

# Analysis of Transactional Leadership and Organizational Communication on Employee Performance with Job Satisfaction as A Mediating Variable at The Medan Plantation Seed and Protection Center Plantation Crops In Medan

Demensah Ginting <sup>1</sup>, Mesra B <sup>2</sup>, Kiki Farida Ferine <sup>3</sup>

<sup>1</sup>Master's Student in Management, Panca Budi Development University

<sup>2,3</sup>Master of Management, Panca Budi Development University

Email: <sup>1</sup> [demenginting85@gmail.com](mailto:demenginting85@gmail.com)

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## ABSTRAK

Employee performance is a strategic factor in supporting the success of government technical agencies, particularly the Medan Plantation Seed and Plant Protection Center (BBPPTP), which plays an important role in quality testing, seed certification, and plantation plant protection. This study aims to analyze the effect of transactional leadership and organizational communication on employee performance with job satisfaction as a mediating variable. The study used a quantitative approach with a census method of 135 civil servants at BBPPTP Medan. Primary data were collected through questionnaires and analyzed using Partial Least Squares–Structural Equation Modeling (PLS-SEM) with the help of SmartPLS. The results showed that transactional leadership and organizational communication had a positive and significant effect on employee performance and job satisfaction. Job satisfaction also has a positive and significant effect on employee performance and is proven to mediate the influence of transactional leadership and organizational communication on employee performance. These findings indicate that the consistent application of transactional leadership, effective organizational communication, and increased job satisfaction are important factors in improving the performance of BBPPTP Medan employees. This study is expected to provide empirical contributions to the development of human resource management theory in the public sector and serve as practical considerations for the management of BBPPTP Medan in formulating policies to improve employee performance.

## ABSTRACT

Employee performance is a strategic factor in supporting the success of government technical agencies, particularly the Medan Plantation Seed and Plant Protection Center (BBPPTP), which plays an important role in quality testing, seed certification, and plantation plant protection. This study aims to analyze the effect of transactional leadership and organizational communication on employee performance with job satisfaction as a mediating variable. The study used a quantitative approach with a census method of 135 civil servants at BBPPTP Medan. Primary data were collected through questionnaires and analyzed using Partial Least Squares–Structural Equation Modeling (PLS-SEM) with the help of SmartPLS. The results showed that transactional leadership and organizational communication had a positive and significant effect on employee performance and job satisfaction. Job satisfaction also has a positive and significant effect on employee performance and is proven to mediate the influence of transactional leadership and organizational communication on employee performance. These findings indicate that the consistent application of transactional leadership, effective organizational communication, and increased job satisfaction are important factors in improving the performance of BBPPTP Medan employees. This study is expected to provide empirical contributions to the development of human resource management theory in the public sector and serve as practical considerations for the management of BBPPTP Medan in formulating policies to improve employee performance.

## INTRODUCTION

Employee performance in government agencies engaged in agriculture and plantations is a key factor in the success of government programs, especially in ensuring seed quality and plantation crop protection. The Center for Seed and Plant Protection (BBPPTP) is a technical implementation unit under the Directorate General of Plantations of the Ministry of Agriculture that has strategic tasks in quality testing, seed certification, and control of plantation plant pests. The demands for data accuracy, service precision, and compliance with quality standards make employee performance an aspect that cannot be ignored. In such conditions, internal organizational factors such as leadership style, organizational communication quality, and employee job satisfaction play an important role in determining the level of performance achieved.

One leadership style widely applied in bureaucratic organizations and technical institutions is transactional leadership. This leadership emphasizes the exchange relationship between superiors and subordinates through a clear system of rewards and sanctions based on performance achievements. Bass and his fellow theorists explain that transactional leadership is characterized by two main

components, namely contingent reward (giving rewards if performance meets expectations) and management-by-exception (intervention when there are deviations or errors in task implementation). In the context of government agencies that have standard work rules, standard operating procedures, and measurable performance targets, the characteristics of transactional leadership are relevant because they can encourage compliance, discipline, and the achievement of short-term work goals.

Various recent studies show that transactional leadership not only has a direct effect on employee performance but also through psychological variables such as job satisfaction. Research by Darmanto and Supriyadi (2022) found that transactional leadership style and employee competence have a positive and significant effect on employee job satisfaction and performance, and that job satisfaction is able to mediate the influence of transactional leadership on performance. Similar findings were shown in another study analyzing transactional and transformational leadership styles, where job satisfaction was proven to be a mediating variable linking leadership style to employee performance. These results indicate that the consistent application of transactional leadership—for example, in the form of fair rewards and clear enforcement of rules—can increase job satisfaction, which in turn will encourage better performance.

In addition to leadership, organizational communication is also a structural factor that greatly determines work effectiveness in the public sector. Organizational communication can be understood as the process of conveying and exchanging information, instructions, and feedback through formal and informal channels within the organization, so that members of the organization have a common understanding of tasks, targets, and policies. Recent studies in various sectors show that effective organizational communication contributes to the establishment of good work coordination, reduces misunderstandings, and enhances cooperation among employees. Conversely, communication that is disconnected, unclear, or too hierarchical often leads to role conflicts, task confusion, and ultimately reduces employee performance.

Empirically, organizational communication has been proven to have a close relationship with job satisfaction and performance. Wardana et al. (2025) in their research on savings and loan cooperatives in Bali found that the work environment and organizational communication had a positive and significant effect on employee job satisfaction and performance, and that job satisfaction acted as a mediator in the relationship between organizational communication and performance. Another study on local government agencies also shows that organizational communication has a positive effect on employee performance, and that job satisfaction mediates the effect of communication on performance. These findings confirm that clear, open, and two-way communication not only facilitates task coordination but also fosters feelings of appreciation, engagement, and comfort at work, which are reflected in increased job satisfaction and performance.

Job satisfaction itself is viewed as a positive emotional state that stems from employees' assessment of their work, which includes aspects of tasks, work environment, rewards, relationships with superiors and coworkers, and career development opportunities. A number of recent studies confirm the strategic role of job satisfaction as a mediating variable between various organizational factors (e.g., leadership, organizational climate, compensation, and communication) and employee and organizational performance. Putra et al. (2024) show that job satisfaction mediates the influence of leadership and organizational climate on employee performance. Similarly, international studies on the relationship between leadership (including transactional and transformational styles), job satisfaction, and organizational performance find that job satisfaction acts as an important link that explains how leadership practices can be translated into higher performance.

In the context of the Medan Plantation Seed and Protection Center, employee performance challenges are not only related to meeting administrative targets, but also concern the speed and accuracy of services, coordination across sections or fields, and the ability to adapt to new regulations and technologies in the seed and plant protection sector. In general, government technical agencies often experience phenomena such as dependence on instructions from superiors, suboptimal use of two-way communication, employee perceptions of fairness in the provision of rewards or recognition, and variations in job satisfaction levels between units. If the dominant leadership style is transactional but is not balanced with open and supportive organizational communication, then the reward and sanction system that is implemented can be perceived as a burden rather than a performance motivator. Conditions like this have the potential to reduce job satisfaction and make employee performance less than optimal.

On the other hand, if transactional leadership is implemented consistently and fairly—for example, through clear targets, proportional rewards, and transparent enforcement of rules—and supported by effective organizational communication, employees tend to feel more valued, understand work expectations, and have clarity of roles. This is expected to increase job satisfaction, which is then reflected in improved individual and work unit performance. However, empirical studies that specifically examine the influence of transactional leadership and organizational communication on employee

performance with job satisfaction as a mediating variable in the context of the Center for Plantation Seed and Protection, particularly in Medan, are still relatively limited. Most previous studies have been conducted in the banking sector, cooperatives, service companies, or other government agencies with different task characteristics.

## LITERATURE REVIEW

### Employee Performance

According to Robbins & Judge (2020), employee performance can be defined as behavior that contributes to the achievement of organizational goals, which is usually measured based on the achievement of results desired by the organization or company.

### Job Satisfaction

Greenberg and Baron (2020) "Job satisfaction is the extent to which people like (satisfaction) or dislike (dissatisfaction) their jobs." Job satisfaction encompasses both positive and negative dimensions, depending on how an individual perceives their work.

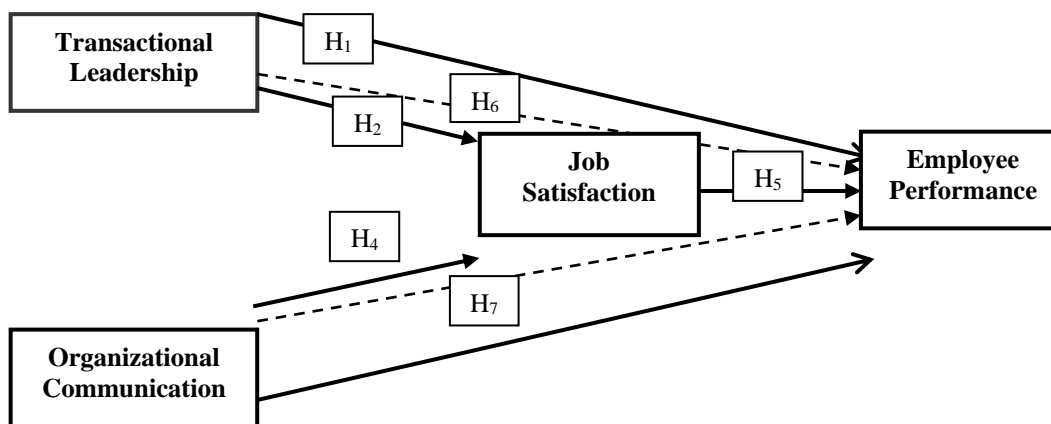
### Organizational Communication

N. Neiroukh et al. (2024) define organizational communication as a process in which an organization clearly defines details related to the work environment and the nature of responsibilities expected of organizational staff.

### Transactional Leadership

Alharbi & Aljounaidi (2021), in their empirical study, view transactional leadership as a style that focuses on work relationships based on rewards and punishments to encourage employee efficiency and productivity. According to the consensus in the current literature, transactional leadership is understood as a managerial approach that maintains stability and efficiency through targeted supervision and clear communication regarding roles and rewards.

Figure 1. Conceptual Framework



### Research Hypothesis

- H1: Transactional leadership has a positive and significant effect on employee performance at the Medan Plantation Seed and Plant Protection Center.
- H2: Transactional leadership has a positive and significant effect on job satisfaction at the Medan Plantation Seed and Plant Protection Center.
- H3: Organizational communication has a positive and significant effect on employee performance at the Medan Plantation Seed and Plant Protection Center.
- H4: Organizational communication has a positive and significant effect on job satisfaction at the Medan Plantation Seed and Plant Protection Center.
- H5: Job satisfaction has a positive and significant effect on employee performance at the Medan Plantation Seed and Plant Protection Center.
- H6: Transactional leadership has a positive and significant effect on employee performance through job satisfaction at the Medan Plantation Seed and Plant Protection Center.
- H7: Organizational communication has a positive and significant effect on employee performance through job satisfaction at the Medan Plantation Seed and Plant Protection Center.

## RESEARCH METHOD

### Type of Research

The type of research used by the researcher is quantitative research. According to Sugiyono (2022), quantitative research can be defined as a method based on positivism philosophy, used to study a specific population or sample, with sampling techniques generally conducted randomly, data collection using research instruments, and quantitative/statistical data analysis with the aim of testing predetermined hypotheses. This type of quantitative research was conducted to create a study aimed at adjusting a study and analyzing transactional leadership and organizational communication on employee performance with job satisfaction as a mediating variable at the Medan Plantation Seed and Plant Protection Center.

## RESULTS AND DISCUSSION

### Validity Test

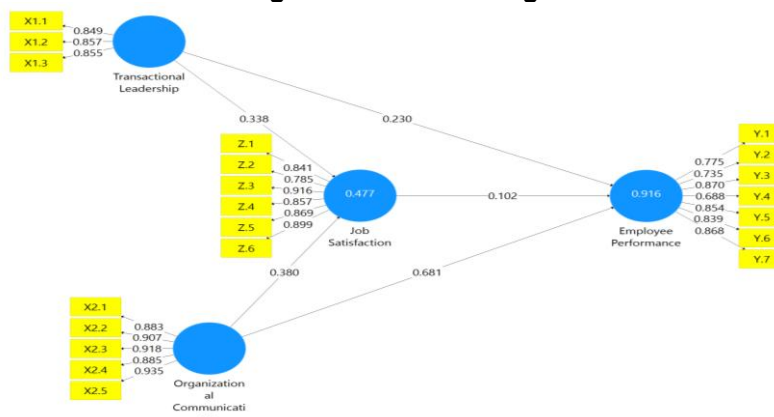
Table 1. Outer Loadings Values

	Employee Performance	Job Satisfaction	Organizational Communication	Transactional Leadership
X1.1				0.849
X1.2				0.857
X1.3				0.855
X2.1			0.883	
X2.2			0.907	
X2.3			0.918	
X2.4			0.885	
X2.5			0.935	
Y.1	0.775			
Y.2	0.735			
Y.3	0.870			
Y.4	0.688			
Y.5	0.854			
Y.6	0.839			
Y.7	0.868			
Z.1		0.841		
Z.2		0.785		
Z.3		0.916		
Z.4		0.857		
Z.5		0.869		
Z.6		0.899		

Source: Smart PLS Output, 2025

Based on the values in Table 1 above, which show the results of outer model testing through loading factor/outer loadings values, all indicators in each variable have a loading value  $\geq 0.60$ . This indicates that each indicator is measured validly and strongly. Therefore, it can be concluded that all items in the questionnaire have met the validity criteria, as shown in the following figure.

Figure 2 Outer Loading



In this study, there is an equation, and that equation consists of two substructures for substructure 1:

$$Z = \beta_1 X_1 + \beta_2 X_2 + e_1$$

$$Z = 0.338 X_1 + 0.380 X_2 + e_1$$

For substructure 2:

$$Y = \beta_2 X_1 + \beta_3 X_2 + \beta_3 Z + e_2$$

$$Y = 0.230 X_1 + 0.681 X_2 + 0.102 Z + e_2$$

### Reliability Test

Table 2. Construct Reliability and Validity Test

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Employee Performance	0.909	0.912	0.928	0.651
Job Satisfaction	0.930	0.934	0.945	0.743
Organizational Communication	0.945	0.946	0.958	0.821
Transactional Leadership	0.815	0.819	0.890	0.729

Source: Smart PLS Output, 2025

From Table 2 above, the reliability test results show that the Cronbach's Alpha and Composite Reliability values for all constructs are above 0.70. This indicates that all indicators have high internal consistency and are reliable in measuring their respective constructs. Thus, the research instrument is declared reliable and suitable for use in structural model testing.

### Coefficient of Determination (R<sup>2</sup>)

In assessing the model with PLS, we begin by looking at the R-square for each dependent latent variable. The table below shows the R-square estimation results using SmartPLS.

Table 3. R Square Results

	R Square	Adjusted R-Square
Job Satisfaction	0.477	0.470
Employee Performance	0.916	0.915

Source: Smart PLS, 2025

Table 3 shows the R-squared values for both dependent variables. For the work motivation variable, the R-squared value is 0.477, meaning that the influence of transactional leadership and organizational communication is 0.477 or 47.7%, with the remainder attributable to other variables outside the model. The R-square value for employee performance is 0.916, meaning that transactional leadership, organizational communication, and job satisfaction account for 0.916 or 91.6%, with the remainder attributable to other variables outside the model.

### Hypothesis Testing

The direct effect between variables can be seen in the *path coefficients*. The data analysis results show the direct effect values in the following table.

**Table 4. Path Coefficients (Direct Effects)**

	Original Sample	T Statistics	P Values	Conclusion
Transactional Leadership -> Employee Performance	0.230	3.962	0.000	Accepted
Transactional Leadership -> Job Satisfaction	0.338	3.636	0.000	Accepted
Organizational Communication -> Employee Performance	0.681	11,135	0.000	Accepted
Organizational Communication -> Job Satisfaction	0.380	4,345	0.000	Accepted
Job Satisfaction -> Employee Performance	0.102	3.221	0.001	Accepted

Source: Smart PLS Output, 2025

The results in Table 4 show the following direct effect values:

1. Transactional leadership has a positive and significant effect on employee performance with a t-statistic value of 3.962 above 1.96 and a significance of 0.000 below 0.05, meaning that transactional leadership has a real effect on employee performance because the significance value is below 0.05 . The results of this study are in line with previous studies, namely that transactional leadership has a positive and significant effect on employee performance (Syahrani & Mesra, 2024).
2. Transactional leadership has a positive and significant effect on job satisfaction, with a t-statistic value of 3.636 above 1.96 and a significance of 0.000 below 0.05, meaning that transactional leadership has a significant effect on job satisfaction because the significance value is below 0.05. The results of this study are consistent with previous research, namely that transactional leadership has a positive and significant effect on job satisfaction (Skopak & Hadzaihmetovic, 2022).
3. Organizational communication has a positive and significant effect on employee performance with a t-statistic value of 11.135 above 1.96 and a significance of 0.000 below 0.05, meaning that organizational communication has a significant effect on employee performance because the significance value is below 0.05. The results of this study are in line with previous research findings, namely that organizational communication has a positive and significant effect on employee performance (Ramadhana & Indrawan, 2023).
4. Organizational communication has a positive and significant effect on job satisfaction with a t-statistic value of 4.345 above 1.96 and a significance of 0.000 below 0.05, meaning that organizational communication has a real effect on job satisfaction because the significance value is below 0.05. The results of this study are in line with previous studies, namely that organizational communication has a positive and significant effect on job satisfaction (Bintang & Ferine, 2025).
5. Job satisfaction has a positive and significant effect on employee performance with a t-statistic value of 3.221 above 1.96 and a significance of 0.001 below 0.05, meaning that job satisfaction has a significant effect on employee performance because the significance value is below 0.05. The results of this study are consistent with previous research findings, namely that job satisfaction has a positive and significant effect on employee performance (Nurseha & Ferine, 2024).

### Indirect Effects Between Variables

The indirect effect between variables can be seen in the *specific indirect effects* value. The data analysis results show the indirect effect value in Table 5 below.

**Table 5. Specific Indirect Effects (Indirect Effects)**

	Original Sample	T Statistics	P Values	Conclusion
Transactional Leadership -> Job Satisfaction -> Employee Performance	0.034	2.122	0.034	Accepted
Organizational Communication -> Job Satisfaction -> Employee Performance	0.039	2.437	0.015	Accepted

Source: Smart PLS, 2025



Table 5 shows the indirect effects between variables, namely:

1. Transactional leadership has a positive and significant effect on employee performance through job satisfaction with a t-statistic value of 2.122 above 1.96 and a significance value of 0.034 below 0.05, meaning that job satisfaction acts as an intervening variable between transactional leadership and employee performance.
2. Organizational communication has a positive and significant effect on employee performance through job satisfaction with a t-statistic value of 2.437 above 1.96 and a significance value of 0.015 below 0.05, meaning that job satisfaction acts as an intervening variable between organizational communication and employee performance.

### CONCLUSION

1. Transactional leadership has a positive and significant effect on employee performance at the Medan Plantation Seed and Plant Protection Center.
2. Transactional leadership has a positive and significant effect on job satisfaction at the Medan Plantation Seed and Plant Protection Center.
3. Organizational communication has a positive and significant effect on employee performance at the Medan Plantation Seed and Protection Center.
4. Organizational communication has a positive and significant effect on job satisfaction at the Medan Plantation Seed and Plant Protection Center.
5. Job satisfaction has a positive and significant effect on employee performance at the Medan Plantation Seed and Plant Protection Center.
6. Transactional leadership has a positive and significant effect on employee performance through job satisfaction at the Medan Plantation Seed and Plant Protection Center.
7. Organizational communication has a positive and significant effect on employee performance through job satisfaction at the Medan Plantation Seed and Plant Protection Center.

### RECOMMENDATIONS

1. Employee performance with the lowest value statement is "I have the initiative to take action or find solutions without having to wait for orders from my superiors." Therefore, the suggestion that can be given is that the Medan Plantation Seed and Plant Protection Center (BBPPTP Medan) needs to build a work culture that encourages employee initiative by providing clarity of authority, coaching-style leadership support, and recognition for ideas and solutions taken independently in accordance with SOPs.
2. Job satisfaction with the lowest score being "I am satisfied with the salary or compensation I receive in accordance with my workload and job responsibilities." The Medan Plantation Seed and Protection Center is advised to continuously review and adjust its remuneration system, taking into account the balance between workload, job responsibilities, and compensation received, in order to improve employee satisfaction and performance.
3. Organizational communication with the lowest score of "Information related to work is shared openly and evenly with all employees." The Medan Plantation Seed and Plant Protection Center needs to strengthen its internal communication system by ensuring that work information is conveyed openly, timely, and evenly to all employees in order to improve coordination and work effectiveness.
4. Transactional leadership with the lowest value statement: "My supervisor gives me clear rewards or compensation when I successfully achieve my set work targets." The Medan Plantation Seed and Plant Protection Center should implement a clear, objective, and consistent reward system for achieving work targets in order to increase employee motivation, satisfaction, and performance.

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