Teacher Performance Determinants

Rinaldi Rizal Affandi, **Yohny Anwar, M. Toyib Daulay**

Abstract

This study aims to analyze the effect of technology implementation, training, and work discipline on teacher performance with competence as an intervening variable. This research uses a quantitative approach with an associative research type. The population in this study consisted of all teachers totaling 50 people, and the sampling technique used was a census method, so the entire population was used as the sample with 100 respondents. The data analysis method used was Structural Equation Modeling (SEM) based on Partial Least Square (PLS) with the assistance of SmartPLS software. The results showed that work discipline has a positive and significant effect on teacher performance and competence. Competence also has a positive and significant effect on teacher performance. Training has a positive and significant effect on competence but does not have a significant effect on teacher performance. Technology implementation does not have a significant effect on teacher performance or competence. Furthermore, competence is proven to mediate the effect of work discipline and training on teacher performance, but it does not mediate the effect of technology implementation on teacher performance. Therefore, improving teacher performance can be achieved through enhancing work discipline and teacher competence.

Keywords: Technology Implementation, Training, Work Discipline, Competence, Teacher Performance, SmartPLS.

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Introduction

The success of the education system is largely determined by the quality of teachers as the main executors of the learning process in schools. Teachers not only function as deliverers of material but also as facilitators, motivators, guides, and agents of change who play a role in shaping the character and competence of students. Improving teacher performance is one of the main priorities in efforts to improve the quality of education. In the rapidly developing era of digital transformation, the world of education is undergoing significant changes, especially in terms of implementing learning technology. The integration of information and communication technology into the teaching and learning process has become an unavoidable necessity. Teachers are required to be able to utilize various digital devices, learning platforms, interactive media, and technology-based administrative systems to create effective, efficient, and engaging learning. Appropriate technology implementation can improve the quality of learning interactions, expand access to information, and encourage innovation in teaching methods. Training provides opportunities for teachers to update their knowledge, improve pedagogical and professional skills, and understand the latest education policies such as curriculum changes and competency-based learning methods. Effective training is not only theoretical but also able to have a real impact on improving teachers' teaching abilities. Discipline reflects the level of compliance and individual responsibility towards established rules, schedules, and work standards. Teachers with high work discipline will be more consistent in carrying out their duties, starting from punctual attendance, preparing learning tools, implementing the teaching and learning process according to schedule, to completing academic administration. Optimal performance is not only influenced by external factors such as technology and training but is also greatly influenced by internal factors, namely the competence of the teacher. Competence is the main foundation in determining performance quality because it reflects integrated pedagogical, professional, social, and personality abilities in task execution. In this context, competence is presumed to act as an intervening variable that mediates the influence of technology implementation, training, and work discipline on teacher performance. Effective technology implementation can improve teachers' digital and pedagogical competence. Continuous training can strengthen professional and methodological competence. Consistent work discipline can support continuous competence development. Ultimately, increased competence will have a direct impact on improving teacher performance.

Table 1. Teacher Performance Pre-Survey (Y)

No	Statement	Yes	No	Percentage Yes (%)	Percentage No (%)	Total
1	I am able to carry out teaching tasks with quality results.	12	18	40%	60%	30
2	I am able to complete teaching tasks according to the amount of work given	11	19	37%	63%	30
3	I always complete teaching tasks on time.	10	20	33%	67%	30

Based on Table 1 of the Teacher Performance (Y) Pre-Survey of 30 respondents, it appears that teacher performance is still relatively low. On the statement regarding the ability to carry out teaching tasks with quality results, only 12 respondents (40%) answered *yes* and 18 respondents (60%) answered *no*. On the statement about completing work according to the number of tasks, 11 respondents (37%) answered *yes* and 19 respondents (63%) answered *no*. Meanwhile, regarding timeliness in completing tasks, only 10 respondents (33%) answered *yes* and 20 respondents (67%) answered *no*. These results indicate that teacher performance still needs to be improved.

Problem Formulation

1. Does technology implementation have a positive and significant effect on teacher performance at UPT SMP Negeri 19 Medan?
2. Does training have a positive and significant effect on teacher performance at UPT SMP Negeri 19 Medan?
3. Does work discipline have a positive and significant effect on teacher performance at UPT SMP Negeri 19 Medan?
4. Does technology implementation have a positive and significant effect on teacher competence at UPT SMP Negeri 19 Medan?
5. Does training have a positive and significant effect on teacher competence at UPT SMP Negeri 19 Medan?
6. Does work discipline have a positive and significant effect on teacher competence at UPT SMP Negeri 19 Medan?
7. Does competence have a positive and significant effect on teacher performance at UPT SMP Negeri 19 Medan?
8. Does technology implementation have a positive and significant effect on teacher performance with competence as an intervening variable at UPT SMP Negeri 19 Medan?
9. Does training have a positive and significant effect on teacher performance with competence as an intervening variable at UPT SMP Negeri 19 Medan?
10. Does work discipline have a positive and significant effect on teacher performance with competence as an intervening variable at UPT SMP Negeri 19 Medan?

Research Objectives

1. To examine and analyze the effect of technology implementation on teacher performance at UPT SMP Negeri 19 Medan.
2. To examine and analyze the effect of training on teacher performance at UPT SMP Negeri 19 Medan.
3. To examine and analyze the effect of work discipline on teacher performance at UPT SMP Negeri 19 Medan.
4. To examine and analyze the effect of technology implementation on teacher competence at UPT SMP Negeri 19 Medan.
5. To examine and analyze the effect of training on teacher competence at UPT SMP Negeri 19 Medan.
6. To examine and analyze the effect of work discipline on teacher competence at UPT SMP Negeri 19 Medan.
7. To examine and analyze the effect of competence on teacher performance at UPT SMP Negeri 19 Medan.
8. To examine and analyze the effect of technology implementation on teacher performance with competence as an intervening variable at UPT SMP Negeri 19 Medan.
9. To examine and analyze the effect of training on teacher performance with competence as an intervening variable at UPT SMP Negeri 19 Medan.
10. To examine and analyze the effect of work discipline on teacher performance with competence as an intervening variable at UPT SMP Negeri 19 Medan.

Literature Review

Teacher Performance

According to Bass (2018), performance is the results of Yesng's work achieved by a person based on the Yesng standards that have been set by the organization. Teacher Performance is the results of teachers' work in planning, implementing, and evaluating learning according to educational standards. According to Newstrom (2018), performance is the level of achievement of individual work results according to their responsibilities.

Indicators of Teacher Performance

According to Newstrom (2018), indicators of Teacher Performance are:

1. Work quality The level of accuracy, neatness, and quality of learning outcomes carried out by the teacher.
2. Work quantity The number of learning and administrative tasks that can be completed.
3. Timeliness The ability to complete tasks according to the specified deadlines.
4. Work effectiveness The ability to utilize resources optimally to achieve learning objectives.
5. Responsibility The teacher's willingness to be accountable for their work results and obligations.

Factors Affecting Teacher Performance

Factors affecting Teacher Performance according to Newstrom (2018) can be explained through several aspects that show an individual's work results in carrying out their duties and responsibilities. These factors include:

1. Work quality, namely the teacher's ability to produce good quality work in the learning process.
2. Work quantity, namely the amount of work or tasks that can be completed by the teacher in a certain period.
3. Timeliness, namely the teacher's ability to complete work according to the specified time.
4. Work effectiveness, namely the teacher's ability to utilize existing resources optimally to achieve learning objectives.
5. Responsibility, namely the teacher's willingness to carry out assigned duties and obligations and be responsible for their work results.

Technology Implementation

Definition of Technology Implementation

According to Koehler, Mishra, & Cain (2019), technology implementation in education is the teacher's ability to integrate technology with pedagogical knowledge and teaching materials in a balanced way to create effective learning. This concept emphasizes that technology must be aligned with teaching methods and the content of learning materials, not stand alone. According to Nurmadiah (2019), educational technology is a systematic process of designing, developing, utilizing, managing, and evaluating technology-based learning resources to improve the effectiveness and efficiency of learning.

Indicators of Technology Implementation

According to Koehler, Mishra, & Cain (2019), indicators of Technology Implementation are as follows:

1. Ability to integrate technology with learning materials The teacher's ability to combine technology with the content of the subject matter so that technology supports the delivery of concepts and makes learning more effective.
2. Ability to use technology according to learning methods The teacher's ability to adapt the use of technology to teaching methods, such as discussions, presentations, or project-based learning, so that the learning process runs optimally.
3. Selection of appropriate technological media according to learning objectives The ability to choose applications or technological devices that suit the goals and competencies students aim to achieve.
4. Utilization of technology to improve student interaction and understanding The use of technology to encourage active student participation, clarify material through visual/interactive media, and improve learning understanding.

Training

Definition of Training

According to Noe (2019), training is a planned organizational effort to facilitate the learning of job-related competencies to improve performance. According to Dessler (2020), training is a systematic process for teaching the skills, knowledge, and attitudes needed for an individual to perform their job effectively.

Indicators of Training

According to Noe (2019), indicators of Training are:

1. Suitability of training materials: Training materials must be relevant to the needs of the teacher's tasks, such as learning strategies, curriculum, and learning evaluation.
2. Training methods: The methods used (discussions, practice, simulations, workshops) must be able to help teachers understand and apply the material effectively.
3. Instructor competence: Training instructors must have expertise and experience to be able to deliver material clearly and applicably.
4. Participant participation: The level of activity of teachers in participating in training shows their involvement and seriousness in self-development.
5. Training evaluation: An assessment of the training results to determine the extent to which the training improves teacher abilities.

Work Discipline

Definition of Work Discipline

According to Rivai (2018), work discipline is an individual's awareness and willingness to obey all applicable rules and norms. Teacher work discipline means adherence to school rules, teaching schedules, and professional responsibilities. According to Robbins and Judge (2019), work discipline is an individual's compliance with organizational rules and standards.

Indicators of Work Discipline

According to Rivai (2018), indicators of Work Discipline are:

1. Punctuality, Teachers attend and complete tasks according to the predetermined schedule.
2. Compliance with regulations, Teachers obey the school's rules and applicable policies.
3. Work responsibility, Teachers complete learning and administrative tasks with full responsibility.
4. Adherence to procedures, Teachers follow established learning procedures and operational standards.
5. Consistency of work behavior, Teachers demonstrate disciplined behavior consistently, not only at certain times.

Competence

Definition of Competence

According to Armstrong (2020), competence is a combination of technical abilities, behaviors, and knowledge that enables a person to work effectively. Teacher competence includes pedagogical, professional, social, and personality abilities in carrying out educational tasks. According to Spencer & Spencer (2017), competence is a basic characteristic of an individual that is related to performance effectiveness, including knowledge, skills, and attitudes.

Indicators of Competence

According to Armstrong (2020), indicators of Competence are:

1. Professional knowledge, The level of teacher understanding of teaching materials and curriculum.
2. Technical skills, The teacher's ability to use learning methods, media, and technology.
3. Interpersonal skills, The ability to communicate and interact effectively with students and colleagues.

4. Work attitude and behavior, Professional attitude, work ethic, and commitment to educational tasks.
5. Problem-solving ability, The teacher's ability to overcome learning obstacles quickly and precisely.

Conceptual Framework

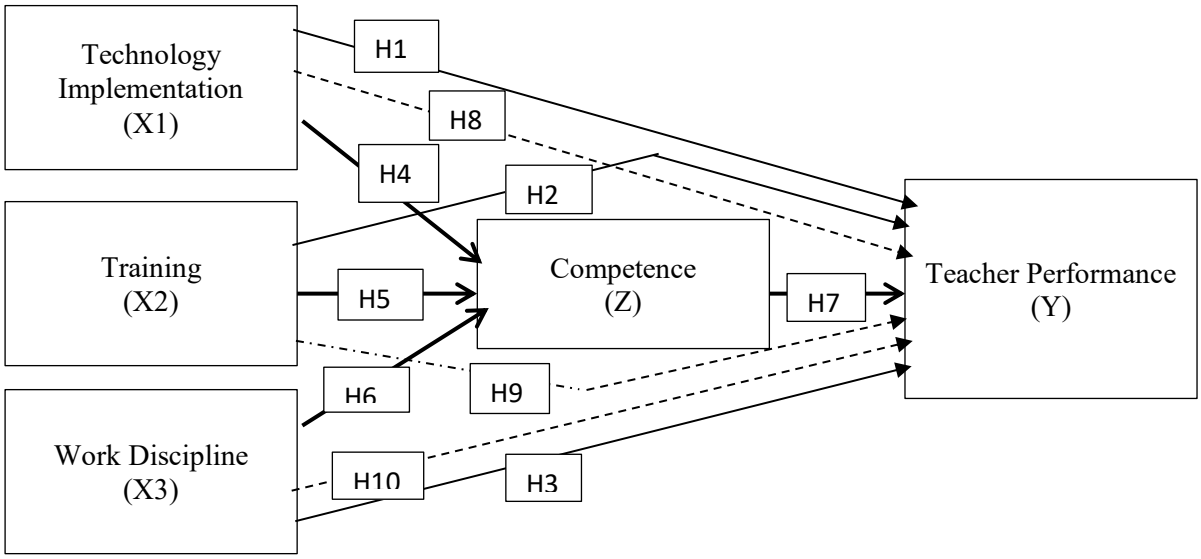

Figure 1. Conceptual Framework

Hypotheses

Based on the problem formulation and conceptual framework in this study, the hypotheses proposed are as follows:

H1: Technology implementation has a positive and significant effect on teacher performance at UPT SMP Negeri 19 Medan.
H2: Training has a positive and significant effect on teacher performance at UPT SMP Negeri 19 Medan.
H3: Work discipline has a positive and significant effect on teacher performance at UPT SMP Negeri 19 Medan.
H4: Technology implementation has a positive and significant effect on teacher competence at UPT SMP Negeri 19 Medan.
H5: Training has a positive and significant effect on teacher competence at UPT SMP Negeri 19 Medan.
H6: Work discipline has a positive and significant effect on teacher competence at UPT SMP Negeri 19 Medan.
H7: Competence has a positive and significant effect on teacher performance at UPT SMP Negeri 19 Medan.
H8: Technology implementation has a positive and significant effect on teacher performance with competence as an intervening variable at UPT SMP Negeri 19 Medan.
H9: Training has a positive and significant effect on teacher performance with competence as an intervening variable at UPT SMP Negeri 19 Medan.
H10: Work discipline has a positive and significant effect on teacher performance with competence as an intervening variable at UPT SMP Negeri 19 Medan.

Research Methodology

Type of Research

This study uses a quantitative approach with an associative research method. According to Sugiyono (2019), the quantitative research method is a research method based on the

philosophy of positivism, used to research a specific population or sample, sampling techniques are generally done randomly, data collection uses research instruments, and data analysis is statistical with the aim of testing predetermined hypotheses. According to Sugiyono (2019), associative research is research that aims to determine the relationship or influence between two or more variables.

Research Location

This research was conducted at Jl. Agenda No.34, Sei Putih Barat Village, Medan Petisah District, Medan City.

Population and Sample

According to Sugiyono (2019), the population is a generalization area consisting of objects or subjects that have certain qualities and characteristics determined by the researcher to be studied and then conclusions drawn.

The population in this study were all teachers of SMP Negeri 19 Medan, totaling 50 people. According to Sugiyono (2019), a sample is part of the number and characteristics possessed by the population. The sampling technique in this study used a saturated sampling technique (total sampling). According to Sugiyono (2019), saturated sampling is a sample determination technique when all members of the population are used as samples.

Data Collection Techniques

The data collection techniques used in this study are:

1. Questionnaire, According to Sugiyono (2019), a questionnaire is a data collection technique carried out by giving a set of written questions or statements to respondents to answer. The questionnaire in this study used a Likert scale.
2. Documentation Study, According to Sugiyono (2019), documentation is a data collection technique by studying documents related to the research problem.

Data Analysis Technique

This study uses the Partial Least Squares (PLS) method with the help of SmartPLS software. According to Ghozali (2020), PLS-SEM is a variance-based Structural Equation Modeling analysis method used to test relationships between latent constructs and is very suitable for use in research with a relatively small sample size and does not require normally distributed data.

Stages of PLS Data Analysis

According to Ghozali (2020), PLS analysis is carried out through two main stages: evaluation of the measurement model (outer model) and evaluation of the structural model (inner model).

Evaluation of the Measurement Model (Outer Model)

According to Ghozali (2020), evaluation of the outer model is carried out to assess the validity and reliability of the construct through:

1. Convergent Validity: Measured by looking at the loading factor value. A loading value > 0.70 is declared valid.
2. Discriminant Validity: Measured by looking at the cross-loading values or the Fornell-Larcker Criterion to ensure that each construct is different from other constructs.
3. Composite Reliability: A value > 0.70 indicates that the construct has good reliability.
4. Cronbach's Alpha: A value > 0.70 indicates adequate internal consistency.

Evaluation of the Structural Model (Inner Model)

According to Ghozali (2020), evaluation of the inner model is carried out to test the relationship between latent variables by looking at:

1. R-Square (R^2): Used to measure how much the independent variables can explain the dependent variable.
2. Path Coefficient: To determine the direction of the relationship and the strength of the influence between variables.
3. Bootstrapping: Used to test the significance of the effect by looking at the t-statistic and p-value.

Criteria for testing hypotheses according to Ghozali (2019) are:
a. If the t-statistic > 1.96 and p-value < 0.05, then the hypothesis is accepted.
b. If the t-statistic < 1.96 and p-value > 0.05, then the hypothesis is rejected.
Furthermore, to test the intervening variable, an indirect effect test is used through the bootstrapping procedure in SmartPLS.

Hypothesis Testing

According to Sugiyono (2019), a hypothesis is a temporary answer to the research problem formulation whose truth still needs to be tested empirically. Hypothesis testing in this study was carried out using the results of PLS analysis through SmartPLS by looking at the path coefficient values, t-statistic, and p-value to determine whether the hypothesis is accepted or rejected.

Results

Outer Model Analysis

The outer model analysis was conducted to evaluate the extent to which the indicators used can measure the latent constructs validly and reliably. This assessment includes internal reliability, convergent validity, and discriminant validity. Furthermore, convergent validity was checked using the Average Variance Extracted (AVE). The analysis results show that all constructs have an AVE above 0.5. This indicates that more than 50% of the indicator variance can be explained by the measured construct, so these indicators are convergently valid.

Convergent Validity

Convergent validity is used to assess the extent to which the indicators of a construct truly measure that construct. In this study, convergent validity was measured using two main parameters, namely factor loadings and the Average Variance Extracted (AVE). The analysis results show that all indicators have loading factors above 0.7, which means each indicator has a strong contribution to the measured construct.

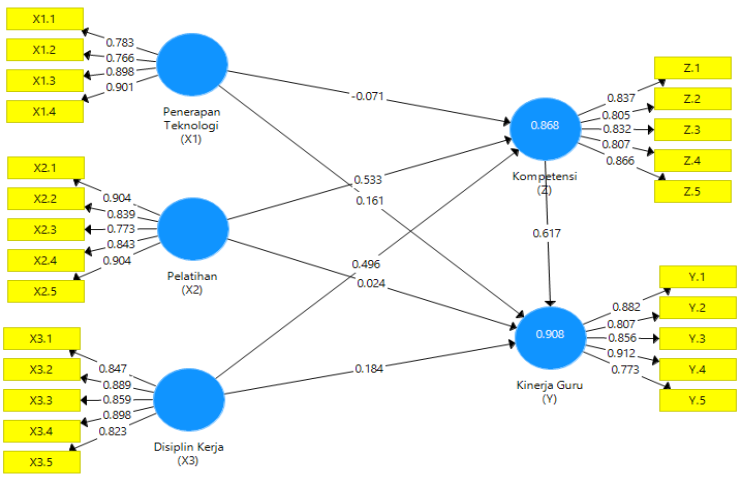

Figure 2. Outer Model

Source : Output Smart PLS 3.3.3

The SmartPLS output for loading factors provides the results in the following table: Outer Loadings. In this study, there are equations consisting of two substructures. For substructure 1:
Z = b1X2 + b2X1 + b3X3 + e1
Z = 0,533 - 0,071 + 0,496 + e1
For substructure 2:
Y = b2X1 + b4X2 + b3X4 +b4Z + e2
Y = 0,161 + 0,024 + 0,184 + 0,617 + e2

Table 2. Outer Loadings

	Work Discipline_(X 3)	Teacher Performance_(Y)	Competence_(Z)	Training_(X 2)	Technology Implementation_(X1)
X1. 1					0,783
X1. 2					0,766
X1. 3					0,898
X1. 4					0,901
X2. 1				0,904	
X2. 2				0,839	
X2. 3				0,773	
X2. 4				0,843	
X2. 5				0,904	
X3. 1	0,847				
X3. 2	0,889				
X3. 3	0,859				
X3. 4	0,898				
X3. 5	0,823				
Y.1		0,882			
Y.2		0,807			
Y.3		0,856			
Y.4		0,912			
Y.5		0,773			
Z.1			0,837		
Z.2			0,805		
Z.3			0,832		
Z.4			0,807		

Z.5			**0,866**		

Source : Output Smart PLS 3.3.3

Based on Table 2, the results of the outer loadings test show that all indicators for the variables Technology Implementation (X1), Training (X2), Work Discipline (X3), Competence (Z), and Teacher Performance (Y) have loading factor values above 0.70. This indicates that all indicators are declared valid and able to reflect each variable well. For the Technology Implementation variable (X1), the outer loading values range from 0.766 to 0.901. The Training variable (X2) has values between 0.773 and 0.904. Work Discipline (X3) shows values between 0.823 and 0.898. Furthermore, the Teacher Performance variable (Y) has values between 0.773 and 0.912, and the Competence variable (Z) ranges from 0.805 to 0.866. Thus, it can be concluded that all indicators in this study have met the convergent validity criteria, so they are suitable for further analysis.

Discriminat Validity

Discriminant validity is used to ensure that each construct is empirically distinct from other constructs in the model. This means that the indicators of a construct should be more strongly related to their own construct than to other constructs. In this study, discriminant validity was tested using the Fornell-Larcker criterion, which compares the square root of the Average Variance Extracted (AVE) of each construct with the correlations between constructs. The analysis results show that the square root of the AVE of each construct is greater than its correlation with other constructs. This indicates that each construct in this study has clear differences from one another and its indicators specifically represent each construct.

Table 3. Discriminant Validity

	Work Discipline_(X3)	**Teacher Performance_ (Y)**	**Competence_ (Z)**	**Training_(X2)**	**Technology Implementation_(X1)**
X1. 1	0,696	0,709	0,676	0,723	0,783
X1. 2	0,597	0,671	0,641	0,725	0,766
X1. 3	0,724	0,774	0,784	0,891	0,898
X1. 4	0,774	0,745	0,759	0,875	0,901
X2. 1	0,905	0,882	0,897	0,904	0,813
X2. 2	0,714	0,742	0,743	0,839	0,790
X2. 3	0,621	0,645	0,637	0,773	0,798
X2. 4	0,646	0,718	0,742	0,843	0,846
X2. 5	0,828	0,812	0,797	0,904	0,871
X3. 1	0,847	0,687	0,716	0,747	0,689
X3. 2	0,889	0,855	0,775	0,773	0,763
X3. 3	0,859	0,791	0,741	0,741	0,731

X3.4	0,898	0,813	0,848	0,853	0,790
X3.5	0,823	0,718	0,819	0,675	0,622
Y.1	0,731	0,882	0,858	0,758	0,753
Y.2	0,787	0,807	0,784	0,739	0,688
Y.3	0,837	0,856	0,866	0,835	0,785
Y.4	0,865	0,912	0,817	0,794	0,768
Y.5	0,546	0,773	0,644	0,655	0,661
Z.1	0,725	0,686	0,837	0,690	0,614
Z.2	0,686	0,709	0,805	0,726	0,731
Z.3	0,704	0,856	0,832	0,741	0,734
Z.4	0,791	0,784	0,807	0,732	0,671
Z.5	0,837	0,856	0,866	0,835	0,785

Source : Output Smart PLS 3.3.3

Based on Table 3, the results of the discriminant validity test show that each indicator has the highest loading value on the variable being measured compared to other variables. This can be seen from the cross-loading values of each indicator which are higher on their own construct. The indicators for the variables Technology Implementation (X1), Training (X2), Work Discipline (X3), Teacher Performance (Y), and Competence (Z) have generally met the discriminant validity criteria because the loading values on the main construct are higher than the loading values on other constructs. Thus, it can be concluded that all variables in this study have a good level of discriminant validity, so they are able to distinguish one construct from another and are suitable for further analysis.

Composite reliability

In composite reliability testing, each variable is evaluated using its reliability value; if the variable value is greater than 0.60, the research is considered reliable; if between 0.60 and 0.7, it is considered less reliable. The table below shows the Cronbach's alpha, composite reliability, and AVE values, which are used to determine whether the research is reliable and valid.

Table 4. Construct Reliability and Validity

	Cronbach's Alpha	**Composite Reliability**	**Average Variance Extracted (AVE)**
Work Discipline_(X3)	**0,914**	**0,936**	**0,746**
Teacher Performance_(Y)	**0,901**	**0,927**	**0,718**
Competence_(Z)	**0,887**	**0,917**	**0,689**
Training_(X2)	**0,906**	**0,931**	**0,729**
Technology Implementation_(X1)	**0,858**	**0,904**	**0,704**

Source : Output Smart PLS 3.3.3

Based on Table 4, the test results show that all variables have Cronbach's Alpha values above 0.70, which means each construct has a good level of reliability. The composite reliability values are also above 0.70, so all variables are declared consistent in measuring their constructs. Additionally, the Average Variance Extracted (AVE) values for each variable are above 0.50, indicating that each construct has met the convergent validity criteria. Thus, the variables Work

Discipline (X3), Teacher Performance (Y), Competence (Z), Training (X2), and Technology Implementation (X1) are declared reliable and valid, so they are suitable for further analysis.

Inner Model Analysis

The structural model (inner model) is evaluated to ensure that the resulting basic model is strong and correct. Several indicators can be used to identify the stages of checking the main model assessment, including:

Coefficient of Determination (R2)

Based on the data processing performed using the SmartPLS 3.0 program, the R Square values obtained are as follows:

Table 5. R Square Results

	R Square	Adjusted R Square
Teacher Performance_(Y)	0,908	0,900
Competence_(Z)	0,868	0,859

Source : Output Smart PLS 3.3.3

Based on Table 5, the R Square value for the Teacher Performance variable (Y) is 0.908 and the Adjusted R Square is 0.900. This indicates that 90.8% of the variation in Teacher Performance can be explained by the independent variables in the model, while the remaining 9.2% is influenced by other variables outside the study. Furthermore, the Competence variable (Z) has an R Square value of 0.868 and an Adjusted R Square of 0.859, which means 86.8% of the variation in Competence can be explained by the variables in the model, while the remaining 13.2% is influenced by other factors outside the study. Thus, this research model is relatively strong in explaining the relationships between the variables studied.

Hypothesis Testing

After assessing the inner model, the next step is to assess the relationship between constructs as hypothesized in this study. Hypothesis testing in this study was conducted by looking at the T-Statistics and P-Values. A hypothesis is declared accepted if the T-Statistic value > 1.96 and P-Values < 0.05. The following are the direct effect Path Coefficients:

Table 6. Path Coefficients (Direct Effect)

	Original Sample (O)	T Statistics (| O/STDEV |)	P Values	Results
Work Discipline_(X3) -> Teacher Performance_(Y)	0,184	2,114	**0,018**	**Accepted**
Work Discipline_(X3) -> Competence_(Z)	0,496	3,804	**0,000**	**Accepted**
Competence_(Z) -> Teacher Performance_(Y)	0,617	5,766	**0,000**	**Accepted**
Training_(X2) -> Teacher Performance_(Y)	0,024	0,124	**0,451**	**Rejected**
Training_(X2) -> Competence_(Z)	0,533	1,858	**0,032**	**Accepted**
Technology Implementation_(X1) -> Teacher Performance_(Y)	0,161	0,963	**0,168**	**Rejected**
Technology Implementation_(X1) -> Competence_(Z)	-0,071	0,306	**0,380**	**Rejected**

Source : Output Smart PLS 3.3.3

1. Work Discipline (X3) on Teacher Performance (Y)
   Work discipline has a positive and significant effect on teacher performance with a coefficient value of 0.184, T-statistic of 2.114, and P-Values of 0.018 (<0.05). Thus, the hypothesis is accepted, meaning that better work discipline will improve teacher performance.
2. Work Discipline (X3) on Competence (Z)
   Work discipline has a positive and significant effect on competence with a coefficient value of 0.496, T-statistic of 3.804, and P-Values of 0.000 (<0.05). This means the hypothesis is accepted, so high work discipline can improve competence.
3. Competence (Z) on Teacher Performance (Y)
   Competence has a positive and significant effect on teacher performance with a coefficient value of 0.617, T-statistic of 5.766, and P-Values of 0.000 (<0.05). Thus, the hypothesis is accepted, indicating that good competence will improve teacher performance.
4. Training (X2) on Teacher Performance (Y)
   Training does not have a significant effect on teacher performance with a coefficient value of 0.024, T-statistic of 0.124, and P-Values of 0.451 (>0.05). Therefore, the hypothesis is rejected, meaning that training has not been able to directly improve teacher performance.
5. Training (X2) on Competence (Z)
   Training has a positive and significant effect on competence with a coefficient value of 0.533, T-statistic of 1.858, and P-Values of 0.032 (<0.05). Thus, the hypothesis is accepted, so training can improve competence.
6. Technology Implementation (X1) on Teacher Performance (Y)
   Technology implementation does not have a significant effect on teacher performance with a coefficient value of 0.161, T-statistic of 0.963, and P-Values of 0.168 (>0.05). Therefore, the hypothesis is rejected, indicating that technology implementation has not had a direct impact on teacher performance.
7. Technology Implementation (X1) on Competence (Z)
   Technology implementation does not have a significant effect on competence with a coefficient value of -0.071, T-statistic of 0.306, and P-Values of 0.380 (>0.05). Thus, the hypothesis is rejected, meaning that technology implementation does not affect the improvement of competence.

Table 7. *Path Coefficients* (Indirect Effects)

	Original Sample (O)	T Statistics (| O/STDEV |)	P Values	Results
Work Discipline_(X3) -> Competence_(Z) -> Teacher Performance_(Y)	0,306	3,036	**0,001**	**Accepted**
Training_(X2) -> Competence_(Z) -> Teacher Performance_(Y)	0,329	1,739	**0,041**	**Accepted**
Technology Implementation_(X1) -> Competence_(Z) -> Teacher Performance_(Y)	-0,044	0,304	**0,381**	**Rejected**

Source : Output Smart PLS 3.3.3

1. Work Discipline (X3) on Teacher Performance (Y) through Competence (Z)
   Work discipline has a positive and significant effect on teacher performance through competence with a coefficient value of 0.306, T-statistic of 3.036, and P-Values of 0.001

(<0.05). Thus, the hypothesis is accepted, meaning that competence is able to mediate the effect of work discipline on teacher performance.

2. Training (X2) on Teacher Performance (Y) through Competence (Z)
   Training has a positive and significant effect on teacher performance through competence with a coefficient value of 0.329, T-statistic of 1.739, and P-Values of 0.041 (<0.05). Therefore, the hypothesis is accepted, indicating that competence acts as a mediating variable in the relationship between training and teacher performance.
3. Technology Implementation (X1) on Teacher Performance (Y) through Competence (Z)
   Technology implementation does not have a significant effect on teacher performance through competence with a coefficient value of -0.044, T-statistic of 0.304, and P-Values of 0.381 (>0.05). Thus, the hypothesis is rejected, meaning that competence is not able to mediate the effect of technology implementation on teacher performance.

Conclusion

1. Work discipline has a positive and significant effect on teacher performance at UPT SMP Negeri 19 Medan.
2. Work discipline has a positive and significant effect on competence at UPT SMP Negeri 19 Medan.
3. Competence has a positive and significant effect on teacher performance at UPT SMP Negeri 19 Medan.
4. Training does not have a significant effect on teacher performance at UPT SMP Negeri 19 Medan.
5. Training has a positive and significant effect on competence at UPT SMP Negeri 19 Medan.
6. Technology implementation does not have a significant effect on teacher performance at UPT SMP Negeri 19 Medan.
7. Technology implementation does not have a significant effect on competence at UPT SMP Negeri 19 Medan.
8. Work discipline has a significant effect on teacher performance through competence (there is a mediation effect) at UPT SMP Negeri 19 Medan.
9. Training has a significant effect on teacher performance through competence (there is a mediation effect) at UPT SMP Negeri 19 Medan.
10. Technology implementation does not have an effect on teacher performance through competence (there is no mediation effect) at UPT SMP Negeri 19 Medan.

Suggestions

1. The school needs to improve teacher work discipline through consistent application of rules, supervision, and the provision of sanctions and rewards so that teacher performance becomes more optimal.
2. The school is advised to improve the quality of training by adjusting the material, methods, and teacher work needs so that it can maximize competence improvement.
3. Teacher competence development needs to be continuously improved through career development programs, workshops, and further education because it has been proven to have a significant effect on performance.
4. The implementation of technology in learning needs to be evaluated and its effectiveness improved, for example through more intensive training on technology use so that it can truly support teacher competence and performance.
5. School management needs to provide continuous support, both in terms of facilities and a conducive work environment, to encourage the improvement of teacher competence and performance.
6. Future research is advised to add other variables such as work motivation, leadership, or work environment to enrich the research model.

7. Future researchers are advised to expand the research object to other institutions or sectors so that the research results can be generalized more widely.

References

[1] Bernard M. Bass., & Ronald E. Riggio. (2018). *Transformational leadership* (2nd ed.). Routledge.

[2] C Rizky, Y Anwar, N Ardian, RP Suharsono (2024*), Strategi peningkatan Source daYes manusia pelaku UMKM desa through optimasi platform digital dalam aspek produksi, pemasaran dan permodalan,* Jurnal Pengabdian MasYesrakat Sapangambei Manoktok Hitei

[3] Emron Edison, Anwar Yohny (2016), *KI*, Manajemen Source DaYes Manusia. Alfabeta

[4] Gary Dessler. (2020). *Human resource management* (16th ed.). Pearson.

[5] Imam Ghozali. (2020). *Partial Least Squares: Konsep, Teknik dan Aplikasi Menggunakan Program SmartPLS 3.0*. Semarang: Badan Penerbit Universitas Diponegoro.

[6] John W. Newstrom. (2018). *Organizational behavior: Human behavior at work* (14th ed.). McGraw-Hill Education.

[7] Lyle M. Spencer., & Signe M. Spencer. (2017). *Competence at work: Models for superior performance*. John Wiley & Sons.

[8] Nurmadiah. (2019). Konsep teknologi pendidikan dalam pembelajaran. *Jurnal Pendidikan dan Pembelajaran, 6*(2), 45–53.

[9] Matthew J. Koehler., PunYes Mishra., & William Cain. (2019). What is technological pedagogical content knowledge (TPACK)? *Journal of Education, 193*(3), 13–19.

[10] Michael Armstrong. (2020). *Armstrong's handbook of human resource management practice* (15th ed.). Kogan Page.

[11] Muhamad Toyib Daulay, M. Herri MustaqimHasibuan, Nazaruddin, Isfenti Sadalia (2019), *The Effect of Mutation, Promotion and Job Satisfaction on Employee Performance of Plantation Companies in Medan ,*American International Journal of Business Management(AIJBM)

[12] Raymond A. Noe. (2019). *Employee training and development* (7th ed.). McGraw-Hill Education.

[13] Risman Setiawan, Yohny Anwar, Henry Aspan (2022*), An Effect Of Occupational Safety And Health On Employee Performance At PT. PLN (Persero) ULP Binjai Barat,* Britain International of Humanities and Social Sciences (BIoHS) Journal

[14] Stephen P. Robbins., & Timothy A. Judge. (2019). *Organizational behavior* (18th ed.). Pearson Education.

[15] Sugiyono. (2019). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.

[16] Veithzal Rivai. (2018). *Manajemen Source daYes manusia untuk perusahaan: Dari teori ke praktik*. Rajawali Pers.

[17] Yessy Yovina Vanesa, Rahim Matondang, Isfenti Sadalia, Muhamad Toyib Daulay (2019), *The influence of organizational culture, work environment and work motivation on employee discipline in PT Jasa Marga (Persero) TBK, Medan Branch, North Sumatra, Indonesia,* American International Journal of Business Management(AIJBM)