

The Influence of Leadership on Job Satisfaction and Its Impact on Employee Performance of PDAM Tirtanadi, North Sumatra Province

T. Fakhri Noor A. Johan¹, Prihatin Lumbanraja², A. Rahim Matondang³

^{1,2} Faculty of Economy & Business, Department of Management Science, Universitas Sumatera Utara, Indonesia

³ Faculty of Engineering, Universitas Sumatera Utara, Indonesia

Corresponding Author: T. Fakhri Noor A. Johan

Abstract: This research is motivated by many factors that influence the performance of PDAM Tirtanadi employees, namely leadership and job satisfaction. Clean water services are a very important component of public services. PDAM Tirtanadi is a Regional Owned Enterprise (BUMD). The PDAM is responsible for providing and serving clean water for the community, as well as developing the regional economy by expanding employment, and seeking profits as the main source of regional financing. This research was conducted with an empirical study approach supported by surveys. Data was collected using a questionnaire and documentation study. The sample in this study were 153 respondents. Hypothesis testing uses path analysis at a confidence level of 95% ($\alpha = 0.05$). The test results with the F test show that the leadership variables and job satisfaction simultaneously have a positive and significant effect on employee performance. The test results with the t test show that leadership variables have a positive and significant influence on employee performance and the job satisfaction variable has a positive and significant effect on employee performance.

Keywords: Leadership, Job Satisfaction, and Employee Performance

Date of Submission: 16-05-2019

Date of acceptance: 01-06-2019

I. Introduction

Water is a basic need that cannot be separated from human life. Population growth, development progress, and increasing living standards have caused the need for clean water to continue to increase. This makes the service quality of the provider and manager of clean water very much needed by the community.

Therefore, it is necessary to have good management of water resources in order to produce processed water that meets health standards so that humans can be utilized effectively and efficiently. The handling agency is the Regional Water Company (PDAM), where PDAM Tirtanadi is a Regional Owned Enterprise (BUMD). PDAM Tirtanadi has various employee performance appraisals in terms of understanding, initiative and skills.

Table 1.1 List of Assessments of Employee Performance for 2014-2017

No.	Penilaian	2014		2015		2016		2017	
		Orang	%	Orang	%	Orang	%	Orang	%
1.	Very Good (A)	31	15.5%	34	17%	26	13%	25	12.5%
2.	Good (B)	33	16.5%	35	17.5%	38	19%	36	18%
3.	Medium (C)	68	34%	64	32%	67	33.5%	65	32.5%
4.	Low (D)	68	34%	67	33.5%	69	34.5%	74	37%
	Total	200	100%	200	100%	200	100%	200	100%

Source: HR Division of PDAM Tirtanadi (2018)

Table 1.1 shows that employee performance has not shown optimal performance. The large number of employees who experience a decline in performance is also caused by employees who do not work, often absent from work and do not carry out work that should be completed on time. The absence of employees raises the number of jobs that cannot be completed on time, which makes employee performance decline.

Tabel 1.2 Rotation of Employee Position in 2017

Position	Promotion	Mutations	Demotion	Total
Head of Division	3	2	2	7
Branch head	2	2	2	6
Head of Science	2	2	2	6
Head of Division	10	7	5	22
Project Leader	2	11	9	22
Branch Employee	22	22	22	66

Unit Staff	21	22	28	71
Total	62	68	70	200

Source: Personnel Section of PDAM Tirtanadi (2018)

The lack of attention of the leadership objectively in seeing the ability of employees in the field of work outside of work makes employees bored at work because there are no challenges that make employees motivated to work harder and more optimally. In fact, most employees stated that the employee promotion and demotion system was unfair. The following are job rotation data in PDAM Tirtanadi. Some of the factors that cause a decrease in employee performance from several empirical studies conducted by previous studies are job satisfaction and leadership. Dissatisfaction is the starting point of the problems that arise in the organization. From the worker side, dissatisfaction can cause a decrease in yield. Employee dissatisfaction is often a separate phenomenon that makes employees often lazy, less active in participating in organizational activities and employees also tend to dislike things that are their job.

Bana (2016) states that leadership has a positive and significant effect on employee performance. Professional leadership, active, caring and able to influence employees, provide encouragement and can improve the performance of individuals in the organization. This is supported by research Jaka, et al (2013) which states leadership has a positive and significant influence on employee performance. However, Kosasih (2017) in his research concluded that the factors that most influence employee performance are not leadership but job satisfaction. Leadership has an important role but only contributes less influence to performance.

II. Theoretical Review

2.1 Theory of Work Performance

Hasibuan (2011) states the performance of one's work on everything that is charged to him. Rivai (2005) states that performance is a real behavior that is displayed by everyone as work performance produced by employees in accordance with their role in the company. Employee performance is a very important thing in the company's efforts to achieve its goals. The performance of human resources is work performance or work results (output), both quality and quantity, which is achieved by the union of human resources for a period of time in carrying out their work duties in accordance with the responsibilities given to them.

2.2 Theory of Job Satisfaction

The theory of job satisfaction in Sunyoto (2012) is:

1. Discrepancy Theory from Porter where job satisfaction someone by calculating the difference between something that should be with the reality that is felt.
2. Equity Theory from Adam that people will feel satisfied or dissatisfied, depending on the presence or absence of equity (equity) in a situation, especially work situation.
3. The Two Factor Theory from Herzberg that job satisfaction and job dissatisfaction are different things.
4. The Need Fulfillment Theory from Schaffer. Job satisfaction of employees depends on whether or not the needs of employees are met.
5. Theory of Group Views (Social Reference Group Theory) from Alderfer that employee satisfaction does not depend on the fulfillment of needs alone, but also depends on the views and opinions of the group, which by employees is considered as a reference group.
6. Expectancy Theory from Victor Vroom that motivation is a product of the way someone wants something and someone's assessment allows certain actions to guide it.

2.3 Theory of Leadership

Beni Saebani and Sumantri (2014) that leadership is a person's ability to influence other people to work together in accordance with the plan to achieve the stated goals. Moehariono (2012) that leadership is a process by a person or group trying to influence the duties and attitudes of others towards a career from the desired results to achieve the organization's vision and mission. Saebani and Sumantri (2014) stated that there are several types of leadership, namely:

1. Type of Autocratic Leadership

Namely the leader acts as a dictator against the members of his group.

2. Type of Militaristic Leadership

3. Type of Paternalistic Leadership

4. Type of Fielder Contingency Leadership

Developed by Fred E. Fielder that the success of a leader is not only determined by the leadership style he applies.

5. Three-Dimensional Leadership Type

Said by William J. Reddin. This type of leadership is called three dimensions because the approach connects three groups of leadership styles, namely the basic style, effective style, and ineffective style.

III. Research Metodology

The type of research used is descriptive research approach through survey. Regional Water Company (PDAM) Tirtanadi North Sumatra Province having its address at Jl. Sisingamangaraja No. 1 Medan. This research was conducted from November 2018 - January 2019. The population was 250 employees. Sampling technique with proportionate stratified random sampling. Methods of collecting data with interviews, questionnaires and documentation studies. Data analysis with path analysis techniques through the SPSS version 22 program. Statistical approaches are descriptive statistics and inferential statistics.

IV. Research Results and Discussion

Table 4.1 Demography

Variable	Number of people	Percent (%)
Age (Year)		
18 - 21	20	13,07
21 - 24	45	29,41
24 - 27	48	31,38
>27	40	26,14
Gender		
- Man	85	55,6
- Woman	68	44,4
Education		
- SLTA	25	16,3
- D3	30	19,6
- S1	65	42,5
- S2	33	21,6
Working Duration (Year)		
- 1-2	33	21,57
- 3-4	45	29,41
- 5-10	75	49,02

Source: Processed by The Author (2019)

4.1 Results of Inferential Statistical Analysis

4.1.1 Simultaneous Test Analysis Results (F Test)

H0: $b_1, b_2, b_3 = 0$ (Simultaneous leadership and job satisfaction have no effect on performance).

Ha: $b_1, b_2, b_3 \neq 0$ (Leadership and job satisfaction simultaneously influence performance).

The results of the influence of leadership and job satisfaction on employee performance can be seen in Table 4.2.

Table 4.2 Simultaneous Test Results

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2069,622	2	1034,811	79,277	,000 ^b
	Residual	1957,960	150	13,053		
	Total	4027,582	152			

a. Dependent Variable: Kinerja_Pegawai_Y

b. Predictors: (Constant), Kepuasan_Kerja_Z, Kepemimpinan_X

Source: Processed by The Author (2019)

Based on Table 4.2, the value of Fcount (79,277) > Ftable (2.60) at $\alpha = 5\%$ thus Ha is accepted. In Table 4.2 above, the significance value of 0.000 is smaller than $\alpha = 0.05$, this means that the variables of leadership and job satisfaction have a significant influence on the performance of the employees of PT PDAM Tirtanadi North Sumatra.

4.1.2 Partial Test Analysis Results (t Test)

1. Effect of Leadership Variables on Employee Performance

Ho: $b_1 = 0$, meaning that partial leadership does not affect the performance of employees at PT PDAM Tirtanadi North Sumatra.

Day: $b_1 \neq 0$, meaning that leadership partially influences employee performance at PT PDAM Tirtanadi North Sumatra.

2. Effect of Variable Job Satisfaction on Employee Performance

Ho: $b_2 = 0$, meaning that job satisfaction partially has no effect on employee performance at PT PDAM Tirtanadi North Sumatra.

Ho: $b_2 \neq 0$, meaning that job satisfaction partially has no effect on employee performance at PT PDAM Tirtanadi North Sumatra.

The Decision Criteria for The Partial Test are as Follows:

- Ho accepted and Ha ignored, $-t_{table} < t_{count} < t_{table}$ at $\alpha = 5\%$
- Ho ignored and Ha accepted, $-t_{table} < t_{count} > t_{table}$ at $\alpha = 5\%$

Table 4.3 Partial Test Analysis Results (t Test)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6,754	1,883		3,586	,000
	Kepemimpinan_X	,472	,056	,541	8,377	,000
	Kepuasan_Kerja_Z	,219	,051	,280	4,346	,000

Source: Processed by The Author (2019)

Based on Table 4.3 above, it can be explained that:

- The tcount of the leadership variable is 8,377 with a significant level of 0,000. Based on hypothesis test criteria, namely if $t_{count} > t_{table}$ (1,660) then Ha is accepted. This shows that if the leadership variable is increased by one unit, then the employee's performance will increase by 0.541 or equivalent to 54.1%. This means that the leadership variable partially has a positive and significant effect on the performance of PT PDAM Tirtanadi's North Sumatra Indonesian Employees.
- The value of tcount from the variable job satisfaction is 4.346 with a significant level of 0.000. Based on hypothesis test criteria, namely if $t_{count} > t_{table}$ (1,660) then Ha is accepted. This shows that if the leadership variable is increased by one unit, then the employee's performance will increase by 0.280 or equivalent to 28.0%. This means that the Job Satisfaction variable partially has a positive and significant effect on the Employee Performance of PT PDAM Tirtanadi North Sumatra Indonesia.

4.1.3 Path Analysis

Table 4.4
Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	18,500	2,635		7,022	,000
	Kepemimpinan_X	,525	,080	,471	6,564	,000

a. Dependent Variable: Kepuasan_Kerja_Z

Source: Processed by The Author (2019)

To calculate the direct effect or DE can be seen in Table 4.4 The description is as follows:

Effect of leadership variables on job satisfaction

$$X \rightarrow Z = 0.471 (0,000)$$

Effect of variable job satisfaction on employee performance

$$Z \rightarrow Y = 0.280 (0,000)$$

To calculate indirect or IDE influences. The description is as follows:

$$X \rightarrow Z \rightarrow Y = (0.471 \times 0.280) = 0.131$$

4.1.4 Results of Analysis of Determinant Coefficient Test (R²)

The determinant coefficient (R²) is used to see how much influence the independent variable has on the dependent variable. The determinant coefficient (R²) regression results can be seen in table 4.5 below:

Table 4.5 Coefficient of determination (R^2)

Model Summary^b

Model	R	R Square	Adjusted Square	Std. Error of the Estimate
1	.717 ^a	.514	.507	3,613

a. Predictors: (Constant), Kepuasan_Kerja_Z, Kepemimpinan_X
 b. Dependent Variable: Kinerja_Pegawai_Y

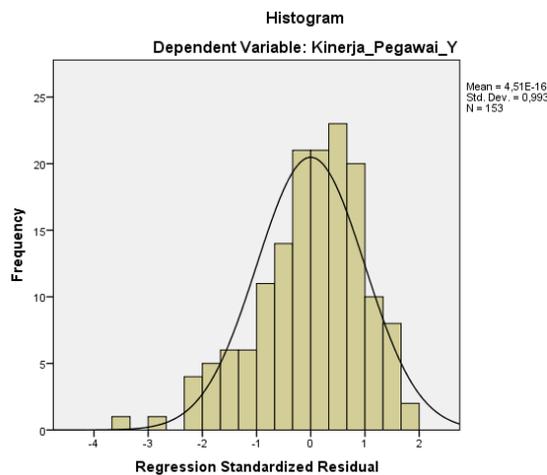
From Table 4.5 above shows that the coefficient of determination (R^2) or determinant of 0.514 means that the independent variable is leadership (X), and the intervening variable of job satisfaction (Z) is able to explain the dependent variable namely employee performance (Y) of 51.4% and the remaining 48.6% is influenced by variables not examined.

4.2 Classic Assumption Test

4.2.1 Normality Test Results

The normality test aims to test whether in the regression model, the confounding or residual variables are normally distributed.

In Figure 4.1 it can be seen that the data (dots) spread around the diagonal line and follow the direction of the diagonal line. Therefore, based on Figure 4.1 it can be concluded that it has met the normality test.



The interpretation of Figure 4.1 above shows that the histogram graph shows a normal distribution pattern.

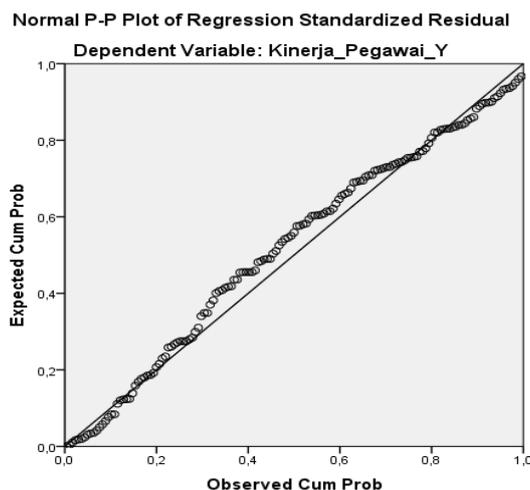


Figure 4.1. Normal P- P Plot of Regression Standardized Residual

Source: Processed by The Author (2019)

Table 4.6 One-Sample Kolmogorov-Smirnov Test
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		153
Normal Parameters ^{a,b}	Mean	,0000000
	Std. Deviation	3,58905478
Most Extreme Differences	Absolute	,075
	Positive	,038
	Negative	-,075
Test Statistic		,075
Asymp. Sig. (2-tailed)		,055 ^c

- a. Test distribution is Normal.
- b. Calculated from data.
- c. Lilliefors Significance Correction.

Source: Processed by The Author (2019)

4.2.2 Multicollinearity Test

Multicollinearity test aims to examine the correlation between independent variables. The results of processing can be seen in Table 4.7 as follows:

Table 4.7 Multicollinearity Test

Collinearity Statistics	
Tolerance	VIF
,778	1,285
,778	1,285

Source: Processed by The Author (2019)

Based on the results of data processing in Table 4.7, it shows that none of the independent variables has a Tolerance value of less than 0.1, which means there is no correlation between the independent variables. Calculation of the value of Variance Inflation Factor (VIF) also shows that there is not one independent variable that has VIF greater than 1, it can be concluded that the regression model does not have a multicollinearity problem.

4.2.3 Heterokedasticity Test Results

Heterocedasticity occurs because of changes in situations that are not reflected in the specifications of the regression model. In other words, heterocedasticity occurs if the residual does not have a constant variance. Examination of the symptoms of heterocedasticity is to look at the pattern of scatter diagrams, namely graphs which are residual scatter diagrams, namely the difference between the predicted Y value and Y observation.

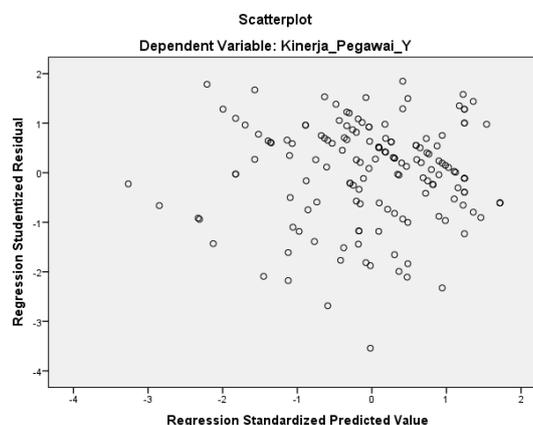


Figure 4.2 Scatterplot Heterokedastisitas Secara Serempak

Source: Processed by The Author (2019)

In Figure 4.2 it can be seen that scatter diagrams do not form a certain pattern because it does not experience heteroscedasticity.

Glejser Model

Determine decision criteria:

- a. If the significant value is > 0.05, then there is no heteroscedasticity disorder.
- b. If the value is significant < 0.05, then there is a heteroscedasticity disorder.

Tabel 4.8 Glejser Test

Coefficients ^a		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,538E-15	1,883		,000	1,000
	Kepemimpinan_X	,000	,056	,000	,000	1,000
	Kepuasan_Kerja_Z	,000	,051	,000	,000	1,000

a. Dependent Variable: Abs_Res

Source: Processed by The Author (2019)

In Table 4.8 it appears that the significance of the independent variable is greater than 0.05, so it does not experience heteroscedasticity.

V. Discussion

1. Effect of Leadership on Job Satisfaction

Based on the results of the study, it is known that leadership variables have a positive influence and satisfaction with the employment variables. It means that if leadership is getting better, then job satisfaction will increase.

This is in line with the research of Kosasih (2017), Rahadian and Suwanda (2017), Juwono and Wangsadinata (2010), and Dewi (2017) which states that leadership has a positive and significant effect on job satisfaction. A leader must be able to direct his subordinates well and can become a public figure in an organization so employees will feel satisfied, especially when carrying out a job with good support from the leadership and the closeness that is not only on certain parties but on all employees

2. Effect of Job Satisfaction on Employee Performance

The results of the study state that job satisfaction has a positive and significant effect on the employees' performance if the employee satisfaction is increased, it will improve employee performance. Job satisfaction has a considerable influence on organizational productivity both directly and indirectly. Satisfaction can be formulated as a general response of workers in the form of behavior displayed by employees as a result of perceptions of matters relating to their work. A worker who enters and joins in an organization has a set of desires, needs, desires and past experiences that unite and form an expectation that is expected to be fulfilled in his place of work.

This research is in line with research from Febriyana (2015), Suprpta, et al. (2015), and which states that job satisfaction has a positive and significant effect on employee performance. If job satisfaction increases, employee performance will also increase. Employee satisfaction in working makes something capable of connecting between tasks and responsibilities this is able to provide optimal performance in employees.

3. Effect of Leadership on Employee Performance Through Job Satisfaction

Based on the results of research conducted illustrate that leadership applied has a large influence on employee performance through job satisfaction, besides that leadership is known to have a significant effect on job satisfaction and also job satisfaction has a significant effect on employee performance, job satisfaction is significant in mediating the relationship between leadership to performance employee. This is in line with the research of Kosasih (2017), Suwanda (2017) which states that leadership has a positive and significant effect on job satisfaction other than that.

VI. Conclusion

- 1. Leadership has a positive and significant effect on job satisfaction.
- 2. Job satisfaction has a positive and significant effect on employee performance.
- 3. Job satisfaction is significant in mediating the relationship between leadership to employee performance.
- 4. Determination coefficient (R²) or determinant of 0.514 or 51.4%.

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IOSR Journal of Business and Management (IOSR-JBM) is UGC approved Journal with SI. No. 4481, Journal no. 46879.

T. Fakhri Noor A. Johan.", *The Influence of Leadership on Job Satisfaction and Its Impact on Employee Performance of PDAM TirtanadiNorth Sumatra Province*". *IOSR Journal of Business and Management (IOSR-JBM)*, Vol. 21, No. 5, 2019, pp. -08-15