The Effect of Leadership and Work Motivation on Operator Performance

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ABSTRACT

Information technology in the education system today is very advanced and completely online, so the performance needs of school operators will determine the quality of schools in addition to the leadership and work motivation of the principal. This study aims to analyze the effect of leadership and work motivation on the performance of elementary school operators; and analyze the influence of the principal's leadership on the work motivation of school operators. This study uses quantitative methods to examine three variables, namely two independent variables and one dependent variable. This research was conducted using quantitative research with a survey method with a correlational approach, with a total population of 26 principals and 26 school operators so that the population was 52 people. The sample was carried out by the census method. The instrument test in this study used validity and reliability tests. Using descriptive analysis and hypothesis testing. The results of the calculation of normality in the principal's leadership data as the dependent variable (X1) the hypothesis is accepted or in other words the data is normally distributed. In the work motivation data as the dependent variable (X2) the hypothesis is accepted or in other words the data is normally distributed. In the school operator's performance data as an independent variable (Y) the hypothesis is accepted or in other words the data is normally distributed. In the linearity test, there is a linear relationship between the principal's leadership variable (X1) and the work motivation variable (X2) on the school operator's performance variable (Y). The conclusion of this study is that there is an influence of leadership on the performance of school operators, there is an influence of leadership on the performance of school operators and there is an influence of leadership and work motivation of the principal on the performance of school operators.

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1. INTRODUCTION

In this day and age especially since the Covid 19 pandemic hit the world, information technology has become very vital in all sectors of life, as well as in education, since the implementation of social distance and physical distance, all educational activities and learning processes use online systems more.

The phenomenon that occurs in today's online era, success in improving the quality of education in schools cannot be separated from the way the principal manages and utilizes supporting facilities, especially internet technology, educators, administrative staff, and technology operators in schools (Mohzana, Fahrurrozi, & Murcahyanto, 2021). The magnitude of the duties and responsibilities carried out by the principal, it must have employees who are dedicated and master high information technology to be able to provide maximum results, especially in the data collection system. This cannot be separated from the role of the operator who drives the online system. So that the performance of the operator also determines the success of the learning process. The performance of technical operators in schools is also very dependent and influenced by the principal, school conditions, motivation, and others which are an integral part of the education management system in schools in improving the quality of education.

The data collection system at the elementary and junior high school levels is through the Instruction of the Minister of National Education No. 2 of 2011 concerning Education Data Management Activities, as well as the Secretariat of the Directorate General of Primary and Secondary Education which has a role in collecting complete, correct, up-to-date and accurate data using Primary data collection system for educators. In order to continue to improve the quality of the primary data collection system for educators. A circular letter from the Director General of Primary and Secondary Education number 0993/D/PR/2019 has been issued regarding the quality of primary and secondary school data (Nainggolan, 2020; Wahyuni et al., 2018).

Data from the Basic and Secondary Educator Basic Data Collection System application is used as a reference for data in the Ministry of Education and Culture programs at the primary and secondary education levels (Carles et al., n.d.). If schools do not actively participate, schools will lose because their data will not reach the Ministry of Education and Culture (Putra et al., 2020). The school will automatically not be touched by the Kemendikbud programs. The data from the application will be used as a data reference in the Ministry of Education and Culture's programs at the basic education level such as: the provision of National Student Identification Numbers, School Operational Assistance, Assistance for Poor Students, teacher allowances, National Examinations, and other programs (Annida & Syahrani, 2022). Therefore, schools must actively participate in data collection activities, in this case the role and performance of school operators is very important.

Operators tasked with assisting schools in inputting basic data for educators must have the ability and expertise in the computer field. In addition, operators who are highly dedicated are needed to work in dealing with basic data problems for educators in schools. Primary data collection for educators carried out by the government on a national scale, the data management is carried out online (Sholihah, 2020).

With the online school data collection system through the primary educator data collection system, school operators have a very important role in entering school profile data such as school principals, educators, educators, students and school facilities such as facilities and infrastructure located in the school. the school (Lesmana et al., 2017). The delivery of basic educator data updates by school operators has a time limit that has been determined by the government. So the school operator before sending must coordinate with the principal to achieve optimal results. So that in doing this task also requires optimal operator performance (Sholihah, 2020).

The less optimal performance of the operator is due to the lack of attention from the school in controlling and paying attention to the operator's performance at work. What is happening today is that there are still many operators who are always late in sending data and the operator's attendance rate at

school is not optimal (Nurmala, 2019; Rambagi, 2021). High performance will provide success and success in completing the assigned responsibilities and tasks, while low performance will give dissatisfaction with the tasks and responsibilities assigned to him (Suryani & SE, 2019; Uno & Lamatenggo, 2012; Mangkunegara, 2016; Daryanto, 2011; Abdullah, 2014; Fahrurrozi et al., 2021; Mohzana, Fahrurrozi, Hartini Haritani, et al., 2021; Murcahyanto et al., 2019).

To improve the performance of the operator, it is necessary to have work motivation from the operator in carrying out his duties so that he is more active and enthusiastic in doing all the tasks assigned to him so as to improve his performance (Nugroho et al., 2016). So that work motivation is very important in growing enthusiasm and enthusiasm at work. The performance of the operator greatly affects the leadership of the principal because the principal is very responsible for everything that is done by the operator in carrying out the tasks assigned to him, from sending basic data, Education Quality Mapping data and reporting funds both online and offline (Alfaini et al., 2021). The principal's leadership on the performance of school operators is influenced by good work motivation from within the school operator (Nugroho et al., 2016).

Based on the description of the background above, it can be identified several problems in this study as follows: Operator motivation is still low, operator performance is not optimal, delays in data collection and school administration, lack of communication between operators and school principals, lack of discipline of elementary school operators, supervision has not been maximally carried out by the principal, less careful in importing and sending data to the teacher's main data server. In accordance with the problems as stated above, in general this study aims: To analyze whether leadership has an effect on the performance of elementary school operators; Analyzing work motivation can affect the performance of elementary school operators; and Analyzing that the principal's leadership has an effect on the work motivation of school operators.

To support the problems in the discussion, researchers look for various previous studies that are relevant to the problem that is the object of this current research. Therefore, to fulfill the code of ethics in scientific research, it is necessary to explore relevant previous studies. Based on the results of the exploration of previous studies that are relevant to the current research, there are several previous studies that are relevant to the current research, including; Bernadetha Rizki Kaize's research in 2018 students of the Elementary School Masters Study Program, Postgraduate Program at the Jakarta Universitas Terbuka with the title "Transferring Principal Leadership and Work Motivation on the Performance of Elementary School Operators in Bogor Regency"; Research by Angga Debby Frayuda in 2016, Conducted research on "The Influence of Head of Service Leadership and Compensation Through Work Motivation on the Performance of Rembang Regency Education Office Employees"; and research conducted by Lumban Raja in 2014 with the title The influence of leadership style and work motivation on teacher performance at SMPN 1 Pandan.

Based on the description of the theoretical basis and framework of thought above, the hypotheses in this study are: There is an influence of principal's leadership on the performance of elementary school operators; There is an effect of work motivation on the performance of elementary school operators; and There is an influence of the principal's leadership on the work motivation of elementary school operators.

2. METHODS

Research on the performance of elementary school operators was carried out at elementary schools located in Selong District, East Lombok Regency. This research was started from March to May 2021. This research was conducted using quantitative research with a survey method with a correlational approach, one of which is a study designed to obtain information about the relationship between different variables in a population. This study examines three variables, namely two independent variables and one dependent variable. The independent variables are the principal's leadership and work motivation, while the dependent variable is the performance of elementary school operators (Y). Quantitative approach is

used to measure the independent variables and dependent variables by using numbers that are processed through statistical analysis.
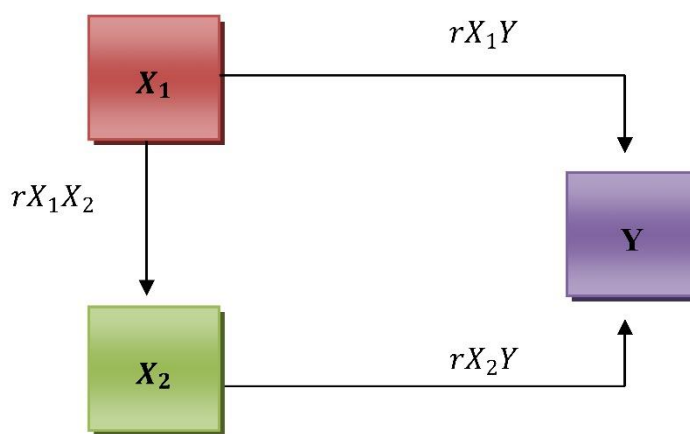

Figure.1. Research Design

Information:
X_1 = Principal Leadership
X_2 = Work motivation
Y = Operator Performance
X_1 Y= Effect of Principal Leadership on Operator Performance
X_2 Y = Effect of work motivation on operator performance
 X_1 X**-2**= Effect of Principal Leadership on work motivation

The data needed in this study is information related to the principal's leadership, work motivation to the performance of elementary school operators. The population in this study were all elementary school principals and elementary school operators in Selong District with a total population of 26 principals and 26 school operators so that the population was 52 people.

Sampling was carried out by the census method, this was seen from the number of areas and objects studied so that researchers felt the need to conduct a thorough research without having to take a sample with a certain number of Selong District has 26 elementary schools, then the entire population will be taken as a sample, namely the principal 26 schools and 26 elementary school operators with a total population of 52 people.

The research instrument was used to measure the value of the variables studied. The number of instruments studied depends on the number of variables studied, because the research instruments will be used for measurement with the aim of obtaining accurate quantitative data (Sugiyono, 2016). The research data uses a score for each variable obtained through the distribution of questionnaires as a data collection instrument. The questionnaire instrument was used to collect data on the performance of school operators, principals' leadership and work motivation.

In this study using the correlation method, correlation is a term used to measure the strength of the relationship between variables. Correlation analysis is a way to find out whether or not there is a relationship between variables, for example the relationship between two variables (Sapardi, n.d.2012). Some characteristics of a good instrument are valid and reliable (Arifin, 2012). The instrument test in this study used validity and reliability tests. The reliability test in this study used the help of the SPSS Statistics 18.00 program to simplify calculations. If r $_{count}$ is equal to or greater than 0.600 then the instrument is reliable, otherwise if r $_{count}$ is less than 0.600 then the instrument is not reliable.

Data collection techniques were carried out using quantitative methods through correlational design between the influence of school principal leadership and work motivation on the performance

of elementary school operators using a questionnaire, namely a list of questions given to respondents to explore data according to research problems. The data analysis technique used in this research is statistical analysis. This analysis was conducted to see the influence of the principal's leadership and work motivation on the performance of elementary school operators, using research steps with descriptive and inferential data analysis/hypothesis testing.

Descriptive analysis is used to see the trend of the distribution of variables and determine the level of achievement of respondents in each variable. The general description in each variable is described in the average score obtained. The descriptive analysis in this study consisted of: a) Analysis of portrait data (frequency and percentage), b) analysis of the central tendency of the data (mean value of median and mode) and c) analysis of variation in values (range and standard deviation or variance). While the hypothesis test is done by using simple regression analysis and multiple regression analysis. Simple regression analysis was used to determine the effect of the first independent variable (X1) or the second independent variable (X2) on the dependent variable (Y). Multiple regression analysis was used to determine the effect of both the first and second independent variables together on the dependent variable.

3. FINDINGS AND DISCUSSION

3.1. Pre-requisite Test Results Analysis

Normality test

The normality test is used to test whether in the regression model, the confounding or residual variables have a normal distribution. The normality test of the data used in this study is the Lilifors test. Based on the test results on each variable as follows:

Based on the results of the normality calculation on the principal's leadership data as the dependent variable (X1) using the 2013 Microsoft Excel program, it can be concluded that the largest absolute value value is 0.137. By knowing that the critical value of L for the sample (n) = 26 and = 0.05 is 0.173, it can be concluded that the value of Lo (0.137) < Lα (0.173). This means that the hypothesis is accepted or in other words the data is normally distributed.

Based on the results of the normality calculation on work motivation data as the dependent variable (X2) using the 2013 Microsoft Excel program, it can be concluded that the largest absolute value value is 0.072. By knowing the critical value of L for the sample (n) = 26 and = 0.05 is 0.173, it can be concluded that the value of Lo (0.972) < L (0.173). This means that the hypothesis is accepted or in other words the data is normally distributed.

Based on the results of the normality calculation on the school operator's performance data as an independent variable (Y) using the 2013 Microsoft Excel program, it can be concluded that the largest absolute value value is 0.137. By knowing the critical value of L for the sample (n) = 26 and = 0.05 is 0.173, it can be concluded that the value of Lo (0.137) < L (0.173). This means that the hypothesis is accepted or in other words the data is normally distributed.

Linearity test

The linearity test was carried out with the aim of seeing the linear relationship between the dependent variable and the independent variable using the SPSS 20.0 program with the following output.

Table 1. Output ANAVA Linearity Test

			Sum of Squares	df	Mean of Square	F	Sig
Unstandarized residual	Beetween Groups	(Combined)	13,197	23	0,574	2,295	0,348
***Unstandarized Predicated Value**		Linearity	0,000	1	0,000	0,000	1,000
		Deviation from Linearity	13,197	22	0,600	2,399	0,336
	Within Groups		0,500	2	0,250		
	Total		13.697	25			

Based on the output table above, it shows that the value of Sig. The linearity of 1,000 is greater than the significance level of 0.05, thus it can be concluded that there is a linear relationship between the principal's leadership variable (X1) and the work motivation variable (X2) on the school operator's performance variable (Y).

3.2. Hypothesis Test Results

The results of the analysis of the influence of the principal's leadership (X1) on the performance of school operators (Y)

The results of the first hypothesis test analysis output using SPSS 20.0 are shown in the table as follows:

Table 2. Output Variables Entered/Removed

Model	Variabels Entered	Variabels Removed[a]	Method
1	Principal leadership[b]		Enter

a. Dependent variable: operator performance
b. All requested variables entered

The table above describes the variables entered and the methods used. In this case, the variables included in this analysis are the principal's leadership as the independent variable and the school operator's performance as the dependent variable and the method used in this analysis is the enter method.

Table 3. Output Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,994[a]	0,988	0,988	2,002

a. Predictors: (Constant), Principal leadership

The table above explains the magnitude of the correlation value (R). Thus the magnitude of the correlation value (R) obtained is 0.994 and the value of the correlation coefficient (R Square) is 0.988 which means that the magnitude of the influence of the principal's leadership on the performance of school operators is 98% and the rest is the influence of other factors.

Table 4. Output ANOVA[a] 2.Hypothesis Test 1

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7968,263	1	7968,263	1987,954	0,000[b]
	Residual	96,199	24	4,008		
	Total	8064,462	25			

a. Dependent variable : Operator performance

b.Predictors: (Constant), Principal leadership

From the output it is known that the magnitude of the calculated F value = 1987.954 with a significance level of 0.000 <0.05, thus the regression model can be used to predict the school operator's performance variables. school (X1) on the school operator's performance variable (Y).

The results of the analysis of the effect of work motivation (X2) on the performance of school operators (Y)

The results of the first hypothesis test analysis output using SPSS 20.0 are shown in the table as follows:

Table 5. Output Variables Entered Work Motivation

Model	Variabels Entered	Variabels Removed[a]	Method
1	work motivation[b]		Enter

a. Dependent variable: operator performance
b. All requested variables entered

The table above describes the variables entered and the methods used. In this case the variables included in this analysis are work motivation as an independent variable and school operator performance as the dependent variable and the method used in this analysis is the enter method.

Tabel 6. Output Model Summary Work Motivation

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,999[a]	0,998	0,998	0,761

a.Predictors: (Constant), work motivation

The table above explains the magnitude of the correlation value (R). Thus the magnitude of the correlation value (R) obtained is 0.999 and the value of the correlation coefficient (R Square) is 0.998

which means that the magnitude of school work motivation on the performance of school operators is 99% and the rest is the influence of other factors.

Table 7. Output ANOVAᵃ Work Motivation

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8050,552	1	8050,552	13890,779	0,000[b]
	Residual	13,909	24	0,580		
	Total	8064,462	25			

a. Dependent variable: operator performance
b.Predictors: (Constant), work motivation

From the output, it is known that the calculated F value = 13,890 with a significance level of 0.000 < 0.05, thus the regression model can be used to predict the school operator's performance variables. Thus, it can be concluded that there is a positive and significant influence between work motivation variables (X2) to the school operator's performance variable (Y).

The results of the analysis of the influence of the principal's leadership (X1) and work motivation (X2) on the performance of school operators (Y)

The results of the F test can be seen in the ANOVAa table below. Prob value. F count seen in the last column (sig.)

Table 8. Output ANOVAᵃ Hypothesis 3

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8050,765	2	4025,382	6759,528	0,000[b]
	Residual	13,697	23	0,596		
	Total	8064,462	25			

a. Dependent variable: Operator performance
b.Predictors: (Constant), Work motivation, Principal leadership

Probability value. The calculated F (sig.) in the table above is 0.000 less than the 0.05 significance level, so it can be concluded that the estimated linear regression model is feasible to use to explain the effect of principals' leadership (X1) and work motivation (X2) on school operator performance (Y) .

The t-test in multiple linear regression is intended to test whether the parameters (regression coefficients and constants) that are thought to estimate the multiple linear regression equation/model are the right parameters or not. The exact meaning here is that the parameter is able to explain the behavior of the independent variable in influencing the dependent variable. Parameters estimated in linear regression include intercept (constant) and slope (coefficient in linear equation). In this section, the t-test is focused on the slope parameter (regression coefficient) only. So the t test in question is the regression coefficient test.

The test results can be seen in the Coefficientsᵃ table as shown in the image below:

Table 9. *Output Coefficients[a]*

Model		Unstandarized Coefficients		Standarized Coefficients	t	Sig
		B	Std.Error	Beta		
1	(Constant)	-4,121	1,308		-3,151	0,004
	Principal leadership	-0,055	0,092	-0,053	-0,598	0,004
	Work motivation	1,109	0,094	1,052	11,770	0,000

a. Dependent variable: Operator performance

Probability value. t count of the independent variable of the principal's leadership is 0.004 which is smaller than 0.05 so that the independent variable of the principal's leadership has a significant effect on the dependent variable of the school operator's performance at alpha 5% or in other words, the principal's leadership has a significant effect on the performance of school operators at the level of confidence 95%. Likewise, the effect of the independent variable on work motivation on the dependent variable on the performance of school operators, because the value of prob. t count (0.000) which is smaller than 0.05 so it can be said that the independent variable work motivation has a significant effect on the dependent variable of school operator performance at alpha 5%.

DISCUSSION

The first step taken by researchers in the implementation of this research, namely to test the validity and reliability of the questionnaire instrument that will be used in the study. Validity and reliability tests were carried out on respondents outside the population. The questionnaire instrument that has passed the validity and reliability test, is then distributed to the actual research sample.

The results of the statistical validity and reliability test using the product moment correlation to test the validity and alpha cronsback for the reliability test showed that of the 50 statement items from the three questionnaires, namely the leadership questionnaire, the principal's work motivation and the school operator's performance questionnaire, 38 items were declared valid. and the three questionnaires were declared reliable.

After the data was collected, the researcher carried out an assumption test, namely the normality test using the Lilifors test and the linearity test using correlation. The results of the normality test on each data, namely the principal's leadership data, work motivation data and school operator performance data show that the data is normally distributed and has a linear relationship between the principal's leadership and work motivation on the performance of school operators. The next step in this research is to test the hypothesis on each hypothesis, namely:

4.1. There is an influence of leadership on the performance of school operators.

The results of the hypothesis test indicate that there is a significant influence between leadership as an independent variable (X1) on the performance of school operators as the dependent variable (Y), this is evidenced by the value of the output, it is known that the calculated F value is smaller than the 5% significance level, with Thus the regression model can be used to predict the school operator's performance variable. Thus, it can be concluded that there is a positive and significant influence between the leadership variable (X1) on the school operator's performance variable (Y).

4.2. There is an effect of the principal's work motivation on the performance of school operators.

As in the first hypothesis, the second hypothesis also illustrates that the magnitude of the calculated Fcount is smaller than the significance of 5%, thus the regression model can be used to predict the school operator's performance variables, thus it can be concluded that there is a positive and significant influence between work motivation variables. (X2) on the school operator's performance variable (Y).

*4.3. **There is an influence of the principal's leadership and work motivation on the performance of school operators.***

Taking into account the probability value, the F count (sig.) is smaller than the 0.05 significance level, so it can be concluded that the estimated linear regression model is feasible to use to explain the influence of leadership (X1) and work motivation (X2) on the performance of school operators (Y). Furthermore, when viewed from the probability t- count of the independent variable leadership is smaller than 0.05 so that the independent variable leadership of the principal has a significant effect on the dependent variable of the performance of school operators at alpha 5% or in other words, the leadership of the principal has a significant effect on the performance of elementary school operators in 95% confidence level. Similarly, the effect of the independent variable on work motivation on the dependent variable of school operator performance, because the value of probability t count (0.000) which is smaller than 0.05 so it can be said that the independent variable of work motivation has a significant effect on the dependent variable of school operator performance at alpha 5%.

4. CONCLUSION

Based on the results of the research and discussion, it can be concluded that: The data obtained from respondents on each variable have met the assumption test as a condition that must be met in parametric statistics. The assumption test in question is that all data obtained on each variable are normally distributed and have a linear relationship between each of these variables.

The results of the first hypothesis test indicate that there is a significant influence between the principal's leadership and the performance of elementary school operators. The results of the second hypothesis test indicate that there is a relationship between work motivation and the performance of elementary school operators.

After seeing the results of the first and second hypotheses, hypothesis testing was carried out on the two independent variables on the dependent variable. The test results show that there is a significant influence between the principal's leadership and work motivation on the performance of elementary school operators.

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