Original Article

Effects of Leadership Style and Knowledge Sharing on Employee Performance of the Ministry of Transportation in North Sumatra Province, Indonesia

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Abstract: Today, the performance of government employees in carrying out their duties and obligations is a critical element in determining the realization of good governance. Improving public services is closely related to the internal culture of local government organizations and the work ethic. In the government, bureaucracy still needs to be improved to achieve optimal performance. This study determines the effects of leadership style and knowledge sharing on the performance of employees of the Ministry of Transportation for North Sumatra Province, Indonesia. This quantitative study uses a survey questionnaire to 354 civil servants from the Ministry of Transportation for North Sumatra Province, Indonesia. The result indicates that the leadership style affects employee performance. also, knowledge sharing affected employee performance. The key to the success of an organization in achieving the desired goals is that the organization can manage its human resources properly. The Ministry of Transportation highly desires this condition for North Sumatra Province as a government institution that serves the community.

Keywords: Leadership style; knowledge sharing; government employees; employee performance.

1. Introduction

The performance of government employees as state apparatus in carrying out their duties and obligations is an important element in determining the realization of good governance. Improving public services is closely related to the internal culture of local government organizations, and the work ethic in the government bureaucracy still needs to be improved to achieve optimal performance. Government agencies need to create high employee performance because high employee performance is expected to be a reflection of local agencies or agencies in managing and allocating

employees. Employee performance will also affect the amount of output following the specified time. The key to the success of an organization in achieving the desired goals is that the organization is able to manage its human resources properly. The Ministry of Transportation highly desires this condition for North Sumatra Province as a government institution that serves the community. Good employee performance is able to bring the goals of the organization.

According to Rivai (2020), performance is the result of work in quality and quantity achieved by an employee in carrying out the duties in accordance with the responsibilities given. Many factors affect employee performance, including leadership. As a government institution that serves the community, good employee performance can bring the organiation's goals. Leaders with transformational leadership have a vision for the future and are able to identify changes in the environment, are able to transform these changes into organizational changes, provide motivation and inspiration to individual employees to be creative and innovative, build solid teamwork, bring changes in work ethic and management performance, dare and be responsible for leading, and control the organization. The object of this research was conducted on employees of the Ministry of Transportation for North Sumatra Province. The assessment results of the work quality of the employees of the Ministry of Transportation for North Sumatra Province can be seen in the following table:

Table 1. Data on Employee Performance Goals Ministry of Transportation for North Sumatra Province

Elements Assessed	Average Score of Employees		
	2020	2021	2022
Service Orientation	85.6	85.3	83.3
Integrity	82.5	81.9	80.4
Commitment	82.5	81.9	80.8
Discipline	83.6	82.0	81.0
Cooperation	81.6	79.8	82.00
Leadership	80.5	81.6	81.00
Overall Average Score	82.1	81.5	81.0

Table 1 shows a decrease in the percentage of employee performance goals from 2020-2022. Thus, for three consecutive years, there were employee performance issues in the Ministry of Transportation for North Sumatra Province. Performance that is not optimal can be caused by employee dissatisfaction. A leader's role in influencing subordinates is very important for the organisation's progress. Koesmono in Rinda et al. (2022) revealed that a leader in the organization is needed to bring the organization to the goals that have been set. Leaders usually apply a certain leadership style to influence the performance of their subordinates. Leadership style is a leader's behavior used by someone when they want to influence others. A leader can use various leadership styles to influence and motivate his subordinates for improving the performance of his subordinates in doing the job.

Leadership style also has an important influence on the development of human resources. Leadership style is the overall pattern of a leader's actions, both visible and invisible to his subordinates. Leadership style describes a consistent philosophy, skills, traits, and attitudes that underlie one's behavior. Leadership style will show directly about a leader's belief in the abilities of his subordinates. This means that leadership style is behavior and strategy, resulting from a combination of philosophies, skills, traits, and attitudes, which are often applied by a leader when the leader tries to influence the performance of his subordinates (Rorimpandey, 2013). The power that exists in the leader and that of the group (interpersonal relations between the two) as well as the environmental situation (task orientation) will follow a person's leadership style if he interacts with his subordinates. Furthermore, leadership styles are instruction, consultation, participation, and delegation.

The current phenomenon at the Ministry of Transportation for North Sumatra Province shows the employees do not understand the orders their superiors give. An unfavorable leadership style from superiors causes less optimal coaching of employees in carrying out the tasks assigned to them. Performance of employees of the Ministry of Transportation for North Sumatra Province which is not optimal can be seen from the discipline and professionalism of employees in carrying out work such as making work reports that are not on time, repeating mistakes in making reports, and being slow in carrying out superiors' instructions. This, of course, can disrupt the organisation's overall performance (Interview with one of the employees of the Ministry of Transportation for North Sumatra Province). The results of the researchers' monitoring indicate that the performance assessed so far is still low. For this reason, it is necessary to conduct a re-examination to improve employee performance within the Ministry of Transportation for North Sumatra Province. Employee performance appraisal and turnover greatly influence organizational performance in carrying out tasks and functions, so researchers are interested in examining leadership style on employee performance.

Wu et al. (2012) revealed knowledge sharing as a learning process, exchanging ideas and sharing knowledge to increase individual excellence. The main focus of sharing knowledge is people willing to be invited to exchange information and knowledge with other people, groups or organizations. Knowledge sharing is the exchange of

knowledge, information, and someone's experience that is considered valuable to other people in the organization. Knowledge sharing can also be said as exchanging knowledge between individuals with one another so that they act as information givers and information recipients. The culture of knowledge sharing is a very influential factor in the successful implementation of knowledge management. When someone is willing to share the knowledge they have, in fact, they will not lose this knowledge. However, this knowledge will increase or multiply if the person who receives it can use it properly and share it with others.

Knowledge sharing is a process in which individuals exchange knowledge and experience. Awareness about the importance of sharing knowledge for the performance of an organization has existed for a long time. Sharing knowledge is a strategy created to avoid or minimize obstacles the organization and its employees will face. Knowledge is managed through knowledge sharing, and knowledge is an absolute necessity for companies. The companies that have the ability to absorb knowledge will be able to manage and exploit knowledge in their resources to produce competitive advantages that have an impact on the company's existence amidst an increasingly heated competitive climate. With regard to encouraging employees to work together to share their knowledge with others, there is still a gap that is felt by employees as seen in Table 2 below.

Table 2. Results of Survey of Initial Knowledge Sharing Ministry of Transportation for North Sumatra Province

No	Statement	SA	A	H	D	SD
1	Roles of Leadership. Your leader shares the knowledge he/she has.	20%	35%	15%	10%	5%
2	Trust and Openness Climate. You feel you trust your colleagues in sharing the knowledge you have.	20%	20%	10%	45%	5%
3	Appreciation for knowledge, learning, and innovation. Your organization implements activities to share knowledge.	30%	45%	5%	5%	15%

Table 2 shows that trust between employees is still low. According to Tobing (2011), the development of knowledge sharing must consider the elements, such as participants (employees), contributors, media, and the availability of people who facilitate knowledge sharing. All these elements are integrated by a trust. Without trust among employees, the knowledge-sharing process carried out by the organization will be hampered. The culture of knowledge sharing is one factor that influences the successful implementation of knowledge management. When someone is willing to share knowledge, he will not lose it, but knowledge will be multiplied or increased if the person receiving it uses it properly and shares it with others (Sarja, 2014).

2. Literature Review

2.1. Leadership Style

According to Yukl (2012) in Edison et al. (2017), leadership is the process of influencing others to understand and agree with what needs to be done and how the task is done effectively, as well as the process of facilitating individual and collective efforts to achieve common goals. Edy (2016) defines leadership as a person's ability to influence other people, in this case, his subordinates, in such a way that other people want to do the will of the leader even though he may not.

2.2. Knowledge Sharing

Tobing (2011) defines knowledge sharing as a systematic process of sending, distributing, and disseminating knowledge and multidimensional contexts from a person or organization to other people or organizations who need it through various methods and media. Gurteen (2012) and Yusup (2020) state that knowledge sharing is a conceptual description of interactions in the form of communication between two or more people to develop and enhance one's knowledge (Raharso & Tjahjawati, 2016) defines knowledge sharing as a mechanism by which knowledge is transmitted from one party to another.

2.3. Employee Performance

Masram & Mu'ah (2017) states that performance is the result or level of success of a person as a whole during a certain period in carrying out tasks compared to various possibilities, such as work standards, targets, goals, and predetermined criteria that have been mutually agreed upon. According to Kasmir (2016), performance is the result of work and work behavior achieved in completing the tasks and responsibilities given within a certain period.

3. Materials and Methods

Research design is used to guide in carrying out the research process. The research design provides a clear and structured guide to researchers in conducting their research. According to Fachruddin (2009), a research design is a framework or details of work procedures that will be carried out when researching, so it is expected to provide an overview and which directions will be carried out in carrying out the research, as well as provide an overview of the research has been finished or completed. This study uses a quantitative research method, i.e., research whose specifications are systematic, planned, and clearly structured from the start to the creation of the research design. Quantitative research methods, as stated by Sugiyono (2013) on the basis of the philosophy of positivism, are used to examine certain populations or samples, collect data using research instruments, analyze data quantitatively/statistically, and aim to test established hypotheses. Judging from the nature of this research, this study is a descriptive analysis. Descriptive is research that is directed to provide symptoms, facts, or events systematically and accurately regarding the characteristics of a population or area. The research instrument used in this study was a questionnaire made by the researcher. Sugiyono (2013) states that a research instrument is a data collection tool used to measure observed natural and social phenomena. Thus, using research instruments is to find complete information about a problem, a natural or social phenomenon. The data were analyzed using SPSS-25 through ordinary least square approach.

4. Results and Discussion

4.1. Classical Assumptions

4.1.1. Normality Test

The normality test aims to test whether, in the regression model, the confounding or residual variables have a normal distribution (Ghozali, 2016). Data normality tests can be done using two methods, graphics and statistics. The normality test for the graphical method uses the normal probability plot, while the normality test for the statistical method uses the one-sample Kolmogorov-Smirnov test.
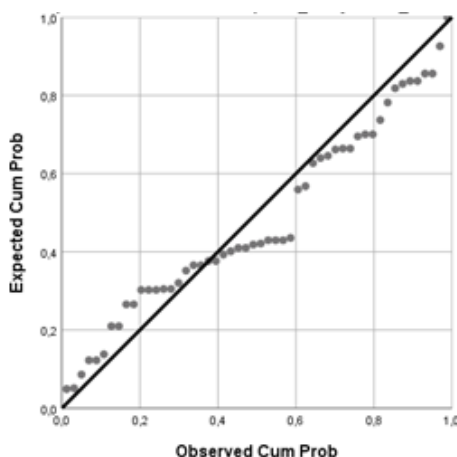

Figure 1. Normal P Plot

Normally distributed data will form a straight diagonal line, and plotting the residual data will be compared with the diagonal line. If the distribution of the residual data is normal, then the line that describes the actual data will follow the diagonal line (Ghozali, 2016).

4.1.2. Heteroscedasticity Test

The heteroscedasticity test aims to test whether from the regression model there is an inequality of variance from the residuals of one observation to another. A good regression model has homoscedasticity or does not have heteroscedasticity.

Table 3. Results of Glejser Test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		

1	(Constant)	1.572	1.302		1.208	.233
	Leadership Style_X1	-.050	.043	-.166	-1.173	.247
	Knowledge_Sharing_X2	.010	.050	.027	.191	.850

a. Dependent Variable: Abs_Res

Table 3 shows the significance value of the leadership style of 0.247 and the knowledge sharing of 0.850, which is higher than 0.05. Thus, it can be concluded that there are no symptoms of heteroscedasticity.

4.1.3. Multicollinearity Test

The multicollinearity test aims to determine whether there is a correlation between the independent variables in the regression model. The multicollinearity test in this study was seen from the tolerance value or variance inflation factor (VIF).

Table 4. Results of the Multicollinearity Test

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Leadership style	0.995	1.005
	Knowledge sharing	0.995	1.005
a. Dependent Variable: Employee performance			

The tolerance value of leadership style is 0.995 and knowledge sharing is 0.995, all of which are greater than 0.10. Meanwhile, the VIF value of leadership style is 1.005, and knowledge sharing is 1.005, all of which are less than 10. Thus, Table 4 captures the tolerance value of all independent variables is greater than 0.10, and the VIF value of all independent variables is also less than 5. Thus, there is no correlation symptom in the independent variables. It can be concluded that there are no symptoms of multicollinearity between independent variables in the regression model.

4.2. Multiple Linear Regression Analysis

Multiple linear regression testing explains to what extent the role of the leadership style and knowledge sharing on the employee performance. Data analysis in this study used multiple linear regression analysis using SPSS 25.0 for Windows.

Table 5. Results of Multiple Linear Regression

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.497	1.856		-.268	.790
	Leadership Style_X1	.730	.061	.813	11.940	.000
	Knowledge_Sharing_X2	.294	.071	.281	4.127	.000
a. Dependent Variable: Employee Performance (Y)						

The multiple linear regression equation has the formulation: Y: $a + b_1x_1 + b_2x_2 + e$, so the equation is obtained: Y = -497 + 0.30 X1 + 0.294 X2.

4.2.1. Coefficient of Determination (R^2)

The coefficient of determination is used to see how much the independent variable contributes to the dependent variable. The greater the value of the coefficient of determination, the better the ability of variable X to explain variable Y.

Table 6. Coefficient of Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson

1	0.880a	0.774	0.765	1,096	1.712
a. Predictors: (Constant), Knowledge sharing, Leadership style					
b. Dependent Variable: Employee performance					

Table 4.4 shows that the adjusted R square value is 0.765 or 76.5%. This shows that the variables Leadership Style (X1) and Knowledge Sharing (X2) can explain the Employee Performance variable (Y) of 76.5%, while the remaining 23.5% (100% - 76.5%) is explained by other variables outside this research model.

4.3. Hypothesis testing

Hypothesis testing is a decision-making method based on data analysis from controlled experiments and observations.

4.3.1. T-test (Partial)

The t-statistical test is also known as the individual significance test. This test shows how far the influence of the independent variables partially on the dependent variable.

Table 7. Result of Partial Test (t-test)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	-0.497	1.856		-0.268	0.790
1	Leadership style	0.730	0.061	0.813	11.940	0.000
	Knowledge sharing	0.294	0.071	0.281	4.127	0.000

a. Dependent Variable: Employee performance

Hypothesis test of the effects of leadership style on employee performance shows t-table value was 2.008. From this description, t-stat (11.940) > t-table (2.008), and a significance value of 0.000 < 0.05. It can be concluded that the first hypothesis is accepted, meaning that the Leadership Style had a significant effect on the variable Employee Performance. Hypothesis test of the effects of knowledge sharing on employee performance shows t-table value was 2.008. From this description, t-stat (4.127) > t-table (2.008), and a significance value of 0.000 < 0.05. It can be concluded that the second hypothesis is accepted, meaning that the knowledge sharing had a significant effect on the employee performance.

4.3.2. F-test (Simultaneous)

This test shows whether all the independent variables included in this model have a joint effect on the dependent variable.

Table 8. Results of Simultaneous test (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	201.227	2	100.614	83.801	0.000b
	Residual	58.830	49	1.201		
	Total	260.058	51			

a. Dependent Variable: Employee performance
b. Predictors: (Constant), Knowledge sharing, Leadership style

The F-test obtained F-table value of 3.19. From this description, F-stat (83.801) > F-table (3.19), and a significance value of 0.000 <0.05. It can be concluded that the third hypothesis is accepted, meaning leadership style and knowledge sharing had a significant effect simultaneously on the employee performance.

5. Conclusions

This study concludes that leadership style and knowledge sharing have a significant effect on employee performance. Also, leadership style and knowledge sharing had a significant effect simultaneously on the employee performance variable.
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