaction (Z), Teacher Performance (Y), and the R-Square values for each of these variables.

- a. The variable Teacher Satisfaction (Z) has an R Square of 0.724. This means that about 72.4% of the variation in teacher satisfaction levels can be explained by the factors used in the regression model.
- b. The variable Teacher Performance (Y) has an R Square of 0.936. This indicates that about 93.6% of the variation in teacher performance can be explained by the factors used in the regression model.

Thus, in terms of the ability to explain variation in the data, the model predicting teacher performance (Y) has a higher level of fit compared to the model predicting teacher satisfaction (Z). Therefore, for understanding and predicting teacher performance, the regression model related to the Teacher Performance (Y) variable may be more useful or relevant than the model related to the Teacher Satisfaction (Z) variable. To measure how well the model built from the available data, the Q2 Method is needed, which is a cross-validation method used in statistics.

Q2= 1-1 [(1-R12) (1- R22)]] = 1-1 [(1-0.724) (1-0.936)] = 1- [(0.276)*(0.064)] = 0.982

Based on the calculation results using (Q2), it can be concluded that the value is above 0 with a value of 0.982 or 98% (predictive relevance), indicating how well your model fits the test data.

Hypothesis Testing

Hypothesis testing is done by looking at the value of the P-Value using the Goodness of Fit Model. P-Value is a measure used in statistics to evaluate the significance of hypothesis testing results. In the context of the Goodness of Fit Model, P-Value is used to determine how well the tested model fits the observed observational data. In this study, there are five relationships tested in the Goodness of Fit model:

Table 6 Path Coefficient					
Variable	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
School Principal					
Teacher					
Satisfaction	0.48	0.497	0.148	3.239	0.001
School Principal					
Leadership ->					
Teacher					
Performance	0.353	0.364	0.096	3.696	0.000
Teacher					
Teacher					
Performance	0.245	0.213	0.111	2.208	0.028
Facilities and					
Infrastructure ->					
Teacher					
Satisfaction	0.403	0.402	0.139	2.907	0.004
Facilities and					
Infrastructure ->					
Teacher					
Performance	0.426	0.445	0.103	4.152	0.000

Source: Smart PLS Calculation

A P-Value smaller than the determined significance level (usually 0.05) indicates that the relationship is statistically significant. In this case, the relationships between Satisfaction (Z1), Performance (Y), Leadership (x1), and Facilities and Infrastructure (x2) are proven to be significant at the 0.05 significance level because the P-Value is less than 0.05.

To measure the total influence of one variable on another variable, the total effect between the two variables is required. Total effect is the overall influence of one independent variable on the dependent variable, including direct and indirect effects mediated through a mediator variable.

	Та	able 7 Total E	Effect		
	Original Sample	Sample	Standa rd Deviati on (STDE	T Statistics (O/STDE	P
School Principal	(0)		•)	•0	values
Leadership ->					
Teacher					
Satisfaction	0.48	0.497	0.148	3.239	0.001
School Principal					
Leadership ->					
Teacher					
Performance	0.471	0.47	0.088	5.362	0.000
Teacher					
Satisfaction ->					
Teacher					
Performance	0.245	0.213	0.111	2.208	0.028
Facilities and					
Infrastructure ->					
Teacher					
Satisfaction	0.403	0.402	0.139	2.907	0.004
Facilities and					
Infrastructure ->					
Teacher					
Performance	0.525	0.531	0.087	6.013	0.000
	Source	· Smart PLS (Calculation		

Source: Smart PLS Calculation

From the total effect of several independent variables on the dependent variable, namely Performance (Y), using the Goodness of Fit Model method, the research results show that a smaller P-Value than the predetermined significance level (usually 0.05) indicates that the total effect is statistically significant. In this case, the total effect of Leadership (X1), Facilities and Infrastructure (X2) on Satisfaction (Z), and Performance (Y) are all significant at the 0.05 significance level because the P-Value is less than 0.05.

Next, the influence test refers to the process of analyzing the impact of independent variables on the dependent variable in a model. In this analysis, we are often interested in understanding the direct contribution of independent variables to the dependent variable, as well as the indirect contribution through mediator variables between them. Direct influence refers to the observed impact of independent variables on the dependent variable without going through mediator variables. This is often measured by path coefficients that directly connect the two variables in the model. Indirect influence is the impact that occurs through indirect paths involving one or more mediator variables between the independent and dependent variables. This is often calculated by summing the contributional variables in the model. Indirectly visible but through additional variables in the model. Indirect by summing the contributional variables in the model.

connecting the variables through mediators. "Total influence" is the sum of the direct and indirect influences of independent variables on the dependent variable. This provides a complete picture of how much the independent variables affect the dependent variable in the model, including direct effects and indirect effects through mediators. Thus, in research, the influence test is used to analyze how variables are related in a model and understand the direct and indirect contributions of independent variables to the dependent variable in the context of the ongoing research.

Table 8 Influence Test					
Influence Test	Direct Influence	Indirect Influence	Total		
School Principal Leadership -> Teacher Satisfaction	0.480				
School Principal Leadership -> Teacher Performance	0.471				
Teacher Satisfaction -> Teacher Performance	0.245				
School Principal Leadership -> Teacher Performance mediated by satisfaction	0.471	0.480 x 0.245 = 0,1176	0,5886		
Facilities and Infrastructure -> Teacher Satisfaction	0.403				
Facilities and Infrastructure -> Teacher Performance	0.525				
Facilities and Infrastructure -> Teacher Performance mediated by satisfaction	0.525	0.403 x 0.245 = 0,098735	0,623735		

Source: Calculation

Based on the analysis results above, the calculation results are divided into two categories: direct and indirect research. The following are explanations of the calculation results:

Direct Influence:

- a. The direct influence of the School Principal's Leadership on Teacher Satisfaction is 0.480.
- b. The direct influence of the School Principal's Leadership on Teacher Performance is 0.471.
- c. The direct influence of Teacher Satisfaction on Teacher Performance is 0.245.
- d. The direct influence of Facilities and Infrastructure on Teacher Satisfaction is 0.403.
- e. The direct influence of Facilities and Infrastructure on Teacher Performance is 0.525.

Indirect Influence:

- a. The indirect influence of the School Principal's Leadership on Teacher Performance, mediated by Teacher Satisfaction, is the result of multiplying the direct influence of the School Principal's Leadership on Teacher Satisfaction (0.480) with the direct influence of Teacher Satisfaction on Teacher Performance (0.245), which is 0.1176.
- b. The indirect influence of Facilities and Infrastructure on Teacher Performance, mediated by Teacher Satisfaction, is the result of multiplying the direct influence of Facilities and Infrastructure on Teacher Satisfaction (0.403) with the direct influence of Teacher Satisfaction on Teacher Performance (0.245), which is 0.098735.

Therefore, the conclusion from these influences is that the School Principal's Leadership, Teacher Satisfaction, and Facilities and Infrastructure have a significant influence on Teacher Performance, both directly and indirectly through Teacher Satisfaction. This emphasizes the importance of leadership, teacher satisfaction, and the condition of facilities and infrastructure in improving teacher performance.

CONCLUSION

Based on the results of the study, it can be concluded that principal leadership has a significant influence on teacher performance (H1). There is sufficient evidence to support that principal leadership has a positive effect on teacher performance, indicating the importance of the principal's role in creating a conducive work climate and providing the direction and support needed by teachers to achieve optimal performance. Furthermore, school infrastructure also has a positive and significant effect on teacher performance (H2). Physical factors such as learning facilities and infrastructure support teacher performance at school.

Principal leadership affects not only teacher performance but also teacher satisfaction (H3). Good principal leadership creates a supportive work environment, providing teachers with the direction and support they need, thus increasing their satisfaction. Similarly, adequate infrastructure in schools has a positive effect on teacher satisfaction (H4). Good physical facilities, such as comfortable classrooms and supporting equipment, are crucial in increasing teachers' satisfaction with their work environment.

Teachers' own satisfaction also has a significant effect on their performance (H5). Factors that increase teachers' satisfaction prove to be important in improving their performance at school. In addition, principal leadership mediated by teacher satisfaction has a positive effect on teacher performance (H6). Effective leadership increases teacher satisfaction, which in turn, improves their performance. Finally, infrastructure mediated by teacher satisfaction also has a positive effect on teacher performance (H7). Good infrastructure conditions increase teacher satisfaction, which then contributes to improve teacher performance.

REFERENCES

- Abdurrahman, M. S., Purnomo, R., & Jati, E. P. (2019). Pengaruh Motivasi Kerja Otonom dan Internal Locus of Control Terhadap Kinerja Karyawan dengan Employee Engagement Sebagai Variabel Mediasi (Vol. 26). *Jurnal Performance*.
- Afandi, P. (2018). Manajemen Sumber Daya Manusia. Zanafa Publishing.
- Afrizal, A. (2017). *Metode Penelitian Kualitatif: Sebuah Upaya Mendukung Penggunaan Penelitian Kualitatif Dalam Berbagai Disiplin Ilmu*. PT Rajagrafindo Persada.
- Ariyanto, T., Herwin, H., & Sujati, H. (2023). Uji Validitas Dan Reliabilitas Konstruk Instrumen Tes Kemampuan Operasi Hitung Bilangan Bulat Menggunakan Cfa. *Aksioma: Jurnal Program Studi Pendidikan Matematika,* 12(3), 2977. <u>https://doi.org/10.24127/ajpm.v12i3.7482</u>
- Aula, F. H., & Nugraha, J. (2020). Pengaruh Tata Ruang Kantor dan Sarana Prasarana Terhadap Kinerja Pegawai. *Jurnal Pendidikan Manajemen Perkantoran*, 5(2), 169–185. <u>https://doi.org/10.17509/jpm.v5i2.28836</u>

Hasibuan, H., & Malayu, M. (2017). Manajemen Sumber Daya Manusia. Bumi Aksara.

Herawati, H., Iskandar, D., & Lumbantobing, R. (2018). Efek Moderasi Risiko Sistematis Pada Pengaruh Profitabilitas, Risiko Leverage, dan Pertumbuhan Aktiva Terhadap Nilai Perusahaan Sektor Industri Manufaktur Yang Listing di Bursa Efek Indonesia. *Jurnal Manajemen Bisnis, Jurnal Manajemen Bisnis*.\

- Jemiyanto, D. D. (2018). Analisis Kepemimpinan, Budaya Organisasi Dan Kompensasi Terhadap Kinerja Karyawan Melalui Loyalitas Karyawan Pada Pt. Synergy First Logistics Yogyakarta. *Jurnal Online Ekonomi*, Bisnis Dan Manajemen Daulat Rakyat (UPAJIWA), 2 No 2.
- Karundeng, M. M., Mandey, S. L., & Taroreh, R. N. (2022). Pengaruh Kepribadian Esktraversi Dan Gaya Kepemimpinan Transformasional Terhadap Kinerja Pegawai Di Kecamatan Ranowulu Kota Bitung. *Jurnal EMBA*.
- Kasmir, K. (2018). *Manajemen Sumber Daya Manusia (Teori Dan Praktik*). PT Raja Grafindo Persada.
- Mangkunegara, A. A. A. P. (2018). *Manajemen Sumber Daya Manusia Perusahaan*. Remaja Rosdakarya.
- Mi, L., Gan, X., Xu, T., Long, R., Qiao, L., & Zhu, H. (2019). A new perspective to promote organizational citizenship behaviour for the environment: The role of transformational leadership. *Journal of Cleaner Production*, 239, 118002. <u>https://doi.org/10.1016/j.jclepro.2019.118002</u>
- M.Makhrus Ali, & Tri Hariyati,. (2022). Metodologi Penelitian Kuantitatif Dan Penerapan Nya Dalam Penelitian. *Education Journal*.
- Putra, B. A., & Pasaribu, V. L. D. (2022). Pengaruh Gaya Kepemimpinan dan Lingkungan Kerja Terhadap Kinerja Karyawan pada PT. Tumbakmas Niagasakti. *Jurnal Pendidikan Tambusai*, 6 Nomor 1.
- Putra Widyatmika, I. D. G. A., & Riana, I. G. (2020). Pengaruh Kepemimpinan Transformasional Terhadap Komitmen Organisasional, Dengan Kepuasan Kerja Sebagai Variabel Mediasi. *E-Jurnal Manajemen Universitas Udayana*, 9(10), 3486. <u>https://doi.org/10.24843/EJMUNUD.2020.v09.i10.p04</u>
- Robbins, P. S., & Judge, T. A. (2017). Organizational Behaviour. Salemba Empat.
- Sasongko, A. G., Hairudinor, H., & Syafari, M. R. (2021). Pengaruh Budaya Organisasi, Motivasi Kerja Dan Gaya Kepemimpinan Transformasional Terhadap Kinerja Karyawan Dengan Kepuasan Kerja Sebagai Variabel Intervening Di Mining Support Division PT Kaltim Prima Coal. Jurnal Bisnis Dan Pembangunan, 10(1), 62. <u>https://doi.org/10.20527/jbp.v10i1.9958</u>

Sinambela, L., P. (2017). Manajemen Sumber Daya Manusia. Bumi Aksara.

- Sugiyono, S. (2018). Metode penelitian pendidikan:(pendekatan kuantitatif, kualitatif dan R & D). CV. Alfabeta.
- Sutrisno, E. (2018). Manajemen Sumber Daya Manusia", Kencana Prenada. Kencana Prenada.