The Influence of Transformational Leadership, Academic Supervision, and Interpersonal Communication on the Performance of XYZ Elementary School Teachers at Bekasi

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KEYWORDS	ABSTRACT
Transformational Leadership; Teacher Performance; School Management; Academic Supervision; Interpersonal Communication	The success of a teacher's performance is inseparable from the active role of all components of the school environment that support educational success. Collaboration among school leaders, teachers, administrative staff, and parents is required. School leaders must also be proactive in assisting teachers with their problems. This study aimed to determine the positive influence of transformational leadership, academic supervision, and interpersonal communication on the performance of teachers at SD XYZ in Bekasi. The research was conducted at SD XYZ Bekasi starting in October 2024 with a sample of all teachers at SD XYZ Bekasi, totaling 47 teachers. The data obtained were analyzed using *SmartPLS 3.0*. This quantitative study employed a structural equation modeling (SEM) approach and IPMA. The results showed that transformational leadership had a positive impact on academic supervision, and interpersonal communication had a positive impact on academic supervision transformational leadership had a positive impact on teacher performance, academic supervision had a positive impact on teacher performance, interpersonal communication had a positive impact on teacher performance at SD XYZ Bekasi.

Introduction

Teaching is a profession with great duties and responsibilities. In addition to providing knowledge, teachers must also be able to educate and prepare the nation's next generation. Teachers are a factor that determines the sustainability of a nation because it is related to the educational process experienced by the nation's next generation. Professional teachers can generate creative and innovative ideas and are willing to apply useful discoveries in student learning.

follows up on the learning by evaluating / reflecting on the next lesson. (Munawir et al., 2022, p. 8) suggest that teachers as professional educators should be able to educate, advise, teach, and train. The diverse responsibilities of teachers as managers, leaders, facilitators, administrators, innovators, motivators, dynamic actors, evaluators, and supervisors can be improved by developing

these four skills. Professional teachers are seen from their professional learning practices, where the benchmark for teacher professionalism is not only seen when learning in class but starts from when the teacher plans and designs learning, during the learning process, and

Professional teachers who can carry out learning activities effectively can be interpreted as the teacher's abilities or performance. Performance is a person's work achievement, better known as performance. Performance consistently shows the success of an organization and the individuals in it. Teacher performance is a teacher's active behavior in the learning process. This can be seen in how a teacher designs, implements, and assesses learning outcomes (Sunaryo, 2020, pp. 17–18). The success of a teacher's performance cannot be separated from the active role of all components of the school environment that encourage education. Cooperation between needed school leaders, teaching staff, administrative staff, and parents is important. School leaders must also be active in helping teachers' problems.

The findings of D. Kartini et al., p. (2020, p. 156) in their research namely that there are still teachers who are less adept at delivering learning materials, lack creativity in developing materials, have not utilized technology in teaching and learning processes in the classroom, and have not been optimal in applying modern learning methods. Teachers' performance has not been maximized from the habit of teachers who prepare learning media only if there is supervision, have not held remedial and enrichment learning, lack of enthusiasm in teaching, and lack of motivating students in learning. Given the importance of teacher performance in schools, teacher performance deserves special attention. For students to experience improved quality and learning outcomes, efforts to improve teacher performance are important, so accurate and valid data are needed about the factors that influence teacher performance (Ruslan, 2020, p. 179).

In theory, one of the factors that can affect a teacher's performance is transformational leadership. Transformational leadership is a factor that affects teacher performance (Ruslan & Suhaimi, 2020, p. 178; Sirait et al., 2021, p. 391; Tanjung et al., 2020, p. 539). This leadership motivates school stakeholders to work together according to noble values, increasing participation in achieving the school vision (Sirait et al., 2021 p. 392). Transformational leadership inspires subordinates to achieve results beyond expectations (Thoha, 2019: 100). This pattern encourages teachers to grow and achieve higher (Ruslan, 2020 p. 180). Principals play a role in ensuring smooth learning and teacher performance. However, teachers' activities are not always evenly distributed, influenced by the principal's leadership as a role model, support provider, and motivator (Sirait et al., 2021, p. 396).

Academic supervision significantly affects teacher performance (D. Kartini et al., 2020, p. 156; Sunaryo, 2020, p. 17) and is a systematic effort to improve teaching quality through guidance and support (Karim et al., 2021, p. 497). As part of the principal's function, this supervision includes overseeing academic activities to optimize the quality of education (Susanti et al., 2020, p. 67). Principals act as supervisors by checking lesson plans, observing the teaching process, discussing, assisting in problem analysis, and socializing operational tasks (Ahmad & Saefurrohman, 2020, p. 290).

Termuan D. Kartini et al., p. (2020, p. 156), in their research, that school principals in the regions often leave school for official matters, allegedly making teachers feel that there is no supervision from their superiors, so their performance is not optimal. Not all principals carry out academic supervision regularly, the steps of supervision are appropriate and planned, and the follow-up of the supervision results has not improved teacher learning in the classroom. In addition to transformational leadership and school supervision, another important factor in supporting teacher performance is the interpersonal communication process in the school environment where teachers work. Research conducted by Kartini et al. (2020) and Ruslan (2020) provides empirical evidence of interpersonal communication's important role in improving teacher performance in public junior high schools in North Banjarmasin District.

Interpersonal communication is the use of written, spoken, or nonverbal symbols to convey ideas in interactions between individuals (Solomon & Theiss, 2022, p. 37). This process is transactional, where messages are sent and received simultaneously (Hargie, 2021; Susilawati et al., 2021, p. 360). Direct communication allows the spontaneous exchange of information, not only to convey messages but also to exchange ideas for effective communication. In the context of leadership, interpersonal communication between principals and subordinates plays a role in building cooperation through active verbal and nonverbal communication. Individuals in this communication process message and provide feedback symbolically (Mikhaharahap et al., 2022, p. 2671).

School management is important in establishing effective communication with teachers to motivate them to improve their performance. In a school, teachers, other staff and principals must communicate to cooperate to achieve educational goals. Good communication can create relationships and solid between both parties. Wrong information or ineffective delivery can cause conflict between employees, disrupting coordination and further affecting employee performance. In this case, if miscommunication occurs in the school environment, it will disrupt teacher performance. *teamwork*

Teachers at SD XYZ in Bekasi are expected to be dedicated professionals, have a clear vision, and demonstrate responsibility and hard work in their duties. By practicing these values, teachers are expected to be role models for students and colleagues, resulting in a productive work environment and improved teacher performance.

In reality, based on data from the results of teacher supervision at SD XYZ in Bekasi, it was found that teachers' performance was not optimal. The following is a description of the performance of SD XYZ teachers in Bekasi taken from data on the results of teacher supervision in the 2021/2022-2022/2023 academic year.

The results of teacher supervision at SD XYZ Bekasi for the 2021/2022 to 2022/2023 academic years show variations in teacher performance ratings based on the subjects taught. Of the 38 teachers evaluated, most received predicates B and **AB** , with a few receiving **K**. Thematic subjects dominated with the largest number of teachers, followed by science, social studies, Bahasa Indonesia, mathematics, Civics, and others. Some teachers experienced an increase in supervision scores from the previous year, such as **RS** (Thematic) who increased from 86 to 89, and **PF**

(Thematic) from 86 to 92. However, there were also those who experienced a decrease, such as **EP** (BK) from 93 to 85, and **AB** (BK) from 92 to 86. Two teachers, namely **CE** (PAK) and **E** (BK), received the predicate **K** with supervision results below 75 in both school years. Overall, the supervision results show that the majority of teachers performed well, with some showing improvements in their teaching and competencies.

From the results of the last two years of supervision, 5% of teachers received a grade**K** , 56% a **B** grade, and 39% grade**an AB** . The **K** (<60), **B** (75-89) and **AB** (90-100) scores indicate that more than 60% of teachers have not yet reached the Very Good category. In addition, teacher performance at SD XYZ Bekasi still needs to be improved, especially in the collection of administrative tasks. Of the 28 teachers who were required to submit administration**PAS** , only 14 (50%) were on time. For the collection of semester 1 grades, out of 35 teachers, only 18 (51.42%) followed the rules. In collecting the analysis of questions**PH, PTS, and PAS** , only 15 out of 35 teachers submitted on time.

Another phenomenon is the leadership change of the principal at SD XYZ Bekasi. When there is a change in leadership, subordinates will compare the leadership style of the previous leader so that various perceptions arise. Teachers' perceptions of the principal's leadership style can shape their behavior and performance, both positively and negatively. Teachers' positive opinion of the principal's leadership can create a conducive work environment and improve the overall performance of the school.

In addition, the results of the researcher's interviews with several teachers indicate the formation of groups in the teachers' room that are influenced by criteria such as age, ethnicity, gender and interests. It appears that at least three different groups have formed, each exhibiting different traits. While these social interactions may seem harmless at first, they can have a major impact on individual performance. These groups often develop exclusive dynamics that inhibit communication and collaboration between teachers, hindering the successful development of working relationships. They argue that committee formation is often based on closeness between members due to the interpersonal communication that exists between them. As a result, teacher effectiveness may be hampered due to the lack of exchange of ideas and best practices, as well as a lack of support and collaboration in addressing problems in the learning and education process at school.

The description above shows that teacher performance is a key factor that determines the effectiveness of the learning process. Theoretically, there are several factors that support the improvement of teacher performance in performing their duties and responsibilities. These factors include transformational leadership, academic supervision, and interpersonal communication. Based on this theory, the author wants to directly analyze the influence of transformational leadership, academic supervision, and interpersonal communication on the performance of XYZ elementary school teachers in Bekasi.

This study aims to analyze the various factors that influence academic supervision and teacher performance at SD XYZ Bekasi. Specifically, this study examines the positive influence of transformational leadership on academic supervision as well as teacher performance. In addition,

this study also evaluates how interpersonal communication contributes to academic supervision and teacher performance. Furthermore, this study examines the relationship between academic supervision and teacher performance, in order to understand the role of supervision in improving the professionalism of educators.

This research is theoretically useful in deepening the understanding of transformational leadership, academic supervision, and interpersonal communication and their influence on teacher performance. Practically, the results of this study can be utilized by various parties. For researchers, these findings are useful as comparative analysis material with the theory studied. For teachers, this research can be the basis for designing training programs to improve teaching competencies. Principals can use it as a reference in refining supervision to improve teacher performance. Meanwhile, the foundation can design a long-term strategy to improve the quality of education at SD XYZ Bekasi by strengthening leadership, supervision and interpersonal communication.

Materials and Methods

This research uses positivism-based quantitative methods to test hypotheses through statistical data analysis. The design used is associative quantitative, which aims to analyze the influence or relationship between variables (Sugiyono, 2020, p. 37). This study involves four variables: transformational leadership, academic supervision, interpersonal communication, and teacher performance. Teacher performance is the dependent variable (endogenous), while the other three are independent variables (exogenous).

This research was conducted at SD XYZ Bekasi. The research time began in October 2024. The research subjects are all XYZ Elementary School teachers in Bekasi, totaling 47 teachers. The data that will be obtained from the subjects will be analyzed, concluded, and the conclusions apply to the entire population.

The population of this study were all 47 teachers from SD XYZ in Bekasi. This study used a census, namely all 47 teachers of SD XYZ in Bekasi. In this study, the data collection technique used was a questionnaire with multiple choice forms. This study used a questionnaire in the form of questions to test the effect of transformational leadership, academic supervision, and interpersonal communication on teacher performance. The scale used is the Likert scale, which ranges from 1 to 5 (strongly disagree to strongly agree).

Content (face) validity testing is done through expert judgment and statistical calculations. Face validity is assessed based on professional insight to ensure the feasibility of instruments, such as questionnaires. In this study, the assessment was conducted by Dr. Innocentius Bernarto, S.T., M.M., M.Si. from Pelita Harapan University. Furthermore, instrument validation using the Partial Least Squares (PLS) method with the help of SmartPLS 3.0

Descriptive statistical analysis is used to process and describe data in the form of tables and summaries that make it easier for readers to understand the research results (Pakpahan et al., 2021). Meanwhile, inferential statistical analysis aims to draw conclusions and make predictions based on the data collected. In this study, the analysis was carried out using SmartPLS 3.0 with the PLS-

SEM approach, which includes evaluating the measurement model (outer model) and structural model (inner model).

Importance-Performance Map Analysis (IPMA) in PLS-SEM allows the extraction of latent variable scores to evaluate importance and performance. This analysis divides the relationship between the two into four quadrants: Quadrant I ("Keep Up the Good Work") indicates important factors expected to support customer satisfaction, which need to be maintained in performance. Quadrant II ("Possible Overkill") contains less important factors than customers expect, so the company needs to shift resources to higher priority factors. Quadrant III ("Low Priority") contains factors with low perception and performance, which do not need special attention. Quadrant IV ("Concentrate Here") contains important factors whose performance is still lacking, requiring resource allocation for performance improvement. This analysis helps managerial considerations in improving performance.

Results and Discussion
Inferential Statistics
The statistical analysis includes the measurement (outer) and structural (inner) models.
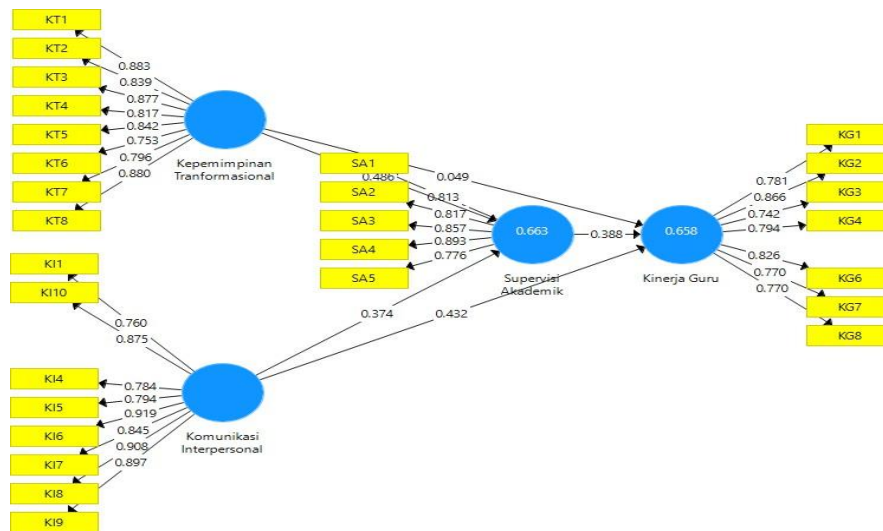### *Outer Model* Test

Figure 1. SmartPLS Outer Loading Calculation Figure

Furthermore, Table 1 clearly illustrates the values of the loading factor that meet the requirements of convergent validity.

Table 1. *Loading Factor* Value

No. Item	Performance Teacher	Leadership Transformational	Supervision Academic	Communication Interpersonal
KG1	0.781			
KG2	0.866			
KG3	0.742			
KG4	0.794			
KG6	0.826			

KG7	0.770		
KG8	0.770		
KT1		0.883	
KT2		0.839	
KT3		0.877	
KT4		0.817	
KT5		0.842	
KT6		0.753	
KT7		0.796	
KT8		0.880	
SA1			0.813
SA2			0.817
SA3			0.857
SA4			0.893
SA5			0.776
KI1				0.760
KI4				0.784
KI5				0.794
KI6				0.919
KI7				0.845
KI8				0.908
KI9				0.897
KI10				0.875

Source: Results Data Processing (2024)

Through the results of data processing described in the table above, it can be seen that the variables studied, namely the use of teacher performance (KG), transformational leadership (KT), academic supervision (SA) and interpersonal communication (KI), all items have met the requirements for the value *loading factor* above 0.600. The AVE test results can be seen in the table image below:

Table 2. AVE Test Results

Variables	Cronbach's Alpha	Composite Reliability (Rho_A)	Composite Reliability (Rho_C)	Average Variance Extracted (AVE)
PerformanceTeacher	0.902	0.909	0.922	0.630
Transformational Leadership	0.938	0.941	0.949	0.701
Academic Supervision	0.890	0.905	0.918	0.693
Interpersonal Communication	0.944	0.947	0.954	0.722

Source: Data Processing Results (2024)

Based on the data in the table, the AVE values for the teacher performance variable (0.630), transformational leadership (0.701), academic supervision (0.693), and interpersonal communication (0.722) all exceed the 0.5 threshold. This indicates that each indicator used to measure the variable makes an important contribution to the variation of the variable itself, which,

in turn, increases the validity of the variable. Therefore, it can be concluded that the constructs of teacher performance, transformational leadership, academic supervision, and interpersonal communication in this study have AVE values exceeding 0.5 for all variables. This indicates that each item statement on each variable has met the requirements in testing convergent validity.

1. Discriminant Validity Test (HTMT)

   Discriminant validity testing ensures that each latent variable indicator does not overlap with other variables (Mustafa & Wijaya, 2012). This validity is measured using the Heterotrait-Monotrait Ratio (HTMT), which compares the correlation between indicators of different constructs with the correlation within the same construct. Discriminant validity is achieved if the HTMT value is below 0.90. The results of the variable-level discriminant validity test are shown in Table 3.

Table 3. Discriminant Validity Test Results (HTMT)

	Leadership Transformational	Teacher Performance	Communication Interpersonal	Supervision Academic
Transformational Leadership				
Teacher Performance	0.747			
Interpersonal Communication	0.839	0.817		
Supervision Academic	0.837	0.812	0.805	

Source: Data Processing Results (2024)

The results of the analysis **HTMT** show the discriminant validity between variables in the factor analysis. The values on the main diagonal line reflect the Average Variance Extracted (AVE), which indicates how much of the indicator variation can be explained by the factor. For example, the AVE value of 0.747 for teacher performance indicates that 74.7% of the variation in the teacher performance indicator is explained by the factor. Values outside the main diagonal line indicate correlations between factors, with lower correlations indicating stronger discriminant validity.

2. Validity and Reliability Test

Table 4. RhoC Reliability Validity Test Results

Variables	Cronbach's Alpha	Composite Reliability (Rho_A)	Composite Reliability (Rho_C)
Teacher Performance	0.902	0.909	0.922
Transformational Leadership	0.938	0.941	0.949
Academic Supervision	0.890	0.905	0.918
Interpersonal Communication	0.944	0.947	0.954

Source: Data Processing Results (2024)

This data shows that each variable (teacher performance, transformational leadership, academic supervision, and interpersonal communication) has a good level of reliability. values *The Cronbach's alpha, composite reliability (rho_a)* and *composite reliability (rho_c)* for each variable are consistently high, above 0.600, which is the general threshold for acceptable reliability. This indicates that the indicators used to measure each variable are quite consistent and reliable.

Inner Model Test

Inner model testing is a guideline for estimating the causal relationship between construct variables in research using SmartPLS software, followed by an assessment based on the path coefficient, *Variance Inflation Factor (VIF)*, and *R-squared.*

1. Multicollinearity Test

The multicollinearity test is done by calculating the VIF (Variance Inflation Factor) value, with a VIF value of less than 5.00 (Hair et al., 2017). The results of the multicollinearity test are presented in table 5.

Table 5. Multicollinearity Test Results

	VIF
Transformational Leadership -> Academic Supervision	2.676
Interpersonal Communication -> Academic Supervision	2.676
Transformational Leadership -> Teacher Performance	3.378
Academic Supervision -> Teacher Performance	2.969
Interpersonal Communication -> Teacher Performance	3.091

Source: Data Processing Results (2024)

The VIF (value *Variance Inflation Factor*) is used to evaluate the presence of *multicollinearity* between variables in the regression model. The higher the VIF value, the higher the level of *multicollinearity* between the variables. The table shows that:

1) Transformational leadership -> academic supervision has a VIF of 2.676.
2) Interpersonal communication -> academic supervision has a VIF of 2.676.
3) Transformational leadership -> teacher performance has a VIF of 3.378.
4) Academic supervision -> teacher performance has a VIF of 2,969.
5) Interpersonal communication -> teacher performance has a VIF of 3.091.

From these values, it can be seen that all relationships between variables have VIF values of less than 5, which indicates no collinearity between constructs or no significant indication of multicollinearity.

2. Multicollinearity Test

According to Ghozali & Latan (2015), the coefficient of determination (R^2) is used to test the fit of the model and assess the predictive power of the structural model. R^2 measures

the percentage of variance explained by the dependent variable in the internal model. Teacher performance is the variable explained by the independent variable or the focus of the research. The results of the R² analysis can be seen in table 6.

Table 6. Calculation Results of R² Value

	R Square	*R Square Adjusted*
Teacher Performance	0.658	0.634
Academic Supervision	0.663	0.648

Source: Data Processing Results (2024)

Regression analysis shows that teacher performance has a significant impact on academic supervision, with 65.8% of its variation explained by teacher performance. After adjusting, the R² for teacher performance is 0.634, indicating that 63.4% of the variation in academic supervision can still be explained. Academic supervision also had a strong effect on transformational leadership and interpersonal communication, explaining 66.3% of the variation in both. After adjusting, the R² for academic supervision was 0.648, indicating 64.8% of the variation in both factors could still be explained.

3. Hypothesis Test

In this study, hypothesis testing was conducted to find the correlation between the latent variables being studied. The PLS-SEM method is used to test the hypothesis, by examining the path coefficient values for judgment. Table 7 below displays the results of the path coefficients between exogenous and endogenous variables in this study.

Table 7. *Path Coefficients*

Hypothesis	*Standardized Path Coefficient*	Decision
H1: Transformational Leadership affects positive toward Academic Supervision	0.486	Supported
H2: Interpersonal Communication has a positive on Academic Supervisioneffect	0.374	Supported
H3: Transformational leadership has an effect positive on Teacher Performance	0.049	Supported
H4: Academic Supervision has effect a positive on Teacher Performance	0.388	Supported
H5: Interpersonal Communication has effecta positive on Teacher Performance	0.432	Supported

Source: Data Processing Results (2024)

Thus, the following research model is obtained along with the path coefficient:
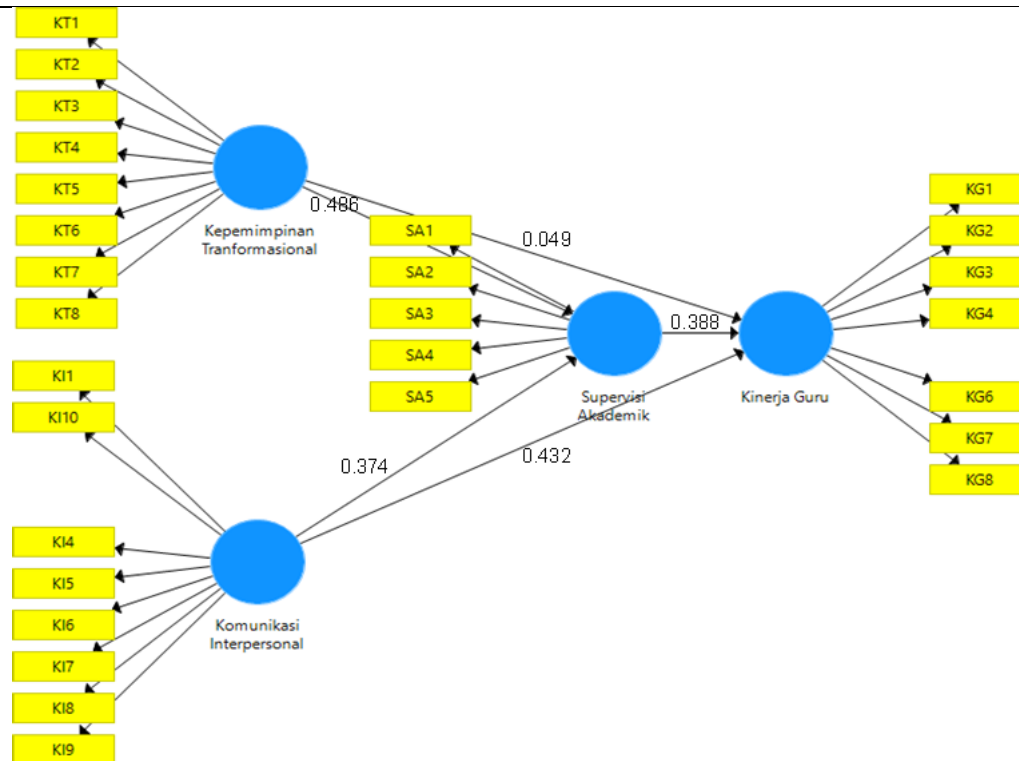
Figure 2. Path Coefficient Test Model

Based on the coefficient path picture above, the following equation can be obtained:

Academic Supervision = 0.486 Transformational Leadership + 0.374 Interpersonal Communication

Teacher Performance = 0.049 Transformational Leadership + 0.388 Academic Supervision + 0.432 Interpersonal Communication

Regression equation I shows that transformational leadership has a coefficient of 0.486, which means that every one-level increase in transformational leadership will increase academic supervision by 0.486. Interpersonal communication has a coefficient of 0.374, indicating that an increase in interpersonal communication contributes to an increase in academic supervision. Regression equation II shows that transformational leadership has a coefficient of 0.049, which means that every one-level increase in transformational leadership increases teacher performance by 0.049. Interpersonal communication has a coefficient of 0.432, indicating a positive contribution to teacher performance. Academic supervision coefficient is 0.388, indicating a positive relationship between academic supervision and teacher performance. Overall, these two regression equations describe the effect of transformational leadership, academic supervision, and interpersonal communication on teacher performance.

By considering the path coefficient value generated after data analysis, this can be used as a basis for responding to hypotheses and drawing conclusions from this study. The results

per hypothesis based on the standardized path coefficient value and the decisions taken are as follows:

Hypothesis 1: Transformational leadership has a positive effect on academic supervision of XYZ elementary school teachers in Bekasi.

The results of hypothesis testing show that the path coefficient value is not equal to zero, which is 0.486. Therefore, the hypothesis "there is a positive influence of transformational leadership with academic supervision" is supported. The path coefficient value is positive. This indicates that there is a positive effect on academic supervision.

Hypothesis 2: Interpersonal communication has a positive effect on the academic supervision of teachers at SDK XYZ Bekasi.

The results of hypothesis testing show that the path coefficient value is not equal to zero, which is 0.374. Therefore, the hypothesis "there is a positive influence of interpersonal communication with academic supervision" is supported. The path coefficient value is positive. This indicates that interpersonal communication has a positive effect on academic supervision.

Hypothesis 3: Teacher transformational leadership has a positive effect on the performance of XYZ elementary school teachers in Bekasi.

The results of hypothesis testing show that the path coefficient value is not equal to zero, which is 0.049. Therefore, the hypothesis "there is a positive influence of transformational leadership on teacher performance" is supported. The path coefficient value is positive. This indicates that transformational leadership has a positive effect on teacher performance.

Hypothesis 4: Academic supervision has a positive effect on the performance of XYZ elementary school teachers in Bekasi.

The results of the analysis show that academic supervision has a positive influence on teacher performance. The standardized path coefficient of 0.388 indicates that an increase in academic supervision is associated with an increase in teacher performance. Thus, this hypothesis is supported. The path coefficient value is positive. This indicates that academic supervision has a positive effect on teacher performance.

Hypothesis 5: Interpersonal communication has a positive effect on the performance of XYZ elementary school teachers in Bekasi.

The results of hypothesis testing show that the path coefficient value is not equal to zero, which is 0.432. Therefore, the hypothesis "there is a positive effect of interpersonal communication on teacher performance" is supported. The path coefficient value is positive. This shows that interpersonal communication has a positive effect on teacher performance.

Importance - Performance Map Analysis (IPMA)
The IPMA results for the indicators on the SA variable are presented in Table 8 and Figure 3.

Table 8. SA Variable IPMA Results

	Importance	Performance
KT1	0.071	64.894
KT2	0.073	74.468
KT3	0.084	69.149
KT4	0.063	65.957
KT5	0.074	58.511
KT6	0.072	63.830
KT7	0.070	68.085
KT8	0.074	60.638
KI1	0.052	69.149
KI4	0.050	72.340
KI5	0.051	60.638
KI6	0.064	75.177
KI7	0.055	63.830
KI8	0.054	78.014
KI9	0.055	75.177
KI10	0.057	65.957

Source: Data Processing Results (2024)

The IPMA results for academic supervision show that KT1, KT5, KT6, and KT8 have importance between 0.071 to 0.074 with low performance (58.511 to 64.894), thus requiring improvement. KT7 with an importance of 0.070 and a performance of 68.085 is very important, but can still be improved. KT2 and KT3 have importance of 0.073 and 0.084 with performance of 74.468 and 69.149 respectively, both are important with good performance, especially KT2 which has the highest performance.

Meanwhile, variables KI1, KI4, KI6, KI8, KI9, KT4, KI5, KI7, KI10 have importance between 0.050 to 0.064 with performance of 60.638 to 78.014. It is important to maintain and improve the performance of these variables. The main focus should be on improving the performance of **KT2**, while maintaining and improving the other variables to improve overall academic supervision.
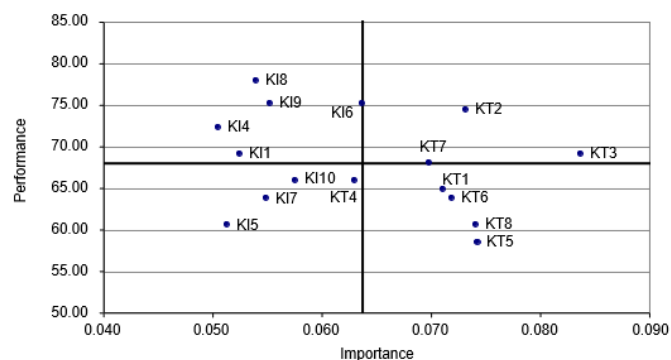

Figure 3. IPMA for SA Variables

The description of the relationship between the level of importance and performance in the IPMA analysis for SA variables is as follows:
1) Quadrant I: KT2, KT3, KT7
2) Quadrant II: KI1, KI4, KI6, KI8, KI9
3) Quadrant III: KT4, KI5, KI7, KI10
4) Quadrant IV: KT1, KT5, KT6, KT8

The overview of the relationship between the level of importance and performance in the IPMA analysis for SA variables shows some important findings. First, indicators KT2, KT3, and KT7 are in Quadrant I, which means these indicators have a high level of importance and performance. This indicates that these indicators are already well managed and it is important to maintain their high performance due to their significant contribution to the SA variable.

Second, indicators KI1, KI4, KI6, KI8, and KI9 are located in Quadrant II, which means their performance is high but their importance is relatively low. This suggests there may be excessive effort on these indicators, and perhaps resources could be reallocated to other more important areas.

Third, indicators KT4, KI5, KI7, and KI10 are in Quadrant III, which has a low level of importance and performance. These indicators are considered a low priority and do not need to be the main focus in efforts to improve the performance of current SA variables.

Finally, indicators KT1, KT5, KT6, and KT8 are in Quadrant IV, which has a high level of importance but low performance. This indicator requires immediate attention and improvement because it has a major impact on SA variables but has not achieved adequate performance.

The IPMA results for the indicators on the KG variable are presented in table 9 and figure 4 below:

Table 9. Results of IPMA Variable KG

	Importance	Performance
KT1	0.038	64.894
KT2	0.031	74.468
KT3	0.043	69.149
KT4	0.023	65.957
KT5	0.034	58.511
KT6	0.036	63.830
KT7	0.026	68.085
KT8	0.037	60.638
SA1	0.083	78.723
SA2	0.074	71.277
SA3	0.102	75.887
SA4	0.087	77.305
SA5	0.083	48.936
KI1	0.079	69.149
KI4	0.083	72.340
KI5	0.075	60.638
KI6	0.085	75.177
KI7	0.087	63.830
KI8	0.077	78.014
KI9	0.078	75.177
KI10	0.089	65.957

The IPMA results for teacher performance show that KT2 and KT3 have low importance (0.031-0.043) with performance of 69.149 and 74.468. SA1, SA2, SA3, SA4, KI1, KI4, KI6, KI8, and KI9 have higher importance (0.074-0.102) and performance of 69.149 to 78.723, which requires improvement. KI5, KI7, KI10, and SA5 have high importance (0.075-0.089) and low performance (48.936-65.957), so it is necessary to focus on their improvement. The top priority is to improve KI and SA variables, while improving KT for better teacher performance.
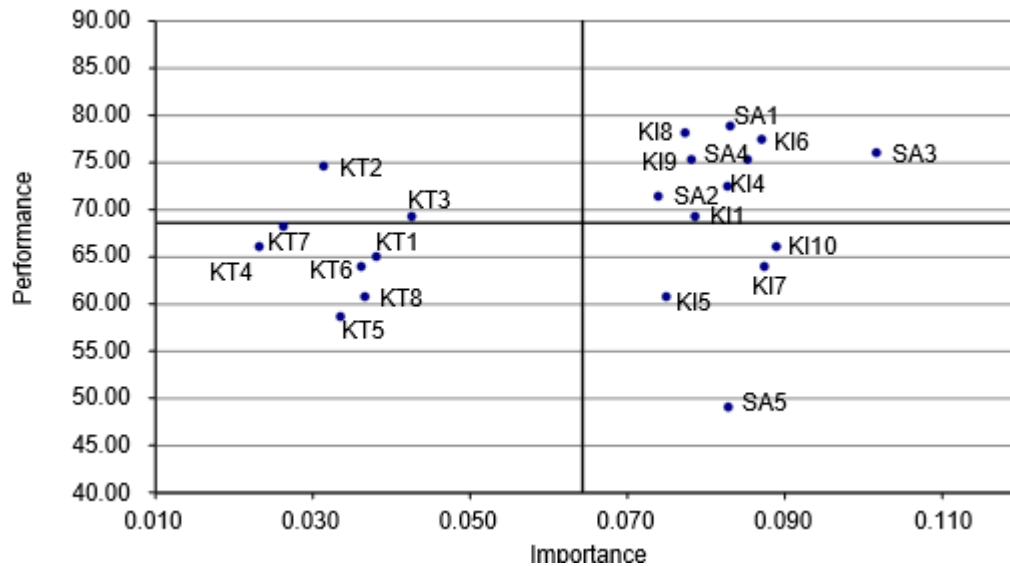

Figure 4. IPMA for KG Variables

The description of the relationship between the level of importance and performance in the IPMA analysis for the KG variable is as follows:
1) Quadrant I: SA1, SA2, SA3, SA4, KI1, KI4, KI6, KI8, KI9,
2) Quadrant II: KT2, KT3.
3) Quadrant III: KT1, KT4, KT5, KT6, KT7, KT8.
4) Quadrant IV: KI5, KI7, KI10, SA5.

The description of the relationship between the level of importance and performance in the IPMA analysis for the KG variable shows several important findings. First, indicators SA1, SA2, SA3, SA4, KI1, KI4, KI6, KI8, and KI9 are in Quadrant I, which means these indicators have a high level of importance and performance. This indicates that these indicators are already well managed and it is important to maintain their high performance due to their significant contribution to the KG variable.

Second, indicators KT2 and KT3 are located in Quadrant II, which means their performance is high but their importance is relatively low. This suggests there may be excessive effort on these indicators, and perhaps resources could be reallocated to other more important areas.

Third, indicators KT1, KT4, KT5, KT6, KT7, and KT8 are in Quadrant III, which has a low level of importance and performance. These indicators are considered a low priority and do not need to be the main focus in efforts to improve the current performance of the KG variables.

Finally, indicators KI5, KI7, KI10, and SA5 are in Quadrant IV, which has a high level of importance but low performance. These indicators require immediate attention and improvement because they have a major impact on the KG variable but have not achieved adequate performance.

Discussion

This study aims to examine the influence of transformational leadership, academic supervision, and interpersonal communication on the performance of XYZ elementary school teachers in Bekasi. The findings of this study are discussed in relation to theory and previous research and are based on data that has been processed, summarized, and presented.

The Effect of Transformational Leadership on Academic Supervision

The results of hypothesis testing indicate a positive influence between transformational leadership and academic supervision. That is, the better the transformational leadership, the higher the level of academic supervision. This finding supports the hypothesis proposed in the study that "there is a positive influence of transformational leadership on academic supervision".

The results of this study are in accordance with research by Hassan and Pasha (2021) which shows that transformational leadership contributes directly to the effectiveness of academic supervision, by increasing lecturer motivation and performance. Research by Sari and Asari (2020) also found that transformational leadership has a direct impact on lecturer engagement in academic supervision, which in turn contributes to improving teaching quality. In addition, a study by Nuri and Hasan (2022) showed that transformational leadership creates a supportive environment, which directly affects the effectiveness of academic supervision. Arifin et al. (2024) showed that there is a direct relationship between leadership transformational and improved teaching quality through better academic supervision.

The Effect of Interpersonal Communication on Academic Supervision

The results of hypothesis testing show that interpersonal communication has a positive influence on academic supervision. This means that the stronger and more positive interpersonal communication applied in an organization, the higher the level of academic supervision. The results of this study are in accordance with Arifin and Santoso's research (2021, p. 45) which shows that good interpersonal communication between supervisors and teachers can build trust and encourage openness, which has a positive impact on the academic supervision process.

According to Pratama and Andini (2021, p. 30), positive interpersonal communication contributes to increasing teachers' openness to feedback, strengthening motivation, and improving performance in academic supervision. Another study by Susanto and Lestari (2022, p. 60) also supports these findings, stating that effective interpersonal communication allows teachers to feel supported and understood, thus accelerating the achievement of academic goals. Overall, this study confirms that interpersonal communication plays an important role in expediting the academic supervision process and improving the working relationship between supervisors and teachers.

The Effect of Transformational Leadership on Teacher Performance

The results of hypothesis testing show that transformational leadership has a positive impact on teacher performance. This finding supports the hypothesis that transformational leadership

improves teacher performance, as suggested in the study. Therefore, the more effectively transformational leadership is implemented, the better teacher performance.

The results of this study are in line with research conducted by Ruslan and Suhaimi (2020) which shows that transformational leadership directly affects teacher performance. Specifically, improving teacher performance is significantly influenced by transformational leadership. The quality of the principal's transformational leadership is directly proportional to the performance of his teachers.

In addition, according to research by Susilawati, Suhaimi and Noorhapizah (2021), and Mikhaharahap et al. (2022) which shows that there is a positive and significant influence between principal leadership on teacher performance. This shows that the principal's leadership has an influence on the formation of teacher performance, where the more effective the principal's leadership, the higher the performance of the teachers.

Research conducted by Kartini et al., (2020, p. 156) shows a correlation between teacher performance and transformational leadership. This finding highlights the importance of transformational leadership factors in influencing teacher effectiveness. Transformational leadership involves charismatic leaders who play a strategic role in guiding the organization to achieve its goals. Transformational leadership according to Susilawati et al. (2021, p. 361) will have a positive influence in building a culture of cooperation, behavior in the organization, developing a conducive climate and improving performance in the organization. Principals show consistent dedication to the educational unit optimism and enthusiasm through behaviors that improve teacher performance (Wijayanto et al., 2021, p. 60). they supervise and strive to maintain teacher motivation by promoting

The Effect of Academic Supervision on Teacher Performance

The results of hypothesis testing show that academic supervision has a positive effect on teacher performance as initially hypothesized. This means that the better the academic supervision implemented in an educational institution, the higher the teacher performance. The results of this study are in accordance with the research of Irfan (2018) and Kartini, Kristiawan, and Fitria (2020) which show that the principal's academic supervision has a positive and significant effect on teacher performance. This proves that teacher performance can be improved if academic supervision also increases.

Sunaryo's research (2020, p. 17) shows that principals' academic supervision has a significant impact on teacher performance. An increase in principals' academic supervision, which includes leadership and supervision, can result in better teacher performance. Conversely, a reduction in academic supervision can result in a decrease in teacher performance. This illustrates that teacher performance is enhanced by transformational leadership, effective academic supervision, and strong interpersonal communication.

Kartini et al. (2020: 161) argue that learning quality will improve if academic supervision is applied to improve teacher performance. If teachers feel supported by the principal, they will be motivated to improve their performance. To achieve optimal results, educators must engage in

continuous professional development and be skilled in using technology and information effectively. Teacher performance is very important to produce quality learning, which includes activities such as planning learning, implementing teaching strategies, building interpersonal relationships, evaluating learning outcomes, and providing remedial and enrichment. This is also in accordance with Setyaningsih and Suchyadi (2021, p. 182) research which concluded that teachers respond positively to academic supervision carried out by school principals because supervision activities are very important to change teacher performance for the better.

The Effect of Interpersonal Communication on Teacher Performance

The results of hypothesis testing show that interpersonal communication has a positive influence on teacher performance. This means that the better the interpersonal communication implemented in an educational institution, the higher the teacher performance.

The results of this study are in line with research conducted by Kartini et al., (2020) and Ruslan and Suhaimi (2020) which show that interpersonal communication has a positive and significant effect on teacher performance. Effective interpersonal communication is very important to improve teacher performance. The stronger the interpersonal communication that exists in schools, the better teacher performance will be. In addition, according to research by Susilawati et al. (2021), and Mikhaharahap et al. (2022) which shows that there is a positive effect of interpersonal communication on teacher performance. This shows that interpersonal communication has an influence on the formation of performanceteacher, where the more effective interpersonal communication, the higher the teacher's performance.

Mikhaharahap et al., p. (2022, p. 2683) explained that there is a positive and significant relationship between interpersonal communication and teacher performance. This shows that the better the effectiveness of communication patterns, whether vertical, horizontal, diagonal, formal, informal, or non-formal, the better the teacher's performance. Effective communication will improve teachers' ability to manage the teaching and learning process. Furthermore, good communication will foster mutual understanding and cooperation among organizational members, which is very important for achieving organizational goals.

Research Limitations

In this research, there are several limitations that need to be considered. Some aspects that require a deeper understanding include the concept, methodology, and technical implementation of the research, all of which are still an obstacle in this study. First, the questionnaire was distributed online using the Google Form application, which allows for Non Response Bias. This can happen if respondents ask other people to fill out the questionnaire, so the opinions expressed may not match the actual views of the respondents, which can affect the results of the study.

Second, respondents may have difficulty in understanding the statements and questions in the questionnaire. Since the questionnaires are not filled out under the supervision of the researcher, respondents may give improvised answers when they encounter questions that are difficult to

understand, which may cause bias in the results. However, due to time and coverage limitations, online questionnaire distribution is still considered the most effective way.

Third, time constraints in collecting questionnaires and respondents' busyness when filling out questionnaires can produce inaccurate data. In addition, respondents' understanding of the questionnaire and the number of statement items and questions are also factors that need to be improved.

Fourth, the measurement of teacher performance in this study may not cover all relevant aspects of performance. Various factors, including psychological well-being and work environment, can influence teacher performance, which were not measured in this study.

Conclusion

Based on the results and discussion in the previous chapter, several conclusions can be drawn. Firstly, transformational leadership positively affects academic supervision at SD XYZ in Bekasi, indicating that as transformational leadership increases, academic supervision also improves. Secondly, interpersonal communication positively affects academic supervision at SD XYZ in Bekasi, meaning that as interpersonal communication increases, academic supervision also increases. Thirdly, transformational leadership positively affects teachers' performance at SD XYZ in Bekasi, suggesting that when transformational leadership increases, teacher performance improves. Additionally, academic supervision positively influences teacher performance at SD XYZ in Bekasi, where increased academic supervision leads to better teacher performance. Lastly, interpersonal communication also positively affects teacher performance at SD XYZ in Bekasi, meaning that as interpersonal communication improves, teacher performance also increases.

References

Ahmad, A., & Saefurrohman, S. (2020). Teacher´ s Perception of Academic Supervision of the School Headmaster. *Utopía y Praxis Latinoamericana*, *25*(6), 289–302. https://doi.org/https://doi.org/10.5281/zenodo.3987624

Arifin, M., Shulhani, R., Khoir, M. I., & Maulana, M. Z. (2024). Peran Kepemimpinan Transformasional dalam Meningkatkan Kinerja Tim di Organisasi. *FRAME: Foundations of Research and Management in Education*, *1*(1), 30–40.

Arifin, Z., & Santoso, B. (2021). Pengaruh komunikasi interpersonal terhadap efektivitas supervisi akademik. *Jurnal Pendidikan Dan Pengembangan*, *10*(2), 45–58.

Hargie, O. (2021). *Skilled Interpersonal Communication: Research, Theory and Practice* (7th Edition). Routledge.

Hassan, S., & Pasha, M. (2021). Transformational leadership and its impact on academic supervision effectiveness. *Journal of Educational Leadership*, *10*(2), 145–158.

Irfan, A. (2018). Supervisi Akademik Kepala Sekolah dan Kompensasi dalam Kinerja Mengajar Guru. *Jurnal Administrasi Pendidikan*, *25*(2), 264–274. https://doi.org/10.17509/jap.v25i2.15641

Karim, A., Kartiko, A., Daulay, D. E., & Kumalasari, I. D. (2021). The Effect of The Supervision of The Principal and The Professional Competency of Teachers on Teacher Performance in Private MI in Pacet District. *Nidhomul Haq : Jurnal Manajemen Pendidikan Islam*, *6*(3), 497–512. https://doi.org/10.31538/ndh.v6i3.1686

Kartini, D., Kristiawan, M., Fitria, H., Negeri, S., & Sugihan, M. (2020). The influence of principal's leadership, academic supervision, and professional competence toward teachers' performance. *International Journal of Progressive Sciences and Technologies (IJPSAT)*, *20*(1), 156–164.

Kartini, K., Ahmad, S., & Eddy, S. (2020). Pengaruh Gaya Kepemimpinan Kepala Sekolah dan Komunikasi Interpersonal Terhadap Kinerja Guru. *Journal of Education Research*, *1*(3), 290–294. https://doi.org/https://doi.org/10.37985/jer.v1i3.34

Mikhaharahap, A., Akos, M., Asmawatiy, C., & Saputra, R. W. (2022). The effect of interpersonal communication and school leadership on the performance of junior high school teachers in Kapuas Barat District of Kapuas Regency. *East Asian Journal of Multidisciplinary Research*, *1*(11), 2667–2690.

Munawir, M., Salsabila, Z. P., & Nisa', N. R. (2022). Tugas, Fungsi dan Peran Guru Profesional. *Jurnal Ilmiah Profesi Pendidikan*, *7*(1), 8–12. https://doi.org/10.29303/jipp.v7i1.327

Nuri, M., & Hasan, M. (2022). The impact of transformational leadership on the effectiveness of academic supervision in higher education. *Journal of Educational Administration*, *14*(1), 78–89.

Pratama, R., & Andini, S. (2021). Pengaruh komunikasi interpersonal terhadap kualitas supervisi akademik di perguruan tinggi. *Jurnal Komunikasi Pendidikan*, *12*(1), 28–35.

Ruslan, M., & Suhaimi, S. (2020). Contribution of Principal Transformational Leadership and Interpersonal Communication through Work Motivation on Teacher Performance at all State Junior High Schools in Banjarmasin Utara Sub-district. *Journal of K6 Education and Management*, *3*(2), 178–186. https://doi.org/10.11594/jk6em.03.02.09

Sari, M., & Asari, S. (2020). The role of transformational leadership in enhancing faculty engagement in academic supervision. *International Journal of Higher Education*, *9*(4), 112–121.

Setyaningsih, S., & Suchyadi, Y. (2021). Implementation of Principal Academic Supervision to Improve Teacher Performance In North Bogor. *JHSS (Journal of Humanities and Social Studies)*, *5*(2), 179–183. https://doi.org/10.33751/jhss.v5i2.3909

Sirait, D., Suriansyah, S., Ngadimun, N., & Suhaimi, S. (2021). The Influence of Principal Transformational Leadership, Work Culture and Work Environment on Teacher Performance in State Senior High Schools throughout Banjarbaru City . *Journal of Advances in Education and Philosophy* , *5*(12), 391–400. https://doi.org/10.36348/jaep.2021.v05i12.004

Solomon, D., & Theiss, J. (2022). *What is Interpersonal Communication?* (2nd Edition). Routledge.

Sugiyono. (2020). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Alfabeta.

Suhaimi. (2018). Kepemimpinan Transformasional Kepala Sekolah pada SMP Muhammadiyah 4 Banjarmasin. *Jurnal Penelitian Tindakan Dan Pendidikan*, *4*(1), 37–46.

Sunaryo, Y. (2020). Academic Supervision of School Principals and Teacher Performance: A Literature Review. *International Journal Pedagogy of Social Studies*, *5*(2), 17–34.

Susanti, S., Wardiah, D., & Lian, B. (2020). Effect of academic supervision of school heads and school culture on quality teaching teachers. *International Journal of Progressive Sciences and Technologies*, *20*(1), 67–77.

Susanto, A., & Lestari, D. (2022). Peran komunikasi interpersonal dalam meningkatkan efektivitas supervisi akademik. *Jurnal Ilmu Pendidikan*, *15*(3), 57–65.

Susilawati, Y., Suhaimi, S., & Noorhapizah, N. (2021). Relationship of Transformational Leadership, Interpersonal Communication with Teacher Performance through Teacher Discipline . *Journal of Advances in Education and Philosophy* , *5*(11), 357–363. https://doi.org/10.36348/jaep.2021.v05i11.004

Tanjung, B. N., Rahman, Y., & Suryana, A. T. (2020). The Influence of Transformational Leadership, Job Satisfaction and Organizational Citizenship Behavior on the Performance of Islamic School Teachers. *Systematic Reviews in Pharmacy,* , *11*(7), 539–546.

Wijayanto, S., Abdullah, G., & Wuryandini, E. (2021). Pengaruh gaya kepemimpinan transformasional, motivasi kerja, dan kepuasan kerja terhadap kinerja guru sekolah dasar. *Jurnal Akuntabilitas Manajemen Pendidikan*, *9*(1), 54–63. https://doi.org/10.21831/jamp.v9i1.35741