

The Role of Job Satisfaction in Mediating the Influence of Leadership on Employee Performance at PTPN 4 Regional 1 Janji Rantauprapat Plantation

Stefen Daniel Berkat Hutabarat, Kholilul Kholik, Muhammad Toyib Daulay

Abstract

This study aims to examine the role of job satisfaction in mediating the influence of leadership on employee performance at PTPN 4 Regional 1 Kebun Janji Rantauprapat. Business organizations in the plantation sector, such as PTPN 4, face increasingly high performance demands related to competition, efficiency, and strict production targets. Therefore, it is important to understand the factors that can improve employee performance, one of which is through the influence of leadership and job satisfaction levels. This study adopts a quantitative approach using Structural Equation Modeling (SEM) to test the relationship between the variables of leadership, job satisfaction, and employee performance. The results show that leadership has a positive and significant effect on employee performance, both directly and through job satisfaction as a mediating variable. Job satisfaction is also proven to have a significant direct effect on employee performance. In addition, effective leadership, particularly transformational leadership, contributes to increased job satisfaction, which in turn improves employee performance. This study provides recommendations for PTPN 4 management to develop a supportive leadership style, pay attention to the balance between workload and compensation, and create a transparent reward system to improve job satisfaction and employee performance.

Keywords: Leadership, Job Satisfaction, Employee Performance

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Introduction

Business organizations in the plantation sector, including PTPN 4 Regional 1 Kebun Janji Rantauprapat, face increasingly high performance demands due to intensifying competition, efficiency requirements, and strict production targets. In this context, employee performance is a key factor that determines the success of an organization in achieving its strategic objectives. High performance is not only determined by the quality of human resources, but also by the leadership style applied and the level of employee job satisfaction.

Leadership is considered one of the main determinants of performance because leaders play a role in directing, motivating, and inspiring employees to work optimally. Recent studies show that effective leadership, particularly transformational leadership and supportive leadership, has a positive influence on employee performance both directly and through certain psychological variables. For example, a study by Al Khajeh (2023) shows that the right leadership style contributes significantly to improving employee performance by creating a conducive work environment and harmonious working relationships. Similarly, research by Purwanto et al. (2020) found that leadership has a positive effect on employee performance in various industrial sectors in Indonesia by increasing motivation and work commitment.

However, the influence of leadership on employee performance is not always direct. Various contemporary studies confirm that psychological variables such as job satisfaction play an important role as mediators. Job satisfaction describes the extent to which employees feel satisfied with their work, including aspects such as salary, working conditions, relationships with superiors and colleagues, and career development opportunities. According to Judge et al. (2020), high job satisfaction tends to encourage positive work behaviors, such as work engagement, organizational commitment, and ultimately better performance. Meanwhile, research by Tett & Meyer (2021) shows that job satisfaction is closely related to turnover intention and employee productivity, making it an important indicator that management needs to pay attention to.

In relation to leadership, a number of recent studies have found that a quality leadership style can increase employee job satisfaction, which in turn has an impact on performance improvement. For example, research by Ingram & Glod (2022) reveals that transformational leadership has a positive effect on employee performance through increased job satisfaction as a mediating variable. Similar findings were produced by Susanto & Sunarsi (2020), which showed that supportive and communicative leadership can increase job satisfaction, and ultimately have a significant impact on employee performance in the service sector. This indicates that job satisfaction is not only an outcome of leadership practices, but also acts as a psychological mechanism that bridges the relationship between leadership and performance.

In the context of state-owned plantation companies such as PTPN 4, demanding job characteristics, dynamic field conditions, and pressure to achieve production targets can influence employees' perceptions of their leaders and their level of job satisfaction. Research in the plantation sector shows that employee job satisfaction is influenced by leadership factors, organizational justice, and the reward system implemented (Sari & Putra, 2021). When employees feel that they are led by superiors who are able to set an example, communicate clearly, provide support in completing work, and appreciate their contributions, job satisfaction tends to increase. Conversely, authoritarian, unresponsive, or non-transparent leadership has the potential to reduce job satisfaction and negatively impact performance.

In particular, PTPN 4 Regional 1 Kebun Janji Rantauprapat plays a strategic role in supporting the company's overall performance. The challenges faced include achieving production targets, operational cost efficiency, and maintaining the quality of plantation products. Under these circumstances, the role of leadership at the plantation and work unit levels becomes very important in motivating employees to maintain high motivation, discipline, and commitment to achieving the set goals. If leaders are unable to create a positive work

climate, employees may experience burnout, decreased job satisfaction, and ultimately suboptimal performance.

Research in state-owned enterprises and the public sector in Indonesia in recent years has also confirmed the importance of job satisfaction as a mediator in the relationship between leadership and performance. For example, a study by Handayani & Rachmawati (2020) on government agencies found that effective leadership improves employee performance through job satisfaction and organizational commitment as mediating variables. Similar results were shown by Nugroho & Rahmawati (2021), who studied SOEs in the service sector, where job satisfaction was found to significantly mediate the influence of leadership on employee performance.

However, studies that specifically examine the role of job satisfaction in mediating the influence of leadership on employee performance in plantation companies, especially at PTPN 4 Regional 1 Kebun Janji Rantauprapat, are still relatively limited. In fact, the characteristics of work in the plantation sector, which involves field work, weather factors, seasonal production targets, and intensive interaction between field leaders and workers, have the potential to produce dynamics of job satisfaction and performance that are unique compared to other sectors. The limitations of this research create an important research gap that needs to be filled, especially in order to produce practical recommendations for management in strengthening the role of leadership and improving employee performance through job satisfaction management.

Based on the above description, it is important to conduct research entitled "The Role of Job Satisfaction in Mediating the Influence of Leadership on Employee Performance at PTPN 4 Regional 1 Kebun Janji Rantauprapat". This research is expected to contribute theoretically by enriching the literature on the relationship between leadership, job satisfaction, and employee performance, as well as contributing practically to the management of PTPN 4 in formulating leadership development strategies and increasing job satisfaction to encourage optimal employee performance.

Literature Review

Theoretical Framework

Leadership

Definition of Leadership

Leadership in an organization is defined as the ability to guide, influence, and motivate others to work effectively in achieving common goals. Damarsari Ratnasahara Elisabeth et al. (2025) emphasize that the transformational leadership style plays an important role in creating a positive work climate through an emotional and motivational approach to subordinates.

Factors Influencing Leadership

Tarigan (2025) identifies three main aspects that determine the success of this leadership style, especially in workplaces that demand adaptation and innovation:

- 1) **Integrity and Moral Exemplarity**

Leaders who uphold ethical values and set an example for their subordinates build trust and loyalty, and create a work environment that supports shared commitment.

- 2) **Ability to Motivate and Direct Vision**

The success of transformational leadership depends on the extent to which leaders are able to inspire their subordinates by communicating a clear vision and inspiring collective work ethic.

- 3) **Support for Innovation and Creativity**

Leaders who provide space for new ideas and encourage critical thinking will strengthen the spirit of innovation, boost employee confidence, and shape an adaptive and participatory work culture.

Leadership Indicators

According to Yu & Xiang (2024) leadership indicators are:

- 1) Idealized Influence
Leaders act as moral role models by demonstrating ethics, consistency, and integrity in all their actions. This behavior strengthens the trust and respect of subordinates and creates positive emotional bonds within the organization.
- 2) Inspirational Motivation
Leaders convey the organization's vision and mission convincingly and inspire enthusiasm for work. An inspirational communication style encourages employee enthusiasm and commitment to achieving common goals.
- 3) Intellectual Stimulation
Leaders encourage subordinates to think critically, question old procedures, and generate innovative ideas that are essential in a dynamic work environment.
- 4) Individualized Consideration
Leaders give special attention to the personal development needs of each subordinate, both emotionally and professionally, through personal mentoring and coaching.

Job Satisfaction

Understanding Job Satisfaction

Job satisfaction is a psychological condition that reflects employees' positive attitudes toward their work, including their work environment, colleagues, superiors, and the organizational system as a whole. According to Laily et al. (2023), job satisfaction is formed through individuals' perceptions of their workload, role clarity, interpersonal relationships, and the recognition they receive from the organization.

Factors Influencing Job Satisfaction

Laily et al. (2023) identified three main factors that significantly influence job satisfaction, which also reinforce its role as a mediating variable in this research model:

- 1) Work-Life Balance
The balance between work and personal life, measured by the WIPL (Work Interference with Personal Life) and WPLE (Work Enhancement of Personal Life) indicators, has been proven to increase job satisfaction in the long term.
- 2) Burnout
A condition of chronic stress characterized by emotional and physical exhaustion has a negative impact on job satisfaction. However, an individual's resilience to burnout also determines their level of satisfaction.
- 3) Job Insecurity
Uncertainty about the future of one's job reduces a sense of security and impacts job satisfaction, although its effect on performance is relatively indirect.

Job Satisfaction Indicators

Job satisfaction as a mediating variable is measured through five main dimensions based on the research "" by , which reflects employees' perceptions of important aspects of work, namely:

- 1) Satisfaction with salary
Employees' perceptions of fairness and adequacy of income.
- 2) Satisfaction with Supervision
The quality of relationships and support from supervisors.
- 3) Satisfaction with coworkers
Comfort and social interaction with fellow employees.
- 4) Satisfaction with the job itself
Assessment of job content, including task variety and meaning.
- 5) Satisfaction with career opportunities.
Perception of opportunities for development and promotion.

Employee Performance

Understanding Employee Performance

Employee performance refers to the work results achieved by individuals in carrying out their duties in accordance with their responsibilities. According to Stephen & Rahardjo (2024), performance is a key indicator of an organization's success in managing human resources. Commonly used aspects include effectiveness, efficiency, timeliness, and the ability to complete work targets.

Factors Affecting Employee Performance

According to Robbins & Judge (2020), the main factors that influence employee performance include:

- 1) Motivation
High motivation drives the optimal achievement of work targets. This is because motivation plays a significant role in increasing employee productivity.
- 2) Education and Job Training
Ongoing training strengthens employees' technical skills and efficiency. On-the-job training has a direct impact on improving performance quality, especially in target-based sectors.
- 3) Total Participation
Active involvement in work processes and decision-making increases a sense of responsibility and ownership of tasks.
- 4) Leadership
Transformational leadership that provides consistent direction, support, and motivation has been proven to drive high performance.

Employee Performance Indicators

Aminah et al. (2024) identifies three main indicators of employee performance, namely:

- 1) Work Quality
Refers to the accuracy and conformity of work results with established standards. In the plantation sector, this includes the accuracy of procedures and the quality of harvests.
- 2) Work Quantity
Shows the amount of work output in a certain period, such as harvest volume or the area of work completed according to the target.
- 3) Time Accuracy
Measures the ability to complete tasks according to schedule. Time discipline is an important indicator that affects the efficiency and continuity of the work process.

Conceptual Framework

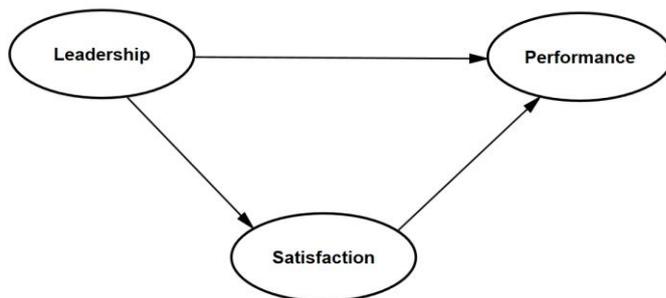


Figure 1. Conceptual Framework

Research Hypothesis

- H₁ : Leadership has a positive and significant effect on employee performance.
H₂ : Job satisfaction has a positive and significant effect on employee performance.
H₃: Leadership has a positive and significant effect on job satisfaction.
H₄: Job satisfaction mediates the effect of leadership on employee performance.

Research Methodology

Type of Research

This research uses a quantitative approach, in accordance with the positivistic paradigm, to explain the causal relationship between variables (motivation, job training, total participation, leadership) and employee performance appraisals at PTPN IV Regional 1 Kebun Janji Rantauprapat, through the mechanism of job satisfaction mediation. This approach was chosen because it is capable of testing hypotheses using statistical techniques and standardized instruments. (Abdullah et al. 2025)

Research Location and Time

This research was conducted at PTPN IV Regional 1 Janji Rantauprapat Plantation, located in Labuhanbatu Regency, North Sumatra Province. This location was chosen because it is one of the strategic plantation units in human resource management and palm oil production, and is relevant to the object of study of employee performance variables. The research was conducted from March to June 2025, covering the process of instrument development, data collection, and analysis.

Population and Sample

Population

The research population consists of all permanent employees of PTPN IV Regional 1 Kebun Janji Rantauprapat who are still actively working as of May 2025. Based on internal company data, the population consists of 127 people spread across the production, processing, maintenance, security, and administration departments. Because the population is not too large, the entire population was used as the sample, which is also known as a population study.

Research Data Sources

The data source used in this study is primary data.

Results

Outer Model Analysis

Outer Model Analysis using the PLS Algorithm yielded the following results:

Validity Test

Table 1. Outer Loadings Values

	Leadership	Performance	Satisfaction
X.1	0.804		
X.2	0.753		
X.3	0.865		
X.4	0.806		
Y.1		0.775	
Y.2		0.872	
Y.3		0.819	
Z.1			0.801
Z.2			0.772
Z.3			0.867
Z.4			0.856
Z.5			0.889

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 ≥ 0.70 . 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.

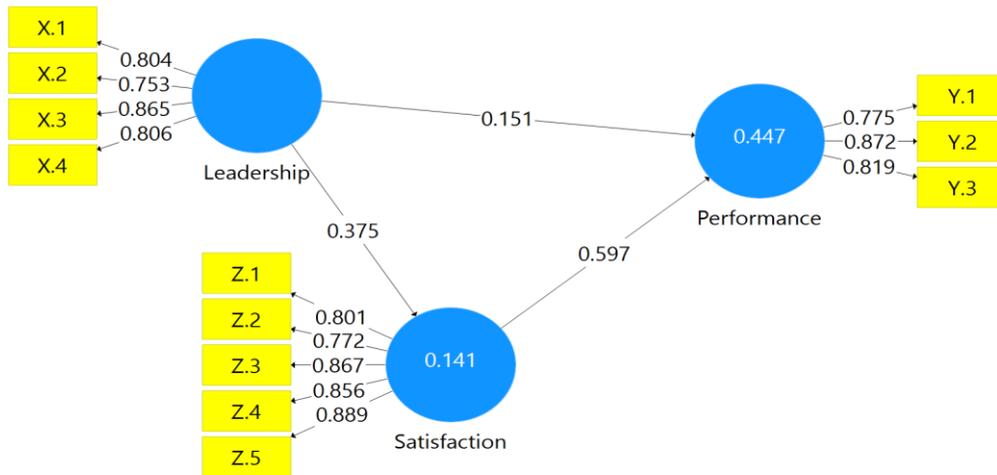


Figure 2. Outer Loading

Reliability Test

Table 2. Construct Reliability and Validity Test

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Leadership	0.823	0.828	0.883	0.653
Performance	0.761	0.775	0.862	0.677
Satisfaction	0.894	0.903	0.922	0.702

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 (R²)

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

Table 3. R Square Results

	R Square	Adjusted R Square
Satisfaction	0.141	0.138
Performance	0.447	0.444

Source: Smart PLS, 2025

Table 3 shows the R square values for both dependent variables. For the satisfaction variable, the R square value is 0.141, meaning that leadership has an influence of 0.141 or 14.1%, with the remainder attributable to other variables outside the model. The R-square value for performance is 0.447, meaning that leadership and satisfaction account for 0.447 or 44.7%, with the remainder attributable to other variables outside the model.

Structural Model Testing (Inner Model)

Hypothesis Testing

Direct Influence Between Variables

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
Leadership -> Performance	0.151	3.545	0.000	Accepted
Leadership -> Satisfaction	0.375	8.745	0	Accepted
Satisfaction -> Performance	0.597	16,780	0.000	Accepted

Source: Smart PLS Output, 2025

Table 4 shows the following direct effect values:

1. Leadership has a positive and significant effect on performance with a t-statistic value of 3.545 above 1.96 and a significance of 0.000 below 0.05, meaning that leadership has a real effect on performance because the significance value is below 0.05 . This study is in line with research stating that leadership has a positive and significant effect on the performance of employees at the Main Branch of JNE in Medan (Herliyana & Kholik, 2025).
2. Leadership has a positive and significant effect on satisfaction with a t-statistic value of 8.745 above 1.96 and a significance of 0.000 below 0.05, meaning that leadership has a significant effect on satisfaction because the significance value is below 0.05. This study is in line with research stating that leadership has a positive and significant effect on the job satisfaction of civil servants at SMA Negeri 2 Binjai (Febrina & Kholik, 2024).
3. Satisfaction has a positive and significant effect on performance with a t-statistic value of 16.780 above 1.96 and a significance of 0.000 below 0.05, meaning that satisfaction has a significant effect on performance because the significance value is below 0.05. This study is in line with research stating that satisfaction has a positive and significant effect on employee performance (Cahya & Kholik, 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
Leadership -> Satisfaction -> Performance	0.224	7.669	0.000	Accepted

Source: Smart PLS, 2025

Table 5 shows the indirect effect between variables, namely leadership has a positive and significant effect on performance through satisfaction with a t-statistic value of 7.669 above 1.96 and a significance value of 0.000 below 0.05, meaning that satisfaction acts as an intervening variable between leadership and performance.

Conclusion

1. Leadership has a positive and significant effect on employee performance at PTPN 4 Regional 1 Kebun Janji Rantauprapat.
2. Leadership has a positive and significant effect on satisfaction at PTPN 4 Regional 1 Kebun Janji Rantauprapat.
3. Satisfaction has a positive and significant effect on employee performance at PTPN 4 Regional 1 Kebun Janji Rantauprapat.

4. Leadership has a positive and significant effect on employee performance through satisfaction at PTPN 4 Regional 1 Kebun Janji Rantauprapat.

Recommendations

1. Leaders at PTPN 4 Regional 1 Kebun Janji Rantauprapat should develop a more transformational leadership style by paying attention to the emotional and psychological needs of employees. This can be done by strengthening two-way communication, providing constructive feedback, and involving employees in decision-making. This supportive and inspiring leadership will create confidence and motivation among employees, thereby improving their performance.
2. To improve job satisfaction, the management of PTPN 4 Regional 1 Kebun Janji Rantauprapat needs to ensure a balance between the workload and compensation received by employees. In addition, providing opportunities for career development and skills improvement through training or workshops will increase job satisfaction. High job satisfaction will motivate employees to be more committed and improve their performance.
3. Management must provide more tangible appreciation and rewards for employees who demonstrate good performance. In addition, there needs to be a more transparent and objective performance appraisal mechanism. In this way, employees will feel valued and motivated to improve their performance. Performance-based incentives can also be an important motivating factor for increasing productivity on the plantation.

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