



Vol. 17 No. 3 2023

AN ANALYSIS OF REWARD AND PUNISHMENT EFFECTS TOWARDS LECTURER PERFORMANCE AT STMIK ROYAL USING SPSS SOFTWARE

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Submit :
23/06/2023

accept :
18/08/2023

Publish :
29/08/2023



Abstract

The need for optimal implementation of reward and punishment on the STMIK Royal campus is a real problem at the current institutional management level. This can be seen from interviews with several STMIK Royal lecturers, where rewards tend to be more dominant than punishment, which has yet to be applied consistently. Given these problems, this study aims to analyze and find out how the application and influence of reward and punishment have on the performance of lecturers at STMIK Royal. The research method used in this study used a quantitative approach where the data collection instruments used were questionnaires or questionnaires and interviews. The data comes from the permanent lecturer population at STMIK Royal Kisaran in 2023, namely 83 lecturers. The sampling technique used was saturated sampling so that the samples in this study were all of the population taken, totaling 83 respondents. The analytical method uses multiple regression analysis by conducting the F-test and t-test, where the data is processed using the SPSS software. The equation $Y = 17.033 + 0.148 X_1 + 0.803 X_2$ is obtained from multiple regression analysis results. Simultaneously the reward and punishment variables affect lecturer performance by 35.2%. But partially, only the punishment variable affects the lecturer performance variable, while the reward variable has no partial effect on the lecturer performance variable at STMIK Royal.

Keywords: Rewards, Punishment, Lecturer Performance, Quantitative Research

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<http://publikasi.lldikti10.id/index.php/jit>

DOI : <https://doi.org/10.22216/jit.v17i3.2531>

PAGES: 669-679



INTRODUCTION

Lecturers are human resources whose contribution is enormous in making the nation's life more intelligent, which is expressed in the form of the tridharma of higher education, namely education/teaching, research, and community service. Lecturer performance is one of the most important things in creating a quality higher education institution. Good lecturer performance will have an impact on the university. There are so many factors that can influence a lecturer's performance, such as competency, compensation, motivation, organizational culture, rewards, punishment, and so on. At STMIK Royal, the Tridharma of Higher Education activities are running well. However, because the implementation of rewards and punishment at STMIK Royal has not been optimal, it has become a real problem at the campus management level itself [1].

Reward and punishment are two different methods but have the same goal in improving lecturer performance. Rewards are used to improve work performance, while punishment is used to prevent various violations that will cause losses. Rewards are an attempt to create a feeling of acceptance in the work environment, which touches aspects of compensation and aspects of relationships between workers. Meanwhile, punishment is a threat of punishment which aims to correct violators, maintain applicable regulations, and teach violators a lesson. With well-managed rewards and punishments, it can trigger a person's creativity, productivity and loyalty. However, if rewards and punishments are not carried out, it can lead to low employee responsibility in completing their tasks [2].

STMIK Royal is one of the private universities in the city of Kisaran with several achievements. However, it is felt that the performance of STMIK Royal lecturers is not optimal, seen from the low work performance and indiscipline of the employees. The lack of optimal performance of STMIK Royal lecturers can be caused by many factors that influence lecturer performance, one of which is because rewards and punishment have not been implemented optimally in this organization. The best form of appreciation is to let employees know that they are appreciated by the company, not just by a small group of people [3]. The implementation of rewards and punishment on the STMIK Royal campus still experiences many problems in its implementation. This can be seen from the current imbalance between reward and punishment. The forms and types of rewards and punishment that exist so far have not been clearly programmed. Based on interviews conducted with several STMIK Royal lecturers, information was obtained regarding the rewards that are often given in the form of promotions from ordinary lecturers to structural officials for diligent lecturers who have a high work ethic. Other rewards that have also been implemented include giving awards or plaques/trophies for lecturers who win research or service grants. This information was obtained when conducting pre-research at the STMIK Royal campus.

In 2021 STMIK Royal created the best lecturer reward program by providing quite large monetary prizes. This program is expected to motivate lecturers to improve lecturer performance to be even better. Meanwhile, the punishment that has been implemented by STMIK Royal is





only giving warning letters to lecturers who violate their duties and obligations, such as not fulfilling attendance within the specified working hours, while strict sanctions in the form of dismissal are only applied to lecturers who have actually made fatal mistakes involving their name. good STMIK Royal.

This problem shows that reward and punishment in STMIK Royal has not been running well, thus affecting the performance of STMIK Royal lecturers, which can be said to be still stagnant . Based on the explanation above, the problem formulation of this research is how to analyze the application of reward and punishment to the performance of lecturers at STMIK Royal Assisted with SPSS Software , either partially or simultaneously.

RESEARCH METHODS

The method used in this research uses a quantitative method where the population is STMIK Royal Kisaran lecturers, totaling 83 lecturers . Then the sampling technique used was saturated sampling so that the sample in this study was the entire population taken, totaling 83 respondents who were considered homogeneous. The data collection technique uses a questionnaire (questionnaire) with a Likert scale with a scale range of 1-5 with the criteria of strongly disagree (STS), disagree (TS), disagree (KS), agree (S) and strongly agree (SS). Then the data analysis technique in this research uses descriptive statistical analysis. Meanwhile, the variable used in this research consists of the independent variable, namely reward (X_1) and punishment (X_2) and the dependent

variable is STMIK Royal Kisaran Lecturer Performance (Y) .

Understanding Rewards

Reward is defined as a strategy or policy that aims to reward people fairly, consistently, according to their value organization. Matter This related with implementation, maintenance and process award with practice Which interpreted For improving performance, organizational, team and individual [4] .

Understanding Punishment

In general, according to purwanto quoted by Resa Nur Pahlevi explain that punishment differentiated become two, namely punishment preventive And punishment repressive. Punishment preventive is punishment Which enforced to prevent violations. Preventive punishment is regulated to maintain discipline and to shape a person's mentality for Lecturer Performance Reviews [5] .

Understanding performance

Lecturer performance is the ability demonstrated by lecturers in carrying out their duties or work. Performance is said to be good and satisfactory if the results achieved are in accordance with established standards. Meanwhile Ivancevich And Matteson say, lecturer performance is the result of work in terms of quality and quantity achieved by a lecturer in completing his duties and obligations [6] .

As for Performance appraisal is an effort or action carried out by a party management in evaluating or measuring the results of activities that have been carried out carried out by each





responsibility center compared with established benchmarks [7]

Framework of Thinking

From the previous explanation, to make it easier to understand in studying and analyzing, a framework can be created in the following scheme :

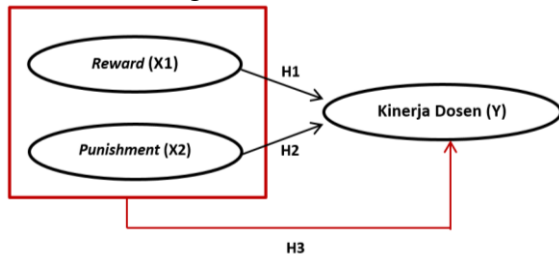


Figure 1. Research Framework

Based on the picture above, the research hypothesis can be formulated as follows:

H1: There is a partial influence of reward on the performance of STMIK Royal lecturers.

H2: There is a partial influence of punishment on the performance of STMIK Royal lecturers

H3: There is a simultaneous influence of reward and punishment on the performance of STMIK Royal lecturers.

RESULTS AND DISCUSSION

Validity and Reliability Test

The validity test is used to determine the accuracy and validity of the research questionnaire used so that it is able to measure the key variables being studied (Ghozali, 2013). The validity test was tested using the SPSS 25.0 program by looking at the Pearson Correlation correlation in the table Correlations for each question item with a total test score. The basis for making decisions from this validity test is seen by comparing the calculated r value with the r table, with the following conditions: If the calculated r

value $> r$ table, then we declare the item valid, and conversely if the calculated $r < r$ table then we declare the item invalid. To get the r table, it is obtained from the distribution table of the r table value at a significance level of 5% where $N = 83$, the r table value = 0.213.

The reliability test is used to determine the extent to which the data can provide relatively no different results when measuring the same items again, or it can be said to show the level of consistency of the research questionnaire. by looking at the Cronbach's alpha value in the Reliability Statistics table . According to V. Wiratna Sujarweni (2015), the basis for making decisions from this reliability test is seen by comparing Cronbach's alpha values . The questionnaire is said to be reliable and consistent if Cronbach's alpha value is > 0.6 .

Validity and Reliability Test Results

Variabel	N=83 Jumlah Butir Pertanyaan	Uji Validitas		Uji Reliabilitas	
		r hitung	Keputusan	α Cronbach's	Keputusan
Reward (X_1)	8	> 0.213	valid	0.638	reliabel
Punishment (X_2)	6	> 0.213	valid	0.605	reliabel
Kinerja Dosen (Y)	10	> 0.213	valid	0.700	reliabel

Table 1 . Recapitulation of Validity and Reliability Test Results

r value above the table r value (0.213), which means that all question items can be said to be valid. Meanwhile, for the reliability test, all variables have a Cronbach's alpha value greater than 0.600, which means that all variables are consistent or reliable . Thus, it can be concluded that all the question items are valid and consistent in measuring each variable.





Classic assumption test

The classical assumption test is used in a regression model which can be said to be linear, where the classical assumption test consists of a normality test, multicollinearity test, heteroscedasticity test and linearity test (Ghozali, 2011). For this reason, in the next stage the classical assumption test process will be carried out as follows:

a. Normality test

The normality test is used in viewing in the regression model, the confounding variables are normally distributed. As is known, the t test and F test assume that the residual values follow a normal distribution. If the assumptions are violated, then the statistical test becomes invalid for small sample sizes (Ghozali, 2011). In this study, the normality test used the Kolmogorov-Smirnov test.

The basis for making decisions from this test is that if the significance value is > 0.05 then the residual value is normally distributed and vice versa.

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		83
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	3.00351057
Most Extreme Differences	Absolute	.088
	Positive	.045
	Negative	-.088
Test Statistic		.088
Asymp. Sig. (2-tailed)		.165 ^c

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Table 2. Kolmogorov-Smirnov Test Results

From the test results and The results of the normality test obtained a significance value of 0.165 which is greater than 0.05, so it can be seen that the residual value has a normal distribution, so the normality test in this study has been fulfilled.

b. Multicollinearity Test

The multicollinearity test is used to see whether in the regression model a correlation is found between the independent variables (reward and punishment variables). In principle, a good regression model should have no correlation between independent variables. To detect whether or not there are symptoms of multicollinearity in the regression model, you can look at the tolerance and variance inflation factor (VIF) values, if the tolerance value is > 0.100 and the VIF value is < 10.00 (Ghozali, 2011).

Model	Coefficients ^a						Collinearity Statistics	
	Unstandardized Coefficients		Standardized Coefficients		t	Sig.	Tolerance	VIF
	B	Std. Error	Beta					
1 (Constant)	17.033	3.981			4.278	.000		
Reward	.148	.108	.163		1.370	.175	.570	1.756
Punishment	.803	.202	.473		3.968	.000	.570	1.756

a. Dependent Variable: kinerja

Table 3. Multicollinearity Test Results

From the table above, the tolerance value for all independent variables is greater than 0.100, namely 0.570 for the reward variable and 0.570 for the punishment variable, while the VIF (variance inflation factor) value is less than 10.00, namely 1.756 for the reward and punishment variables. So it can be concluded that there are no symptoms of multicollinearity.





c. Heteroscedasticity Test

The heteroscedasticity test is used to test the regression model to see whether there is an inequality of variance from the residuals of one observation to another. If the variance from the residual from one observation to another is constant, it is called homoscedasticity and if it is different it is called heteroscedasticity (Ghozali, 2011)

To find out whether the phenomenon of heteroscedasticity is occurring or not, we can see this by paying attention to the pattern on the Scatter Plot graph. Symptoms of heteroscedasticity do not occur if there is no clear pattern, such as points spread above and below the number 0 on the Y axis,

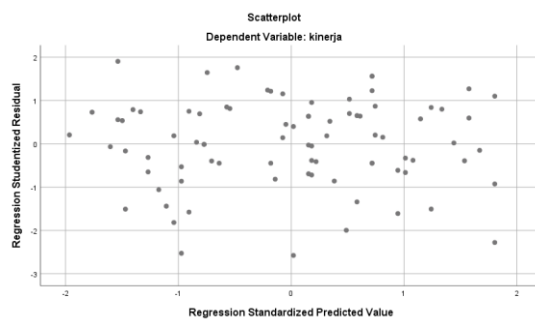


Figure 2. Scatter plot

From the scatterplot image above, you can see the pattern that the points do not show a clear pattern and are spread above and below zero on the Y axis, so it can be concluded that in this study there were no symptoms of heteroscedasticity.

d. Linearity Test

The linearity test is used to see whether the independent variables have a significant linear relationship or not. A good relationship should have a linear relationship between the independent variable and the dependent variable.

The basis for decision making in this linearity test is by comparing the significance value (Sig.) obtained from the results of data processing in the ANOVA table with a value of 0.05 provided that if the Deviation from Linearity Sig. > 0.05 , then there is a significant linear relationship between the independent variable and the dependent variable, and vice versa.

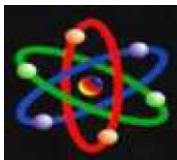
In the linearity test between the reward and performance variables, a value is obtained Deviation from Linearity Sig. of 0.525 and between the punishment and performance variables, the Deviation from Linearity Sig value is obtained. of 0.350, both values are greater than the value of 0.05

From the results of the linearity test, it can be concluded that there is a linear relationship between the independent variables (reward and punishment) and the dependent variable (lecturer performance).

Simple Linear Regression Analysis

The simple regression equation model aims to determine the effect of the independent variables (reward and punishment) on the dependent variable (lecturer performance). The basis for decision making in a simple linear regression test is obtained by comparing the significance value with a probability value of 0.05, where if the significance value is < 0.05 then the independent variable has an effect on the dependent variable, and vice versa. Then compare the calculated t value with the t table where the basis for decision making is if the calculated t value $> t$ table, then the independent variable has an effect on the dependent variable where the t table value obtained from the t value distribution table is 1.988.





Based on the data processing process from the results of a simple linear regression analysis test using the SPSS 25.0 program, the following results were obtained:

a. Simple linear regression analysis test results between the Reward variable and Lecturer Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.474 ^a	.225	.215	3.30610

a. Predictors: (Constant), Reward

Table 4. Summary Reward Model

R Square) value is 0.225, which means that the influence of the reward variable on the lecturer performance variable is 22.5%.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	256.334	1	256.334	23.452	.000 ^b
	Residual	885.353	81	10.930		
	Total	1141.687	82			

a. Dependent Variable: kinerja
 b. Predictors: (Constant), Reward

Table 5. Reward ANOVA

From the table above it can be seen that the calculated F value = 23.452 with a significance level of $0.000 < 0.05$, so that the regression model can be used to predict lecturer performance variables or in other words there is an influence of reward variables on lecturer performance variables.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error			
1	(Constant)	28.657	2.932		9.774	.000
	Reward	.430	.089	.474	4.843	.000

a. Dependent Variable: kinerja

Table 6. Coefficients Rewards

From the table above, it is known that the constant value is 28.657, while the regression coefficient value is 0.430, so

the regression equation can be written as $Y = 28.657 + 0.430X_1$. A constant of 28.657 means that the consistency value of the lecturer performance variable is 28.657. Meanwhile, the regression coefficient The regression coefficient is positive, so it can be said that the direction of the influence of the reward variable on lecturer performance is positive. From the coefficient table above, the calculated t value is $4.843 > t$ table, namely 1.988, so it can be concluded that the reward variable has an influence on the Lecturer Performance variable.

b. Test results of simple linear regression analysis between the Punishment variable and Lecturer Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.580 ^a	.337	.329	3.05724

a. Predictors: (Constant), Punishment

Table 7. Model Summary Punishment

From the table above, it can be explained that the correlation/relationship value (R) is 0.580 and the coefficient of determination (R Square) value is 0.337, which means that the influence of the punishment variable on the lecturer performance variable is 33.7%.

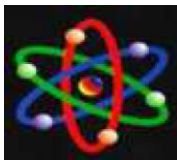
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	384.604	1	384.604	41.149	.000 ^b
	Residual	757.083	81	9.347		
	Total	1141.687	82			

a. Dependent Variable: kinerja
 b. Predictors: (Constant), Punishment

Table 8. Punishment ANOVA

From the table above it can be seen that the calculated F value = 41.149 with a significance level of $0.000 < 0.05$, so that the regression model can be used to predict lecturer performance variables or in other





words there is an influence of the Punishment variable on lecturer performance variables.

Model	Coefficients ^a					
	Unstandardized Coefficients		Standardized Coefficients		Sig.	
	B	Std. Error	Beta	t		
1	(Constant)	17.168	4.002		4.290	.000
	Punishment	.984	.153	.580	6.415	.000

a. Dependent Variable: kinerja

Table 9. Coefficients Punishment

From the table above, it is known that the Constant value is 17.168, while the regression coefficient value is 0.984, so the regression equation can be written as $Y = 17.168 + 0.984X_2$. A constant of 17.168 means that the consistency value of the lecturer performance variable is 17.168. Meanwhile, the regression coefficient The regression coefficient is positive, so it can be said that the direction of influence of the Punishment variable on lecturer performance is positive. From the coefficient table above, the calculated t value is $6.415 > t$ table, namely 1.988, so it can be concluded that the Punishment variable has an effect on the Lecturer Performance variable.

Multiple Linear Regression Analysis

Multiple regression analysis is used to determine whether or not there is a simultaneous influence of the independent variable on the dependent variable. A good regression equation model is one that meets the requirements of classical assumptions, including that all data is normally distributed, linear, the model must be free from all multicollinearity and free from heteroscedasticity.

From the previous analysis, it has been proven that the equation model proposed in this research meets the requirements of the classical assumption test so that the

equation model in this research is considered good. Based on the data processing process from the results of multiple linear regression analysis tests using the SPSS 25.0 program, the following results were obtained:

Model	Coefficients ^a					
	Unstandardized Coefficients		Standardized Coefficients		Sig.	
	B	Std. Error	Beta	t		
1	(Constant)	17.033	3.981		4.278	.000
	Reward	.148	.108	.163	1.370	.175
	Punishment	.803	.202	.473	3.968	.000

a. Dependent Variable: kinerja

Table 10 . Coefficients Multiple Linear Regression Analysis Test Results

Based on the table above, you can see the regression equation:

$$Y = 17.033 + 0.148X_1 + 0.803X_2$$

From the multiple linear regression equation above, it can be interpreted as follows:

1. The constant of 17.033 states that if the reward (X_1) and punishment (X_2) variables are considered constant or ignored, then the lecturer performance variable (Y) is 17.033.
2. The reward regression coefficient (X_1) is 0.148, meaning that for every 1% increase in reward value, the lecturer's performance value increases by 0.148. The regression coefficient is positive, so it can be said that there is a partial positive influence of the reward variable on the performance of STMIK Royal Kisaran lecturers.
3. The punishment regression coefficient (X_2) is 0.803, meaning that for every 1% increase in the punishment value, the lecturer's performance value increases by 0.803. The regression coefficient is positive, so it can be said that there is a partial positive influence





of the punishment variable on the performance of STMIK Royal Kisaran lecturers.

Hypothesis Testing and Discussion

a. t test and discussion

The t test is used to determine whether or not there is a partial (own) influence exerted by the independent variable on the dependent variable. The basis for making decisions from the t test is to compare the significance value with the value of 0.05 and the calculated t value with the t table value (t table value = 1.988), namely:

- If the sig value < 0.05 or t count > t table then there is a partial influence
- If the sig value > 0.05 or t count > t table then there is no partial influence

The partial influence of reward and punishment on lecturer performance can be seen in **table 10** , namely coefficients Multiple Linear Regression Analysis Test Results explain:

1. The Effect of Rewards on Lecturer Performance .

Based on table 10, the calculated t value < from t table is obtained (1.370 < 1.988) with a significant level (0.175 > 0.05) , meaning that there is no partial positive and significant influence of the reward variable on lecturer performance. Thus H_1 is rejected and H_0 is accepted. This means that there is no partial influence of rewards on the performance of lecturers at STMIK Royal Kisaran.

2. The Effect of Punishment on Lecturer Performance .

Based on table 10, the calculated t value > from t table is obtained (3.968 > 1.988) with a significant level (0.000 < 0.05) , meaning that there is a partial

positive and significant influence of the punishment variable on lecturer performance. Thus H_2 is accepted and H_0 is rejected. This means that there is a partial influence of punishment on the performance of lecturers at STMIK Royal Kisaran.

b. F Test and Discussion

The F test is used to determine whether or not there is a simultaneous (joint) influence given by the independent variable to the dependent variable.

The basis for making decisions from the F test is to compare the significance value with the value of 0.05 and the calculated F value with the F table value (F table value = 3.11), namely:

- If the sig value < 0.05 or F count > F table then there is a simultaneous influence
- If the sig value is > 0.05 or F count > F table then there is no simultaneous influence

The effect of rewards and punishments simultaneously on lecturer performance can be seen in the following table:

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	401.959	2	200.979	21.735	.000 ^b
	Residual	739.728	80	9.247		
	Total	1141.687	82			

a. Dependent Variable: kinerja

b. Predictors: (Constant), Punishment, Reward

Table 11. ANOVA Multiple Linear Regression Analysis Test Results

From the table above, it can be seen that the significance value for the influence of reward and punishment variables simultaneously on lecturer performance variables is $0.000 < 0.05$ and the calculated F value is $21.735 > 3.11$, so it can be concluded that H_3 is accepted and H_0 is rejected, meaning that there is an





influence of reward and punishment simultaneously on the performance of lecturers at STMIK Royal Kisaran.

Coefficient of Determination and Discussion

simultaneously has on the dependent variable.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.593 ^a	.352	.336	3.04082

a. Predictors: (Constant), Punishment, Reward

Table 12. Model Summary of Multiple Linear Regression Analysis Test Results

Based on the table above, it is known that the R square value is 0.352, meaning that the influence of the reward and punishment variables simultaneously or together on the lecturer performance variable is 35.2%. From these data, it shows that around 35.2% of lecturer performance variables can be explained by reward and punishment variables, in other words it can be stated that reward and punishment contributed to lecturer performance by 35.2% while the remaining 64.8% was influenced by other variables not discussed in this research.

CONCLUSION

Based on the results of data analysis, interpretation of research results, and discussions that have been presented previously, several conclusions can be put forward from the results of this research, namely:

1. The partial reward variable does not have a positive and significant effect on the performance of STMIK Royal Kisaran lecturers.

2. The punishment variable partially has a positive and significant effect on the performance of STMIK Royal Kisaran lecturers.
3. The reward and punishment variables simultaneously have a positive and significant effect on the performance of lecturers at STMIK Royal Kisaran. The contribution of the influence of reward and punishment to lecturer performance is equal to 35.2% while the remaining 64.8% is influenced by other variables not included in this research. Of these two variables, the variable that most dominantly influences lecturer performance is the punishment variable.

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