



Influence Leadership Management for the Management of Madrasah Facilities and Infrastructure at MTs Negeri 2 Deli Serdang

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Abstract

Seeing the importance of facilities and infrastructure in supporting education, MTs Negeri 2 Deli Serdang is a State Madrasah with Accreditation A where in principle the educational facilities and infrastructure have met existing needs. However, by only meeting existing needs, it cannot run well if the management is not correct. the purpose of this study was to find out what kind of influence Leadership Management has on the management of madrasah facilities and infrastructure at MTs Negeri 2 Deli Serdang. The type of research that the author used in research at MTs Negeri 2 Deli Serdang was quantitative descriptive research. To obtain complete data, the authors use data collection tools in the form of observation, data analysis, and documentation. Based on the results of the study it is understood that the Effect of Leadership Management on the Management of Madrasah facilities and infrastructure at MTs Negeri 2 Deli Serdang which includes: First the planning activities for facilities and infrastructure are always carried out starting from needs analysis, determining the place of goods and selecting goods needed, Second procurement activities have been running starting from dropping the government and procuring schools by buying and determining funds as needed but there are still procurement activities that have not been running. Third, the use of facilities and infrastructure is always carried out to support learning. Fourth, maintenance of facilities and infrastructure is carried out regularly by involving madrasa residents The five inventories are always carried out as evidence of procurement of goods. The six write-off activities have already been carried out. From the results of the research above, it can be concluded that the Influence of Leadership Management on the Management of Madrasah Facilities and Infrastructure at MTs Negeri 2 Deli Serdang has been fulfilled by means of: planning needs, procurement , use , maintenance, inventory, write-off and accountability.

Keywords : Leadership Management, Management of facilities and infrastructure.

Abstract

Seeing the importance of facilities and infrastructure in supporting education, MTs Negeri 2 Deli Serdang is a State Madrasah with Accreditation A where in principle the educational facilities and infrastructure have met existing needs. However, simply meeting existing needs cannot run well if the management is not correct. the purpose of this study was to find out what kind of influence Leadership Management has on the management of madrasah facilities and infrastructure at MTs Negeri 2 Deli Serdang. The type of research that the author used in research at MTs Negeri 2 Deli Serdang was quantitative descriptive research. To obtain complete data, the authors use data collection tools in the form of observation, data analysis, and documentation. Based on the results of the study it is understood that the Effect of Leadership Management on the Management of Madrasah facilities and infrastructure at MTs Negeri 2 Deli Serdang which includes: First the planning activities for facilities and infrastructure are always carried out starting from needs analysis, determining the place of goods and selecting goods needed, Second procurement activities have been running starting from dropping the government and procuring schools by buying and determining funds according to needs but there are still procurement activities that have not been running, Third, the use of facilities and infrastructure is always carried out to support learning, Fourth, maintenance of facilities and infrastructure is carried out regularly by involving madrasa residents, Fifth, inventory is always carried out as evidence of procurement of goods. The six deletion activities have been carried out. From the results of the research above, it can be concluded that the Influence of Leadership Management on the Management of Madrasah Facilities and Infrastructure at MTs Negeri 2 Deli Serdang has been fulfilled by means of: planning needs, procurement, use, maintenance, inventory, write-offs and accountability.

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Introduction

Education as part of national education can educate and improve good personality. With education, it can strive for and develop self-understanding for students. Progress must be realized with a quality learning process and produce graduates who are broad-minded, professional, superior, confident and have high self-esteem. To realize the above results, the right strategy is needed, including students based on the abilities, attitudes, characteristics and behavior of students so as to make the learning process fun (Ali, 2009)

The influence of leadership management must be able to create good teaching and learning situations, and be able to manage the "school plant" special services for madrasas and educational facilities, so that teachers and students get the satisfaction of enjoying working conditions managing teaching personnel and students fostering a curriculum that meets children's needs and maintain educational records.

In Hasibuan's opinion, that management or management is the science and art of managing the process of utilizing human resources and other resources effectively and efficiently to achieve certain goals.

Madrasah facilities and infrastructure as educational institutions need to be built and managed professionally, so that quality educational institutions are realized. And to ensure that these Educational Institutions are achieved, the government has mandated eight national education standards as stated in Government Regulation Number 19 of 2005.

Schools will be effective and efficient if they are supported by good human resources in operating madrasas , educational staff curricula, and all of this is supported by facilities and infrastructure .

Management of madrasah facilities and infrastructure is one of the necessary and important educational resources to be managed properly and is an inseparable part of education management. Madrasah facilities and infrastructure should not be ignored because, with the existence of these madrasah facilities and infrastructure, facilitate the program of teaching and learning activities to be more optimal.

Madrasah facilities are equipment and supplies that are directly used and to support the

educational process, especially in the teaching and learning process, such as the madrasa building, madrasah classrooms, madrasah principal's room, tables, chairs, cabinets, as well as madrasah teaching tools and media. As for what is meant by madrasa infrastructure or teaching in the learning process, such as the madrasa yard, the madrasa garden, as well as the road to the madrasa.

Infrastructure that is used directly for the teaching and learning process in madrasas, such as madrasa gardens for biology lessons, madrasa yards as well as sports fields and so on (Awaluddin and Syahputra, 2016)

Leadership is the process of influencing others in the relationship between leaders and subordinates or with followers. In essence, the meaning of leadership as a process of influencing others to achieve goals in a situation.

As in the Qur'an there are many verses related to leadership issues. Among them the Word of Allah SWT. in QS. Al Baqarah/2: 30 which reads: ○

قَالُوا ۖ خَلِّفْنَا الْأَرْضَ فِي جَاعِلٍ ۖ إِنِّي لِلْمَلِكَةِ رَبِّكَ قَالَ وَادُّ
بِحَمْدِكَ نُسِيخَ وَنَحْنُ الدِّمَاءُ وَيَسْفِكُ فِيهَا يَفْسِدُ مَنْ فِيهَا أَنْجَعُ
تَعْلَمُوا لَا مَا أَعْلَمُ إِنِّي قَالَ ۖ لَكَ وَنَقَدِسُ

Meaning: "Remember when your Lord said to the angels: "Indeed I want to make a caliph on earth". They said: "Why do you want to make (the caliph) on earth someone who will make damage to it and shed blood, even though we always glorify you by praising you and purify you?" God said: "Surely I know what you do not know".

According to the results of research published by Hajeng Darmastuti Year 2019 in the journal Inspiration Management Education stated that, the influence of leadership management on the management of madrasah facilities and infrastructure should always supervise and direct the activities of managing madrasah facilities and infrastructure so that the activities run well and effectively so that they can achieve goals. predetermined goals (Darstuti, 2014)

Method (15%)

This research was conducted at MTs Negeri 2 Deli Serdang Jadi, Lubuk Pakam District, Deli Serdang Regency, North Sumatra . This research was conducted from June to November, 2022. This type of research is quantitative research. The quantitative method is

called the traditional method, because this method has been used for a long time, so it has become a tradition for research. This method is called a quantitative method because the research data is in the form of numbers and the analysis uses statistics.

Quantitative research methods can be interpreted as research methods based on the philosophy of positivism, used to examine certain populations or samples.

A research variable is an attribute or trait or value of a person, object or activity that has been measured by a researcher to study using two variables, namely the independent variable and the dependent variable.

The independent variable or variable X is the variable that is seen as the cause of the emergence of the dependent variable which is thought to be the result. Meanwhile, the dependent variable or Y variable is the variable (effect) that is presumed, which varies according to changes in the independent variables. Generally it is a condition that we like to express and explain.

In the statistical test used in this study using data analysis techniques, namely: Simple regression analysis is used to predict or test the effect of one independent variable on the *dependent variable* . If the score of the independent variable is known, the value of the dependent variable can be predicted.

Regression analysis can also be performed to determine the linearity of the dependent variable and the independent variable. Simple *linear regression* analysis is based on the functional or causal relationship of one independent variable with one dependent variable. Simple *linear regression* analysis is used to predict how far the value of the dependent variable changes, the values of the dependent variable fluctuate or fluctuate.

The general equation of simple linear regression is:

Information:
$$Y = a + bX + e$$

Y = Management of Madrasa Facilities and Infrastructure
 X = Leadership Management
 a = Constant
 b = Coefficient
 e = Errors

Data for the purposes of analysis and hypothesis testing are processed systematically using the SPSS version 20.0 tool.

2. Partial Effect Significance Test (t test)

The t test basically shows how far the influence of an independent variable individually explains the dependent variable. Testing by comparing the value of the probability t_{count} with a probability of 0.05/5%. The decision making rule is:

- H_a is rejected and H_o can be accepted if $t_{count} < t_{table}$.
- H_a is accepted and H_o is rejected if $t_{count} > t_{table}$.

Information :

n = Amount
 k = Number of independent variables
 1 = Constant

This test is used to test the significance of the relationship between X and Y variables, whether the variable (Leadership Management) really influences Y variable (Management of Madrasah Facilities and Infrastructure).

3. Determination Coefficient Analysis (R²)

The coefficient of determination (r^2) basically measures how far the model's ability to explain the variation of the dependent variable. The coefficient of determination is between zero and one. Analysis of r^2 using the formula below:

$$D = r^2 \times 100\%$$

Description: D = Coefficient of Determination
 r = The correlation coefficient squared

value of r^2 means that the ability of the independent variables to explain the variation in the dependent variable is very limited. Vice versa, a value that is close to one means that the independent variables are able to provide almost all the information needed to predict the variation of the dependent variable.

The fundamental weakness of using the coefficient of determination is the bias towards the number of independent variables included in the model. Each additional one independent variable, then r^2 must increase, regardless of whether the variable has a significant effect on the dependent variable.

Therefore, many researchers recommend using the value of *Adjusted* r^2 when evaluating which is the best regression model. Unlike r^2 , the

value of *Adjusted r²* can increase or decrease if one independent variable is added to the model.

Results and Discussion (70%)

test is a tool for measuring a questionnaire which is an indicator of a variable or construct. A questionnaire is said to be reliable or reliable if one's answers to statements are consistent or stable from time to time. The reliability of a test refers to the degree of stability, consistency, predictability, and accuracy. Measurements that have high reliability are measurements that can produce reliable data .

Reliability, or reliability, is the consistency of a series of measurements or a series of measuring instruments. This can be in the form of measurements from the same measuring instrument (test with retest) will give the same results, or for more subjective measurements, whether two raters give similar scores (inter-rater reliability). Reliability is not the same as validity. This means that a reliable measure will measure consistently, but not necessarily measure what it is supposed to measure.

In research, reliability is the extent to which the measurement of a test remains consistent after being performed repeatedly on subjects and under the same conditions. Research is considered reliable when it provides consistent results for the same measurements. It is unreliable if repeated measurements give different results.

Reliability test is a tool used to measure the consistency of a questionnaire which is an indicator of a variable or construct . A questionnaire is said to be reliable or reliable if one's answers to the questions are consistent or stable from time to time .

We can see the results of the data or the results of data processing using the reliability test from table 4.6 below:

Table 4.6

Variable	Alpha coefficient (α) from <i>cronbach</i>
Leadership Management (X)	0.823
Infrastructure Management (Y)	0.803

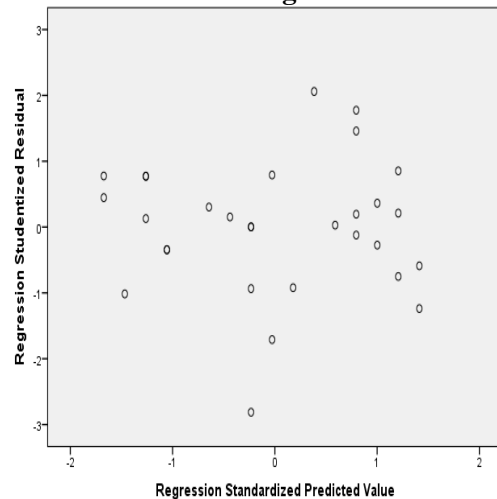
From the results of the data processing above, the coefficient value of each variable can be shown as follows.

1. The value of Variable X, namely Leadership Management, has a coefficient value of 0.823. And the coefficient value of the

management of facilities and infrastructure or variable Y is 0.803.

Meanwhile, the results of data processing from the reliability test table get a graph like Figure 4.2, which is called a pi/lek graph.

Figure 4.2



For the P/plot graph, it ensures that data along that line or at the enol points (0) is carried out for a normality or reliability test in which the value of the X-axis is against the value obtained from the Y-axis sample.

Normality test

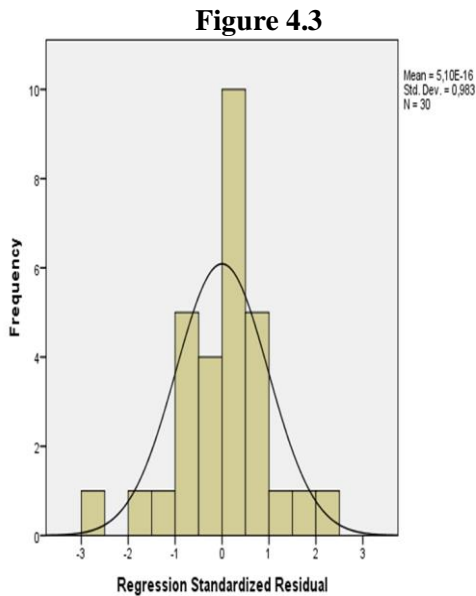
Normality test is a test that is carried out with the aim of assessing the distribution of data in a group of data or variables, whether the data distribution is normally distributed or not.

The Normality Test is useful for determining the data that has been collected is normally distributed or taken from the normal population. The classic method of testing the normality of data is not that complicated. Based on the empirical experience of several statisticians, data with more than 30 digits ($n > 30$) can be assumed to be normally distributed. Usually said to be a large sample.

However, to provide certainty, whether the data is normally distributed or not, the normality test should be used. Because it is not certain that the data with more than 30 data are normally distributed, and conversely the data with less than 30 data are not necessarily not normally distributed, for this we need a proof.

The normality test is to find out whether the distribution of a data follows or approaches the normal distribution or that is the distribution of data in a graph-like form.

The results of data processing using an application that shows the normality test distribution can be seen in Figure 4.3 as follows:



From the graphic data we can see where the graph shows a mean value of 5.10, while the value of E-16. Meanwhile, the standard deviation value is 0.983 and the value of N after deducting the error is 30, meaning that the total data value is 35 minus the standard error of 5, meaning the value is 30.

In the histogram graph above it is said that the variables are normally distributed where the direction of the bell indicates that the distribution of the data is neither skewed to the left nor skewed to the right, so that it can be said to be normal which is in a parallel position in the middle.

The relationship between leadership management and the management of facilities and infrastructure is one of the factors that plays a very important role in educational institutions, whether or not these educational institutions are good or bad. Often a large part depends on the leader. Various studies have also proven that leadership factors play an important role in the development of educational institutions. A very important leader factor is the character of the person who becomes under 90% of all leadership failures are character failures.

Furthermore, the factors related to leadership management are one of the facilities and infrastructure management systems where each educational institution, facilities and infrastructure really support and expedite the educational process. The management of educational facilities and infrastructure is an inseparable part of the educational process. Therefore, to achieve educational goals, the existence of educational facilities and infrastructure cannot be ignored, but must be

considered to improve the quality and quantity in an educational institution.

So, it can be concluded that the existence of good management of facilities and infrastructure can create pleasant conditions for students and educators who are at school. Because the management of facilities and infrastructure in this case is tasked with regulating and maintaining educational facilities and infrastructure so that they can make an optimal and meaningful contribution to the course of the educational process.

Furthermore, this research was also conducted to examine the influence of leadership management on the management of madrasah facilities and infrastructure at MTs Negeri 2 Deli Serdang, based on the results of data processing in statistical tests, namely validity tests, reliability tests, normality tests, multicollinearity tests, heteroscedasticity tests, hypothesis in t-test (partial), simultaneous test or f test, r-square test or r test.

So from the tests above as follows:

- Testing the validity of the results of data processing, it can be seen that all variables X leadership management and variable Y management of facilities and infrastructure are declared valid, it can be seen from the results of the data processing.

- Reliability Test From the results of the data processing above, the coefficient value of each variable can be shown as follows. The value of Variable X, namely Leadership Management, has a coefficient value of 0.823. And the coefficient value of the management of facilities and infrastructure or variable Y is 0.803. For the P/plot graph, it ensures that data along that line or at the enol points (0) is carried out for a normality or reliability test in which the value of the X-axis is against the value obtained from the Y-axis sample.

- We can see the Normality Test where the graph shows a mean value of 5.10, while the value of E-16. Meanwhile the standard deviation value is 0.983 and the value of N after deducting the error is 30 meaning that the total data value is 35 minus the standard error of 5 means the value is 30. In the histogram graph above it is said that the variables are normally distributed where the direction of the bells indicates the distribution of data it is not slanted to the left or slanted to the right, so that can be said to be normal, which is in a parallel position in the middle.

- Multicollinearity test on data or on variables because the tolerance value of the two variables is greater than 0.1 so that the regression model is feasible to use to predict based on input variables. The tolerance value of each X and Y variable is 0.960 with a low infrequency value or p-plot of 1.041 which is expressed in the tolerance value of the p-plot greater than 0.1 and the p-plot smaller than 10, so the model is feasible to continue testing.

- The Heteroscedasticity Test of the p-plot graph shows that the data is above and below the number 0 at the coordinate point of the Y axis and there is no clear pattern in the spread of the data. From the graph results it can be seen that there is no heterodity in the data model. The conclusion drawn from the p-plot graph is that the regression model of this study is feasible to use in predicting the management of facilities and infrastructure based on the influencing variable, namely the leadership management variable.

- Hypothesis test in the t-test (partial) It can be seen and concluded that the $t_{\text{calculated}}$ value of the leadership management variable is 0.875, and the t_{table} value is 0.683, so the $t_{\text{calculated}}$ value is greater than t_{table} with a significance level of 0.5. The value of t_{count} is greater than t_{table} , namely $0.875 > 0.683$ with a significance level value of $0.389 < 0.5$, so it can be stated that variable X, namely the leadership management variable, has a positive effect on variable Y, namely the management of facilities and infrastructure with partial significance.

- Simultaneous test or f test which can be seen from the results of obtaining f_{count} more than f_{table} , namely the f_{table} value of 14.328 with a significance level of 0.01 more than the f_{table} value of 4.1709 with a significance level of 0.001. The acquisition value of f_{count} is more than f_{table} can be expressed as a value of $14.328 > 4.1709$ with a standard error rate of = 5%. Based on the criteria for testing the hypothesis, if f_{count} is more than f_{table} and the significance level is more than 0.05, it indicates that the independent variable or X, namely the leadership management variable simultaneously has a significant effect on the dependent variable (Y), namely the facility and infrastructure management variable.

- R-square test or r test R-Square test results (Test r^2) in table 4.10 It is known that the value of r^2 is 0.346 which, if written in the percentage level, is 34.6% variation of the dependent variable, namely the management of facilities and infrastructure can explained by the

independent variable of the leadership management variable. While the remaining 65.4% is explained by variations from other variables outside this regression model.

- The results of the linear regression analysis were obtained as follows. facilities and infrastructure that show a unidirectional relationship, meaning that if management leadership is strong, the stronger the encouragement for teachers to participate in improving facilities and infrastructure. The number 2.296 indicates that if there is an increase in the variable management of facilities and infrastructure it can also indicate an increase in the increase in leadership management of 2.296.

S Impulse (5%)

The results of the research and discussion that have been carried out can be concluded as follows:

1. There is a significant influence of Leadership Management on the management of madrasah facilities and infrastructure at MTs Negeri 2 Deli Serdang, this can be seen from the results of the t test, namely where the value of $t_{\text{table}} > t_{\text{count}}$ ($t_{\text{table}} 0.683 > t_{\text{count}} 0.875$). Test t-test it is concluded that the t value of the leadership management variable is 0.875, and the t_{table} value is 0.683, then the $t_{\text{calculated}}$ value is greater than the t_{table} with a significance level of 0.5. The value of t_{count} is greater than t_{table} , namely $0.875 > 0.683$ with a significance level value of $0.389 < 0.5$, so it can be stated that variable X, namely the leadership management variable, has a positive effect on variable Y, namely the management of facilities and infrastructure with partial significance.
2. The magnitude of the influence of leadership management on the management of infrastructure can be seen from the results of the simultaneous test or F test, the simultaneous test obtained f_{count} more than f_{table} , namely the f_{table} value of 14.328 with a significance level of 0.01 more than the f_{table} value of 4.1709 with significance level of 0.001. The acquisition value of f_{count} is more than f_{table} can be expressed as a value of $14.328 > 4.1709$ with a standard error rate of = 5%. Based on the criteria for testing the hypothesis, if f_{count} is more than f_{table} and the significance level is more than 0.05, it indicates that the independent variable or X,

namely the leadership management variable simultaneously has a significant effect on the dependent variable (Y), namely the facility and infrastructure management variable.

The results of the R-Square test (Test r^2), it was found that the value of r^2 was 0.346 which, if written at the percentage level, is 34.6% the variation of the dependent variable, namely the management of facilities and infrastructure, can be explained by the independent variable of the leadership management variable. While the remaining 65.4% is explained by variations from other variables outside this regression model.

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