



THE INFLUENCE OF EDUCATIONAL LEVEL, TEACHING EXPERIENCE, TRAINING AND RESPONSIBILITY ON TEACHERS' WORK PRODUCTIVITY

Sabri^{1*}, Sumardin², Lailatul Dzikriyya Bahar³, Eni Sapura⁴, Winta Pratiwi⁵

^{1,2,3,4,5}Master of Management Study Program, Faculty of Economics and Business, Universitas Ibnu Sina, Indonesia

Corresponden Email: sabri@uis.ac.id¹

Abstract

This research aims to analyze the influence of education level, teaching experience, training and responsibility on teacher work productivity at Ibnu Sina Batam Private Elementary School. The research method used is a quantitative approach with multiple linear regression analysis. The sample in this research was 42 teachers obtained using census techniques. Data was collected through questionnaires and analyzed using SPSS software.

The research results show that the level of education, teaching experience, training and responsibility simultaneously have a significant effect on teacher work productivity ($F_{\text{count}} = 1379.988 > F_{\text{table}} = 2.47$, sig. $0.000 < 0.05$). Partially, Teaching and Training Experience has a significant effect ($t_{\text{count}} = 27,308$ and $60,150 > t_{\text{table}} = 1.661$, sig. $0.000 < 0.05$), while the level of education and responsibility are not significant. The coefficient of determination ($R^2 = 0.983$) shows that 98.3% of the variation in work productivity is explained by this variable. Training and teaching experience contribute more dominantly, so it is recommended that schools improve training programs and provide teachers with opportunities to gain more diverse teaching experience to increase work productivity.

Keywords: Education Level, Teaching Experience, Training, Responsibilities, Teacher Work Productivity

INTRODUCTION

Teachers play a very important role in determining the success of education in schools. As the spearhead of the implementation of formal education, teachers are not only responsible for the knowledge transfer process, but also act as educators, mentors and motivators for students. Teacher work productivity is one of the key factors in ensuring the quality of learning provided, especially at the elementary school (SD) level, which is the initial foundation for building students' character and knowledge.

Basic education is an important phase in character and intellectual formation of students. Teachers who have high work productivity are able to provide meaningful learning experiences for students. They not only convey lesson material but also set an example in attitude and behavior. Therefore, attention to factors that influence teacher work productivity is very relevant for research, especially in private school environments such as the Ibnu Sina Batam Private Elementary School.

Ibnu Sina Batam Private Elementary School is an educational institution that has the vision of producing a generation with noble character and achievements. In an effort to realize this vision, the role of teachers is very strategic. Productive teachers not only teach well but are also able to manage

the class, motivate students, and meet the needs of school administration. Thus, teacher work productivity is the main measure of educational success in this school.

Teacher work productivity can be influenced by many factors. One of the main factors is the level of education possessed by the teacher. A higher level of education is often directly proportional to better insight and competence. Highly educated teachers usually have a better understanding of effective learning methods and can apply them in the classroom in relevant and innovative ways. Apart from education level, teaching experience is also an important factor that influences teacher work productivity. Teachers with longer teaching experience have the ability to face learning challenges better. They usually have developed strategies to deal with various situations in the classroom, both academic and non-academic, so as to create a conducive learning environment for students.

Training or professional development is another element that determines teacher work productivity. Well-designed training gives teachers the opportunity to improve their competencies, understand new approaches to learning, and keep up with developments in educational technology. With relevant training, teachers can continue to develop and make a greater contribution to students and schools.

On the other hand, the responsibilities carried out by teachers also have a significant influence on work productivity. Responsibilities not only include classroom teaching duties but also involve school administration, extracurricular activities, and interactions with students' parents. Teachers who have a high sense of responsibility are usually more motivated to give their best in their assignments. However, even though there are many factors that support teacher work productivity, it cannot be ignored that there are still various challenges that must be faced. One of the main challenges is limited access to quality training. Some teachers find it difficult to take part in training due to costs, time or limited information. This hampers their efforts to improve their competency in a sustainable manner.

The high workload is also another obstacle that is often felt by teachers at the Ibnu Sina Batam Private Elementary School. Teachers are not only required to teach but also have to complete quite a lot of administrative tasks. This administrative burden often reduces time that could be used to prepare teaching materials or attend professional development training.

The level of education and teaching experience, although an advantage for some teachers, does not always guarantee optimal work productivity. Teachers with higher education or long experience still need support in the form of training and effective workload management. Without this support, their potential may not be fully realized. Apart from internal factors, there is also the influence of external factors, such as school policies and the work environment. School policies that support teachers' professional development can have a positive impact on their productivity. On the other hand, a less conducive work environment can reduce teacher morale and motivation.

Interactions between teachers, students and parents also play a role in determining teacher work productivity. Good communication between these three parties can create a more positive learning atmosphere. Teachers who feel supported by their students' parents tend to be more motivated to

improve the quality of their teaching. In the context of the Ibnu Sina Batam Private Elementary School, several teachers stated the need for improvements in the support system provided by the school. This includes providing regular training, reducing administrative burdens, and more effective time management to support their main duties as educators.

Education is a long-term investment, and teachers are a key element in ensuring this investment pays off. Therefore, increasing teacher work productivity not only has an impact on students but also on achieving overall educational goals. This research is expected to provide deeper insight into how the level of education, teaching experience, training and responsibilities influence teacher work productivity.

By identifying the factors that influence teacher work productivity, schools can design more effective strategies to support teachers. This strategy can include relevant training programs, developing policies that support teacher welfare, and managing a more balanced workload. Furthermore, this research can also be a basis for developing better teacher management models in other private schools. By sharing experiences and best practices, Ibnu Sina Batam Private Elementary School can be an example for other schools in increasing teacher work productivity.

Based on the background of the problem described above, the problem that the researcher will determine is (1) Is there an influence of Education Level on Teacher Work Productivity at Ibnu Sina Batam Private Elementary School?, (2) Is there an influence of Teaching Experience on Teacher Work Productivity at Ibnu Sina Batam Private Elementary School?, (3) Is there an influence of Training on Teacher Work Productivity at Ibnu Sina Batam Private Elementary School?, (4) Is there an influence of Responsibility on Teacher Work Productivity in Private Elementary Schools? Ibnu Sina Batam?, (5) Is there an influence of Education Level, Teaching Experience, Training and Responsibility together on Teacher Work Productivity at Ibnu Sina Batam Private Elementary School?

LITERATURE REVIEW

Work Productivity

Productivity According to Blocher, Chen, Lin (2017:847) Productivity is the relationship between how much output is produced and how much input is needed to produce that output. According to Husien Umar (2019:9) productivity means a comparison between the results achieved (*output*) and the total resources used (*input*). In the book cost accounting and management accounting for advanced technology and globalization, Supriyono (2018) states that productivity is productivity related to producing efficiently and specifically aimed at the relationship between output and the input used to produce that output. Meanwhile, according to Basu Swasta and Ibnu Sukotjo (2016: 281), productivity is a concept that describes the relationship between results (the number of goods and services produced) and the sources (labor, raw materials, capital, energy, etc.) used to produce these

goods. According to Sinungan (2017:8) productivity can be interpreted as a comparison between the totality of expenditure at a certain time divided by the totality of input during that period.

Level of education

Education level shows differences in rank, position and level in a structure. Education is the process of nurturing the younger generation to live life effectively. According to Zahara Idris (2020), "Education is a series of communication activities aimed at between adult humans and students." M.J. Langeveld (2017) states that "Education is the provision of spiritual guidance and assistance for those who still need it." K.H. Dewantara (2019) added that education aims to advance children's character, mind and body. In general, education is guidance from adults to shape the personality of students.

Teaching Experience

According to Lortie (2015), teaching experience is not only determined by the length of time a person has been in the profession, but also by the quality of interaction with students, problem solving, and personal reflection on teaching practice. This shows that teaching experience is complex and depends not only on time, but also on the depth of experience gained. Teaching experience includes lesson planning, classroom management, and providing assessment and feedback to students. Berliner (2018) stated that teaching experience is closely related to the teacher's level of expertise. Apart from that, teaching experience also influences how teachers understand student needs and develop effective learning strategies. Thus, teaching experience is not just the number of years of teaching, but also reflects a continuous learning process for an educator.

Training

Pramudyo (2017) defines training as "a learning process designed to change people's performance in doing their jobs." Training includes processes, participants, performance, and work, with the aim of improving work quality. Sutrisno (2019) stated that training helps improve skills and use of work equipment. Rachmawati (2018) added that "training is a forum for employees to acquire attitudes, knowledge and skills to become more skilled and able to carry out tasks according to standards." Training is often provided after employees are placed in their field to make them more effective in carrying out their duties.

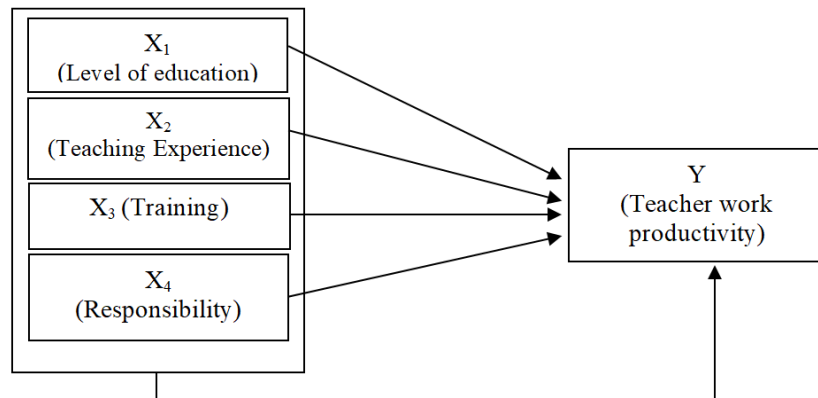


Figure 1 Research Framework

Research Hypothesis

Based on the theoretical basis and framework that has been put forward, this research hypothesis can be formulated as follows:

- H₁ : It is suspected that the level of education influences the work productivity of teachers at the Ibnu Sina Batam Private Primary School.
- H₂ : It is suspected that teaching experience influences teacher work productivity at the Ibnu Sina Batam Private Elementary School
- H₃ : It is suspected that training affects the work productivity of teachers at the Ibnu Sina Batam Private Primary School
- H₄ : It is suspected that responsibility affects the work productivity of teachers at the Ibnu Sina Batam Private Elementary School
- H₅ : It is suspected that the level of education, teaching experience, training and responsibilities of employees simultaneously influence the work productivity of teachers at Ibnu Sina Batam Private Elementary School

METHOD

Research Location and Time

This research was conducted at the Ibnu Sina Batam Private Primary School Office located at Jl. Teuku Umar No. 29432, Kp. Pelita, District. Lubuk Baja, Batam City, Riau Islands 29444. Research activities were carried out for 5 months, namely from October 2024 to February 2025.

Data Types and Sources

The types of data in this research are:

1. Quantitative data: This is a type of research whose specifications are systematic, planned and clearly structured from the start until the creation of the research design. Another definition states that quantitative research is research that requires a lot of use of numbers, starting from data

collection, interpretation of that data, and the appearance of the results. Likewise, at the research conclusion stage it would be better if it were accompanied by pictures, tables, graphs or other displays.

2. Qualitative data: This is a new method because it has been popular with teachers recently, this method is also called post-positivistic because it is based on the philosophy of post-positivism, as well as an artistic method because the research process is more artistic (less patterned), and is called an interpretive method because research data is more concerned with the interpretation of data found in the field. Quantitative research methods can be interpreted as research methods that are used to research certain populations or samples, collecting data using research instruments, quantitative/statistical data analysis, with the aim of testing hypotheses. which has been determined.

Data source

The data used in this research is grouped into two, namely:

1. Primary Data, namely data obtained directly from the research site, both data in the form of research and development programs, teacher conditions, direct events experienced by the author.
2. Secondary data, namely data obtained by the author from lecture notes, articles, other literature related to research.

Method of collecting data

The data collection techniques that the author uses in this research are:

1. Literature Study.

This is a theoretical data collection technique related to the field the writer is researching, whether in the form of books, newspapers, magazines or regulations.

2. Field Study.

Namely by directly observing the object to be studied, namely the Ibnu Sina Batam Private Primary School. The data collection techniques consist of:

- a. Observation, namely carrying out systematic observations and recording of the symptoms or phenomena being investigated. In this case, observations were made on the level of education, teaching experience, training, responsibilities and work productivity of Ibnu Sina Batam Private Elementary School teachers.
- b. Interview, namely a list of questions prepared in written form to obtain information directly by asking the questions to the respondent.
- c. Questionnaire, namely a list of questions prepared in written form to obtain the data the author needs from written answers from respondents. The type of questionnaire used is a closed questionnaire, where the answers are provided so that respondents just have to choose.

Population and Sample

According to Sugiyono (2019: 80), "Population is a generalized area consisting of objects or subjects that have certain qualities and characteristics determined by researchers to be studied and then conclusions drawn." The population of this research is the Ibnu Sina Batam Private Primary School Teachers, numbering 42 teachers. In this research, there was no classification of teacher differences based on type or group status, both types of teaching had the same treatment.

According to Sugiyono (2019:73), the sample is part of the number and characteristics of the population. The sample taken from the population must be truly *representative* (represent). Sample size is the number of samples that will be taken from a population. According to Arikunto (2017: 104), if the population is less than 100 people, then the entire sample size is taken, but if the population is greater than 100 people, then 10-15% or 20-25% of the population can be taken.

Based on this research, because the population is not greater than 100 respondents, the author took 100% of the population at the Ibnu Sina Batam Private Elementary School, namely 42 teachers. Thus, the use of the entire population without having to draw a research sample as a unit of observation is called a census technique

Data Analysis Techniques

1. Descriptive Analysis

Descriptive analysis is a method related to collecting and presenting a group of data so that it provides useful information. This descriptive analysis is used for further analysis, namely Validity Test and Reliability test.

2. Simple Multiple Linear Regression Analysis

The research data used by researchers in this study are variables related to the hypothesis formulated. The basic model used in this research is:

$$AND_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + e_i$$

The coefficients β_1 , β_2 , β_3 and β_4 show the short-term coefficient values of variable X_{1i} , X_{2i} , X_{3i} and X_{4i} . This model is shown to determine the level of significance and elasticity value of changes in each explanatory variable which will influence the work productivity of Ibnu Sina Batam Private Primary School Teachers.

3. Hypothesis Testing

The accuracy of the sample regression function in estimating actual values can be measured from *Goodness of Fit*. Statistically, at least this can be measured from the coefficient of determination value, the F statistical value, and the t statistical value. Statistical calculations are said to be statistically significant if the statistical test value is in the critical area (the area where H_0 is rejected). It is better to say that it is not significant if the value of the statistical test is in the area

where H_0 is accepted (Ghozali, 2019), namely: Simultaneous Significance Test (F Statistical Test), Individual Parameter Significance Test (t Statistical Test), Determination Coefficient Test (R^2).

RESEARCH RESULTS AND DISCUSSION

Validity and Reliability Test Results

Table 1 Validity Test Results for Education Level Variables (X_1)

Question	R-Count	R-Table	Say	Information
Level of education				
X_{1_1}	0.921	0.2017	0.000	Valid
X_{1_2}	0.897	0.2017	0.000	Valid
X_{1_3}	0.915	0.2017	0.000	Valid
X_{1_4}	0.883	0.2017	0.000	Valid
X_{1_5}	0.940	0.2017	0.000	Valid
X_{1_6}	0.902	0.2017	0.000	Valid
X_{1_7}	0.891	0.2017	0.000	Valid
X_{1_8}	0.910	0.2017	0.000	Valid
X_{1_9}	0.905	0.2017	0.000	Valid
X_{1_10}	0.918	0.2017	0.000	Valid
Teaching Experience				
X_{2_1}	0.876	0.2017	0.000	Valid
X_{2_2}	0.854	0.2017	0.000	Valid
X_{2_3}	0.891	0.2017	0.000	Valid
X_{2_4}	0.867	0.2017	0.000	Valid
X_{2_5}	0.902	0.2017	0.000	Valid
X_{2_6}	0.884	0.2017	0.000	Valid
X_{2_7}	0.879	0.2017	0.000	Valid
X_{2_8}	0.842	0.2017	0.000	Valid
X_{2_9}	0.901	0.2017	0.000	Valid
X_{2_10}	0.888	0.2017	0.000	Valid
Training				
X_{3_1}	0.889	0.2017	0.000	Valid
X_{3_2}	0.912	0.2017	0.000	Valid
X_{3_3}	0.873	0.2017	0.000	Valid
X_{3_4}	0.905	0.2017	0.000	Valid
X_{3_5}	0.898	0.2017	0.000	Valid
X_{3_6}	0.901	0.2017	0.000	Valid

Question	R-Count	R-Table	Say	Information
X _{3_7}	0.887	0.2017	0.000	Valid
X _{3_8}	0.893	0.2017	0.000	Valid
X _{3_9}	0.904	0.2017	0.000	Valid
X _{3_10}	0.899	0.2017	0.000	Valid
Responsibility				
X _{4_1}	0.937	0.2017	0.000	Valid
X _{4_2}	0.917	0.2017	0.000	Valid
X _{4_3}	0.904	0.2017	0.000	Valid
X _{4_4}	0.842	0.2017	0.000	Valid
X _{4_5}	0.928	0.2017	0.000	Valid
X _{4_6}	0.910	0.2017	0.000	Valid
X _{4_7}	0.902	0.2017	0.000	Valid
X _{4_8}	0.914	0.2017	0.000	Valid
X _{4_9}	0.908	0.2017	0.000	Valid
X _{4_10}	0.912	0.2017	0.000	Valid
Work productivity				
Y ₁	0.942	0.2017	0.000	Valid
Y ₂	0.935	0.2017	0.000	Valid
Y ₃	0.927	0.2017	0.000	Valid
Y ₄	0.918	0.2017	0.000	Valid
Y ₅	0.939	0.2017	0.000	Valid
Y ₆	0.924	0.2017	0.000	Valid
Y ₇	0.915	0.2017	0.000	Valid
Y ₈	0.908	0.2017	0.000	Valid
Y ₉	0.913	0.2017	0.000	Valid
Y ₁₀	0.921	0.2017	0.000	Valid

Source: SPSS Data Processing Results

Table 2 Reliability Test Results

Variable	Cronbch's Alpha	Reliability Parameters	Information
Level of education	0.985	0,60	Reliable
Teaching Experience	0.735	0,60	Reliable
Training	0.929	0,60	Reliable
Responsibility	0.990	0,60	Reliable
Work productivity	0.915	0,60	Reliable

Source: SPSS Data Processing Results

Based on the table above, it can be seen that the results of the data reliability test show that the data collected from the questionnaire for a variable used in this research is reliable. This can be seen in the value (*alpha cronbach*) variables above: Level of Education, Teaching Experience, Training and Responsibilities > 0.60, which means that these variables are reliable

Hypothesis Testing

Coefficient of determination (R^2) essentially measures how far the model is able to apply variations in the dependent variable. The coefficient of determination value is between zero and one ($0 < R^2 < 1$). A value close to one means that the independent variables provide almost all the information needed to predict variations in the dependent variable.

Table 3 Determination Test (R^2)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.992 ^a	.983	.982	.32970

a. Predictors: (Constant), Responsibilities, Training, Teaching Experience, Education Level

Source: SPSS Data Processing Results

Based on the table above, a summary of the model can be explained, which consists of the results of the simple correlation value (R) and the coefficient of determination (R Square).

1. The resulting R (person correlation) value is 0.992, meaning that the correlation between the variables Educational Level (X_1), Teaching Experience (X_2), Training (X_3), and Responsibilities with the Work Productivity Variable (Y) has a very strong level of relationship.
2. R Square is 0.983, meaning that the percentage contribution of the influence of the variables Educational Level (X_1), Teaching Experience (X_2), Training (X_3), and Responsibilities with the Work Productivity Variable (Y) is 0.983. This means that the level of education (X_1), teaching experience (X_2), training (X_3), and responsibility with the work productivity variable (Y) is 98.3% and the rest is influenced by other variables not examined in this research.

R Determination Test²(Partial)

1. Analysis of the Influence of Education Level (X_1) on work productivity (Y)

Table 4 Determination Test R^2 (Partial)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.969 ^a	.939	.938	.62052

a. Predictors: (Constant), Work_discipline

Based on the table above, a summary of the model can be explained, which consists of the results of the simple correlation value (R) and the coefficient of determination (R Square).

- a. The resulting R (person correlation) value is 0.969, meaning the correlation between the Education Level variables (X_1) with the work productivity variable (Y) has a very strong level of relationship.
- b. R Square is 0.939, meaning that the percentage contribution of the influence of the Education Level variable (X_1) with the Work Productivity variable (Y) is 0.939. This means the percentage level of influence of Education Level (X_1) with work productivity (Y) of 93.9% and the remainder influenced by other variables not examined in this research.

2. Analysis of the Influence of Teaching Experience (X_2) on work productivity (Y)

Table 5 Determination Test R^2 (Partial)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.943 ^a	.889	.888	.84026

- a. Predictors: (Constant), Teaching Experience

Based on the table above, a summary of the model can be explained, which consists of the results of the simple correlation value (R) and the coefficient of determination (R Square).

- a. The resulting R (person correlation) value is 0.943, meaning the correlation between the Teaching Experience variable (X_2) with the work productivity variable (Y) has a very strong level of relationship.
- b. R Square is 0.889, meaning the percentage contribution of the influence of the Teaching Experience variable (X_2) with the work productivity variable (Y) of 0.889. This means the percentage level of influence of Teaching Experience (X_2) with work productivity (Y) of 88.9% and the remainder influenced by other variables not examined in this research.

3. Analysis of the Effect of Training (X_3) on work productivity (Y)

Table 6 Determination Test R^2 (Partial)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.987 ^a	.975	.975	.39661

- a. Predictors: (Constant), Training

Based on the table above, a summary of the model can be explained, which consists of the results of the simple correlation value (R) and the coefficient of determination (R Square).

- a. The resulting R (person correlation) value is 0.987, meaning the correlation between the Training variables (X_3) with the work productivity variable (Y) has a very strong level of relationship.

- b. R Square is 0.975, meaning the percentage contribution of the influence of the Training variable (X_3) with a work productivity variable (Y) of 0.975. This means the training percentage level (X_3) with the work productivity variable (Y) of 97.5% and the remainder influenced by other variables not examined in this research.

4. Analysis of the Effect of Responsibility (X_4) on work productivity (Y)

Table 7 Determination Test R^2 (Partial)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.966 ^a	.940	.933	.64535

a. Predictors: (Constant), Responsibility

Based on the table above, a summary of the model can be explained, which consists of the results of the simple correlation value (R) and the coefficient of determination (R Square).

- a. The resulting R (person correlation) value is 0.966, meaning the correlation between the Responsibility variable (X_4) with the work productivity variable (Y) has a very strong level of relationship.
- b. R Square is 0.940, meaning the percentage contribution of the influence of the Responsibility variable (X_4) with a work productivity variable (Y) of 0.940. This means the percentage level of influence of Responsibility (X_4) with the work productivity variable (Y) of 93.4% and the remainder influenced by other variables not examined in this research.

T Test (Partial)

The t (partial) test is used to test whether each variable has a significant relationship between the independent variable and the dependent variable. In this research, the truth was tested using the t (partial) test. Testing is carried out by looking at the significance level (*pvalue*). If the level of significance produced from the calculation is below 0.05 then the hypothesis is accepted, on the other hand if the level of significance of the calculation results is greater than 0.05 then the hypothesis is rejected.

1. Analysis of the influence of Education Level (X_1) on work productivity (Y)

Table 8 Results of the test of the influence of Education Level (X_1) on work productivity (Y)

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.028	.530		3.825	.000
	Work_Discipline ^b	.898	.024	.969	37.723	.000

a. Dependent Variable: Productivity_

Source: SPSS Data Processing Results

$$Y = a + bX_1 = 2.028 + 0.898 X_1$$

The value of the regression equation above can be explained as follows:

- a. The constant value (a) is 2.028, meaning that the Education Level variable (X_1) value is 0, then the work productivity variable (Y) gets 2,028.
- b. The regression coefficient value of the Education Level variable (X_1) is 0.898, meaning that if the other independent variables are the same, the value is the level of education (X_1) increases by 1%, then work productivity (Y) will increase by 0.898. The coefficient is positive, meaning that there is a positive relationship between Education Level (X_1) with work productivity (Y), the higher the education level (X_1) then work productivity (Y) increases.

The t test is used to test whether each variable has a significant relationship between the independent variable and the dependent variable. For variable (X_1) obtained the value of $t_{\text{count}} < t_{\text{table}}$ ($37,723 > 1,661$) and a significant value ($0.000 < 0.05$) means that H_a is accepted that the level of education (X_1) has a significant effect on work productivity (Y).

2. Analysis of the Influence of Teaching Experience (X_2) on work productivity (Y)

Table 9 Test Results of the Effect of Teaching Experience (X_2) on work productivity (Y)

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.435	.842		2.722	.008
	Teaching Experience ^b	1.118	.041	.943	27.308	.000

a. Dependent Variable: Work productivity

Source: SPSS Data Processing Results

$$Y = a + bX_2 = 2.435 + 1.118 X_2$$

The value of the regression equation above is explained as follows:

- a. The constant value (a) is 2.435, meaning that the Teaching Experience variable (X_2) value is 0, then the work productivity variable (Y) gets 2,435.
- b. The regression coefficient value of the Teaching Experience variable (X_2) is 1.118, meaning that if the other independent variables are the same, the value is Teaching Experience (X_2) increases by 1%, then work productivity (Y) will increase by 1,118. The coefficient is positive, meaning there is a positive relationship between Teaching Experience (X_2) with work productivity (Y), the increasing Teaching Experience (X_2) then work productivity (Y) increases.

The t test is used to test whether each variable has a significant relationship between the independent variable and the dependent variable. For variable (X_2) obtained the value of $t_{\text{count}} < t_{\text{table}}$

(27,308 > 1,661) and a significant value (0.000 < 0.05) means H_a is accepted that Teaching Experience (X_2) has a significant effect on work productivity (Y).

3. Analysis of the Effect of Training (X_3) on work productivity (Y)

Table 10 Training Effect Test Results (X_3) on work productivity (Y)

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.002	.350		2.867	.005
	Training ^b	.426	.016	.987	60.150	.000

a. Dependent Variable: Productivity _

Source: SPSS Data Processing Results

$$Y = a + b X_3 = 1.002 + 0,426 X_3$$

The value of the regression equation above is explained as follows:

- The constant value (a) is 1.002, meaning that the Training variable (X_3) value is 0, then the work productivity variable (Y) gets 1.002.
- Training variable regression coefficient value (X_3) is 0.426, meaning that if the other independent variables have a fixed value and Training (X_3) increases by 1%, then work productivity (Y) will increase by 0.426. The coefficient is positive, meaning that there is a positive relationship between Training (X_3) with work productivity (Y), the more training increases, the more work productivity (Y) increases.

The t test is used to test whether each variable has a significant relationship between the independent variable and the dependent variable. For variable (X_3) obtained the value of $t_{\text{count}} < t_{\text{table}}$ (60,150 > 1,661) and a significant value (0.000 < 0.05) means H_a is accepted that Training (X_3) has a significant effect on work productivity (Y).

4. Analysis of the Effect of Responsibility (X_4) on work productivity (Y)

Table 11 Test Results of the Effect of Responsibility (X_4) on work productivity (Y)

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.248	.547		4.110	.000
	Responsibility ^b	.889	.025	.966	42.174	.000

a. Dependent Variable: Productivity _

Source: SPSS Data Processing Results

$$Y = a + bX_4 = 2.248 + 0.889 X_4$$

The value of the regression equation above is explained as follows:

- a. The constant value (a) is 2.248, meaning that the Responsibility variable (X_4) value is 0, then the work productivity variable (Y) gets 2,248.
- b. The regression coefficient value of the Responsibility variable (X_4) is 0.889, meaning that if the other independent variables have a fixed value and Responsibility (X_4) increases by 1%, then work productivity (Y) will increase by 0.889. The coefficient is positive, meaning that there is a positive relationship between Responsibility (X_4) with work productivity (Y), the increase in responsibility (X_4) then work productivity (Y) increases.

The t test is used to test whether each variable has a significant relationship between the independent variable and the dependent variable. For the Responsibility variable (X_4) obtained the value of $t_{\text{count}} < t_{\text{table}}$ ($42,174 > 1,661$) and a significant value ($0.000 < 0.05$) means H_a is accepted that responsibility (X_4) has a significant effect on work productivity (Y).

T Test (Simultaneous)

Table 12

Results of the Influence of Educational Level Test (X_1), Teaching Experience (X_2), Training (X_3), and Responsibilities (X_4) on work productivity (Y)

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.237	.377		.613	.541
	Level of education	.176	.204	.189	.863	.391
	Teaching Experience	.144	.049	.121	2.942	.004
	Training	.580	.060	.599	9.653	.000
	Responsibility	.090	.196	.098	.458	.648

a. Dependent Variable: Productivity_

Source: SPSS Data Processing Results

$$AND = 0.237 + 0.176X_1 + 0.144X_2 + 0.580X_3 + 0.090X_4 + e$$

The value of the regression equation above can be explained as follows:

- a. A constant of 0.237 means that if the level of education (X_1), teaching experience (X_2), training (X_3), and responsibility (X_4) is 0, then work productivity (Y) is 0.237.

- b. The regression coefficient for the Teaching Experience variable (X_1), which shows a positive coefficient, means that there is a positive relationship of 0.176 between x_1 and work productivity (Y), thus it can be seen that Teaching Experience (X_1) is able to increase work productivity (Y).
- c. The regression coefficient for the Training variable (X_2), which shows a positive coefficient, means that there is a positive relationship of 0.144 between Training (X_2) and work productivity (Y), thus it can be seen that Training (X_2) is able to increase work productivity (Y).
- d. The regression coefficient for the Responsibility variable (X_3), which shows a positive coefficient, means that there is a positive relationship of 0.580 between Responsibility (X_3) and work productivity (Y), thus it can be seen that Responsibility (X_3) is able to increase work productivity (Y).

The t test is used to test whether each variable has a significant relationship between the independent variable and the dependent variable. For variable (X_1) obtained the value of $t_{\text{count}} < t_{\text{table}}$ ($863 < 1,661$) and a significant value ($0.391 > 0.05$) meaning that H_a is rejected that the level of education (X_1) has no significant effect on work productivity (Y). For the Teaching Experience variable (X_2) obtained the value of $t_{\text{count}} < t_{\text{table}}$ ($2,942 > 1,661$) and a significant value ($0.004 < 0.05$) means H_a is accepted that Teaching Experience (X_2) has a significant effect on work productivity (Y). For the Training variable (X_3) get the t value $t_{\text{count}} < t_{\text{table}}$ ($9,653 < 1,661$) and a significant value ($0.000 > 0.05$) means that H_a is accepted that Training (X_3) has a significant effect on work productivity (Y). For the Responsibility variable (X_4) obtained the value of $t_{\text{count}} < t_{\text{table}}$ ($458 < 1,661$) and a significant value ($0.648 > 0.05$) means H_a is rejected that Responsibility (X_4) has no significant effect on work productivity (Y).

F test (simultaneous)

Table 13 ANOVA^a

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	573.943	4	143.486	1379.988	.000 ^b
Residual	9.783	37	.109		
Total	583.726	41			

a. Dependent Variable: Work_Productivity

b. Predictors: (Constant), Responsibilities, Training, Teaching Experience, Work_Discipline

Source: SPSS Data Processing Results

Based on the data results above, the f value $f_{\text{count}} > f_{\text{table}}$ ($1379,988 > 2.47$) and significant value ($0.000 < 0.05$). Thus H_0 is rejected and H_a is accepted. This means that the Education Level (X_1), Teaching Experience (X_2), Training (X_3), and Responsibility (X_4) together have a significant influence on Work Productivity (Y).

CONCLUSION

Based on the research and discussion described in the previous chapter, the following conclusions can be drawn:

1. The research results show that there is a strong relationship between the Education Level variable (X_1), Teaching Experience (X_2), Training (X_3), and Responsibility (X_4) on Teacher Work Productivity (Y). The correlation value (R) of 0.992 indicates that there is a very strong relationship between these variables
2. The coefficient of determination (R Square) of 0.983 indicates that 98.3% of the variation in Teacher Work Productivity can be explained by Education Level, Teaching Experience, Training, and Responsibilities. The remaining 1.7% was influenced by other factors not examined in this study
3. Hypothesis test results show that:
 - a. Education Level (X_1) has a significant influence on Teacher Work Productivity with the t value_{count} > t_{table} and significance level < 0.05
 - b. Teaching Experience (X_2) also has a significant effect on Teacher Work Productivity with the t value_{count} > t_{table} and significance level < 0.05
 - c. Training (X_3) is proven to have a significant influence on Teacher Work Productivity with results showing the t value_{count} > t_{table} and significance level < 0.05
 - d. Responsibility (X_4) has a significant effect on Teacher Work Productivity with the t value_{count} > t_{table} and significance level < 0.05
4. Simultaneous test results show that the variables Educational Level, Teaching Experience, Training and Responsibilities together have a significant influence on Teacher Work Productivity, with a value of F_{count} > F_{table} and significance level < 0.05

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