

Analysis of Transformational Leadership and Compensation on Employee Performance With Work Motivation as a Mediating Variable at the National Plant Seeding and Protection Plantation Medan

Analisis Kepemimpinan Transformasional dan Kompensasi terhadap Kinerja Pegawai dengan Motivasi Kerja sebagai Variabel Mediasi pada Balai Perbenihan dan Perlindungan Tanaman Perkebunan Medan

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ABSTRAK

Penelitian ini bertujuan untuk menganalisis pengaruh kepemimpinan transformasional dan kompensasi terhadap kinerja pegawai dengan motivasi kerja sebagai variabel mediasi pada Balai Besar Perbenihan dan Perlindungan Tanaman Perkebunan (BBPPTP) Medan. Penelitian ini menggunakan metode kuantitatif dengan pendekatan survei, yang melibatkan seluruh 135 pegawai negeri sipil sebagai sampel penelitian. Data dikumpulkan melalui kuesioner dan dianalisis menggunakan metode Partial Least Square (PLS). Hasil penelitian menunjukkan bahwa kepemimpinan transformasional berpengaruh positif dan signifikan terhadap motivasi kerja, namun tidak berpengaruh signifikan secara langsung terhadap kinerja pegawai. Sementara itu, kompensasi berpengaruh positif dan signifikan terhadap kinerja pegawai maupun motivasi kerja. Selain itu, motivasi kerja terbukti memediasi hubungan antara kepemimpinan transformasional dan kompensasi terhadap kinerja pegawai. Temuan ini menegaskan pentingnya pengembangan motivasi kerja melalui kepemimpinan yang inspiratif serta pemberian kompensasi yang adil guna mencapai kinerja pegawai yang optimal. Penelitian ini diharapkan dapat memberikan rekomendasi bagi BBPPTP Medan dalam merumuskan strategi peningkatan sumber daya manusia yang berbasis pada kompetensi, motivasi, dan sistem penghargaan yang efektif.

ABSTRACT

This study aims to analyze the effect of transformational leadership and compensation on employee performance with work motivation as a mediating variable at the Medan Plantation Seed and Plant Protection Center (BBPPTP). The study used a quantitative method with a survey approach, involving all 135 civil servant employees as samples. Data were collected through questionnaires and analyzed using Partial Least Square (PLS). The results showed that transformational leadership had a positive and significant effect on work motivation, but not a direct significant effect on employee performance. Meanwhile, compensation had a positive and significant effect on both employee performance and work motivation. In addition, work motivation was found to mediate the relationship between transformational leadership and compensation on employee performance. These findings emphasize the importance of developing work motivation through inspirational leadership and fair compensation to achieve optimal employee performance. This study is expected to provide recommendations for BBPPTP Medan in formulating strategies for improving human resources based on competency, motivation, and an effective reward system.

INTRODUCTION

Employee performance is a key factor that determines the effectiveness and success of a public organization in achieving its strategic objectives. At the Medan Plantation Seed and Plant Protection Center (BBPPTP), improving employee performance is very important, considering that this institution plays a role in ensuring seed quality, plantation plant health, and technical services to the community and plantation businesses. The complexity of these tasks requires optimal, adaptive employee performance that is capable of responding to dynamic operational challenges.

One factor that influences employee performance is transformational leadership. According to Robbins and Judge (2020), transformational leadership is able to inspire, motivate, and direct employees to achieve higher performance through a clear vision, charisma, intellectual stimulation, and individual attention. This leadership style is considered effective in public organizations because it can build commitment, develop employee potential, and encourage an innovative work culture. Research by Bass & Riggio (2019) also shows that transformational leadership has a significant influence on improving employee performance and job satisfaction.

Apart from leadership, compensation is another important factor that affects employee performance. According to Dessler (2021), compensation includes all forms of remuneration received by employees, whether in the form of salaries, allowances, or non-financial rewards, which aim to motivate employees to work more productively. Research by Wibowo (2020) states that fair and competitive compensation has been proven to increase employee motivation and performance in the government sector. In the context of BBPPTP Medan, transparent compensation that is commensurate with the workload is important to encourage employees to work optimally, especially in technical and field operational services.

However, the influence of transformational leadership and compensation on performance is not always direct, but is often mediated by work motivation. Work motivation is an internal drive that makes employees behave and perform in accordance with organizational goals. According to Herzberg (2017), motivation plays an important role in increasing employee creativity, productivity, and loyalty. Robbins and Judge (2020) also emphasize that motivation is a psychological variable that can bridge the relationship between work environment conditions (e.g., leadership and compensation) and employee performance outcomes.

A number of previous studies support the mediating role of work motivation. Research by Sari & Arifin (2022) found that motivation mediates the relationship between transformational leadership and employee performance in government organizations. Another study by Pratama (2021) shows that work motivation is an important factor in mediating the influence of compensation on employee performance in public agencies. This shows that even though leadership and compensation are influential, optimal performance achievement still depends heavily on the level of employee motivation.

Considering the important role of leadership, compensation, and work motivation in shaping employee performance, as well as the context of BBPPTP Medan, which requires high-performing human resources, it is necessary to conduct research entitled: "Analysis of Transformational Leadership and Compensation on Employee Performance with Work Motivation as a Mediating Variable at the Medan Plantation Seed and Protection Center."

This research is expected to provide an empirical description of the factors that determine employee performance, as well as provide recommendations for more appropriate and data-based performance improvement strategies for BBPPTP Medan.

LITERATURE REVIEW

Employee Performance

Lukito (2025) states that employee performance in the context of family businesses in Indonesia refers to the ability of employees to produce good and sustainable output, measured by comparison with colleagues with equivalent qualifications and employee satisfaction with their own work results. Good employee performance is considered an important component in the sustainability of family organizations because it contributes to productivity, innovation, and long-term growth.

Factors Affecting Employee Performance

Factors Affecting Employee Performance According to Lukito (2025)

Lukito (2025) states that employee performance is influenced by five main factors, namely:

- 1) Leadership
Effective leadership is the most dominant factor in improving employee performance. Leaders who are able to provide direction, support, and exemplary behavior have been proven to improve employee performance.
- 2) Work Motivation
Motivation is an internal driver that determines the level of effort, intensity, and persistence of employees in completing their work. Motivated employees tend to perform better.
- 3) Compensation
Financial and non-financial rewards greatly influence employee morale and productivity. Fair and adequate compensation increases satisfaction and performance.
- 4) Job Satisfaction
High job satisfaction (regarding tasks, superiors, salary, and work environment) is directly related to improvements in the quality and quantity of employee performance.
- 5) Work Environment

A safe, comfortable environment with adequate facilities, good social relationships, and a positive work culture encourages employees to work more effectively and productively.

Work Motivation

According to Vo et al., 2022, work motivation is a drive that stems from individual needs (competence, autonomy, social relationships) that encourage productive and effective individual work behavior.

Compensation

According to Dessler (2021), compensation is a reward system provided by organizations to employees in the form of benefits and rewards, both financial (such as salaries and bonuses) and non-financial (such as awards or career development opportunities). The main purpose of compensation is to motivate employees to improve their performance and productivity within the organization, as well as to retain quality employees.

Transformational Leadership

According to Northouse (2021), transformational leadership is a process that changes and transforms individuals by creating relationships based on mutual trust, inspiration, and motivation to achieve common goals.

Conceptual Framework

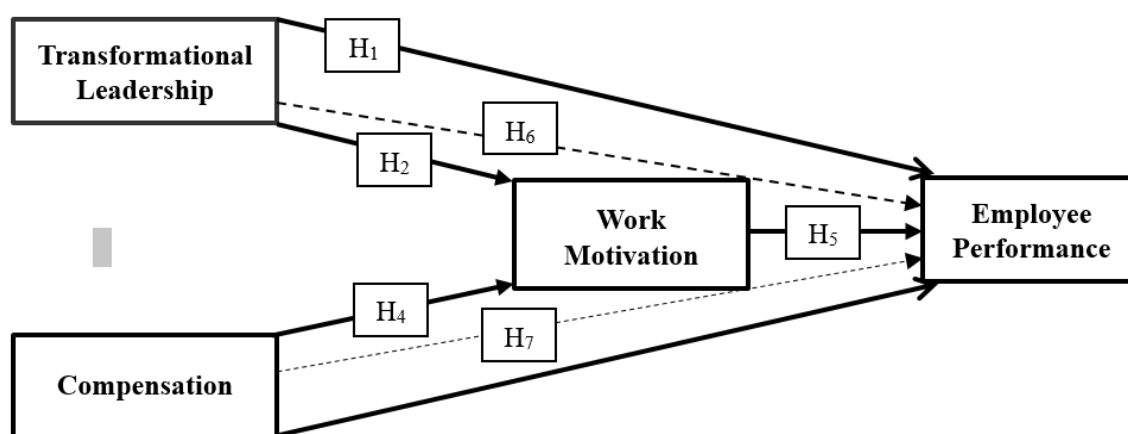


Figure 1. Conceptual Framework

Research Hypothesis

- H₁: Transformational leadership has a positive and significant effect on employee performance at the Medan Plantation Seed and Plant Protection Center.
- H₂: Transformational leadership has a positive and significant effect on work motivation at the Medan Plantation Seed and Plant Protection Center.
- H₃: Compensation has a positive and significant effect on employee performance at the Medan Plantation Seed and Plant Protection Center.
- H₄: Compensation has a positive and significant effect on work motivation at the Medan Plantation Seed and Plant Protection Center.
- H₅: Work motivation has a positive and significant effect on employee performance at the Medan Plantation Seed and Plant Protection Center.
- H₆: Transformational leadership has a positive and significant effect on employee performance through work motivation at the Medan Plantation Seed and Plant Protection Center.
- H₇: Compensation has a positive and significant effect on employee performance through work motivation 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 transformational leadership and compensation on employee performance with work motivation as a mediating variable at the Medan Plantation Seed and Plant Protection Center.

RESULTS AND DISCUSSION

Validity Test

Table 1. Outer Loadings Values

	Compensation	Employee Performance	Transformational Leadership	Work Motivation
X1.1			0.950	
X1.2			0.950	
X1.3			0.947	
X1.4			0.896	
X2.1	0.839			
X2.2	0.908			
X2.3	0.887			
X2.4	0.899			
X2.5	0.902			
X2.6	0.903			
Y.1		0.898		
Y.2		0.929		
Y.3		0.899		
Z.1				0.887
Z.2				0.916
Z.3				0.892

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.

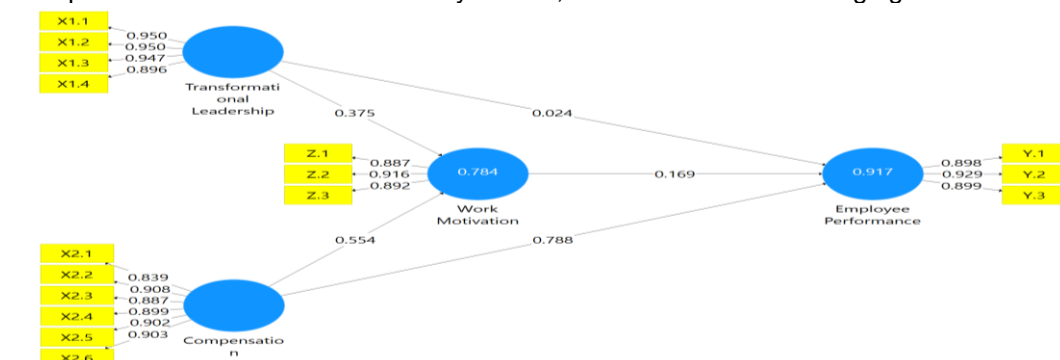


Figure 1. Outer Loading

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

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

$$Z = 0.375X_1 + 0.554X_2 + e_1$$

For substructure 2:

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

$$Y = 0.024 X_1 + 0.788X_2 + 0.169Z + e_2$$

Reliability Test

Table 2. Construct Reliability and Validity Test

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Compensation	0.947	0.948	0.958	0.792
Employee Performance	0.894	0.895	0.934	0.826
Transformational Leadership	0.953	0.954	0.966	0.877
Work Motivation	0.881	0.882	0.926	0.807

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-squared for each dependent latent variable. The table below shows the R-squared estimation results using SmartPLS.

Table 3. R Square Results

	R Square	Adjusted R-Square
Work Motivation	0.784	0.780
Employee Performance	0.917	0.914

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 0.784, meaning that the influence of transformational leadership and compensation is 0.784 or 78.4%, with the remainder attributable to other variables outside the model. The R-square value for employee performance is 0.917, meaning that transformational leadership, compensation, and work motivation account for 0.917 or 91.7%, with the remainder attributable to other variables outside the model.

Direct Effect 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
Transformational Leadership -> Employee Performance	0.024	0.314	0.754	Rejected
Transformational Leadership -> Work Motivation	0.375	5.423	0.000	Accepted
Compensation -> Employee Performance	0.788	10,772	0.000	Accepted
Compensation -> Work Motivation	0.554	7,714	0.000	Accepted
Work Motivation -> Employee Performance	0.169	2,570	0.010	Accepted

Source: Smart PLS Output, 2025

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

1. Transformational leadership has a positive but insignificant effect on employee performance, with a t-statistic value of 0.314 below 1.96 and a significance of 0.754 above 0.05, meaning that transformational leadership has no real effect on employee performance because the significance value is above 0.05. The results of this study are not in line with the results of previous studies, namely that transformational leadership has a positive and significant effect on employee performance (Tarigan & Indrawan, 2024).
2. Transformational leadership has a positive and significant effect on work motivation, with a t-statistic value of 5.423 above 1.96 and a significance of 0.000 below 0.05, meaning that transformational leadership has a significant effect on work motivation because the significance value is below 0.05. The results of this study are in line with previous research findings, namely that transformational leadership has a positive and significant effect on work motivation (Fadillah & Mesra, 2023).
3. Compensation has a positive and significant effect on employee performance with a t-statistic value of 10.772 above 1.96 and a significance of 0.000 below 0.05, meaning that compensation 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 compensation has a positive and significant effect on employee performance (Hulu & Farida, 2025).
4. Compensation has a positive and significant effect on work motivation with a t-statistic value of 7.714 above 1.96 and a significance of 0.000 below 0.05, meaning that compensation has a real effect on work motivation because the significance value is below 0.05. The results of this study are in line with previous studies, namely that compensation has a positive and significant effect on work motivation (Putri et al., 2023).
5. Work motivation has a positive and significant effect on employee performance with a t-statistic value of 2.570 above 1.96 and a significance of 0.000 below 0.05, meaning that work motivation 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 work motivation has a positive and significant effect on employee performance (Siahaan et al., 2022).

Indirect Influence 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
Transformational Leadership -> Work Motivation -> Employee Performance	0.063	2.177	0.030	Accepted
Compensation -> Work Motivation -> Employee Performance	0.094	2.431	0.015	Accepted

Source: Smart PLS, 2025

Table 5 shows the indirect effects between variables, namely:

1. Transformational leadership has a positive and significant effect on employee performance through work motivation with a t-statistic value of 2.177 above 1.96 and a significance value of 0.030 below 0.05, meaning that work motivation acts as an intervening variable between transformational leadership and employee performance.
2. Compensation has a positive and significant effect on employee performance through work motivation with a t-statistic value of 2.431 above 1.96 and a significance value of 0.030 below 0.05, meaning that work motivation acts as an intervening variable between compensation and employee performance.

CONCLUSION AND RECOMMENDATIONS

Conclusion

1. Transformational leadership has a positive but insignificant effect on employee performance at the Medan Plantation Seed and Plant Protection Center.
2. Transformational leadership has a positive and significant effect on work motivation at the Medan Plantation Seed and Plant Protection Center.

3. Compensation has a positive and significant effect on employee performance at the Medan Plantation Seed and Plant Protection Center.
4. Compensation has a positive and significant effect on work motivation at the Medan Plantation Seed and Plant Protection Center.
5. Work motivation has a positive and significant effect on employee performance at the Medan Plantation Seed and Plant Protection Center.
6. Transformational leadership has a positive and significant effect on employee performance through work motivation at the Medan Plantation Seed and Plant Protection Center.
7. Compensation has a positive and significant effect on employee performance through work motivation at the Medan Plantation Seed and Plant Protection Center.

Recommendations

1. Employee performance with the lowest value statement is "My work results are equal to or better than my colleagues at the same job level." Therefore, the recommendation is that the Medan Plantation Seed and Protection Center needs to strengthen its objective and measurable human resource performance appraisal and development system by establishing clear individual performance indicators according to position, accompanied by regular feedback, so that employees are able to recognize their performance position, increase their professional confidence, and be encouraged to achieve performance that is equal to or better than their peers at the same job level.
2. Work motivation with the lowest value statement is "I feel I have the adequate abilities and skills to complete my work well." The Medan Plantation Crops Seed and Protection Center should develop position-based competency training and coaching programs so that each employee can continuously improve their technical and non-technical abilities and skills, enabling them to complete tasks with more confidence, effectiveness, and professionalism.
3. Compensation with the lowest score of "My salary or wages are commensurate with my responsibilities and workload." The Medan Plantation Plant Protection and Seed Center needs to review and adjust its workload and responsibility-based compensation structure so that employees feel fairly valued, motivated, and encouraged to optimize their performance.
4. Transformational leadership with the lowest value statement "My boss is a good role model and has integrity in leading." The Medan Plantation Plant Protection and Seed Center should strengthen integrity-based and exemplary leadership through leadership training and supervisor evaluation mechanisms so that they can become role models who motivate employees to work professionally and ethically.

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