The Correlation between The Principle Innovation and Work Motivation toward Mathematics Teacher Performance at Junior High School

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ABSTRACT
The research aims to analyze the correlation between principal innovation and motivation toward the performance of mathematics teachers at State Junior High School in Bengkulu City. This research was correlation research with a quantitative approach. The sampling technique was proportionate random sampling. The sample in this study was a mathematics teacher at Junior High School in Bengkulu city, totaling 53 people. Data collection instruments were used in the form of a questionnaire with data analysis techniques using the statistical correlation test. The results showed that: (1) There was a positive correlation between school principal innovation and teacher performance in mathematics learning, it was 0.590. (2) There was a positive relationship between motivation and teacher performance in mathematics learning, it was 0.606. It was a strong and positive criterion. (3) There was a joint correlation between school principal innovation and work motivation toward teacher performance at State Junior High School in Bengkulu City.

Keywords: School principal innovation, work motivation, teacher performance.

INTRODUCTION

Teachers are important component in education, they must be given attention so that quality of education can be created. One aspect that can support the achievement of quality education goals is teacher performance. Teacher performance is an important element in education, in addition it is also a determinant of the high and low quality of education.

The teachers to be successful if they meet the predetermined criteria, if a teacher has fulfilled these criteria, then she/he can be said to be successful and have good quality. Conversely, if the teacher has not met these criteria, then she/he cannot be said to be successful. According to Law Number 14 of 2005 concerning teachers and lecturers, professional teacher educators with the main task of educating, teaching, guiding, directing, training, assessing, and evaluating students. Various aspects can support the improvement of teacher performance. According to Arifin & Barnawi (2012: 43), one factor that can influence teacher performance is leadership. In this case the principal. Furthermore, Danim (2012), good teacher performance can be influenced by various factors, including the attitude of innovation. Innovation in this case is how the school principal has innovation in leading the school. Innovative school principals can influence the performance of teachers because in their innovations there are actions relating to things that make teachers motivated and helped in carrying out their duties and responsibilities as a teacher.

Some empirical studies show that there is a relation between innovation and teacher performance in teaching. The results of research conducted by Arman, Bachri, & Manda (2016) show that the competency of the principal as a supervisor has a positive effect on teacher performance. Furthermore,
the results of research conducted by (Kosim, 2017; Muslimin, 2018; Katrin, 2019) show that there is an influence or positive relationship between the principal's leadership and teacher performance. The results of previous research conducted by Saputra & Danim (2019) show that there is a positive influence between democratic leadership styles on teacher performance at State Junior High School in Bengkulu City.

Another aspect that can support the improvement of teacher performance in managing the classroom is derived from the teacher himself, one of them self-motivation. Sobri, et al (2009: 24) explains motivation is a force that drives a person to do an activity. A person's achievement in carrying out a certain activity can be influenced by motivation. Motivation is unique because the factors that influence it tend to be different for each individual and group. According to Pramono, Aunarrahman, & Tomo (2013), Work motivation is a number of styles/impulses that can come from inside and outside a person to initiate related behavior and to determine the shape, direction, intensity, and duration.

The results of previous studies conducted by Oentoeng & Riady (2012: 12) state that work motivation has a large role in influencing teacher performance, thus work motivation has a very large role in creating teacher performance. The results of research conducted by (Connie, 2013; Marlina, Aliman, Somantri, 2018) indicated a positive relationship or influence between motivation on performance in teaching and learning in class. The results of previous research studies indicate that the better or higher motivation of a teacher, both from within the teacher and from external factors, will support the improvement of teacher performance in learning in the classroom.

In general, school principals' innovations of State Junior High School in Bengkulu City are still relatively low. Viewed from the aspect of school management, especially towards learning mathematics, there have not been many updates and changes made by school principals as educational innovators. This was revealed from the author's informal interview with several mathematics teachers of State Junior High School in Bengkulu City in November 2019. From the interview, revealed several phenomena related to the lack of innovation made by principals, especially towards mathematics learning, such as (1) limited facilities and school infrastructure in supporting the performance of mathematics teachers, proven by almost every State Junior High School in Bengkulu City does not yet have a mathematics laboratory and lack of mathematical teaching aids such as cube frameworks, building spaces, measuring devices, and computers with applications related to mathematics learning materials, (2) school principals lack guidance and development of innovative learning models with mathematics teachers, so that principals have difficulty in changing the teaching habits of teachers, especially senior teachers who are still learning by conventional methods, (3) school principals lack create a good relationship in the school environment, this can be seen from the existence of teachers who are not happy with the behavior of the principals that unfair in treating one teacher to another.

From the explanation above, the phenomenon that occurs in mathematics teachers in Bengkulu City State Junior High School, based on the results of preliminary research, shows that there is a tendency for weak teacher performance. The teaching and learning process will be good if the principal is able to motivate the teacher, one of them is by innovating. Based on these problems, an analysis of the relationship between principals' innovation and work motivation was carried out on the performance of teachers in learning mathematics at State Junior High School in Bengkulu City.

**RESEARCH METHODS**

This research was a correlation study with a quantitative approach. The study was intended to analyze the relationship between school principal innovation and work motivation on teacher performance. In this study, there were one dependent variable and two independent variables, where the dependent variable is the performance of mathematics teachers of State Junior High School in Bengkulu City (Y), while the independent variable was the school principal's innovation (X₁) and teacher's work
motivation ($X_2$). In analyzing the relationship between variables, there was a paradigm of the relationship between independent and dependent variables as shown below.

![Figure 1. Research Design](image)

**Population and Research Samples**

The population in this study were all mathematics teachers of State Junior High School in Bengkulu City who were classified as civil servant. The population in this study was 112 people.

The research sample was chosen from the total population. In determining the number of samples taken to represent the total population using the following equation.

$$n = \frac{N}{1 + Ne^2} \quad \text{(Solvin in Umar, 2010)}$$

The calculation of research samples based on the formula is as follows.

$$n = \frac{112}{1 + 112(0,1)^2} \rightarrow n = \frac{112}{1 + 112(0,01)}$$

$$n = \frac{112}{2,12} \rightarrow n = 52,8 \approx 53$$

Sample selection from each school using a sampling technique that was proportionate random sampling. The equation in the calculation of the number of samples from each school is as follows.

$$n = \frac{X}{N} \times N_i \quad \text{(Sugiyono, 2007: 75)}$$

Information:

- $n$ = the number of samples desired
- $N$ = total population
- $X$ = total population of each region
- $N_i$ = total population

**Research Data Collection Techniques**

Data collection techniques in this study used survey techniques through questionnaires. Questionnaires are distributed online by using the Google form on the link (www.bit.ly/angketpenelitianenny). Questionnaires were distributed by providing links to teachers via whatshap and telephone.

**Research Instruments**

The instrument in this study was a closed questionnaire. The research instrument used a rating scale with four criteria. The questionnaire in this study was a questionnaire to measure school
principal innovation, which consisted of 32 statements with a rating criteria scale: 4 (always), 3 (often), 2 (ever), 1 (never).

Furthermore, the questionnaire to measure teacher's work motivation variable consists of 24 statements with assessment criteria, namely: 4 (strongly agree), 3 (agree), 2 (disagree), 1 (very never), and a questionnaire to measure teacher performance in learning, which consists of 28 statements with selected criteria, namely: 4 (always), 3 (often), 2 (ever), 1 (never).

**Instrument Quality Analysis Test Result**

The research instruments were first tested by validity and reliability tests. The validity test results of each instrument are as in the following table.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Valid</th>
<th>Invalid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovation</td>
<td>29 item</td>
<td>3 item</td>
</tr>
<tr>
<td>Motivation</td>
<td>22 item</td>
<td>2 item</td>
</tr>
<tr>
<td>Performance</td>
<td>24 item</td>
<td>1 item</td>
</tr>
</tbody>
</table>

Furthermore, test instruments that meet valid criteria are tested reliably. The reliability test results are as follows.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Alpha score</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovation</td>
<td>0.897</td>
<td>Reliable</td>
</tr>
<tr>
<td>Motivation</td>
<td>0.867</td>
<td>Reliable</td>
</tr>
<tr>
<td>Performance</td>
<td>0.902</td>
<td>Reliable</td>
</tr>
</tbody>
</table>

**Test Requirement Analysis**

Prerequisite test analysis of research data using normality test, linearity test, and multicollinearity test.

1) Normality Test

A normality test is used to determine the level of distribution of data in a variable, and find out whether a data approaching a normal distribution or not. While data that was feasible to be used in the research was data that given a normal distribution. This normality test uses the Kolmogorov Smirnov normal test or decision making by comparing the calculated Kolmogorov values with the Kolmogorov table. If the Kolmogorov count is smaller than the Kolmogorov table, the distribution is normal. Data is said to be normally distributed data if the significance value is greater than 0.05 (Ghozali, 2011: 160).

2) Linearity Test

The linearity test performed to determine the feasibility of independent variables in predicting variable Y. The technique used to test linearity by analyzing the correlation coefficient of each independent variable with Y. According to Suhadak (2010: 72), if the probability (p) < $\alpha$ = 0.5, then the independent variable is feasible as one of the predictors of the Y variable.

3) Multi-collinearity Test

Multicollinearity means that there is a linear correlation between two or more independent variables with the dependent variable. If the independent variables used do not correlate with each other, or correlated but they are higher than $r_{xy}$, then it can be said that there is no multicollinearity. To meet the assumption test, it can be seen from the value of VIF (Variance Inflation Factor), which if VIF <10 can be concluded between independent variables does not occur multicollinearity.

**Hypothesis Testing**

The steps in testing the hypothesis in research follow:

1) Simple Linear Correlation
To determine the closeness of the relationship between the two variables and to determine the direction of the relationship that occurs, a simple correlation analysis is used. A simple linear correlation test uses the product-moment correlation formula.

\[ r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{[N(\sum X^2)(\sum Y^2)]^2[\sum (X^2)(\sum Y^2)]}} \]

Information:
- \( r_{xy} \) = correlation coefficient
- \( \sum X \) = number of item scores
- \( \sum X \) = total score of all items
- \( N \) = number of respondents

2) Multiple Correlations

To find out whether there was a relationship between the independent variables together with the dependent variable, a double correlation test is performed using the formula:

\[ R_{yx_1x_2} = \sqrt{r^2_{yx_1} + r^2_{yx_2} - 2r_{yx_1}r_{yx_2}r_{x_1x_2}} \]

Information:
- \( R_{yx_1x_2} \) = simultaneous correlation \( x_1, x_2 \) and \( Y \)
- \( r_{yx_1} \) = product moment correlation \( x_1 \) and \( Y \)
- \( r_{yx_2} \) = product moment correlation \( x_2 \) and \( Y \)
- \( r_{x_1x_2} \) = correlation between \( x_1 \) and \( x_2 \)

Sugiyono (2013: 192) explains that to find out the relationship between two variables with the interpretation of the correlation coefficient is as follows:

<table>
<thead>
<tr>
<th>Inter Coefficient</th>
<th>Relationship Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.80 – 1.000</td>
<td>Very Strong</td>
</tr>
<tr>
<td>0.60 – 0.799</td>
<td>Strong</td>
</tr>
<tr>
<td>0.40 – 0.599</td>
<td>Strong enough</td>
</tr>
<tr>
<td>0.20 – 0.399</td>
<td>Low</td>
</tr>
<tr>
<td>0.00 – 0.199</td>
<td>Very Low</td>
</tr>
</tbody>
</table>

Riduwan (2006: 88) states that to determine the level of achievement of respondents (TCR) and relationship criteria, the formula is used:

\[ TCR = \frac{\text{average}}{\text{maximum}} \times 100\% \]

<table>
<thead>
<tr>
<th>TCR (%)</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 20</td>
<td>Very weak</td>
</tr>
<tr>
<td>21 – 40</td>
<td>Weak</td>
</tr>
<tr>
<td>41 – 60</td>
<td>Medium</td>
</tr>
<tr>
<td>61 – 80</td>
<td>Strong</td>
</tr>
<tr>
<td>81 – 100</td>
<td>Very Strong</td>
</tr>
</tbody>
</table>
Data collection is done online using google form. Spread is done by dividing the link in the address (www.bit.ly/angketpenelitianyenny) to mathematics teachers from 25 Junior High Schools in Bengkulu City.

The time spent for one month, from January 25, 2020 to February 25, 2020. Questionnaires were distributed for data collection adjusted to the number of teachers and schools that became the study sample, as many as 53 people.

**Descriptions of Research Respondents**

Respondents in this study were mathematics teachers with state civil apparatus status at 25 State Junior High Schools in Bengkulu City. Description of the characteristics of respondents in this study as in the following table:

<table>
<thead>
<tr>
<th>Table 5 Characteristics of Research Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>a. Male</td>
</tr>
<tr>
<td>b. Female</td>
</tr>
<tr>
<td>Age</td>
</tr>
<tr>
<td>a. 20-30 Years Old</td>
</tr>
<tr>
<td>b. 31-40 Years Old</td>
</tr>
<tr>
<td>c. &gt;40 Years Old</td>
</tr>
<tr>
<td>Last Education</td>
</tr>
<tr>
<td>a. Bachelor</td>
</tr>
<tr>
<td>b. Master</td>
</tr>
<tr>
<td>Length of Work</td>
</tr>
<tr>
<td>a. 1-10 Years</td>
</tr>
<tr>
<td>b. 11-20 Years</td>
</tr>
<tr>
<td>c. &gt;20 Years</td>
</tr>
</tbody>
</table>

**Research Data Description**

The data is described based on the results of a questionnaire obtained from 53 respondents, namely mathematics teachers at Junior High School in Bengkulu City. The results of the distribution of data trends on the principals' innovation variables are presented as the following diagram.

![Figure 2. Distribution of variable responses X₁](image)

Results of the respondents' responses analysis. The results of the distribution of respondents' categories of motivation variables are presented in the form of a diagram like the following figure.
The results of the distribution of respondents' responses based on teacher performance variable data are presented in the diagram as follows.

Analysis of Prerequisite Test result
Before conducting the hypothesis test, the data analysis prerequisite test is performed first, which includes: (1) normality test, (2) linearity test, and (3) multicollinearity test. The following data were the results of each analysis prerequisite test.

1) Normality Test Result
The results of the normality test aim to illustrate whether the research results were normally distributed or not. The data normality test used in this study is the Kolmogorov-Smirnov test with SPSS software. The testing criterion is if the significance value > $\alpha = 0.05$, then the results of the study are from normally distributed data. Normality test results from research data on each variable as in the following table:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sig.</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Innovation</td>
<td>.193</td>
<td>Normal</td>
</tr>
<tr>
<td>Motivation</td>
<td>.200*</td>
<td>Normal</td>
</tr>
<tr>
<td>Performance</td>
<td>.200*</td>
<td>Normal</td>
</tr>
</tbody>
</table>

The data above showed that in the Kolmogorov-Smirnov test the results of research on each variable have normal distribution data with a significant level of each variable more than $\alpha = 0.05$. This was in accordance with the opinion (Ghozali, 2011: 160) which states that the data is said to be normally distributed data if the significance value is greater than 0.05. Based on this it can be concluded that the data from each research variable are normally distributed.

2) Linearity Test Results
The linearity test is intended to determine whether each independent variable has a linear effect or not on the dependent variable. The linearity test results of the school principal's innovation variable (X1) against Y are based on the output of the test results with the SPSS program as presented in the following table.
Table 7. Linearity values of Linearity Test Results

<table>
<thead>
<tr>
<th>Relationship</th>
<th>F value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>X&lt;sub&gt;1&lt;/sub&gt;*Y</td>
<td>26.803</td>
<td>.000</td>
</tr>
<tr>
<td>X&lt;sub&gt;2&lt;/sub&gt;*Y</td>
<td>35.795</td>
<td>.000</td>
</tr>
</tbody>
</table>

The linearity test results above indicate that the significance is less than 0.05 which is equal to 0.000. This is follow the opinion of Suhadak (2010: 72), if the probability (p) < ∝ = 0.5, then each independent variable (innovation and motivation) deserves to be one of the predictors of the Y variable.

3) Multi-collinearity Test Result

The results of multicollinearity testing are based on SPSS output.

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td></td>
</tr>
<tr>
<td>Innovation</td>
<td>.777</td>
</tr>
<tr>
<td>Motivation</td>
<td>.777</td>
</tr>
</tbody>
</table>

The regression test output showed a tolerance value greater than 0.1 and a VIF value of less than 10 for each independent variable. So it was concluded that there was no multi collinearity problem.

Research Hypothesis Test Results

Hypothesis testing is done to test whether there was a correlation between the independent variable and the dependent variable. In this study the correlation showed the correlation of independent variables (school principal innovation and work motivation) with the dependent variable (teacher performance). Testing the hypothesis in this study by using a 95% confidence level. Tests used statistical tests with correlation tests with SPSS aids.

Hypothesis testing is carried out in two stages, namely: (1) partially testing the independent variable (X1, X2) with the dependent variable using the simple linear correlation test (product moment of Pearson). (2) the third hypothesis testing looks at the simultaneous relationship of the independent variable (X1, X2) with the dependent variable (Y) with the multiple correlation test. The hypothesis testing criteria are accepted hypothesis if the price of r count is greater than r table or the price of F count is greater than F table then the coefficient is said to be significant and vice versa. In addition, the hypothesis is accepted if the significance value is less than alpha (0.05). The results of correlation analysis based on test output using SPSS are shown in the following table.

Table 9 Correlation Test Results

<table>
<thead>
<tr>
<th></th>
<th>Inovation</th>
<th>Motivation</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inovation</td>
<td>1</td>
<td>.472</td>
<td>.590</td>
</tr>
<tr>
<td>Sig.</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Motivation</td>
<td>.472</td>
<td>1</td>
<td>.606</td>
</tr>
<tr>
<td>Sig.</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Performance</td>
<td>.590</td>
<td>.606</td>
<td>1</td>
</tr>
<tr>
<td>Sig.</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

The results of the analysis based on the correlation test on the relationship between variables in this study are drawn as follows.
Based on the relationship in the picture above, it can be seen that the correlation between school principal innovation and performance based on the test obtained a value of 0.59 which means there was a strong relationship between the two variables. Furthermore, the relationship between work motivation and performance variables obtained r value of 0.606 with a strong relationship. While the relationship of variables X1 and X2 together against the Y variable with an R value of 0.697 which showed a very strong relationship. In addition, there was a relationship between the principals' innovation variables and work motivation with a correlation value of 0.472. The value of r count for each variable correlation was positive so that a positive relationship occurs. The results of hypothesis testing are summarized as follows.

**DISCUSSION**

This study aimed to examine the relationship between school principal innovation and work motivation with the performance of mathematics teachers in Bengkulu City State Junior High School. The results of the analysis of the research data showed that: (1) there is a relationship between school principals’ innovations on teacher performance in learning mathematics in Bengkulu City State Junior High School, (2) there is a relationship between work motivation and teacher performance in learning mathematics in Bengkulu City State Junior High School, and (3) there is a relationship between school principal innovation and work motivation on teacher performance in learning in State Junior High School in Bengkulu City.

### a. The relationship of school principal innovation with teacher performance in learning

The results of the analysis of the research data indicate that the aspect of school principal innovation was based on the assessment of mathematics teachers at State Junior High School in Bengkulu city was high criteria. Performance variables were also on the high criteria with an average score of 75.52. This means that school principals' innovation according to Bengkulu City State Junior High School mathematics teacher was high categorized. The analysis also showed that the high criteria reach 66.38%, meaning that more than 60% of school principals had high criteria for innovation. This was also supported by data showing very high criteria around 32.07%. The high school principal's innovation was in line with the teacher's performance which, on average, on high criteria.

However, based on data analysis respondents' answers to two dimensions have the highest disagree response. First, the paragraph dimension with as many as 15 people (28.20) who said they did not agree with the statement of planning and carrying out activities based on the needs of the school.

Furthermore, in the exemplary dimension with one indicator, there were 18 people (33.96%) respondents answered never. The statement was an embryo of humanitarian relations with school
residents. This shows that the need for approaches or principals to interact with school residents including teachers. This means that the interaction of principals must be improved.

Based on the results of the analysis, in general, this study showed that the relationship between school principals' innovations and teacher performance in learning mathematics at State Junior High School in Bengkulu City. The correlation that occurs was a positive correlation where every increase in school principal innovation will improve the performance of teachers at the school. This is evidenced by the results of statistical analysis with a 95% confidence level obtained by a correlation value of 0.590. So that the relationship that occurs in the category is quite strong. The results of this study indicated that if the principal of State Junior High School at Bengkulu City has high innovation, the performance produced by the mathematics teacher was also higher. Based on the analysis of research data, it is known that the relationship was comparable to the following graph:

![Figure 5. Relationship between innovation and performance](image)

The picture above shows that the relationship between the two variables is proportional. Every increase in the innovation score of the principal's performance score will also increase. Based on this, it can be concluded that in a school environment that has a school principal who is innovating in leading, the teacher's performance at the school is also getting better.

The results of this study are consistent with the theory that the reflection aspect of school principal innovation will have an impact on teacher performance. The results of this study are supported by the results of research conducted by Saputra & Danim (2019) which states that there was a positive influence between democratic leadership styles on teacher performance. This showed that the school principal who was democratic in determining policy or leadership will have an impact on the performance of the principal. Democratic school principals were concerned with how the principal innovates in leading. The results of the study were also supported by research conducted by Andi, Harapan, & Arafat (2018) which showed that there was an influence of the principal's supervision on teacher performance.

The results of this study are supported by several previous studies which state that school principal innovation has a positive relationship with teacher performance improvement. The results of research conducted by Safitri (2014) showed that there was a direct relationship between school principal innovation and the performance of high school teachers in Malang. Other results that show the relationship between school principals' innovations and teacher performance is a study conducted by Jasmani (2016) which concluded that there is a significant relationship between the innovative attitude of school principals and the performance of State Junior High School teachers in Bengkulu City.

b. Relationship of motivation with teacher performance in learning mathematics at State Junior High School in Bengkulu City

The results of the analysis of the research data showed that on the aspect of motivation, the average motivation of working mathematics teachers in Bengkulu City State Junior High School was at 70.60 with high criteria. This means that the motivation of Bengkulu City State Junior High School
mathematics teachers in working both from the motivator and Hygien factors. The analysis also showed that the high criteria reached 56.60% meaning that most of the teachers had a high motivation. This is also supported by data that showed very high criteria for around 24.52%. The high motivation will support the performance produced by the teacher at work.

The results of the questionnaire data analysis showed that the average score on the hygiene factor dimension was lower than the internal factors. One of them was the indicator that measures adequate and conducive working conditions where there are 17 people (32.07%) of respondents answered never. This shows that working conditions must be improved such as facilities and infrastructure. The results of hypothesis testing indicate that there was a relationship between work motivation and the performance of mathematics teachers in Bengkulu City State Junior High School. The relationship based on the results of the analysis showed a positive relationship with a correlation value of 0.606, which is very strong criteria. This means that at a 95% confidence level the statistical hypothesis is accepted so that there was a relationship between the motivational variable (X2) and the performance variable (Y). This means that the higher the motivation of Bengkulu City State Junior High School mathematics teachers in working, the higher the resulting performance. The positive relationship between the two variables is illustrated by the relationship graph score of each respondent on each variable as shown below.

![Relationship of Motivation and Performance](image)

**Figure 6. Relationship of Motivation and performance**

The picture above shows the relationship between the two variables. Namely motivation and performance were directly proportional. The higher was the motivation score, the performance score will also increase. Based on these data, it can be concluded that teachers who have high motivation in teaching food will improve the performance provided.

The results of this study indicate that there is a relationship of motivation with performance. This was consistent with the theory that mentions aspects of motivation that can support performance.

The results of this study are supported from the results of empirical studies that showed the relationship or influence of work motivation on teacher performance. The results of Dewi's research (2013) concluded that there was an influence of work motivation on the performance of economics teachers in State Junior High Schools in Wonogiri Regency. Other results showed a relationship between motivation and teacher performance, namely research conducted by Indah (2019); Marlina & Aliman (2018); Firmawati, Yusrizal, & Usman (2017) showed the influence of work motivation on improving teacher performance. It showed that motivation had a role in improving teacher performance in class.

Saputra and Danim (2018) who showed the results of the study showed that work motivation had a positive effect on the performance of accounting teachers with a contribution of 80.6%, the
remaining 19.4% accounting teacher performance was determined by other factors outside the study. Furthermore, the results of research conducted by Hamdani, Kesumawati, & Kristiawan (2018) show that teacher work motivation affects teacher performance in Banyuasin High School by 89.3%. Meanwhile, the results of Samuel, Opoku & Donyina's research (2015) concluded that there was a significant positive correlation between motivation and performance among teaching staff at Accra Polytechnic.

c. The simultaneous relationship of Innovation and motivation with teacher performance in learning mathematics in Bengkulu City Junior High School.

The results of the research for the third hypothesis aim to determine the significance of the correlation between school principal innovation (X1) and work motivation (X2) together with the performance of mathematics teachers in learning in Bengkulu City State Junior High School (Y). Test results with an R value of 0.697 which is almost close to 1 and F test results with a significance of less than alpha (0.05).

The results of this study were empirically supported by previous research conducted by Hamdani, Kesumawati, & Kristiawan (2018) which states that there was an influence of motivation and Managerial Competence of the School Principals together on the performance of teachers at State Junior High School in Bengkulu City by 89.30%. Principal's managerial competency has the same tendency as the principal's innovation.

CONCLUSION
Based on the results of research and discussion that has been described, the conclusions of this study are as follows:
a. There was a relationship between school principal innovation and teacher performance in learning mathematics in Bengkulu City State Junior High School.
b. There was a relationship between teacher motivation and teacher performance in learning mathematics in Bengkulu City Junior High School.
c. There was a joint relationship with school principal innovation and work motivation with teacher performance in learning at Bengkulu City Junior High School.

Besides, principals need to establish good and communicative relations with every school member. Also, the principal needs to improve and provide role models in leadership. Schools are required to improve adequate facilities and infrastructure and support the performance of teachers in schools. It is recommended for teachers to attend trainings that support good classroom performance and management. In addition, it needs to be emphasized in the evaluation activities on how to measure learning in the classroom and arrange evaluation tools.

REFERENCE


