AN ANALYSIS OF COMPENSATION AND COMPETENCE EFFECTS TOWARDS LECTURER PERFORMANCE AT STMIK ROYAL KISARAN

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Abstract

The purpose of this research is to analyze the effect of compensation and competence partially and simultaneously on the lecturer's performance of STMIK Royal Kisaran in Asahan Regency, North Sumatera. The population of this research was all regular (permanent) lecturers at STMIK Royal totally of 90 people where data collection was carried out by distributing questionnaires and interviews to those permanent lecturers. The quantitative method was used in this study, while the analytical method used was multiple regression analysis by performing the F test and t test where the data is processed using SPSS software. From the results of multiple regression analysis the equation $Y = 8.032 + 0.181X_1 + 0.339X_2$ is obtained. Partially and simultaneously the compensation and competence variables affect the performance variables of lecturers at STMIK Royal Kisaran.

Keywords: *Compensation, Competence, Lectures Performance, Quantitative method*

INTRODUCTION

The teaching profession is actually an inseparable part of such an education system in higher education. The duties and responsibilities of lecturers have a profound effect on realizing the goals of national education which is to educate the life of the nation, improve the quality of Indonesian people which includes the quality of faith and piety, noble morals, mastery of science and technology, and also to incarnat Indonesian society to be equitable, prosperous, well progress, and civilized [6].

STMIK Royal is one of the private tertiary institutions in Kisaran City of Asahan Regency, North Sumatera, which organizes higher education in the field of information technology. The campus is the most important part in the effort to educate and inculcate such intelligent sense of the

nation, therefore the roles and responsibilities of the campus are very important to be applied [4]. The role of the lecturers as a human resource at the campus is certainly stands on very high concern. They do not only transfer their knowledge to the students, but also have to teach moral norms and values as well. These are a tough task and responsibility, that's why lecturers who have good performances in achieving the goals of the campus organization are needed surely [6].

Clearly there are many factors which would affect the performances of the lecturers, some of them are leadership, discipline, motivation, organizational culture, competence, compensation, and others. But in this study the author only tries to analyze the compensation and competence factors in order to see the extent

of these factors on the performance of lecturers on the STMIK Royal Kisaran.

According to some experts, one of the important functions in Source Management Human Power (SMHP) is compensation. Compensation is one of the most sensitive side aspects in relationships working. Nowadays, just like in the modern era there have been some cases that have occurred in the work relationships which contained compensation issues and various related aspects, such as benefits, compensation increases, compensation structures, and scale of compensation. In practice, there are still many companies that do not understand on the compensation system correctly. Where as the compensation system can help the companies in providing reinforcement of the organization's key values and facilitate the achievement of organizational goals.

The objectives of compensation management include: getting qualified personnel, retaining existing employees, ensuring fairness, respecting desired behavior, monitoring costs, complying with regulations, increasing administrative efficiency.

Competence is a set of knowledge, skills and basic values which are reflected in the habits of thinking and acting. Competence can also be defined as a specification of the knowledge, skills and attitudes that a person has and their application in work, in accordance with the performance standards required by the community and the world of work. A lecturer must have some competencies including: pedagogic competence, personality competence, social competence, and professional competence [1].

METHOD

In this research, the data needed are: Questionnaire Techniques, to obtain the data can be done by using a questionnaire technique that distributed on a list of questions to respondents arranged in a structured manner, in order to get the data accurately of the direct responses from respondents. The questionnaires were given to the lecturers of STMIK Royal Kisaran. The questions are classified into Likert Scale within five alternative answers. Each answer category is given a score from one up to five.

Technique of Interview is a technique of collecting the data by interviewing predetermined respondents. The data source is respondents who are assessed/mastered on the issues to be studied. Technique of documentation is a technique carried out by studying documents, therefore the writer is expected to get data completely.

In this study there are two exogenous variables and one endogenous dependent variable as follows:
a. Exogenous variables consists of compensation (X_1) and competence (X_2)
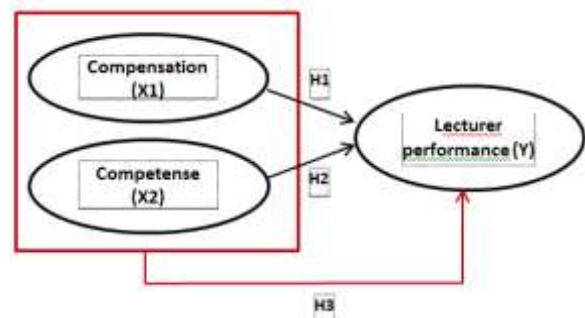b. Endogenous Variables namely Lecturer Performance (Y)

Figure 1. Framework of Research

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

H_1 : There is a partial compensation effect on the lecturers performance of STMIK Royal Kisaran.

H_2 : There is a partial effect of competence on the lecturers performance of STMIK Royal Kisaran.

H_3 : There is a simultaneous effect of compensation and competence on the lecturers performance of STMIK Royal Kisaran.

RESULT AND DISCUSSION

The Results of Validity and Reliability Testing

Compensation

The compensation variable is measured by using 8 question items. Based on the results of the analysis of the validity on 8 item questions used in this research questionnaire, all of these items have a value of r count above the r table of 0.207, it means that all the item questions are valid.

Then for the reliability test analysis, the Cronbach's Alpha value was 0.631 or higher than 0.600. It can be defined that the compensation variable is consistent or reliable. Thus, it can be interpreted that 8 questions item are valid and consistent in measuring compensation variables.

Competence

The competence variable is measured by using 11 questions. Based on the results of the validity analysis on that 11 question items used in the research questionnaire shows all the items have a value of r count above the r table of 0.207, which means that all the question items are said to be valid.

Then for the reliability test analysis, the Cronbach's Alpha value was 0.625 or higer than 0.600. It can be interpreted that the competence variable is consistent or reliable. Thus, it can be concluded that 11 question items are valid and consistent in measuring the competence variable.

Lecturers Performance

The variable of lecturer performance was measured by using 7 questions. Based on the results of the validity analysis of 7 question items used in this research questionnaire, all of these items have a value of r count above the r table of 0.207, which means that all item questions are said to be valid.

Then for the reliability test analysis, the value of Cronbach's Alpha was 0.618 or higher than 0.600. It can be interpreted that the lecturers performance variable is consistent or reliable. Thus, it can be concluded that 7 question items are valid and consistent in measuring lecturers performance variable.

Classic Assumption Testing Normality Testing

The objective of normality testing is to test whether in the regression model, confounding or residual variables have a normal distribution. As it is known, t and F test assume that the residual value follows the normal distribution. If this assumption is violated then the statistical test becomes invalid for a small number of samples [2]. The Kolmogorov-Smirnov testing is used for the normality testing. The essential way in making decision is if the significance value > 0.05 means the residual value is normally distributed and vice versa.

Table 1. The Result of Kolmogorov-Smirnov Normality testing

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		90
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	2.36694506
Most Extreme Differences	Absolute	.052
	Positive	.044
	Negative	-.052
Kolmogorov-Smirnov Z		.491
Asymp. Sig. (2-tailed)		.970

Based on the table above, the results of the normality testing and obtained a significance value of 0.970 higher than 0.05, it can be concluded that the residual value is normally distributed, therefore the normality testing has been fulfilled.

Multicollinearity Testing

The aim of Multicollinearity testing is to test whether the regression model will be found on a correlation between independent variables like compensation and competence variables. An ideal regression model should not occur such correlation between independent variables. While, one of the ways to detect the presence or not of multicollinearity in the regression model through *the value of tolerance and variance inflation factor (VIF)*.

Both of these measurements indicate that each independent variable becomes a dependent variable and is also regressed against other independent variables. The value of cut-off commonly used to indicate the presence of multicollinearity is a tolerance value > 0.100 or equal to a VIF value <10.00 [2].

Table 2. The Results of Multicollinearity Testing

Model	Collinearity Statistics	
	Tolerance	VIF
Compensation	.755	1.324
Competence	.755	1.324

From the results of the multicollinearity testing which can be seen from the table above, concludes that there is no symptoms of multicollinearity. It is proven by obtaining the tolerance value for all the independent variables higher than 0.100, which is 0.755 for the compensation variable and 0.755 for the competency variable, while the VIF (variance inflation factor) value is less than 10.00, namely 1.324 for the compensation variable and 1.324 for the competence variable.

Heteroscedasticity Testing

An ideal regression model should be homoscedasticity or no heteroscedasticity occurs. In order to detect the presence or absence of heteroscedasticity which can be done by looking at the Plott Chart (Scatter plot). If there is no clear pattern, such as the point spread above and below the number 0 (zero) on the Y axis, then there is no heteroscedasticity. The results of Heteroscasticity testing be seen in the following figure:
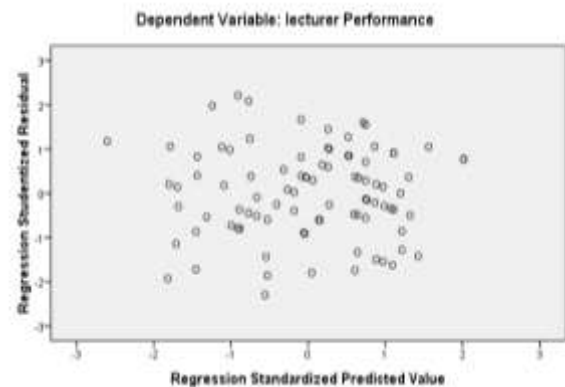

Figure 2. Scatterplot

From the figure above, it can be seen that the points do not show clear patterns and spread above and below the zero (0) on the Y axis, it means there is no any symptoms of heteroscedasticity occurs in this study.

LinearityTesting

There is a basic way in making decision of the linearity testing by comparing the significance value (Sig.) which obtained in the processing of SPSS software data in the ANOVA table with a value of 0.05 with the provisions if the value of the Deviation from Linearity Sig. > 0.05, thus there is a linearly significant relationship between the independent variable and the dependent variable and vice versa.

In the linearity testing between compensation and performance variables, the value of Deviation from Linearity Sig. of 0.697 and between the competence and performance variables the value of Deviation from Linearity Sig. of 0.914, both value are higher than the value of 0.05.

Based on the results above, it can be concluded that there is a linear relationship between the competence and motivation variables on the performance variable.

The Analysis of corelation

A technique in statistics that is used to measure the level of closeness of influence or relationship between variables is called Correlation Coefficient. In this study, Bivariate correlation is used to determine the effect of compensation and competence variables on the lecturers' performance through Pearson's correlation, with the basis of making decisions: If the significance value < 0.05 then it correlates,

on the contrary if the significance value > 0.05 then it does not correlate at all.

From the processing data, the significance value of the relationship between performance and compensation is 0.000, which is less than 0.05, so it can be interpreted that the relationship between the performance variable and the compensation variable correlates with the degree of the correlation being moderate, which is 0.411.

While the significance value of the relationship between performance and competence is 0,000 which is smaller than 0.05, it can be interpreted that the relationship between the performance variable and the competency variable correlates with the degree of correlation being moderate which is equal to 0.499.

The Analysis of Simple Linear Regression

The model of Simple regression equation aims to determine the effect of independent variables (compensation and competence) on the dependent variable (lecturers performance). The basis for decision making in a simple linear regression testing is obtained by comparing the significance value with a probability value of 0.05 where if the significance value < 0.05, then the independent variable influences the dependent variable, and vice versa.

Then compare the value of t arithmetic with t table where the basis for decision making is if the value of t arithmetic > t table then the independent variable influences the dependent variable where the value of t table obtained from the distribution table t value is 1.988.

Based on the data processing of the simple linear regression analysis using the

SPSS software program, the following results are obtained:

Testing Results of Simple Linear Regression Analysis between the Compensation variable for Lecturers Performance

Table 3. The Model of Compensation Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.411ᵃ	.169	.159	2.56587

From the table 3, it can be explained the magnitude of the correlation value / relationship (R) that is equal to 0.411 and also obtained the coefficient of determination value (R Square) of 0.169 which implies that the effect of the compensation variable on the lecturers performance variable is only 16.9%.

Table 4. ANOVA of Compensation

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	117.623	1	117.623	17.866	.000ᵃ
	Residual	579.366	88	6.584		
	Total	696.989	89			

From the table 4, it can be seen that the calculated F value = 17.866 with a significance level of 0.000 < 0.05, so that the regression model can be used to predict the variable of lecturers performance or in other words there is the effect of compensation variables on the lecturers performance variable.

Table 5. Coefficients of Compensation

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	18.884	2.693		7.011	.000
	Compensation	.343	.081	.411	4.227	.000

From the table 5, it is known that the constant value is 18.884, while the regression coefficient value is 0.343, so the regression equation can be stated, namely $Y = 18.884 + 0.343X_1$. A constant of 18,884 implies that the consistency value of the lecturer performance variable is 18,884. While the regression coefficient X_1 of 0.343 states that every 1% increase in the value of compensation, the value of the lecturers performance increases by 0.343. The regression coefficient is positive, thus it can be said that the direction of the effect of the compensation variable on lecturer performance is positive.

From the coefficient table above also obtained the value of t arithmetic of 4.227 > t table is 1.988, therefore it can be concluded that the compensation variable influences the Lecturers Performance variable.

Testing results of Simple Linear Regression Analysis between the variables of Competence and Lecturers Performance

Table 6. The Model of Competence Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.499ᵃ	.249	.241	2.43879

From the table 6, it can be explained that the magnitude of the correlation value / relationship (R) that is equal to 0.499 and also obtained the coefficient of determination value (R Square) of 0.249 which implies that the influence of the competence variable on the lecturers performance variable is 24.9%.

Table 7. Competence ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	173.593	1	173.593	29.187	.000a
	Residual	523.396	88	5.948		
	Total	696.989	89			

From the table 7 it can be seen that the calculated F value = 29.187 with a significance level of 0,000 < 0.05, thus the regression model can be used to predict lecturer performance variable or in other words there is an influence of competence variables on lecturer performance variable.

Table 8. The Coefficients of Competence

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	9.575	3.828		2.501	.014
	Competence	.432	.080	.499	5.402	.000

From the table 8, it is known that the constant value is 9.575, while the regression coefficient value is 0.432, so the regression equation can be written, namely $Y = 9.575 + 0.432X_2$. A constant of 9.575 implies that the consistency value of lecturer performance variable is 9.575. While the regression coefficient X_2 of 0.432 states that for each addition of 1% the value of competence, the value of lecturer performance increases by 0.432. The regression coefficient is positive, so it can be concluded that the direction of the influence of the competence variable on lecturer performance is positive. From the coefficient table 8 which also obtained the value of t arithmetic of 5.402 > t table is 1.988, so it can be said that the competence variable influences the Lecturer Performance variable**.**

The Analysis of Multiple Linear Regression

The Analysis of Multiple regression is used to determine whether there is a simultaneous influence of the independent variable on the dependent variable. A good regression equation model is one that fullfill the requirements of classical assumptions, including all the data that are normally distributed, linear, the model must be free of all multicollinearity and free from heteroscedasticity.

From the previous analysis, it has been proven that the equation model proposed in this study has fulfilled the requirements of classical assumption testing so that the equation model in this study is considered to be good. Based on the data processing from the results of the test of multiple linear regression analysis using the SPSS 20.0 application, the following results are obtained:

Table 9. Coefficients of Testing Results of Multiple Linear Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.032	3.831		2.097	.039
	compensation	.181	.087	.217	2.079	.041
	competence	.339	.090	.392	3.754	.000

Based on the table 9, we can see the regression equation:

$$Y = 8.032 + 0.181X_1 + 0.339X_2$$

From the multiple linear regression equation above it can be interpreted as follows a constant of 8.032 states that if the compensation variable (X_1) and competence (X_2) are considered constant or ignored, the lecturer performance variable (Y) is 8.032. Compensation regression coefficient (X_1) is 0.181 which means that every 1% increase in the value of compensation, the value of

lecturer performance increases by 0.181. The regression coefficient is positive, so it can be said that there is a positive influence on the compensation variable partially on the lecturers performance of STMIK Royal. Competency regression coefficient (X_2) is 0.339 means that every 1% increase in the competency value, the lecturer performance value increases by 0.339. The regression coefficient is positive, thus it can be said that there is a positive influence on the competence variable partially on the lecturers performance of STMIK Royal Kisaran.

Hypothesis Testing and Discussion

t test and discussion

  t test is used to determine the presence or not of the partial influence given to the independent variable toward the dependent variable. The basis for decision making from the t test is to compare the significance value to the value of 0.05 and the value of *t* arithmetic with the value of *t* table (*t* table value = 1.988), namely:

- If the value of sig < 0.05 or *t* arithmetic > *t* table then there is a partial effect
- If the sig value > 0.05 or *t* arithmetic > *t* table then there is no partial effect.

  The effect of partial compensation and competence on the lecturers performance can be seen in table 9 is the coefficients of the Multiple Linear Regression Analysis Testing Results by explaining as follows:

a. Effect of compensation on lecturer performance.
 Based on table 9, the value of *t* count > *t* table (2.079 > 1.988) with a significant

level (0.04 <0.05) is obtained, it means that there is a positive and significant influence on the compensation variable partially on the lecturers performance. Thus H_1 is accepted and H_o is rejected. It is shows that there is a partial compensation effect on the lecturers performance at STMIK Royal Kisaran.

b. Effect of competence on lecturer performance.
 Based on table 9, the value of *t* count > *t* table (3.754 > 1.988) with a significant level (0.00 < 0.05) is obtained, it means that there is a positive and significant influence on the competency variable partially on the lecturers performance. Thus H_2 is accepted and H_o is rejected. It states that there is a partial influence of competence on the lecturers performance at STMIK Royal Kisaran.

F **Test and Discussion**

  F test is used to determine the presence or not of simultaneous (joint) effects which are given from the independent variables toward the dependent variable. The basis for decision making from the *F* test is to compare the significance value to the value of 0.05 and the calculated *F* value with the table F value (table *F* value=3.10), are:

- If the sig value < 0.05 or *F* arithmetic > *F* table then there is a simultaneous effect
- If the sig value > 0.05 or *F* arithmetic > *F* table then there is no simultaneous effect

The effect of competency and motivation simultaneously on the lecturers performance can be seen in the following table 10:

Table 10. ANOVA Test Results for the Analysis of Multiple Linear Regression

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	198.373	2	99.186	17.306	.000ª
	Residual	498.616	87	5.731		
	Total	696.989	89			

From the table 10, it can be seen that the significance value for the effect of compensation and competence variables simultaneously on the lecturers performance variables is 0.000 <0.05 and F count is 17.306 > 3.10, so it can be concluded that H_3 is accepted and H_o is rejected, it means that there is a simultaneous influence of compensation and competence on the performance of lecturers at STMIK Royal Kisaran.

Coefficient of Determination and Discussion

The function of Determination Coefficient is to find out the percentage sum of influence given by independent variables simultaneously on the dependent variable.

Table 11. Summary Model of Testing Results of Multiple Linear Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.533ª	.285	.268	2.39400

Based on the table 11, it is known that the R square value of 0.285 means that the effect of compensation and competence variables simultaneously or jointly on the lecturers performance variable is 28.5%. From these data it is shown that around 28.5% of the Lecturer Performance variable can be explained by compensation and competence variables, in other words it can be stated that the compensation and competency variables contribute to the lecturers performance by 28.5% while the remaining 71.5% is influenced by other variables which is not discussed in this study.

CONCLUSION

The compensation and competence variables have positive and significant effects partially and simultaneously on the performance of lecturers in STMIK Royal Kisaran. From the results of multiple regression analysis the equation $Y = 8.032 + 0.181X_1 + 0.339X_2$ is obtained. The contribution of compensation and competence to lecturers performance was 28.5% while the remaining 71.5% was influenced by other variables which not included in this study. From these two variables, the most dominant variable influencing lecturers performance is the competence variable.

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