(RESEARCH ARTICLE)

Analysis of supervision, leadership, and compensation on employee performance at the north sumatra DPRD office

M. Iqbal Fadillah and Eli Delvi Yanti *

Management Study Program, Universitas Pembangunan Panca Budi, Indonesia.

Abstract

The analysis of the study aims to find out whether partial supervision has a positive and significant effect on employee performance at the North Sumatra DPRD Office. Does leadership partially have a positive and significant effect on employee performance at the North Sumatra DPRD Office. Does partial compensation have a positive and significant effect on employee performance at the North Sumatra DPRD Office. Whether supervision, leadership and compensation simultaneously have a positive and significant effect on employee performance at the North Sumatra DPRD Office. The research method is causal associative research with the help of the SPSS Version 25 program. This study uses multiple linear regression. The population in this study is 82 respondents. The sample in this study is 82 respondents. Primary data collection uses questionnaires. The results of the study show that partial supervision has a positive and significant effect on employee performance at the North Sumatra DPRD Office. Leadership partially has a positive and significant effect on the performance of employees at the North Sumatra DPRD Office. Partial compensation has a positive and significant effect on employee performance at the North Sumatra DPRD Office. Supervision, leadership and compensation simultaneously have a positive and significant effect on employee performance at the North Sumatra DPRD Office.

Keywords: Supervision; Leadership; Compensation and Employee Performance; North Sumatra

1. Introduction

Organizations are generally established with goals to be achieved, so in order to optimize these goals, employees who are part of an important asset for the success of the organization are needed to survive in the midst of increasingly fierce and competitive business competition. Employees who have high performance in carrying out their duties and responsibilities are one of the advantages and advantages for the organization so that the organization's management needs to maintain and maintain the existence of high-performing employees. A very important factor for achieving high productivity is the implementation of the performance of its employees, because it is one of the factors that determine success and progress in achieving goals. The success of the organization is inseparable from the support of employees who perform in carrying out their duties and responsibilities in the midst of increasingly fierce and competitive business competition. According to [1], "Performance is the result of work achieved by a person or a group of people in an organization in accordance with their respective authorities and responsibilities in an effort to achieve the goals of the organization concerned legally, not violating the law and in accordance with morals and ethics". High employee performance means that the organization's opportunity to achieve and optimize the achievement of goals can be achieved, so that organizational leaders need to pay attention and prioritize employee performance. Employees have not been able to do their work on time. There are factors that affect the performance of North Sumatra DPRD Office employees, namely supervision, leadership and compensation.

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* Corresponding author: Eli Delvi Yanti.

According to [2], supervision is a manager's activity that seeks to ensure that the work is carried out in accordance with the set plan and the desired results. Supervision and results of work implementation are going well and work can be carried out in accordance with the plan that has been set and will improve employee performance in the organization. Employees have not fully received an inspection of the results of the work carried out. Employees have not always been given solutions/corrective actions if something goes wrong.

According to [3], good leadership can provide comfort for employees at work, because the comfort that employees get from a boss is something special that can ultimately improve employee performance such as the friendliness of the boss to the employee, the attention of the boss, and the motivations given to the employee. The leadership carried out by the leadership can be well received by employees, automatically employees will not leave the organization because comfort and work atmosphere are obtained from the organization, in addition to the motivation that continues and continues to be given by the leadership to employees will always encourage employee performance in the organization. Leadership in the North Sumatra DPRD Office, namely the leadership lacks decision-making with employees. Leaders have not conveyed creative ideas or ideas related to work. The leadership has not fully given directions to employees in doing the assigned work [4].

According to [5], Compensation is also one of the factors that affect employee performance, if the compensation provided by the organization is in accordance with the expectations of the work achieved by the employee, it will have an impact on employee performance". Providing satisfactory compensation is also one thing that a worker sees. So far, the factor of providing satisfactory compensation has played a role in improving employee performance. If compensation is given correctly, employees will be more satisfied and motivated to achieve the organization's goals. On the other hand, without adequate compensation, existing employees are very likely to leave the organization and to relocate is not easy.

Based on the theoretical study, it can be identified that there is a relationship between performance and supervision, leadership, and compensation. Therefore, the author is interested in conducting further research on "Analysis of Supervision, Leadership, and Compensation for Employee Performance at the North Sumatra DPRD Office.

1.1. Theoretical foundations

1.1.1. Employee Performance

Performance is a universal concept which is the operational effectiveness of an organization, parts of the organization, and its employees based on predetermined standards and criteria. Organizations are basically run by humans, so performance is actually human behavior in playing the role they play in an organization to meet the standards of behavior that have been set in order to produce the desired results and actions. According to [1], performance is the result of quality and quantity of work achieved by an employee in carrying out his duties in accordance with the responsibilities given to him. According to [6], performance is to set useful goals, not only for performance evaluation at the end of a certain period, but also the results of the work process throughout that period [7]

1.1.2. Supervision

According to [2], work supervision is a manager's activity that strives to ensure that the work is carried out in accordance with the set plan and desired results. According to [8], work supervision is a systematic effort to determine implementation standards and planning objectives, design a feedback information system, compare real activities with predetermined standards, determine and measure deviations and take the necessary actions for correction to ensure that all company resources are used in the most effective and efficient way in achieving the company's goals. According to [9] Work supervision is the process of observing all organizational activities to better ensure that all work being carried out is in accordance with a predetermined plan [10].

1.1.3. Leadership

According to [3] leadership is the process of directing, guiding and influencing the thoughts, feelings, actions and behaviors of others to be moved towards certain goals. [6], leadership is "the ability of a person who is able to encourage or invite others to do something based on the acceptance/acceptance by the group and has the right specifics for the specific situation. According to [11], leadership is an effort to instill influence and not coercion to motivate employees so that they work according to what the manager wants, namely the achievement of organizational goals.

1.1.4. Compensation

According to [5], compensation is any form of payment or reward given to employees and arises from the employee's work. According to [12], "Compensation is everything that is received can be physical or non-physical and must be calculated and given to a person who is generally an object that is excluded from tax income. According to [11], Compensation is the overall remuneration received by employees as a result of the implementation of work in the organization in the form of money or others, which can be in the form of salaries, wages, bonuses, incentives and other benefits such as health benefits, holiday allowances, meal money, leave money and others [13]

2. Research methodology

This research method is a quantitative research method using research data in the form of numbers and analysis using statistics. In the data collection using research instruments, data analysis is quantitative with the aim of testing the hypothesis that has been determined. In quantitative research, it is a survey if the problem is clear. Quantitative research is a research method based on the philosophy of positivism (relying on empiricism) which is used to research on a specific population or sample, sampling techniques are generally carried out randomly, data collection uses objective research instruments, and data analysis is quantitative or statistical, with the aim of testing hypotheses that have been established.

The sampling technique uses the census or saturation sampling technique, which is a method of drawing samples with all members of the population used as samples [15]. In this case, all honorary employees of the North Sumatra DPRD office are used, totaling 82 employees. The data collection technique used is a questionnaire technique, namely by giving or distributing a list of questions to respondents. The data analysis method was carried out through SPSS Version 25 with data quality test, classical assumption test, multiple linear regression analysis, hypothesis test, and determination test.

3. Results and discussion

3.1. Data Quality Test

3.1.1. Validity Test

Table 1 Validity Test

Supervision (X1)		Leadership (X2)		Compensation (X3)		Employee Performance (Y)		rtable
Grain	rcalculate	Grain	rcalculate	Grain	rcalculate	Grain	rcalculate	
X1.1	0.700	X2.1	0.696	X3.1	0.655	Y. 1	0.694	0.30
X1.2	0.633	X2.2	0.564	X3.2	0.713	Y. 2	0.677	0.30
X1.3	0.762	X2.3	0.812	X3.3	0.711	Y. 3	0.709	0.30
X1.4	0.651	X2.4	0.772	X3.4	0.721	Y. 4	0.649	0.30
X1.5	0.713	X2.5	0.649	X3.5	0.639	Y. 5	0.728	0.30
X1.6	0.643	X2.6	0.563	X3.6	0.737	Y. 6	0.651	0.30
X1.7	0.672	X2.7	0.812	X3.7	0.641	Y. 7	0.709	0.30
X1.8	0.870	X2.8	0.772	X3.8	0.659	Y. 8	0.649	0.30
X1.9	0.673	X1.9	0.649	X1.9	0.652	X1.9	0.728	0.30

Source: SPSS v.25 Data Processing Results, 2024.

Based on table 1. Above, the calculated value of the statement item on each variable studied > 0.30. Thus, it is concluded that all items of the statement are valid.

3.1.2. Reliability Test

Table 2 Reliability Test Results

Variable	Cronbach's Alpha	N of Items
Surveillance (X1)	0.913	9
Leadership (X2)	0.909	9
Compensation (x3)	0.903	9
Employee Performance (Y)	0.906	9

Source: SPSS Data Processing Results v.25, 2024

Based on table 2. above, the *value of Cronbach's Alpha* obtained for each variable > 0.60. Thus, it is concluded that the questionnaire used in this study is reliable or reliable.

3.2. Classical Assumption Test

3.2.1. Normality Test
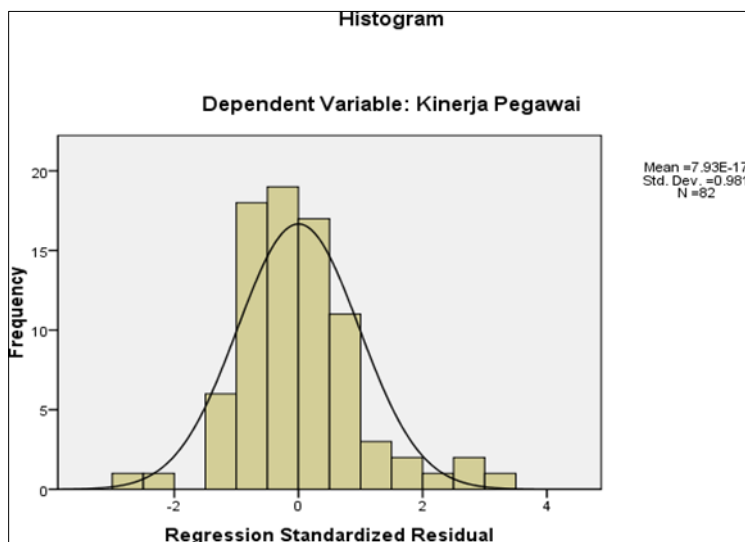
Source: SPSS 25 Processing Results, 2024

Figure 1 Histogram Normality Test Results

Based on the explanation of Figure 1. The results of the normality test showed that the data had been distributed normally, marked by a histogram showing a bell-shaped line without a slope to the left or right. The normality test can be seen in the following figure
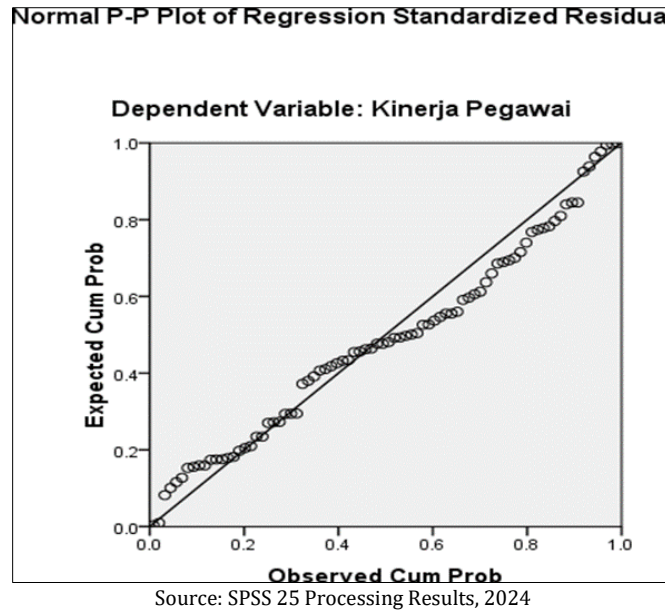
Figure 2 Results of PP Plot Normality Test

Based on the explanation in Figure 2, the results of the data normality test using *the PP Plot of Regression Standardized Residual* show that the data points for all variables are scattered around the diagonal line. This shows that the data is distributed normally. Based on the figure, it can be concluded that the data results are normally distributed.

Table 3 Kolmogrov-Smirnov Test Results

		Unstandardized Residual
N		82
Normal Parametersa	Mean	0.0000000
	Std. Deviation	2.57672166
Most Extreme Differences	Absolute	0.097
	Positive	0.097
	Negative	-0.075
Kolmogorov-Smirnov Z		0.881
Asymp. Sig. (2-tailed)		0.420
a. Test distribution is Normal.		

Based on table 3. above, the results of the data processing, the magnitude of *Kolmogrov Smirnov's significance value* is 0.420, then it can be concluded that the data is distributed normally, where the significance value is greater than 0.05 ($p = 0.420 > 0.05$).

3.2.2. Multicollinearity Test

Based on table 4 below, it can be seen that the Variance Inflation Factor (VIF) number is smaller than 10, including supervision 1.928< 10, leadership 2.743< 10 and compensation 2.537< 10, as well as   supervision tolerance values of 0.519 > 0.10, leadership 0.365> 0.10 and compensation 0.394 > 0.10 so that it is free from multicollinearity.

Table 4 Multicollinearity Test

Type	Unstandardized Coefficients		t	Sig.	Collinearity Statistics	
	B	Std. Error			Tolerance	VIF
1 (Constant)	2.951	1.491	1.980	0.051		
Supervision	0.321	0.057	5.617	0.000	0.519	1.928
Leadership	0.359	0.078	4.593	0.000	0.365	2.743
Compensation	0.212	0.054	3.947	0.000	0.394	2.537

Dependent Variable: Employee Performance
Source: SPSS 25 Processing Results, 2024

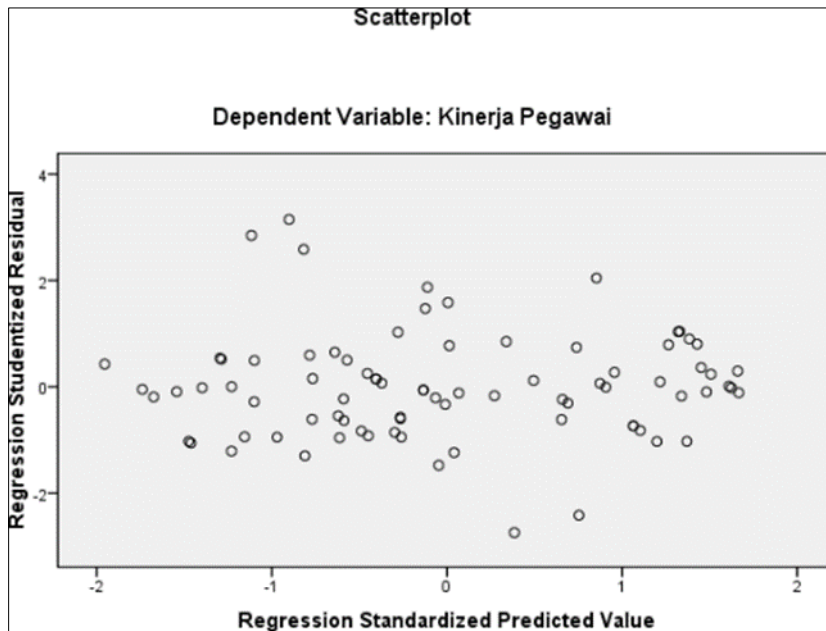### 3.2.3. Heteroscedasticity Test

Figure 3 Results of Scatterplot Heteroscedasticity Test

Source SPSS 25 Processing Results, 2024

Based on the results in Figure 3, the scatterplot shows that the resulting dots are scattered randomly and do not form a specific pattern or trend of the line. The image also shows that the data distribution is around the zero point. The results of this test indicate that this regression model is free from heteroscedasticity problems.

3.3. Multiple Linear Regression Analysis

Table 5 Multiple Linear Regression Analysis Results

Type	Unstandardized Coefficients		t	Sig.	Collinearity Statistics	
	B	Std. Error			Tolerance	VIF
1 (Constant)	2.951	1.491	1.980	0.051		
Supervision	0.321	0.057	5.617	0.000	0.519	1.928
Leadership	0.359	0.078	4.593	0.000	0.365	2.743
Compensation	0.212	0.054	3.947	0.000	0.394	2.537

Source: SPSS v.25 Data Processing Results, 2024.

3.4. Dependent Variable: Employee Performance (Y)

Based on table 5. Above, the following equation is obtained:

$$Y = 2.951 + 0.321\,X1 + 0.359\,X2 + 0.212\,X3 + e.$$

From this equation, it can be described as follows

- If everything in the independent variables is considered zero, then the performance value of the employee (Y) is 2.951.
- If there is an increase in supervision by 1, then the performance of employees (Y) will increase by 0.321.
- If there is an increase in leadership by 1, then the performance of the employee (Y) will increase by 0.359.
- If there is an increase in compensation by 1, then the performance of the employee (Y) will increase by 0.212.

3.5. Hypothesis Test

3.5.1. Partial Test (t-Test)

Table 6 Partial Test Results (t-Test)

Coefficientsa						
Type	Unstandardized Coefficients		t	Sig.	Collinearity Statistics	
	B	Std. Error			Tolerance	VIF
1 (Constant)	2.951	1.491	1.980	0.051		
Supervision	0.321	0.057	5.617	0.000	0.519	1.928
Leadership	0.359	0.078	4.593	0.000	0.365	2.743
Compensation	0.212	0.054	3.947	0.000	0.394	2.537

a. Dependent Variable: Employee Performance
Source: Data processed with SPSS v.25, 2024

Based on Table 6, it is known that:

- The effect of supervision on employee performance with the results of calculation 5,617 > ttable 1,990 and significant 0.000 < 0.05, then Ha was accepted and H0 was rejected, which stated that partial supervision had a significant effect on employee performance.
- The influence of leadership on employee performance with the results of 4.593 > 1.990 ttable and significant 0.000 < 0.05, then Ha was accepted and H0 was rejected, which stated that leadership partially had a significant effect on employee performance.
- The effect of compensation on employee performance with a calculation result of 3.947 > table 1.990 and a significant 0.000 < 0.05, then Ha is accepted and H0 is rejected, which states that partial compensation has a significant effect on employee performance.

3.6. Simultant Test (Test F)

Table 7 Simultaneous Test (Test F)

Type	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	2564.603	3	854.868	123.986	.000a
Residual	537.799	78	6.895		
Total	3102.402	81			

Predictors: (Constant), Compensation, Supervision, Leadership
Dependent Variable: Employee Performance
Source: Data processed with SPSS v.25, 2024

Based on Table 7, the results show that Fcal is 123.986 while Ftabel is 2.72 which can be seen at $\alpha = 0.05$ (see appendix table F). The probability of significance is much smaller than 0.05, which is 0.000 < 0.05, so the regression model can be said that in this study, leadership supervision and compensation simultaneously have a significant effect on employee performance. Then the previous hypothesis is Accept Ha or the accepted hypothesis.

3.7. Determination Coefficient Test (R2)

Table 8 Determination Coefficient Test (R2)

Type	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.909a	0.827	0.820	2.62581

Predictors: (Constant), Compensation, Supervision, Leadership
Dependent Variable: Employee Performance.
Source: SPSS v.25 Data Processing Results, 2024.

Based on table 8, it can be seen that *the adjusted R Square* figure of 0.820 which can be called a determination coefficient which in this case means that 82.0% of employee performance can be obtained and explained by supervision, leadership and compensation. While the remaining 100% - 82.0% = 18.0% is explained by other factors or variables outside the model, such as work discipline, work environment, work motivation and others.

4. Discussion

4.1. The Effect of Supervision on Employee Performance

The results showed that the calculation of 5.617 > ttable 1.990 and significant 0.000 < 0.05, then Ha was accepted and H0 was rejected, which stated that partial supervision had a significant effect on employee performance. Supervision is a manager's activity that strives to ensure that the work is carried out in accordance with the set plan and desired results. Supervision and results of work implementation are going well and work can be carried out in accordance with the plan that has been set and will improve employee performance in the organization.

4.2. The Influence of Leadership on Employee Performance

The results showed that the tcount of 4.593 > ttable 1.990 and significant 0.000 < 0.05, then Ha was accepted and H0 was rejected, which stated that leadership partially had a significant effect on employee performance. Good leadership can provide comfort for employees at work, because the comfort that employees get from a boss is something special that can ultimately improve employee performance such as the friendliness of the boss to the employee, the attention of the boss, and the motivations given to the employee. The leadership carried out by the leadership can be well received by employees, automatically employees will not leave the organization because of the comfort and work atmosphere obtained from the organization, in addition to the motivation that the leadership continues to give to employees will always encourage employee performance in the organization

4.3. The Effect of Compensation on Employee Performance

The results showed that the calculation of 3.947 > ttable 1.990 and significant 0.000 < 0.05, then Ha was accepted and H0 was rejected, which stated that partial compensation had a significant effect on employee performance. Compensation is also one of the factors that affect employee performance, if the compensation provided by the company is in accordance with the expectations of the work achieved by the employee, it will have an impact on employee performance". Providing satisfactory compensation is also one thing that a worker sees. So far, the factor of providing satisfactory compensation has played a role in improving employee performance. If compensation is given correctly, employees will be more satisfied and motivated to achieve the company's goals. On the other hand, without adequate compensation, existing employees are very likely to leave the organization and to relocate is not easy.

4.4. The Influence of Supervision, Leadership and Compensation on Employee Performance

The results show that the F count is 123.986 while the Ftable is 2.72 which can be seen at $\alpha = 0.05$ (see appendix to table F). The significant probability is much smaller than 0.05, which is 0.000 < 0.05, so the regression model can be said that in this study supervision, leadership and compensation simultaneously have a significant effect on employee performance. Then the previous hypothesis is Accept Ha or the accepted hypothesis. Supervision and results of work implementation are going well and work can be carried out in accordance with the plan that has been set and will improve employee performance in the organization. Leadership carried out by the leadership can be well received by

employees, automatically employees will not leave the organization because comfort and work atmosphere are obtained from the organization, in addition to the motivation that the leadership continues to give to employees will always encourage employee performance in the organization. If compensation is given correctly, employees will be more satisfied and motivated to achieve the company's goals.

5. Conclusion

The results of this study show that the variables of supervision (X1), leadership (X2) and compensation (X3) simultaneously have a positive and significant influence on employee performance in the North Sumatra DPRD office. The results of this study have been running in accordance with the purpose of this research and have answered all the problem formulations raised. It is hoped that the next researchers will be able to conduct more in-depth research on the variables of supervision (X1), leadership (X2) and compensation (X3) on employee performance using a different research method from this study.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

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