

The Influence of Principal Academic Supervision, Work Environment and Self-Efficacy on Teacher Performance

Wiwit Rizqiani

Educational Management, Yogyakarta State University, Indonesia
Email: wiwit0020fip.2021@student.uny.ac.id

Received : 27 February - 2025

Accepted : 09 April - 2025

Published online : 14 April - 2025

Abstract

This research seeks to investigate how the supervision of academic principals, the atmosphere at work, and self-confidence affect the teaching quality in high schools located in the Ngaglik District. The study follows an ex-post facto design with a focus on quantitative analysis. The population of this study was 111 teachers in high schools in Ngaglik District. The determination of the research sample of 93 teachers used the simple random sampling technique. The classical assumption test was carried out by testing for normality, linearity, multicollinearity, and heteroscedasticity. The study revealed that principal's academic supervision (X1), work environment (X2), and self-efficacy (X3) each had a positive and significant impact on teacher performance (Y). Academic supervision (X1) had a regression coefficient of 0.419, $t = 5.949 > 1.580$, with a significance value of $0.000 < 0.05$. The work environment (X2) showed a coefficient of 0.345, $t = 4.668 > 1.580$, and significance of $0.000 < 0.05$. Self-efficacy (X3) recorded the highest influence, with a coefficient of 0.460, $t = 6.920 > 1.580$, and a significance value of $0.000 < 0.05$. Simultaneously, academic supervision (X1), work environment (X2), and self-efficacy (X3) collectively influenced teacher performance (Y) significantly, indicated by $F = 17.537 > 4.04$, significance = $0.000 < 0.05$, and an R^2 value of 0.401.

Keywords: Principal's Academic Supervision, Work Environment, Self-Efficacy, Teacher Performance, High School Education.

1. Introduction

The flow of change is increasingly rapid without being realized. Various routines of obligations and demands are carried out in order to prepare for challenges. Efforts are made aimed at realizing the implementation of a program. This is focused on producing quality education for the generation of human resources in facing life in the future. Many efforts are made to prepare for the challenges of global life, one of which is through education. Through education, the younger generation can prepare various anticipations of polemics and challenges as provisions needed in the future. According to Law Number 20 of 2003, quality education is considered a basic entitlement that should be available to every individual. In line with the provisions that must be received by the nation's generation without exception, this includes the implementation of education. Education is a forum for forming the personality of the younger generation who are oriented towards producing intelligent and characterful people. In this case, teachers have an important role in the success of a program. With this, it can be seen that to see the success of achieving quality education can be seen through the results of the quality of its human resources.

Teachers play a crucial role in ensuring the success of the educational process (Nurcahyani et al., 2022). Without teachers, the dreams and hopes of schools and education



agencies will only be mere dreams. The learning implementation system is regulated by the curriculum that has been decided by the government and then realized through the learning process in accordance with educational goals. To achieve hopes and dreams in the future, now the task as an educator is increasingly complex in making various efforts to improve and adjust the mastery of the competencies they have (Hidayat Sutisna et al., 2023).

To produce valuable education, there is a strong relationship with the existence of professional education personnel. A professional teacher is someone who has a profession as an educator who is supported by extensive knowledge and experience that is able to transmit it (Illahi, 2020). Guided by their experience and knowledge, teachers are able to choose and determine which methods, models and strategies are appropriate to use in teaching. In line with Agustini (2018), a teacher must possess the ability to nurture student talents and exchange knowledge with them. With this process, teachers are believed to be one of the components that contribute to the influence in the learning process.

Besides teachers, the principal is also considered a tangible representation of work performance that can be evaluated. Teachers and principals are a unit that can be the main focus when quality produces what is expected or if there is a decline in the scope of the school. The principal is seen as a crucial element in education, contributing significantly to the enhancement of educational standards. This is stated in Government Regulation (PP) Number 28 Article 12 Paragraph 1 of 1990 concerning Basic Education, which explains that the principal has the task and responsibility for organizing educational activities, school administration, coaching education personnel, and maintaining and utilizing infrastructure. The principal is believed to be the holder of the highest authority in the school scope so that he is responsible for improving education that is accountable to the success of students and their programs (Fitrah, 2017). In this case, it is necessary to know that the principal's task is not only to make various efforts to improve quality education but also to pay attention to his employees to always maintain and improve their work performance. This can be a note that improvements in the quality of education are not successful, namely influenced by two factors. First, the focus on the development strategy in education that is input oriented is understood as if the educational input has been fulfilled such as materials, learning tools, media, methods, infrastructure, and teacher training then the output produced will be of good quality but not entirely so. Second, the management in education that is macro-oriented is understood as the rules of the bureaucracy at the central level cannot be fully implemented in the field where it is known that the distribution is not the same.

According to the regulations governing the delegation of authority originating from the center and directed at each region and school, the role of school leaders is the main thing that influences their subordinates. Along with the challenges of global life, namely the development of technology in the 4.0 era, it is believed that there are several roles that replace people in certain fields. The most appropriate solution to deal with it is to adapt learning that is adjusted to the times (Dito & Pujiastuti, 2021). Changes that must be made by teachers through adjustments to the curriculum by implementing several contents that are in line with students' abilities according to 21st century developments and selecting the right learning model for the millennial generation. In 2019, the Ministry of Education and Culture's Regional Education Balance data revealed that teachers in Sleman Regency scored 73.51 on the Teacher Competency Test at the high school level, falling below the government's target score of 80. Based on these data, in line with Qomario et al. (2018) states that several teachers still do not meet the specified criteria.

For a teacher to effectively carry out their roles and responsibilities, they must possess fundamental competencies as a foundation. Although it cannot be denied that a teacher's

duties are indeed very many that must be completed. Returning to the primary duty of the teacher, which is to instruct and enlighten students. As per the findings from interviews held on May 31, 2024, with high school principals and a few teachers in Ngaglik District, Sleman Regency, the preliminary investigation by the researcher revealed issues in the execution of academic oversight by the principal, such as the fact that the academic oversight by the principal was not operating at its best. Principal supervision that did not run optimally and routinely, there was even one school that had never carried out academic supervision at all. The interview on June 5, 2024, there were problems with the physical work environment such as limited facilities and infrastructure in each school covering almost all space limitations in the learning process. Furthermore, the interview conducted on June 8, 2024, still found several teachers who were less able to manage the class, such as no reprimands given to students who came and went in and out of the school when the principal was not there. The author seeks to investigate how the principal's academic supervision, work environment, and self-efficacy impact teacher performance in high schools in Ngaglik District, Sleman Regency, DIY, based on the context provided.

2. Literature Review

2.1. Teacher Performance

Teacher performance is the ability possessed by teachers to demonstrate the skills of a competency that is implemented in the world of work. The duties of teachers include various activities aimed at facilitating the educational process and reaching educational objectives through effective instruction. Teacher performance can be shown through work results. Performance is a picture to show the level of achievement in implementing an activity. Through the performance of a principal, one can see the extent to which a teacher's performance has been achieved in relation to the learning carried out. Therefore, teacher performance plays a very important role as a benchmark for achieving learning targets (Arimbi Pamungkas, 2022). A teacher's effectiveness can be measured by the results of their teaching, their ability to monitor student progress, their evaluation methods, and their capacity to recognize areas needing improvement (Hardiyati et al., 2022).

In accordance with the criteria for teacher performance laid out in Article 20 of Law Number 14 of 2005 on Teachers and Lecturers, teachers must fulfill certain responsibilities which include: (1) planning educational activities, conducting high-quality teaching, and evaluating student learning outcomes, (2) continuously enhancing academic qualifications and skills in alignment with advancements in various fields, (3) demonstrating fairness and avoiding discrimination based on gender, religion, ethnicity, race, or physical attributes, (4) adhering to legal regulations, ethical principles, and religious values, and (5) promoting and preserving national harmony.

2.2. Principal's Academic Supervision

Supervision is a process that involves offering support to teachers, empowering them to enhance their skills and facilitate learning (Addini et al., 2022). Supervision is a function and direction given to provide instructions, provide motivation and establish communication with members of the organization to be able to carry out the expected work (Suchyadi et al., 2022). Supervision involves a range of actions intended to guide educators in enhancing their skills for teaching and learning (Musyadad et al., 2022). The implementation of supervision is a form of effort given from superiors to subordinates with an orientation towards improving work quality (Nasution et al., 2023). Academic supervision is an activity carried out by the

principal or assessor which aims to improve the ability of teacher performance to achieve learning goals. Factors that influence academic supervision are (1) organization, (2) employees, (3) leadership and (4) supervision. In line with Hanafiah et al. (2022), the factors that indicate the success of the principal's academic supervision are as follows: (1) the existence of supervision program planning, (2) work process coaching, (3) implementation of supervision, (4) assessment of work results. To improve learning outcomes, in addition to implementing academic supervision, the principal is also influenced by the work environment or school environment (Muhajirah et al., 2023).

2.3. Work Environment

A positive work environment is essential for maximizing employee performance, as it fosters comfort and enthusiasm in completing tasks, ultimately leading to improved teacher productivity (Anita et al., 2022). The environment is everything that influences individuals. The environment for individuals can be interpreted as something that comes from within the individual, both physically and psychologically and also from outside such as objects and social relationships between social beings and educational institutions (Nurhayati et al., 2022). A positive work atmosphere is essential for productivity and wellbeing, encompassing both tangible and intangible aspects that promote comfort, security, and a sense of belonging while enhancing performance goals (Suryati et al., 2022). The workplace encompasses all elements surrounding employees that have the potential to impact their performance in completing assigned responsibilities.

From the explanation above, the work environment consists of physical and psychological. Both cannot be separated so that they influence each other. The indicators of the work environment are as follows: (1) The relationship between teachers and the leadership of the organization, where teachers who feel good leadership will be motivated to work as well as possible. If this cannot be created in the work environment, it will affect employee performance, (2) Relationships between fellow teachers, with close, friendly and supportive co-workers will lead to increased satisfaction. If the relationship between co-workers is not good, it will affect the work results produced, (3) Working conditions, if the working conditions are good (for example, the environment is clean) then the teacher will find it easier to carry out his duties. Conversely, if this is not felt by the teacher, the teacher will do his duties carelessly or not optimally, and (4) Office facilities, if the office facilities are fulfilled, the teacher will feel easy and smooth in carrying out his duties and responsibilities (Lubis, 2020).

2.4. Self-Efficacy

The theoretical basis was first used by psychology scholar Albert Bandura by describing it in the form of psychological procedures in the form of therapy for individuals. In this case, the benchmarks used to measure changes in self-efficacy are distinguished at the level of intensity and generality. The expectation of this self-efficacy is a mechanism by which changes can be detected and can influence an outcome (Corry & Stella, 2018). The context of measuring self-efficacy according to Bandura & Wessels (1997) is that a person cannot be one who requires mastery of every area of human life. People have differences in their fields according to where they develop their self-efficacy and according to the level of development in certain achievements.

To see the quality of a teacher's self-efficacy can be observed through the identification of dimensions that are able to measure the level of success. Identification of these dimensions includes: (1) Magnitude, meaning the level of a task load. This can be known through the success achieved from the level of difficulty of the tasks and responsibilities that must be faced by a teacher. It should be noted that the beliefs that each individual has regarding the workload

given are certainly different. This aspect tends to determine the selection of behavior for the reaction received through an understanding of the difficulty of the task. If the assignment is only arranged based on the level of difficulty, then knowing the significant level in the teacher will not show the expected results. Anyone who is given such a task will only carry out tasks that are considered capable and will avoid tasks whose level of difficulty is beyond their ability, (2) Generality, meaning the belief of feelings owned by individuals or teachers that show the ability to do the task. This aspect is related to the behavior of individuals with optimism about their abilities. The belief that is owned depends on the level of understanding of analyzing each of themselves from the routine activities carried out, (3) Strength, meaning a sense of trust in the individual's belief in the abilities that he has. This aspect is based on a strength that is owned by an individual's belief in his abilities. High and strong expectations will encourage the achievement that he wants to achieve according to the desired goal, although it is not a barrier for him if he has to do it for the first time. This will also be an obstacle if the belief that the individual has is weak, it will be easily shaken (Bandura & Wessels, 1997).

3. Methods

This study uses an *ex-post-facto* research approach, which is a study by conducting an empirical investigation that is statistical in nature, where a researcher does not have direct control over the variables being studied because the data obtained cannot be manipulated (Sugiyono, 2019). The study falls under the category of quantitative research methodology which is characterized by its scientific, tangible, and empirical nature, as well as being objective, measurable, rational, and systematic. This approach is commonly known as the discovery method as it is frequently employed to explore new areas of science and technology. Studying particular groups or samples, gathering information with research tools, and examining the information through statistical techniques are essential components of this process aimed at validating theories (Sugiyono, 2019).

3.1. Time and Place of Research

This research was done in high schools throughout Ngaglik District, Sleman Regency, DIY and teachers who were respondents in the study. The implementation of this research was carried out in May-July 2024.

3.2. Population and Research Sample

As per Sugiyono (2019), population can be defined as a broad category encompassing individuals or entities with specific features and quantities that researchers utilize for analysis and forming conclusions. All the educators from high schools in Ngaglik District, Sleman Regency, DIY were part of this research, totaling 111 teachers from different institutions: SMAN 1 Ngaglik with 46 teachers, SMAN 2 Ngaglik with 50 teachers, and SMA Insan Mulia Boarding School with 15 teachers. Meanwhile, the sample calculation is 70% of 111 times 1.195, with a population confidence level of 95% and an error rate of 5%. Of the 111 teachers drawn beyond the 5% error rate, a point was found at 70, with an error interval of 5% and a confidence level of 95%, so the multiplier factor is 1.195. Thus, the sample calculation is 70% of 111 times 1.195 = 93 teachers.

3.3. Research Variables

Principal's Academic Supervision (X1), Work Environment (X2), Self-Efficacy (X3), and Teacher Performance (Y).

3.4. Data Analysis Techniques

This research uses a questionnaire or survey given in writing to respondents to collect data (Sugiyono, 2019). All educational institutions receive research questionnaires sent offline. The results produced are more ideal and considered more effective because they can be achieved in a shorter time during teacher working hours. In this study, behavior is measured using a category scale, which is a commonly used scale in research to quantify the actions of individuals (Furchan, 1992). The use of the measurement scale in this study has been modified with only four alternative answers provided and eliminating the answer option sometimes. The following are the scores for each alternative answer "always" = 4; "often" = 3; "rarely" = 2; and "never" = 1.

3.5. Validity and Reliability of Research Instruments

If the research data can reveal a core on a focus that can be measured precisely through each appropriate, then the data is considered valid. Validity testing is carried out to evaluate the validity of the questionnaire (Ghozali, 2016). To test the validity of this study, Pearson's Product Moment Correlation is used together with the SPSS program system. To use Pearson's product moment correlation, the magnitude of the r value with a significance level of 5% is used. If the computed r value exceeds the r table value, then the statement is considered valid; however, if the calculated r value is lower than the r table, the statement is deemed invalid. Before conducting a validity test with statistics, this study was based on expert opinion. Furthermore, the steps to compile the parts of the instrument questionnaire use easy-to-understand diction. If the Cronbach Alpha coefficient surpasses 0.6, the statement is deemed dependable, whereas if it falls below that threshold, the statement is considered untrustworthy. The outcome of the computations conducted using the SPSS software and Cronbach Alpha, along with the reliability test results, indicated a rating of 0.878 (Reliable) for Y; 0.865 (Reliable) for X1; 0.854 (Reliable) for X2; and 0.907 (Reliable) for X3.

4. Results and Discussion

4.1. Research Results

4.1.1. Data Description

The total population of this study was 111 high school teachers in Ngaglik District, Sleman Regency, Yogyakarta. The number of samples in this study was 93 teachers from 3 schools in Ngaglik District, Sleman Regency, namely SMA Negeri 1 Ngaglik, SMA N 2 Ngaglik and SMA Pondok Pesantren Insan Mulia Yogyakarta. The data was obtained from filling out the questionnaire results for high school teachers throughout Ngaglik District, Sleman Regency. The number of teachers from each school can be illustrated in the diagram below:

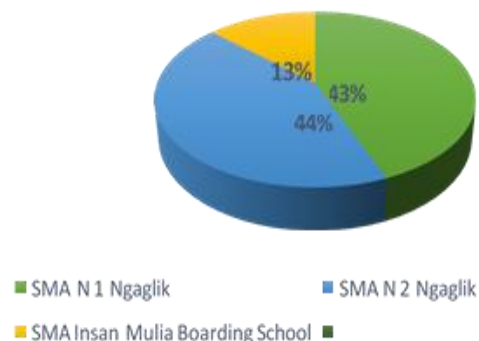


Figure 1. Diagram of Teacher Distribution in Each School

4.1.2. Descriptive Analysis

a) Description of Principal's Academic Supervision (X1)

The academic oversight data provided by the principal on the questionnaire consists of 20 statements, with a total of 93 respondents. The answers used were a category scale by modifying 4 alternative answers. The top mark reached a 4 before dropping to a 1. Within variable X1, the lowest achieved score was 44 and the highest was 71. After the data was processed, the results obtained were a mean of 59.63, a median of 60.00 and a standard deviation (SDi) of 6.081.

b) Work Environment Description (X2)

The data of the principal's academic supervision variable from the questionnaire totaling 20 statements and the number of respondents was 93 people. The answers used were a category scale by modifying 4 alternative answers. The top mark reached 4 before dropping to the lowest score of 1. In the X2 category, the lowest score achieved was 39 and the highest was 73. After the data was processed, the results obtained were a mean of 56.24, a median of 56.00 and a standard deviation (SDi) of 6.135.

c) Self-Efficacy Description (X3)

Self-efficacy variable data from a questionnaire consisting of 20 statements and 93 respondents. The answers used are a category scale by modifying 4 alternative answers. The highest score is 4 decreasing to the lowest score of 1. In variable X2, the minimum score obtained is 46 while the maximum score obtained is 80. After the data was processed, the mean result was 61.91, the median was 62.00 and the standard deviation (SDi) was 6.139.

d) Teacher Performance Description (Y)

Teacher performance variable data from a questionnaire consisting of 20 statements and 93 respondents. The answers used are a category scale by modifying 4 alternative answers. The highest score is 4 decreasing the lowest score is 1. In variable X2, the minimum score obtained is 48 while the maximum score obtained is 71. After the data was processed, the mean result was 58.60, the median was 58.00 and the standard deviation (SDi) was 4.812.

4.1.3. Prerequisite Test Results

a) Normality Test

The aim of conducting a normality test is to determine whether the data follows a normal distribution. The Kolmogorov-Smirnov method is employed for this test using the SPSS software, with a significance level of 95% utilized for analysis. Below are the conclusions drawn from the data analysis:

Table 1. Normality Test Results

Psig	Conclusion	Interpretation
0,200	P > 0,05	Normal

If the results of the normality test show a significance value above 0.05, it can be concluded that the data is normally distributed. On the other hand, if the significance value is below 0.05, it indicates that the data deviates from a normal distribution. The Kolmogorov-Smirnov test results suggest that the data is distributed normally, given that the Asymp. Sig. value of 0.200 exceeds 0.05.

b) Multicollinearity Test

The following are the results of the calculation of correlation values using SPSS from variables X1, X2, and X3:

Table 2. Multicollinearity Test Results

No	Variable	Tolerance	VIF
1	Principal's Academic Supervision	0,636	1,572
2	Work Environment	0,463	2,159
3	Self-Efficacy	0,442	2,265

The multicollinearity test reveals that the tolerance values for X1, X2, and X3 are 0.369, 0.463, and 0.442 respectively. Not only that, the VIF value obtained for X1 is 1.572, X2 is 2.159, and X3 is 2.265. The findings show that the tolerance threshold exceeds 0.10, while the VIF computation falls below 10, indicating the absence of multicollinearity among the independent variables studied.

c) Heteroscedasticity Test

The Heteroscedasticity Test is used to determine if there are variations in residuals among observations in a regression analysis. Below are the outcomes of the Scatterplot heteroscedasticity test.

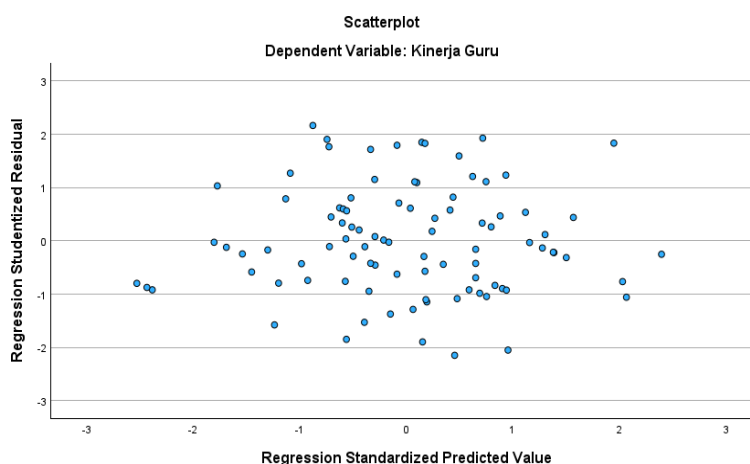


Figure 2. Scatterplot Heteroscedasticity Test Results

Based on the Heteroscedasticity Test, it shows that:

- a) The data points are spread above and below or around the number 0.
- b) The points do not gather.
- c) The distribution of data points does not form a pattern.
- d) The distribution of data points does not form any pattern (wavy, wide, sheet, vertical line, etc.).

4.1.4. Linearity Test

The Linearity Test examines whether there is a direct correlation between the various factors that influence the outcome. Decisions are made by analyzing whether the Sig value is greater than 0.05, then a linear connection between the independent variables and the dependent variable can be observed.

- a) Linearity of Teacher Performance Variable (Y) towards Principal Academic Supervision Variable (X1)

Table 3. Results of the Linearity Test Values of Variable (Y) against (X1)

Variable	Psig	Conclusion	Interpretation
Y against X1	0,456	Psig > 0,05	Linear

According to the calculations, the Sig value achieved is 0.456. Since 0.456 is greater than 0.05, it can be inferred that there is a correlation between the variables examined.

b) Linearity of Teacher Performance Variable (Y) to Work Environment Variable (X2)

Table 4. Results of the Linearity Test Values of Variable (Y) against (X2)

Variable	Psig	Conclusion	Interpretation
Y against X2	0,612	Psig > 0,05	Linear

It can be inferred from the computed value of 0.612 for the Sig that there exists a strong correlation between all variables examined, exceeding the threshold of 0.05.

c) Linearity of Teacher Performance Variable (Y) to Work Environment Variable (X3)

Table 5. Results of Linearity Test Values of Variable (Y) against (X3)

Variable	Psig	Conclusion	Interpretation
Y against X3	0,112	Psig > 0,05	Linear

According to the findings, the Sig value achieved is 0.112. Since the value of 0.112 is greater than 0.05, it can be inferred that there exists a linear correlation among the variables examined.

4.1.5. Hypothesis Testing

Hypothesis testing is proven to determine the truth or accuracy of temporary assumptions. There are four hypotheses tested through simple regression tests to determine each influence between the independent variables (X1), (X2), and (X3) on the dependent variable (Y).

a) The Influence of the Principal's Academic Supervision Variable (X1) on the Teacher Performance Variable (Y)

Ha1 = There is a positive and significant influence on the principal's academic supervision variable on the teacher performance variable.

Ho1 = There is no positive and significant influence on the principal's academic supervision variable on the teacher performance variable.

Table 6. Results of Simple Hypothesis Testing of the Effect of Variable X1 on Variable Y

Independent Variable	Constant	Regression Coefficient	T	F	Sig	R ²	Interpretation
Principal's Academic Supervision	33,629	0,419	5,949	35,393	0,000	0,280	Ha1 accepted and Ho1 rejected

The tested variable has a constant value of 33.629 and a regression coefficient of 0.419 from table 6. The positive coefficient suggests a favorable impact from the tested variable. Based on the calculations in the table, it is evident that Ha1 is supported while Ho1 is dismissed, indicating a beneficial impact and importance on both factors.

b) The Influence of Work Environment Variables (X2) on Teacher Performance Variables (Y)

Ha2 = There is a positive and significant influence on the work environment variable on the teacher performance variable.

Ho2 = There is no positive and significant influence on the work environment variable on the teacher performance variable.

Table 7. Results of Simple Hypothesis Testing of the Effect of Variable X2 on Variable Y

Independent Variable	Constant	Regression Coefficient	T	F	Sig	R2	Interpretation
Work Environment	39,215	0,345	4,668	21,789	0,000	0,193	Ha2 accepted and H02 is rejected

The tested variable has a constant value of 39.215 and a regression coefficient of 0.345 from table 7, suggesting a positive impact of the variable being tested. Through the results of the calculation table, it can be inferred that Ha2 is supported while H02 is not, leading to a beneficial impact on both variables with meaningful implications.

c) The Influence of Self-Efficacy Variable (X3) on Teacher Performance Variable (Y)

Ha3 = There is a positive and significant influence on the work environment variable on the teacher performance variable.

H03 = There is no positive and significant influence on the work environment variable on the teacher performance variable.

Table 8. Results of Simple Hypothesis Testing of the Effect of Variable X3 on Variable Y

Independent Variable	Constant	Regression Coefficient	T	F	Sig	R2	Interpretation
Self- Efficacy	30,106	0,460	6,920	47,884	0,000	0,345	Ha3 accepted and H03 is rejected

The tested variable has a constant value of 30.106 and a regression coefficient of 0.460, as indicated in table 8. The positive coefficient suggests a positive impact of the tested variable. Based on the findings in the calculation table, it is evident that Ha3 is embraced while H03 is dismissed, indicating a beneficial impact and importance on the variables. Then continued with the calculation of the four hypotheses simultaneously by testing multiple regression. This regression test consists of 3 independent variables and 1 dependent variable.

d) The Influence of the Principal's Academic Supervision Variables (X1), Work Environment (X2) and Self-Efficacy (X3) on the Teacher Performance Variable (Y)

Ha4 = There is a positive and significant influence on the work environment variable on the teacher performance variable.

H04 = There is no positive and significant influence on the work environment variable on the teacher performance variable.

Table 9. Results of Simple Hypothesis Testing of the Effect of Variable X3 on Variable Y

Independent Variable	Constant	Regression Coefficient	T	F	Sig	R2	Interpretation
X1	24,748	0,419	5,949	19,860	0,000	0,401	Ha4 accepted and H04 is rejected
X2		0,345	4,668				
X3		0,460	6,920				

The following constant value of the tested variables is 24.748 with the coefficient value of the X1 regression of 0.419, X2 coefficient value of the regression of 0.345, and the coefficient value of the X3 regression of 0.460 based on table 9 is positive which indicates that there is a positive influence of all variables tested. It can be determined from this analysis that the combined effect of X1, X2, and X3 on Y is beneficial. It has been established that when the value of Sig 0.000 < 0.05, there is a notable correlation between X1, X2, and X3 collectively affecting Y. Analysis of the data indicates that Ha4 is supported while H04 is dismissed,

showing a beneficial impact and relevance of the three independent variables on the dependent variable.

4.2. Discussion

4.2.1. The Influence of the Principal's Academic Supervision Variable (X1) on the Teacher Performance Variable (Y)

The simple regression calculations showed that the variable X1 had a t value of 5.949, which was greater than the t table value of 1.580. This suggests that there is a significant influence from the variables being tested, specifically X1 and Y. Variable X1 has a regression coefficient of 33.629 when compared to variable Y. This suggests that 28% of the influence on variable Y can be attributed to variable X1 while the remaining 72% is due to other variables.

The preparation of indicators in the research questionnaire items refers to 4 independent sub variables (X1) including supervision planning, implementation of supervision, monitoring and evaluation and follow-up. The role and purpose of holding academic supervision itself are guiding and facilitating teachers to develop their competence, motivating teachers to carry out their duties and obligations properly, assisting teachers in managing the curriculum and learning and assisting teachers in fostering their students to achieve their best potential.

The principal starts by supervising academics in order to enhance the quality of education. The key factors that influence the enhancement of teacher performance through academic supervision can be identified by the outcomes of the supervision process, highlighting areas for improvement and guiding teachers towards better performance in the future.

4.2.2. The Influence of Work Environment Variables (X2) on Teacher Performance Variables (Y)

The results of the calculations using simple regression showed that the variable X2 had a t-value of 4.668, which was greater than the critical t-value of 1.580. This indicates that there is a significant impact of the tested variables, specifically X2 on Y. The value of the regression coefficient for X2 in relation to Y is 39.215, indicating that X2 has a 19.3% impact on Y, with the remaining 80.7% being influenced by other factors.

The following sub-variables in this study consist of four, including working conditions, office facilitators, relationships between teachers and organizational leaders, and relationships between fellow teachers (Istianah, 2019). In line with the challenges of education in an increasingly rapid era, the role of teachers can be considered the center and backbone of the success of education in an increasingly advanced era of education. Therefore, educators can demonstrate their performance by answering questions according to the requirements to provide high-quality and interesting learning activities for students. Undoubtedly, when teachers have other resources that work well together, the results will be maximized. A work environment is an example. A teacher's work environment is considered highly impactful as it encompasses all their activities, whether physical or non-physical. If this can be resolved well, the feelings that arise will be positive and the enthusiasm of the teachers will be positive, so that their routines will not be a burden for them. It is very important for education to pay attention to the dynamic aspects of the work environment, as well as the roles and impacts it has. A good work environment will increase teacher motivation, which means that they will feel comfortable in the workplace and that the results obtained will be the best. The primary factor that impacts the enhancement of teacher effectiveness in the workplace is highlighted in the second point, which emphasizes the importance of a well-lit and dry environment for

facilitating smooth learning (Lubis, 2020). This means that teachers agree on the supporting atmosphere factor in implementing learning, namely being influenced by the physical conditions of the work environment in the organization.

4.2.3. The Influence of Self-Efficacy Variable (X₃) on Teacher Performance Variable (Y)

From the calculation results through simple regression, the variable X₃ with Y obtained a t value of $6.920 > t$ table 1.580 so that the variables tested, specifically X₃, have an impact on Y. The regression coefficient for X₃ on Y is 39.215 , suggesting that X₃ influences Y by 34.5% , while other variables contribute 65.5% to the impact on Y. The following sub-variables in the study used include nine components, including magnitude, generality, strength, teaching, adjusting education according to needs, student motivation, maintaining discipline, working with colleagues and guardians, and facing change and challenges (Hassan & Ibourk, 2021). The basic importance of self-efficacy is believed to be a belief.

Self-efficacy is the belief in the ability to organize and carry out the actions necessary to achieve achievement. Positive (high) self-efficacy is a role that tends to be dominant that can improve teacher performance. Teachers with high self-efficacy tend to be more ready to experiment and accept innovations in learning that are in accordance with student needs (Santoso & Setiawan, 2018). If teachers have high self-efficacy, their performance will be better. Sources of self-efficacy include the teacher's own mastery, social modeling from successful people, and social persuasion from the environment, usually from appeals and encouragement from superiors and respected positions. As for the dominant indicators that influence the improvement of teacher performance through self-efficacy, the first point states that teachers who have high confidence will be able to easily explain the material to be delivered (Bandura & Wessels, 1997). This shows that a teacher who has extensive experience, good understanding, and always thinks positively and progressively is a teacher who has high self-efficacy.

4.2.4. The Influence of Academic Supervision Variables (X₁), Work Environment (X₂) and Self-Efficacy (X₃) on Teacher Performance Variables (Y)

From the results of the calculations carried out through simple regression, the variable X₄ with Y obtained the value of f value (17.537) $>$ f table (4.04) so that there is an influence of the variables tested, namely X₁, X₂, and X₃ with Y. The regression coefficient value obtained is 0.553 so that it can be seen that the variables X₁, X₂, X₃ have an effect of 55.3% on the variable Y and the other 44.5% are influenced by other variables. The following sub-variables in the study used include nine components, including making learning plans, implementing learning, implementing interpersonal relationships, implementing evaluation of learning outcomes, implementing enrichment programs, and implementing remedial programs. Not a few teachers feel bored with the same routine because of their duties and demands as teachers. Internal and external factors influence teacher boredom (Fitri et al., 2022). In the Republic of Indonesia, the process of becoming a teacher is governed by Law number 14 of 2005, which specifies certain competencies that teachers must possess. These competencies include personality, pedagogical, social, and professional skills. Periodic and systematic work performance assessments can be used to determine the standard of success of teacher performance.

Undoubtedly, the job of an educator makes you feel tired like anyone else. Those who work as educators may feel bored because of the burden of tasks and responsibilities they face. Teachers often experience stress, and if this stress is allowed to continue, it will cause fatigue.

Burnout is a condition in which people who experience continuous work stress tend to easily feel physically, mentally, and emotionally tired. The following factors fall into the category of teacher failure: Inadequate knowledge of effective learning techniques, insufficient classroom control abilities, and limited skills in conducting and applying classroom-based research, lack of desire to excel, lack of discipline, lack of professional commitment, and lack of ability to manage time. In addition, things like teachers must be able to plan learning, be able to improve and develop academic competencies and qualifications along with advances in science and technology, be able to act fairly without discrimination based on race, religion, culture, ethnicity, gender, or certain economic conditions, be able to uphold regulations, laws, and teacher codes of ethics, and be able to fulfill their obligations as educators.

The academic supervision provided by the principal is vital for achieving success and motivating students to meet their expected academic outcomes. Factors that indicate the success of the principal's academic supervision include planning the supervision program, coaching the work process, implementing supervision, and evaluating work results (Sunaedi et al., 2023). These factors include the community environment where the school is located, the size of the school for which the principal is responsible, and the type of education provided. Apart from these things, the work environment will also affect the expected results.

Starting with an ideal work environment. Ideal is certainly an intervention that is no less important and dominant that is needed to produce good performance. It is very important for an organization to have good relationships in the workplace, especially in a non-physical work environment. Many organizations are destroyed and failed because of this. An organization will collapse if each individual prioritizes their personal pride. The physical needs of teachers can be met with a good work environment. This can influence and make it easier for them to carry out the tasks given (Sugiyono, 2019). All teacher duties and responsibilities must be different. Self-efficacy is a way to assess the abilities of each teacher. Teachers who are very confident are more likely to be open, forward-thinking, and interested in new things; these traits are liked both in the organization and in the classroom (teachers and students), and are liked by their students. However, it is still possible that there are teachers who are not confident. The failure of teachers to complete their tasks causes failure, which is the result of teachers who are not confident. Teachers can experience stress and depression, which can affect their performance. There are several different ways to build one's own self-efficacy; some are based on qualities that already exist within a person, while others come from planned outside influences.

5. Conclusion

Research conducted in high schools in Ngaglik District, Sleman Regency, DIY, revealed the correlation between principal's academic supervision and teacher performance. The study found that as the level of academic supervision from the principal increased, so did the performance of the teachers in the school. The variable of the principal's academic supervision was classified as moderate after analyzing the descriptive data distribution. The better the working environment provided, the better the performance of teachers. Based on the results of the distribution of descriptive analysis categorization on the work environment variable, it is categorized as high. The higher the self-efficacy possessed by the teacher, the higher the teacher performance produced. Based on the results of the distribution of descriptive analysis categorization on the self-efficacy variable, it is categorized as moderate. The Determinant coefficient (R^2) holds a value of 0.401, signifying that 40.1% of the variability in the dependent variable can be attributed to the independent variable in this research. The remaining 59.9%

of the variability is governed by unexamined variables in this study. Based on the results of the distribution of descriptive analysis categorization on the teacher performance variable, it is categorized as moderate.

The suggestions from the research results include the principals of senior high schools in Ngaglik District are expected to be able to re-optimize the implementation of academic supervision as evidenced by the research in the medium category (41%). Senior high schools in Ngaglik District are expected to be able to optimize and maintain the work environment as evidenced by the research in the high category (43%). Senior high schools in Ngaglik District are expected to pay more attention to the self-efficacy of teachers through the results of the research, the magnitude of the influence is in the medium category, namely 40%. Researchers are urged to focus on factors that can impact the performance of teachers in the future. Further researchers can also test more in-depth aspects of supervision such as clinical, administrative, institutional supervision, etc. Further researchers can use qualitative research methods that aim to find out the phenomenon as deeply as possible so that the information obtained is better and stronger.

6. References

- Addini, A. F., Husna, A. F., Damayanti, B. A., Fani, B. I., Nihayati, C. W. N. W., Daniswara, D. A., Susanti, D. F., Imron, A., & Rochmawati, R. (2022). Konsep Dasar Supervisi Pendidikan. *Jurnal Wahana Pendidikan*, 9(2), 179. <https://doi.org/10.25157/wa.v9i2.7639>
- Agustini, B. (2018). Peran Guru Dalam Pengelolaan Pembelajaran. *Jurnal Ilmiah Iqra*, 12, 1693–5705.
- Anita, A., Chairilisyah, D., & Kartikowati, S. (2022). The Influence of Principal Leadership and Work Motivation on Teacher Performance at Elementary School. *Journal of Educational Sciences*, 6(3), 429. <https://doi.org/10.31258/jes.6.3.p.429-443>
- Arimbi Pamungkas, A. T. (2022). Students' Difficulties at Elementary School in Increasing Literacy Ability. *Attractive : Innovative Education Journal*, 4(1), 1–12.
- Bandura, A., & Wessels, S. (1997). *Self-efficacy*. Cambridge University Press Cambridge.
- Corry, M., & Stella, J. (2018). *Teacher self-efficacy in online education: A review of the literature*.
- Dito, S. B., & Pujiastuti, H. (2021). Dampak Revolusi Industri 4.0 Pada Sektor Pendidikan: Kajian Literatur Mengenai Digital Learning Pada Pendidikan Dasar dan Menengah. *Jurnal Sains Dan Edukasi Sains*, 4(2), 59–65. <https://doi.org/10.24246/juses.v4i2p59-65>
- Fitrah, M. (2017). Peran Kepala Sekolah Dalam Meningkatkan Mutu Pendidikan. *Jurnal Penjaminan Mutu*, 3(1), 31. <https://doi.org/10.25078/jpm.v3i1.90>
- Fitri, A., Auzar, A., & Burhanuddin, D. (2022). Pengaruh Supervisi Akademik Kepala Sekolah Dan Motivasi Kerja Terhadap Kinerja Guru Tk Kecamatan Tampan Kota Pekanbaru. *Jurnal JUMPED (Jurnal Manajemen Pendidikan)*, 10(1).
- Furchan, A. (1992). *Pengantar metode penelitian kualitatif*. Usaha Nasional.
- Ghozali, I. (2016). Aplikasi Analisis multivariete dengan program IBM SPSS 23 (Edisi 8). *Cetakan Ke VIII. Semarang: Badan Penerbit Universitas Diponegoro*, 96.
- Hanafiah, H., Sauri, R. S., Nurhayati Rahayu, Y., & Arifudin, O. (2022). Upaya Meningkatkan Kompetensi Profesional Guru melalui Supervisi Klinis Kepala Sekolah. *JiIP - Jurnal Ilmiah Ilmu Pendidikan*, 5(10), 4524–4529. <https://doi.org/10.54371/jiip.v5i10.1049>
- Hardiyati, M., Isnaini, F., Apriani, W., Hasanahti, M., & Putri Harapan Hasibuan. (2022). Strategi Meningkatkan Kinerja Guru Profesional. *Cendekiawan: Jurnal Pendidikan Dan Studi Keislaman*, 1(1), 19–25.

- Hassan, O., & Ibourk, A. (2021). Burnout, self-efficacy and job satisfaction among primary school teachers in Morocco. *Social Sciences and Humanities Open*, 4(1). <https://doi.org/10.1016/j.ssaho.2021.100148>
- Hidayat Sutisna, S., Rozak, A., & Renanda Saputra, W. (2023). Peran Kepala Sekolah dalam Meningkatkan Mutu Pendidikan Sekolah. *JIIP - Jurnal Ilmiah Ilmu Pendidikan*, 6(9), 6895–6902. <https://doi.org/10.54371/jiip.v6i9.2718>
- Illahi, N. (2020). Peranan Guru Profesional Dalam Peningkatan Prestasi Siswa Dan Mutu Pendidikan Di Era Milenial. *Jurnal Asy-Syukriyyah*, 21(1), 1–20. <https://doi.org/10.36769/asy.v21i1.94>
- Istianah, I. (2019). Implementasi Program Supervisi Akademik Kepala Sekolah Dalam Meningkatkan Profesionalisme Guru Di Sman 1 Cikarang Utara Dan Man Kabupaten Bekasi. *Jurnal Administrasi Pendidikan*, 26(1), 72–87. <https://doi.org/10.17509/jap.v26i1.19861>
- Lubis, S. (2020). Pengaruh Lingkungan Kerja, Disiplin Kerja, Dan Motivasi Kerja Terhadap Kinerja Guru Madrasah Aliyah Negeri 2 Model Medan. *EduTech: Jurnal Ilmu Pendidikan Dan Ilmu Sosial*, 6(1), 18–26. <https://doi.org/10.30596/edutech.v6i1.4391>
- Muhajirah, B., Rahman, D., & Nursita, L. (2023). Problematika Dalam Pelaksanaan Supervisi Pendidikan. *Nazzama: Journal of Management Education*, 3(1), 84–96.
- Musyadad, V. F., Hanafiah, H., Tanjung, R., & Arifudin, O. (2022). Supervisi Akademik untuk Meningkatkan Motivasi Kerja Guru dalam Membuat Perangkat Pembelajaran. *JIIP - Jurnal Ilmiah Ilmu Pendidikan*, 5(6), 1936–1941. <https://doi.org/10.54371/jiip.v5i6.653>
- Nasution, I., Pramudya, A., Tanjung, A., Oktapia, D., & Nisa, K. (2023). Supervisi Pendidikan Era Society 5.0. *Inspirasi Dunia: Jurnal Riset Pendidikan Dan Bahasa*, 2(2), 118–128. <https://doi.org/10.58192/insdun.v2i2.764>
- Nurcahyani, S. R., Saptono, A., & Pratama, A. (2022). Does Teaching Practice Experience Affect Interest in Becoming a Teacher? The Role of Self-Efficacy as an Intervening Variable. *REVIEW OF MULTIDISCIPLINARY EDUCATION, CULTURE AND PEDAGOGY*, 1(4), 1–16. <https://doi.org/10.55047/romeo.v1i4.333>
- Nurhayati, E. C., Efendi, B., & Wardani, U. A. (2022). Pengaruh Kepemimpinan Kepala Sekolah, Disiplin Kerja, Motivasi Kerja, Lingkungan Kerja, Dan Etos Kerja Terhadap Kinerja Guru SMA N 1 Mojotengah. *Jamasy: Jurnal Akuntansi, Manajemen&Perbankan Syariah*.
- Qomario, Q., Kurniasih, S., & Anggraini, H. (2018). Pendidikan Anak Usia Dini. *Jurnal Caksana: Pendidikan Anak Usia Dini*, 1(2).
- Santoso, E., & Setiawan, J. L. (2018). Peran Dukungan Sosial Keluarga, Atasan, dan Rekan Kerja terhadap Resilient Self-Efficacy Guru Sekolah Luar Biasa. *Jurnal Psikologi*, 45(1). <https://doi.org/10.22146/jpsi.25011>
- Suchyadi, Y., Mirawati, M., Anjaswuri, F., & Destiana, D. (2022). Supervisi Akademik Dalam Meningkatkan. *Jurnal Manajemen Pendidikan*, 10(01), 67–71.
- Sugiyono. (2019). *Metode Penelitian Kuantitatif Kualitatif dan R&D*. Alfabeta.
- Sunaedi, A., Rudji, H., & Muhammadiyah Palu, U. (2023). Supervisi Akademik Kepala Sekolah dalam Meningkatkan Kinerja Guru di Madrasah Aliyah Negeri Tolitoli. *Journal of Educational Management and Islamic Leadership*.
- Suryati, Tannady, H., Lestari, N. C., Supriatna, D., & Mayasari, N. (2022). Analisis peran disiplin kerja, komunikasi dan lingkungan kerja terhadap kinerja guru dan karyawan sekolah dasar di DKI Jakarta. *Jurnal Kewarganegaraan*, 6(4), 6611–6624.