

The Influence of Leadership and Motivation on Employee Performance at the Serang Fire and Rescue Service

TB. Guruh Ramadhan

Universitas Darma Persada

Email: guruhramadhan80@gmail.com

ABSTRACT

Humans always develop actively and are dominant in every organizational activity, because humans become planners, actors, and determinants of the realization of organizational goals. This study aims to determine the effect of leadership and motivation on employee performance at the Serang Fire and Rescue Service. The method used is explanatory research with analytical techniques using statistical analysis with regression, correlation, determination, and hypothesis testing. The results of this study that leadership has a significant effect on employee performance by 45.3%, hypothesis testing is obtained $t_{count} > t_{table}$ or $(9.016 > 1.984)$. Motivation has a significant effect on employee performance by 38.9%, hypothesis testing is obtained $t_{count} > t_{table}$ or $(7.899 > 1.984)$. Leadership and motivation simultaneously have a significant effect on employee performance with the regression equation $Y = 10.037 + 0.410X_1 + 0.349X_2$. The influence contribution is 52.8%, hypothesis testing is obtained $F_{count} > F_{table}$ or $(54.237 > 2,700)$.

Keywords: Leadership, Motivation, Employee Performance

INTRODUCTION

Human resources (HR) is one of the key factors in economic reform, namely how to create qualified and skilled human resources and are highly competitive in global competition (Bernardin & Russell, 2006; Hamdan & Defever, 2003; Marin, 2012). Humans always develop actively and are dominant in every organizational activity, because humans become planners, actors, and determinants of the realization of organizational goals. Goals cannot be realized without the active role of employees even though the tools used are sophisticated (Han et al., 2020; Nielsen et al., 2005; Searcy et al., 2016). The sophisticated tools that are owned are of no use if the active role of employees is not included.

In a government organization, success or failure in the implementation of government duties and administration is influenced by leadership, through leadership and supported by adequate government organizational capacity, then the implementation of good governance (Good Governance) will be realized. the cause of the collapse of the performance of the bureaucracy in Indonesia, (Istianto, 2009; E. Sirait & Suprianto, 2020)

Leadership can be said as a way of a leader in directing, encouraging, and regulating all elements in the group or organization to achieve a desired organizational goal to produce maximum employee performance (Asrar-ul-Haq & Kuchinke, 2016; Dumitriu et al., 2014; Gameda & Lee, 2020). The increase in employee performance means the achievement of one's work in achieving goals. About human resources, which are the main tools for the smooth activities of an organization, it can develop well, if the workforce in the organization can

develop well if the workforce in the organization is given motivation related to growth and development the development of a person's character because motivation is part of encouraging employees to work according to the goals that have been set.

Motivation is a factor that encourages someone to do a certain activity, therefore motivation is often interpreted as a factor driving a person's behavior, (E. J. M. Sirait et al., 2019; Sutrisno, 2014) Providing stimuli that can generate enthusiasm and encouragement to work as optimally as possible so that someone wants to work together, work effectively, and be integrated with all his efforts to achieve organizational goals and satisfy individual needs. The size of the influence of work motivation depends on how much intensity of motivation is given, through responsibility in doing work, achievements achieved, self-development, and independence in acting.

In organizational performance is the answer to the success or failure of the organizational goals that have been set (Heilbrun et al., 2019; Hoendervanger et al., 2019; Lamin & Livanis, 2020). Institutional leaders or managers often ignore and pay no attention to performance issues unless they are very bad, too often not knowing how badly performance has deteriorated so that the institution or agency faces a serious crisis.

Performance must be carried out effectively and efficiently, which means that in carrying out organizational work using organizational resources it must be carried out carefully and thoroughly so that there is no wastage. Good and quality performance can have good consequences not only for the institution or agency but for employees or employees of the institution itself, it can even be felt by the wider community.

According to Moeheriono (in Abdullah, 2014) performance or performance is a description of the level of achievement of the implementation of a program of activities or policies in realizing the goals, objectives, vision, and mission of the organization as outlined through strategic planning or an organization.

The importance of the performance of the employees of the Fire and Rescue Service is the process used to provide the benefits of good work if done correctly and measures the extent to which the performance of the employees of the Fire and Rescue Service, this provides important benefits for employees and leaders in an organization, and the results of performance evaluations can be carried out to determine appropriate actions. And the importance of employee performance needs to be observed to determine the ability of employees, acceptance of employee goals, the level of goals achieved, and the interaction between the goals and abilities of employees in institutions where each of these elements affects a person's performance.

METHOD

The type of research used is quantitative, (Sugiyono, 2007). The population in the study amounted to 100 respondents from the Serang Fire and Rescue Service so that this study was a population study. The data collection technique is through questionnaires with data analysis techniques, namely by using instrument tests, classical assumption tests, regression, correlation coefficients, coefficients of determination, and hypothesis testing.

RESULT AND DISCUSSION

Instrument Test

In this test, validity and reliability tests are used. The validity test is intended to determine the accuracy of the data regarding the suitability between what is to be measured and the measurement results. According to (Sugiyono, 2007) "Valid means that there is a similarity between the data collected and the actual data. While (Ghozali, 2006) argues that a questionnaire is said to be valid if the questions on the questionnaire can reveal something that will be measured by the questionnaire. To perform the validity test, the significance value of 2 tailed is compared with 0.05 with the provisions of:

- a. If the significance value of 2-tailed < 0.05 , then the instrument is valid;
- b. If the 2-tailed significance value > 0.05 , then the instrument is not valid,

From the test results, it was obtained that each statement item for all variables obtained a 2-tailed significance value of $0.000 < 0.05$, thus the instrument was valid.

The next test is *uni* reliability. The reliability test analysis model used in this study is the Cronbach Alpha model. According to (Ghozali, 2006) argues "reliability is a tool to test the consistency of respondents' answers to questions in the questionnaire. A questionnaire is said to be reliable if a person's answer to a question is consistent or stable over time. The measurement is carried out by using Cronbach's Alpha analysis. Ghozali (2013) classifies Cronbach's Alpha values as follows:

- a. If the value of Cronbach's Alpha > 0.60 , it is declared reliable;
- b. b. If Cronbach's Alpha value < 0.60 , it is declared unreliable,

The test results are as follows:

Table 1.
Reliability Test Results

Variable	Cronbach's Alpha	Standard Critical Alpha	Description
Leadership (X1)	0,743	0,600	Reliabel
Motivation (X2)	0,604	0,600	Reliabel
Employee Performance (Y)	0,650	0,600	Reliabel

Based on the test results above, the overall leadership variable (X1), motivation (X2) obtained a Cronbach alpha value greater than 0.600. Thus it is declared reliable.

Classic assumption test

A classical assumption test is intended to determine the accuracy of data. According to Singgih Santoso (2015) "A regression model will be used for forecasting, a good model is a model with minimal forecasting errors". Therefore, a model before being used should meet several assumptions, which are commonly called classical assumptions. In this study, the

classical assumption tests used include Normality Test, Multicollinearity Test, Autocorrelation Test, and Heteroscedasticity Test. The results are as follows:

A normality test was conducted to test whether, in the regression model, the dependent variable and the independent variable were normally distributed or not normally distributed. The results of the normality test using the Kolmogorov-Smirnov Test are as follows:

Table 2.
Kolmogorov-Smirnov . Normality Results

	Tests of Normality					
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Employee Performance (Y)	.086	100	.066	.977	100	.080

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Based on the test results in the table above, a significance value of 0.066 is obtained where the value is greater than the value of $\alpha = 0.050$ or ($0.200 > 0.050$). Thus, the assumption of the distribution of equations in this test is normal.

Multicollinearity testing was conducted to ensure that the independent variables did not have multicollinearity or did not have a correlation effect between the variables set as models in the study. Multicollinearity test was carried out by looking at the Tolerance Value and Variance Inflation Factor (VIF). The test results are as follows:

Table 3.
Multicollinearity Test Results with Collinearity Statistics

Model	Coefficients ^a				
	Unstandardized Coefficients		Standardized Coefficients	Collinearity Statistics	
	B	Std. Error	Beta	Tolerance	VIF
1 (Constant)	10.037	2.853			
Leadership (X1)	.410	.077	.467	.637	1.571
Motivation (X2)	.349	.089	.342	.637	1.571

a. Dependent Variable: Employee Performance (Y)

Based on the test results in the table above, the tolerance value of each independent variable is $0.637 < 1.0$ and the Variance Inflation Factor (VIF) value is $1.571 < 10$, thus this regression model does not occur multicollinearity.

Autocorrelation testing is used to determine whether or not there are deviations in the correlation between sample members. The test was carried out with the Darbin-Watson test (DW test). The test results are as follows:

Table 4.
Autocorrelation Test Results

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.727 ^a	.528	.518	2.433	2.069

a. Predictors: (Constant), Motivation (X2), Leadership (X1)

b. Dependent Variable: Employee Performance (Y)

The test results in the table above obtained the Durbin-Watson value of 2,069, the value is between the interval 1,550 – 2,460. Thus the regression model stated that there is no autocorrelation disorder.

Heteroscedasticity testing is intended to test whether in a regression model there is an inequality of residual variance. The test results are as follows:

Table 5.
Heteroscedasticity Test Results with Glejser Test Model

Model		Coefficients ^a				t	Sig.
		Unstandardized Coefficients		Standardized Coefficients			
		B	Std. Error	Beta			
1	(Constant)	1.226	1.667			.736	.464
	Leadership (X1)	-.011	.045	-.030		-.238	.812
	Motivation (X2)	.029	.052	.072		.565	.573

a. Dependent Variable: RES2

The results of the test using the lesser test obtained the value of Sig. > 0.05. Thus the regression model has no heteroscedasticity disorder.

Descriptive Analysis

This test is used to determine the minimum and maximum scores, mean scores, and standard deviations of each variable. The results are as follows:

Table 6.
Descriptive Statistics Analysis Results Analysis

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Leadership (X1)	100	31	48	37.88	3.991
Motivation (X2)	100	31	44	38.11	3.440
Employee Performance (Y)	100	32	46	38.86	3.505
Valid N (listwise)	100				

Leadership obtained a minimum variance of 31 and a maximum variance of 48 with a mean score of 3.78 with a standard deviation of 3.991. Motivation obtained a minimum variance of 31 and a maximum variance of 44 with a mean score of 3.81 with a standard deviation of 3.440. Employee performance obtained a minimum variance of 32 and a maximum variance of 46 with a mean score of 3.88 with a standard deviation of 3.505.

Quantitative Analysis

This analysis is intended to determine the effect of the independent variable on the dependent variable. The test results are as follows:

Multiple Linear Regression Analysis

This regression test is intended to determine changes in the dependent variable if the independent variable changes. The test results are as follows:

Table 7.
Multiple Linear Regression Test Results

		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	10.037	2.853		3.518	.001
	Leadership (X1)	.410	.077	.467	5.342	.000
	Motivation (X2)	.349	.089	.342	3.913	.000

Based on the test results in the table above, the regression equation $Y = 10.037 + 0.410X_1 + 0.349X_2$ is obtained. From the equation, it is explained that a constant of 10.037 means that if there is no leadership and motivation, then there has been an employee performance value of 10.037 points. The leadership regression coefficient is 0.410, this number is positive, meaning that every time there is an increase in the leadership of 0.410, the employee's performance will also increase by 0.410 points. The motivation regression coefficient is 0.349, this number is positive, meaning that every time there is an increase in motivation of 0.349, the employee's performance will also increase by 0.349 points.

Correlation Coefficient Analysis

Correlation coefficient analysis is intended to determine the level of strength of the relationship of the independent variable to the dependent variable either partially or simultaneously. The test results are as follows:

Table 8.
Leadership Correlation Coefficient Test Results on Employee Performance.

Correlations ^b			
		Kepemimpinan (X1)	Kinerja Pegawai (Y)
Leadership (X1)	Pearson Correlation	1	.673**
	Sig. (2-tailed)		.000
Employee Performance (Y)	Pearson Correlation	.673**	1
	Sig. (2-tailed)	.000	

Based on the test results obtained a correlation value of 0.673, meaning that leadership has a strong relationship with employee performance.

Table 9.
The Result of Testing the Correlation Coefficient of Motivation on Employee Performance

Correlations ^b			
		Motivation (X2)	Employee Performance (Y)
Motivation (X2)	Pearson Correlation	1	.624**
	Sig. (2-tailed)		.000
Employee Performance (Y)	Pearson Correlation	.624**	1
	Sig. (2-tailed)	.000	

Based on the test results obtained a correlation value of 0.624 means that motivation has a strong relationship to employee performance.

Table 10.
Results of Simultaneous Leadership and Motivation Correlation Coefficient Testing on Employee Performance

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.727 ^a	.528	.518	2.433

a. Predictors: (Constant), Motivation (X2), Leadership (X1)

Based on the test results obtained a correlation value of 0.727 means that leadership and motivation simultaneously have a strong relationship to employee performance.

Coefficient of Determination Analysis

The analysis of the coefficient of determination is intended to determine the percentage of the influence of the independent variable on the dependent variable either partially or simultaneously. The test results are as follows:

Table 11.
Results of Testing the Coefficient of Leadership Determination on Employee Performance

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.673 ^a	.453	.448	2.604

a. Predictors: (Constant), Leadership (X1)

Based on the test results, the determination value is 0.453, meaning that leadership has an influence contribution of 45.3% on employee performance.

Table 12.
The Results of the Coefficient of Determination of Motivation on Employee Performance

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.624 ^a	.389	.383	2.753

a. Predictors: (Constant), Motivation (X2)

Based on the test results, the determination value is 0.389, which means that motivation has an influence contribution of 38.9% on employee performance.

Table 13.
The Results of the Coefficient of Leadership Determination and Motivation on Employee Performance

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.727 ^a	.528	.518	2.433

a. Predictors: (Constant), Motivation (X2), Leadership (X1)

Based on the test results obtained a determination value of 0.528, meaning that leadership and motivation simultaneously have an influence contribution of 52.8% on employee performance, while the remaining 47.2% is influenced by other factors.

Partial hypothesis test (t-test)

Hypothesis testing with a t-test is used to determine which partial hypothesis is accepted. The first hypothesis: There is a significant influence of leadership on employee performance. The second hypothesis: There is a significant effect of motivation on employee performance.

Table 14.
Leadership Hypothesis Test Results on Employee Performance
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	16.459	2.498		6.588	.000
Leadership (X1)	.591	.066	.673	9.016	.000

a. Dependent Variable: Employee Performance (Y)

Based on the test results in the table above, the value of t arithmetic $>$ t table or ($9.016 > 1.984$), thus the first hypothesis proposed that there is a significant influence between leadership on employee performance is accepted.

Table 15.
Motivation Hypothesis Test Results on Employee Performance
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	14.645	3.078		4.759	.000
Motivation (X2)	.635	.080	.624	7.899	.000

a. Dependent Variable: Employee Performance (Y)

Based on the test results in the table above, the value of t arithmetic $>$ t table or ($7.899 > 1.984$), thus the second hypothesis proposed that there is a significant influence between motivation on employee performance is accepted.

Simultaneous Hypothesis Testing (F Test)

Hypothesis testing with the F test is used to determine which simultaneous hypothesis is accepted. The third hypothesis There is a significant influence between leadership and motivation on employee performance.

Table 16.
Leadership and Motivation Hypothesis Test Results on Employee Performance
ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	641.974	2	320.987	54.237	.000 ^b
	Residual	574.066	97	5.918		
	Total	1216.040	99			

a. Dependent Variable: Buying decision (Y)

b. Predictors: (Constant), Product Quality (X2), Price (X1)

Based on the test results in the table above, the calculated F value $>$ F table or ($54.237 > 2,700$), thus the third hypothesis proposed that there is a significant influence between leadership and motivation on employee performance is accepted.

Discussion

The Effect of Leadership on Employee Performance Kinerja

From the results of the analysis, it was found that the leadership variable had a significant effect on employee performance with a correlation value of 0.673, meaning that the two variables had a strong relationship with the contribution of 45.3%. Testing the hypothesis obtained the value of t arithmetic $>$ t table or ($9.016 > 1.984$). Thus the first hypothesis proposed that there is a significant effect between leadership on employee performance is accepted. In line with the opinion (Malayu & Hasibuan, 2012) that leadership is the way a leader influences the behavior of subordinates to cooperate and work productively to achieve organizational goals. Next According to Stephen P. Robbins (in Dolphina, 2012) that leadership is the ability to influence a group towards a goal. Leadership is an interpersonal influence that is carried out in certain situations and is directed through the communication process towards the achievement of one or more of these goals.

The Effect of Motivation on Employee Performance

From the results of the analysis, it was found that the motivation variable had a significant effect on employee performance with a correlation value of 0.624, meaning that the two variables had a strong relationship with the contribution of 38.9%. Testing the hypothesis obtained the value of t arithmetic $>$ t table or ($7.899 > 1.984$). Thus the second hypothesis proposed that there is a significant effect between motivation on employee performance is accepted. In line with the opinion (Sutrisno, 2014) that motivation is a factor that encourages someone to do a certain activity, therefore motivation is often interpreted as a factor driving a person's behavior including a person's performance in the organization. Providing stimuli that can generate enthusiasm and encouragement to work as optimally as possible so that someone wants to work together, work effectively, and be integrated with all his efforts to achieve organizational goals and satisfy individual needs.

The Influence of Leadership and Motivation on Employee Performance

From the results of the analysis, it is found that the leadership and motivation variables have a significant effect on employee performance with the regression equation $Y = 10.037 + 0.410X_1 + 0.349X_2$, the correlation value is 0.727, meaning that the two variables have a strong relationship with the contribution of the influence of 52.8% while the remaining 47,2% influenced by other factors. Hypothesis testing is obtained by the calculated F value $>$ F table or ($54.237 > 2,700$). Thus the third hypothesis proposed that there is a significant influence between leadership and motivation on employee performance is accepted. Based on the results of this study, it can be explained that leadership and motivation can influence someone in an organization to improve their performance so that organizational goals can be realized., (Abdullah, 2014; Dolphina, 2012; Malayu & Hasibuan, 2012; E. J. M. Sirait et al., 2019; Sutrisno, 2014).

CONCLUSION

Leadership has a significant effect on employee performance, the correlation value is 0.673 or strong with a contribution of 45.3%. Hypothesis test obtained value of t count $>$ t table or ($9.016 > 1.984$). Thus there is a significant influence between leadership on employee performance at the Serang Fire and Rescue Service. Motivation has a significant effect on employee performance with a correlation value of 0.624 or strong with a contribution of 38.9% influence. Hypothesis test obtained value of t count $>$ t table or ($7.899 > 1.984$). Thus there is a significant influence between motivation on employee performance at the Serang Fire and Rescue Service. Leadership and motivation have a significant effect on employee performance with a correlation value of 0.727 or strong with a contribution of 52.8% influence while the remaining 47.2% is influenced by other factors. Hypothesis testing is obtained by the calculated F value $>$ F table or ($54.237 > 2,700$). Thus there is a significant influence between leadership and motivation simultaneously on employee performance at the Serang Fire and Rescue Service.

REFERENCES

- Abdullah, M. (2014). *Manajemen dan evaluasi kinerja karyawan*. Aswaja Pressindo.
- Asrar-ul-Haq, M., & Kuchinke, K. P. (2016). Impact of leadership styles on employees' attitude towards their leader and performance: Empirical evidence from Pakistani banks. *Future Business Journal*, 2(1), 54–64. <https://doi.org/https://doi.org/10.1016/j.fbj.2016.05.002>
- Bernardin, H. J., & Russell, J. E. A. (2006). *Human resource management*. Tata McGraw-Hill.
- Dolphina, E. (2012). Pengaruh Motivasi, Kepemimpinan dan Budaya Kerja terhadap Kepuasan Kerja Karyawan serta Dampaknya pada Kinerja Perusahaan. *Semantik*, 2(1).
- Dumitriu, C., Timofti, I. C., Nechita, E., & Dumitriu, G. (2014). The Influence of the Locus of Control and Decision-making Capacity upon the Leadership Style. *Procedia - Social and Behavioral Sciences*, 141, 494–499. <https://doi.org/https://doi.org/10.1016/j.sbspro.2014.05.086>
- Gemeda, H. K., & Lee, J. (2020). Leadership styles, work engagement and outcomes among information and communications technology professionals: A cross-national study. *Heliyon*, 6(4), e03699. <https://doi.org/https://doi.org/10.1016/j.heliyon.2020.e03699>
- Ghozali, I. (2006). *Aplikasi analisis multivariate dengan program SPSS*. Badan Penerbit Universitas Diponegoro.
- Hamdan, M., & Defever, M. (2003). Human resources for health in Palestine: a policy analysis: Part I: Current situation and recent developments. *Health Policy*, 64(2), 243–259. [https://doi.org/https://doi.org/10.1016/S0168-8510\(03\)00004-6](https://doi.org/https://doi.org/10.1016/S0168-8510(03)00004-6)
- Han, J., Sun, J.-M., & Wang, H.-L. (2020). Do high performance work systems generate negative effects? How and when? *Human Resource Management Review*, 30(2), 100699. <https://doi.org/https://doi.org/10.1016/j.hrmr.2019.100699>
- Heilbrun, M. E., Poss, B., Boi, L., Anzai, Y., Hu, N., & Kaplan, R. S. (2019). Assessing the Training Costs and Work of Diagnostic Radiology Residents Using Key Performance

- Indicators – An Observational Study. *Academic Radiology*.
<https://doi.org/https://doi.org/10.1016/j.acra.2019.08.004>
- Hoendervanger, J. G., Van Yperen, N. W., Mobach, M. P., & Albers, C. J. (2019). Perceived fit in activity-based work environments and its impact on satisfaction and performance. *Journal of Environmental Psychology*, 65, 101339. <https://doi.org/https://doi.org/10.1016/j.jenvp.2019.101339>
- Istianto, B. (2009). *Manajemen pemerintahan dalam perspektif pelayanan publik*. Kerja sama STIAM I Jakarta dengan Penerbit Mitra Wacana Media.
- Lamin, A., & Livanis, G. (2020). Do third-party certifications work in a weak institutional environment? *Journal of International Management*, 26(2), 100742. <https://doi.org/https://doi.org/10.1016/j.intman.2020.100742>
- Malayu, H., & Hasibuan, H. (2012). *Manajemen sumber daya manusia*, Edisi Revisi. PT Bumi Aksara. Jakarta.
- Marin, S. M. (2012). Change and Innovation in the Educational Policies and Strategies for Human Resources Development. *Procedia - Social and Behavioral Sciences*, 47, 1662–1667. <https://doi.org/https://doi.org/10.1016/j.sbspro.2012.06.880>
- Nielsen, J., Andreasen, A., & Alexander, A. (2005). Promotion of work ability at company level: Intention and performance, dreams and realities. *International Congress Series*, 1280, 386–391. <https://doi.org/https://doi.org/10.1016/j.ics.2005.02.093>
- Searcy, C., Dixon, S. M., & Neumann, W. P. (2016). The use of work environment performance indicators in corporate social responsibility reporting. *Journal of Cleaner Production*, 112, 2907–2921. <https://doi.org/https://doi.org/10.1016/j.jclepro.2015.10.081>
- Sirait, E. J. M., Arhas, S. H., & Suprianto, S. (2019). The Influence of Assignment of Lecturers at School (ALS) Program on Students Learning Motivation in Tarakan City. *Jurnal Ad'ministrare*, 6(1), 79–88.
- Sirait, E., & Suprianto. (2020). *Administrasi dan Manajemen Sekolah; Cetakan Pertama*. Jawa Tengah. CV. Amerta Media.
- Sugiyono, M. (2007). *Kualitataif dan r&d*, Bandung: Alfabeta, 2010. Sugiyono, *Metode Penelitian Kuantitatif Kualitatif Dan R&D Bandung: Alfabeta*.
- Sutrisno, E. (2014). *Manajemen Sumber Daya Manusia*, Cetakan Keenam. Jakarta: Pranada Media Group.