



Strengthening Lecturer Performances to Achieve Key Performance Indicators of University

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Abstract. This study aims to find a model of lecturer performances development to achieve the key performance indicators of higher education. There are six variables studied, including lecturer performance as the dependent variable and work contracts, monitoring systems, assessment systems, consequence actions, and continuous improvement as the independent variables. The study is conducted at the Universitas Negeri Medan, Indonesia, with 126 respondents assigned randomly. According to the study's findings, five independent variables had a significant impact on lecturers' overall performance. The continuous improvement variable has the largest contribution, followed by the monitoring system, work contract, and consequence actions, as well as the performance assessment system. The research emphasizes the importance of university support in developing the lecturers' skills, particularly through continuous improvement, in order to enhance lecturer performance and achieve the key performance of higher education.

Keywords: Performance · Improvement · Contract · Assessment · Monitoring · Consequences

1 Introduction

The rapid development of technology has the effect of increasing stakeholder demands for human resource quality [1]. Educational institutions determine the success of society through graduates who have high competence with strong adaptability to face technological developments [2, 3]. The government aims to improve Indonesian universities by implementing policies on national higher education standards, as outlined in the Minister of Education and Culture Regulation No. 3 of 2020. In section 1 of article 4, eight standards are affirmed as follow: (1) graduate competency standards, (2) learning content standards, (3) learning process standards, (4) education assessment standards for learning, (5) lecturer and education personnel standards, (6) learning facilities and infrastructure standards, (7) management standards, (8) learning financing standards [4]. These policies lead to efforts to improve the quality of education in Indonesia in line with global standards [5]. Each State University in Indonesia should be guided by key performance indicators in the following areas: (1) setting objectives, (2) drafting contract

documents or performance agreements, (3) the implementation process, (4) monitoring, (5) evaluation, (6) continuous improvement, and (7) reporting results.

In order to achieve world-class quality education, the government enacted the Freedom of Learning program, which provides students with opportunities to gain learning experiences outside of their study program, both within and outside the university and in non-educational institutions [5]. This effort is intended to provide students with real and varied work environment experiences that they will encounter in the future. Each institution of higher education is expected to undergo a transformation that is congruent with the eight key performance indicators. The Directorate General of Higher Education - Indonesia encourages colleges to attain the "gold standard" and become its top-ranked institution.

2 Research Method

This research is conducted at the Universitas Negeri Medan, Indonesia. As research respondents are lecturers in undergraduate study programs by taking a sample of 126 people randomly. Research data are collected through observation, interviews and document studies. For the dependent variable, the Lecturer's performance (Y) is measured using the lecturer's performance appraisal instrument. The independent variables, namely the Work contract (X_1), Monitoring system (X_2), Consequence action (X_4) and Continuous improvement (X_5) were measured using a questionnaire instrument with a Likert scale, while Assessment system (X_3) was measured using an assessment instrument. Data analysis is carried out descriptively followed by inductive analysis, namely multiple regression analysis after going through the data normality and data linearity requirements test [6, 7].

3 Results and Discussion

The measurement results for each research variable, both independent and dependent variables, indicate a fairly good rating for the monitoring system, assessment system, and continuous improvement, whereas the work contract, consequence action, and lecturer's performance are rated as good as depicted in Fig. 1.

As shown in Fig. 1, the lecturer's performance as the dependent variable receives an average score of 84.49, which is classified as excellent. A very good independent variable is the lecturer's work contract with the institution, which serves as a guide for the work that will be performed each semester or year. In contrast, the remaining four independent variables, namely monitoring system, assessment system, action consequences, and continuous improvement, are rated as excellent (Table 1).

In order to determine the variables that affect the lecturers' primary performance, independent variables must be analyzed using inferential multiple regression statistical analysis. The data must be examined for normality and linearity, among other requirements. To examine the normality of the data, the SPSS application is used to conduct a Kolmogorov-Smirnov test. With a significance level of $= 0.05$, the calculation results in Table 2 indicate that all variables satisfy the normality requirements for data.

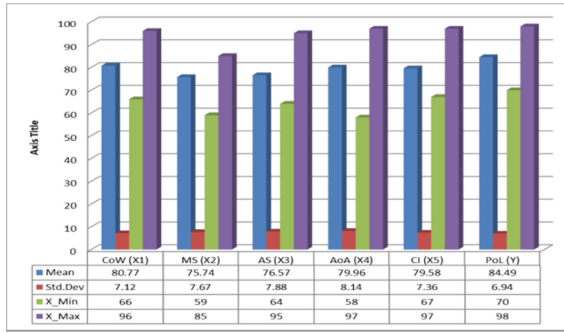


Fig. 1. Statistics of Variable

Tabel 1. One-Sample Kolmogorov-Smirnov Test

	CoW (X ₁)	MS (X ₂)	AS (X ₃)	AoA (X ₄)	CI (X ₅)	LP (Y)
N	126	126	126	126	126	126
Kolmogorov-Smirnov Z	1.245	.952	.709	1.021	1.125	1.235
Asymp. Sig. (2-tailed)	.090	.324	.696	.248	.159	.095
Tolerance	0.709	0.719	0.509	0.544	0.477	
VIF	1.411	1.391	1.963	1.838	2.098	

The second analysis requirement is a multicollinearity test to determine if the regression model finds correlations between independent variables and has a high degree of similarity. According to the Inflation Factor (VIF), a model is deemed free of multicollinearity if the correlation coefficient between the independent variables is less than 10. According to the test results, the VIF value is less than 10 and the Tolerance value is greater than 0.1. Thus, it is possible to assert that the regression model is free of multicollinearity. Furthermore, the autocorrelation test is performed to determine if there is a correlation between the confounding error in period t and period t-1 in a linear regression model. The autocorrelation test utilizes the Durbin-Watson Test, and the Durbin-Watson (D-W) value can be used to detect the presence or absence of autocorrelation problems. Based on the summary table above, it can be seen that the Durbin Watson is 1.759 which indicates that it is in the No Autocorrelation area. Therefore, the autocorrelation test is satisfied, as there is no autocorrelation in the regression model.

The correlation between variables shows all significant, both between independent variables and independent variables with the dependent variable. For multiple correlations, namely the work contract (X₁), monitoring system (X₂), assessment system (X₃), consequence action (X₄) and continuous improvement (X₅) on the main lecturer’s performance (Y) are significant as shown in Table 2. Multiple regression tested from five independent variables to the dependent variable obtained significant results with a of F = 66.314 which exceeds the table value, and a significance of F < 0.05 as shown in

Table 2. Model Summary^b

Model	R	R Square	Change Statistics				
			R Square	F	df1	df2	Sig. F
1	.857 ^a	.734	.734	66.314	5	120	.000

Table 3. ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4510.876	5	902.175	66.314	.000 ^a
	Residual	1632.552	120	13.605		
	Total	6143.429	125			

a. Predictors: (Constant), CI (X5), CoW (X1), MS (X2), AoA (X4), AS (X3)

b. Dependent Variable: PoL (Y)

Table 4. Coefficients^a of Regression

Model		Unstandardized Coeff.		Stand.Coeff	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	11.728	4.590		2.555	.012
	CoW (X1)	.024	.053	.025	.452	.652
	MS (X2)	.025	.051	.027	.491	.625
	AS (X3)	.188	.059	.212	3.208	.002
	AoA (X4)	.222	.054	.261	4.090	.000
	CI (X5)	.462	.065	.486	7.127	.000

a. Dependent Variable: PoL (Y)

Table 3. Furthermore the regression line equation can be formed through the results of the coefficient calculation as shown in Table 4.

According to data analysis results in Table 5, the equation for the regression line derived from this study is $Y = 0.2 X_1 + 0.2 X_2 + 0.18 X_3 + 0.22 X_4 + 0.46 X_5 + 11.728$. In this case, it can be stated that the constant 11.728 is the of the lecturer’s performance score (Y) if the five independent variables are completely omitted. Significant evidence suggests that the employment contract (X₁), monitoring system (X₂), performance appraisal system (X₃), consequence action (X₄) and continuous improvement (X₅) contribute positively to the main performance of lecturers (Y).

The primary performance of lecturers originated from the three fundamental activities of higher education is an achievement that is supported by other variables. This study demonstrates that the employment contract is one of the variables that determine

the lecturer's performance achievement. This is consistent with the research done by Cadez et al. [8] stating the assessment of lecturer performance will support multiple factors that contribute to the improvement of the quality of higher education. Similarly, other variables such as the monitoring system, performance evaluation system, rewards and punishments, and continuous improvement have been proven to provide a significant positive influence on the achievement of lecturers' primary performance. This study is also in line with previous research conducted by Ismail et al. [9] and Stephen [10], which emphasized the significance of establishing a mutually agreed-upon work plan as the foundation for implementing activities that ultimately determine performance achievement. This study also supports previous research by Blyznyuk Tetyana [11] concerning the impact of the assessment system on performance achievement. This study also supports the findings of Patrick [12] and Retnowati et al. [13], which demonstrate that monitoring and evaluation have a positive effect on the performance of university lecturers.

Regarding the contribution of independent variables to the primary performance of lecturers, the continuous improvement variable contributes the most, 46.2%, followed by a monitoring system contributing 25%, work contracts contributing 24%, and subsequent actions contributing 22.2%, and a performance appraisal system contributing 18.2%. The findings of this study demonstrate that university support for the continuous development of lecturers' skills is essential. Monitoring systems and work contracts are variables that must be considered because they have a substantial and substantial impact on determining the lecturers' primary performance.

4 Conclusion

The primary performance of lecturers is the basis for achieving higher education quality. Therefore, the competence of lecturers must continue to be developed in order to improve the main performance in order to achieve university performance. To achieve optimal primary performance, it is necessary to support several variables, and this study proves five independent variables that have been shown to have a significant effect on the main performance of lecturers. The highest contribution that determines the main performance of lecturers is continuous improvement and is followed by a monitoring system, work contracts and consequential actions as well as a performance appraisal system. Therefore, the process of developing the competence of lecturers must remain a priority because it has proven to be the basis for improving key performance.

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