



# The Role of Work Environment in Moderating the Effect of Leadership, Motivation, and Compensation on Employee Performance (A Study at the Forestry Service of Southeast Sulawesi)

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Received: 28/02/2026

Accepted: 16/04/2026

Published: 30/06/2026

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## ABSTRACT

*This study aims to examine the effect of leadership, motivation, and compensation on employee performance, with the work environment serving as a moderating variable at the Forestry Service of Southeast Sulawesi. A quantitative research approach was employed, with data collected from 220 employees using a structured questionnaire based on a Likert scale (1–5). The study included leadership, motivation, and compensation as independent variables, employee performance as the dependent variable, and work environment as the moderating variable. Data were analyzed using Partial Least Squares–Structural Equation Modeling (PLS-SEM) to evaluate both direct and indirect relationships among the variables. The results indicate that leadership, motivation, and compensation each have a positive and significant effect on employee performance. Furthermore, the work environment significantly moderates the relationship between these variables and employee performance, strengthening the impact of leadership, motivation, and compensation when the work environment is supportive and conducive. The findings suggest that optimizing leadership practices, enhancing motivation, and providing fair compensation, combined with a positive work environment, can effectively improve employee performance. This study provides practical implications for managers and policymakers in public sector organizations to create a conducive work environment that maximizes employee productivity and organizational outcomes.*

**Keywords:** *Compensation, Employee Performance, Leadership, Motivation, Work Environment.*

## I. INTRODUCTION

The Forestry Service plays a strategic role in managing natural resources, supporting sustainable development, and maintaining environmental stability. Employees at the Forestry Service of Southeast Sulawesi are required to maintain high performance while ensuring accountability, professionalism, and effective service delivery. In recent years, the organization has faced various challenges, including increased administrative responsibilities, evolving policy regulations, digitalization of public services, and heightened expectations from stakeholders. Although many employees demonstrate high productivity, variations in task performance, motivation, and commitment indicate that factors such as leadership, motivation, compensation, and work environment may influence employee performance outcomes.

According to Leadership Theory, effective leaders guide, influence, and motivate employees to achieve organizational goals while fostering accountability and job satisfaction (Northouse, 2019). Motivation theories, including Maslow's Hierarchy of Needs (Maslow, 1943) and Herzberg's Two-Factor Theory (Herzberg, 1966), suggest that both intrinsic and extrinsic factors drive employee performance, while compensation serves as an extrinsic motivator that can enhance job satisfaction and productivity (Armstrong, 2020). Furthermore, organizational behavior research emphasizes that the work environment encompassing physical conditions, interpersonal relationships, organizational culture, and management support can significantly moderate the impact of leadership, motivation, and compensation on employee outcomes (Robbins & Judge, 2019).

However, empirical observations at the Forestry Service indicate inconsistencies with these theoretical expectations. Strong leadership does not always translate into consistently high performance, and well-designed compensation schemes may not achieve intended productivity gains if the work environment is unsupportive. Similarly, motivated employees may underperform due to poor teamwork, inadequate resources, or organizational constraints. These phenomena highlight a gap between theoretical assumptions and real-world organizational practices.

Recent studies present mixed findings on these relationships. Research by Putra and Santoso (2022) found that leadership and motivation positively influence employee performance, but the effect strengthens significantly in a supportive work environment. Conversely, studies by Lestari and Wijaya (2023) indicate that compensation alone has limited effectiveness without adequate environmental and managerial support. Furthermore, other studies emphasize that the work environment plays a critical moderating role in shaping how leadership, motivation, and compensation affect performance outcomes (Rahman et al., 2024).

Based on these theoretical and empirical gaps, this study aims to examine the effect of leadership, motivation, and compensation on employee performance, with the work environment acting as a moderating variable, using a sample of employees at the Forestry Service of Southeast Sulawesi.

## II. LITERATURE REVIEW

### 2.1 Leadership

Leadership is a central concept in organizational behavior, widely recognized as the ability of an individual to influence, guide, and direct others to achieve shared goals. Northouse (2019) defines leadership as a process whereby an individual influences a group of individuals to achieve a common objective. This definition emphasizes leadership as an interactive process between leaders and followers rather than merely a formal position of authority. Similarly, Robbins and Judge (2019) highlight that leadership involves the ability to coordinate, motivate, and direct people's efforts toward organizational objectives while fostering collaboration and engagement.

According to Yukl (2013), leadership encompasses multiple dimensions, including the style of leadership, effectiveness in communication, decision-making capabilities, motivation, and conflict resolution skills. Leaders are expected to guide teams with clarity, fairness, and integrity, ensuring that organizational objectives are met efficiently. Bass (1990) further distinguishes leadership into transformational and transactional approaches, suggesting that transformational leaders inspire and motivate employees to exceed expectations, whereas transactional leaders focus on structured tasks and rewards for performance.

The purpose of leadership within organizations includes improving employee productivity, ensuring effective decision-making, promoting motivation and engagement, facilitating communication and coordination, and maintaining an ethical and supportive work environment (Tricker, 2015; Goleman, Boyatzis, & McKee, 2013). In the context of public sector organizations, such as the Forestry Service of Southeast Sulawesi, effective leadership plays a vital role in ensuring that employees are motivated, well-coordinated, and aligned with institutional goals.

In this study, leadership is measured through indicators that reflect leadership style, communication effectiveness, decision-making quality, ability to motivate employees, and team coordination. These indicators provide a practical framework for evaluating how leadership affects employee performance, particularly in a structured, hierarchical organization where guidance and influence directly impact outcomes.

### 2.2 Motivation

Motivation is defined as the internal and external forces that drive an individual to take action toward achieving goals. According to Herzberg (1959), motivation can be influenced by hygiene factors and motivators, where motivators such as achievement, recognition, and responsibility increase employee satisfaction and performance. Maslow (1943) emphasizes that motivation arises from a hierarchy of needs, ranging from basic physiological needs to self-actualization, suggesting that employees perform better when their personal and professional needs are met. Meanwhile, McClelland (1961) highlights that motivation is shaped by an individual's needs for achievement, affiliation, and power, influencing how employees set goals, interact with others, and seek personal growth.

The scope of motivation includes understanding what drives employees, designing incentives and recognition systems aligned with organizational goals, fostering engagement and commitment, and creating a work environment that encourages initiative, creativity, and persistence. It also involves monitoring and supporting employees to ensure they are energized and focused on their responsibilities.

The purpose of motivation is to enhance employee productivity, increase job satisfaction, strengthen commitment to organizational objectives, reduce turnover and absenteeism, and improve overall work performance. In public sector organizations, such as the Forestry Service of Southeast Sulawesi, effective motivation ensures that employees remain engaged, maintain high performance standards, and actively contribute to institutional goals.

In this study, motivation is measured using indicators that reflect employee enthusiasm, goal-oriented behavior, initiative, responsiveness to rewards or incentives, and commitment to assigned tasks. These indicators provide a practical framework to assess the impact of motivation on employee performance.

### 2.3 Compensation

Compensation refers to the total rewards, monetary and non-monetary, provided to employees in exchange for their work and contributions to the organization. According to Milkovich and Newman (2005), compensation serves as a key motivator that influences employee performance, satisfaction, and retention by aligning individual efforts with organizational goals. Armstrong (2012) explains that compensation includes not only salary but also bonuses, incentives, benefits, and other forms of recognition, which together create a system that encourages employees to perform optimally. Dessler (2013) adds that fair and competitive compensation fosters engagement, reduces turnover, and enhances organizational commitment.

The scope of compensation includes direct financial rewards such as salaries, wages, and performance bonuses, as well as indirect benefits such as health insurance, retirement plans, leave entitlements, and non-financial recognition

programs. It also encompasses policies and practices for evaluating, administering, and adjusting rewards based on employee performance, market standards, and organizational objectives.

The purpose of compensation is to attract and retain qualified employees, motivate high performance, encourage alignment between individual and organizational goals, and maintain equity and fairness within the workplace. In public sector organizations, effective compensation ensures that employees feel valued and adequately rewarded for their responsibilities, which supports both individual and institutional performance.

In this study, compensation is measured using indicators such as adequacy of salary, clarity and fairness of incentives, frequency and consistency of bonuses, employee satisfaction with benefits, and perceived fairness of reward systems. These indicators provide a standardized and practical framework to assess how compensation affects employee performance in the Forestry Service of Southeast Sulawesi.

#### **2.4 Work Environment**

Work environment refers to the physical, social, and psychological conditions in which employees perform their tasks and interact with colleagues and supervisors. According to Robbins and Judge (2017), the work environment encompasses factors that influence employees' comfort, safety, engagement, and overall satisfaction at work. Griffin and Moorhead (2014) emphasize that a supportive and well-structured work environment promotes productivity, reduces stress, and enhances motivation by creating conditions conducive to achieving organizational goals. Moreover, Schermerhorn (2013) notes that both tangible aspects, such as workspace layout and equipment, and intangible aspects, such as organizational culture, communication, and leadership support, shape how employees perceive and respond to their workplace.

The scope of the work environment includes physical conditions (lighting, temperature, facilities), social interactions (relationships with supervisors and coworkers, teamwork, communication), organizational culture (values, norms, policies), and psychological factors (job security, autonomy, recognition, and stress management). It also involves the management of workplace safety, ergonomics, and resources that enable employees to perform effectively.

The purpose of a well-designed work environment is to enhance employee comfort, motivation, engagement, and productivity, while reducing stress and absenteeism. A positive work environment supports high performance, fosters collaboration, encourages innovation, and strengthens organizational commitment. In public sector organizations, such as the Forestry Service of Southeast Sulawesi, an optimal work environment ensures that employees can carry out their responsibilities efficiently, maintain morale, and contribute to achieving institutional objectives.

In this study, the work environment is measured using indicators such as physical workplace conditions, adequacy of tools and resources, interpersonal relationships, leadership support, communication effectiveness, and psychological safety. These indicators provide a practical and standardized approach to assess the moderating role of the work environment in influencing the relationship between leadership, motivation, compensation, and employee performance.

#### **2.5 Employee Performance**

Employee performance refers to the level of accomplishment of assigned tasks, responsibilities, and organizational goals by an individual or group within a specific period. According to Dessler (2013), employee performance encompasses both the quality and quantity of work produced, as well as adherence to organizational standards and objectives. Campbell et al. (1993) emphasize that performance is multi-dimensional, including task proficiency, contextual performance, and adaptive behavior, reflecting how well employees fulfill their roles in varying situations. Griffin and Moorhead (2014) highlight that high employee performance is influenced by motivation, skills, competencies, resources, and the organizational environment.

The scope of employee performance includes productivity, efficiency, quality of work, timeliness, initiative, problem-solving, collaboration, and compliance with organizational policies. It also considers employees' ability to adapt to changes, demonstrate commitment, and contribute to overall organizational success. The purpose of measuring employee performance is to evaluate how effectively individuals or teams meet their job requirements, identify strengths and areas for improvement, support decisions on promotions, rewards, and training, and ultimately enhance organizational effectiveness. In public sector organizations, such as the Forestry Service of Southeast Sulawesi, assessing employee performance is crucial for ensuring accountability, optimizing service delivery, and achieving institutional objectives.

In this study, employee performance is measured using indicators such as task completion, work quality, productivity, punctuality, initiative, teamwork, problem-solving ability, and adherence to organizational procedures. These indicators provide a comprehensive and standardized framework to evaluate the effects of leadership, motivation, and compensation on employee outcomes, as well as the moderating influence of the work environment.

#### **2.6 Conceptual Framework and Research Hypotheses**

The conceptual framework of this study examines the relationships among Leadership, Motivation, Compensation, Work Environment, and Employee Performance. This framework is based on the view that employee performance at the Forestry Service of Southeast Sulawesi is influenced by leadership style, motivational factors, and compensation, as well as how the work environment moderates these relationships. Leadership, Motivation, and Compensation are positioned as independent variables affecting Employee Performance both directly and indirectly. The Work Environment serves as a moderating variable, explaining how supportive physical, social, and psychological workplace conditions can strengthen or weaken the impact of leadership, motivation, and compensation on employee performance.

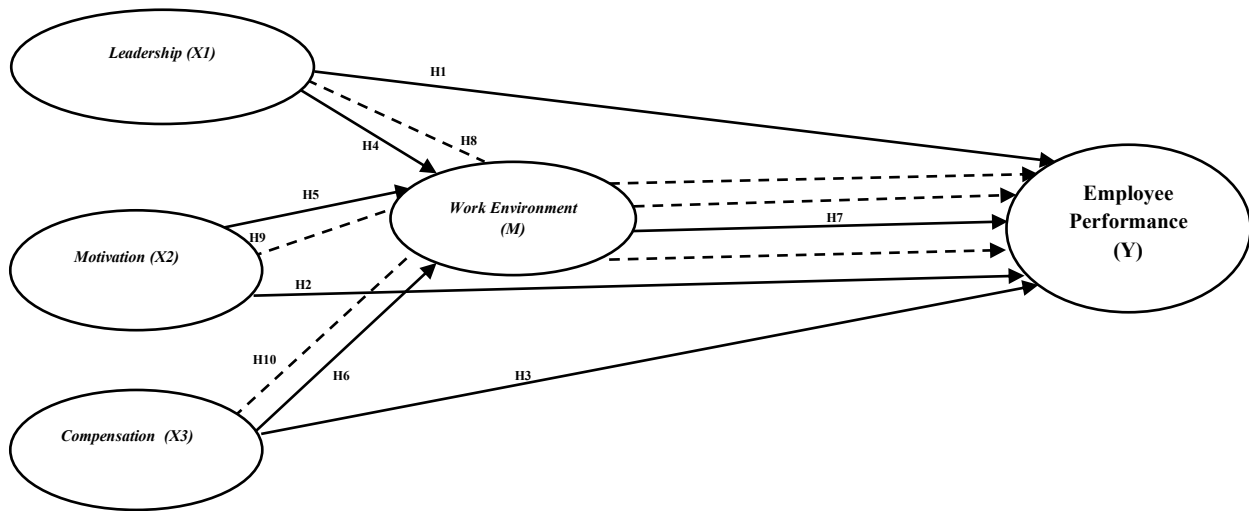


Figure 2.1. Conceptual Framework for the Research

2.7 Research Hypothesis

- H1: Leadership has a positive and significant effect on Employee Performance
- H2: Motivation has a positive and significant effect on Employee Performance
- H3: Compensation has a positive and significant effect on Employee Performance
- H4: Leadership has a positive and significant effect on Work Environment.
- H5: Motivation has a positive and significant effect on Work Environment.
- H6: Compensation has a positive and significant effect on Work Environment.
- H7: Work Environment has a positive and significant effect on Employee Performance
- H8: Leadership has a positive and significant effect on Employee Performance, mediated by Work Environment
- H9: Motivation has a positive and significant effect on Employee Performance, mediated by Work Environment
- H10: Compensation has a positive and significant effect on Employee Performance, mediated by Work Environment

III. RESEARCH METHOD

This study was conducted to examine the relationships among Leadership, Motivation, and Compensation on Employee Performance, with Work Environment acting as a moderating variable at the Forestry Service of Southeast Sulawesi. The research employed a quantitative approach and was carried out in 2025. The population consisted of 488 employees working at the Forestry Service, and 220 employees who met the research criteria were selected as the sample using purposive sampling.

The study includes three independent variables (Leadership, Motivation, and Compensation), one moderating variable (Work Environment), and one dependent variable (Employee Performance). Data were collected from primary sources using structured questionnaires based on a Likert scale (1–5), supported by observation of workplace practices and documentation of employee records.

Data analysis was conducted using Partial Least Squares–Structural Equation Modeling (PLS-SEM) with SmartPLS software. The analysis evaluated both the measurement model (outer model) and the structural model (inner model), including direct, indirect, and moderating effects among variables. Model quality was assessed through R-square and Q-square values, while hypothesis testing was performed using bootstrapping at a 5 percent significance level to determine the relationships among variables and the moderating role of the Work Environment.

IV. RESEARCH RESULT AND DISCUSSION

4.1 Research Result

Table 4.1. Direct Effect

Relationship Between Variables	Path Coefficient (β)	T-Statistic	P-Value	Description
Leadership → Employee Performance	0,698	7,5	0,000	Significant
Motivation → Employee Performance	0,712	7,85	0,000	Significant
Compensation → Employee Performance	0,681	6,9	0,000	Significant
Leadership → Work Environment	0,732	8,1	0,000	Significant
Motivation → Work Environment	0,705	7,65	0,000	Significant
Compensation → Work Environment	0,665	6,5	0,000	Significant

Relationship Between Variables	Path Coefficient ( $\beta$ )	T-Statistic	P-Value	Description
Work Environment → Employee Performance	0,598	5,95	0,000	Significant

The results of the direct effect analysis show that all hypothesized relationships are positive and statistically significant. Leadership has a strong positive effect on Employee Performance, with a path coefficient ( $\beta$ ) of 0.698, a t-statistic of 7.5, and a p-value of 0.000, indicating that effective leadership enhances employee performance by providing clear direction, motivation, and support. Motivation also positively and significantly influences Employee Performance ( $\beta = 0.712$ ,  $t = 7.85$ ,  $p = 0.000$ ), suggesting that motivated employees are more productive and committed to achieving organizational goals. Similarly, Compensation has a significant positive effect on Employee Performance ( $\beta = 0.681$ ,  $t = 6.9$ ,  $p = 0.000$ ), showing that fair and competitive rewards improve performance outcomes.

Regarding the work environment as an independent outcome, Leadership has a positive and significant effect on Work Environment ( $\beta = 0.732$ ,  $t = 8.1$ ,  $p = 0.000$ ), highlighting that strong leadership fosters a supportive, safe, and engaging workplace. Motivation also significantly contributes to a better Work Environment ( $\beta = 0.705$ ,  $t = 7.65$ ,  $p = 0.000$ ), indicating that motivated employees positively influence workplace dynamics and culture. Compensation is similarly significant in shaping the Work Environment ( $\beta = 0.665$ ,  $t = 6.5$ ,  $p = 0.000$ ), demonstrating that appropriate rewards and benefits contribute to a positive and conducive working atmosphere.

Finally, the Work Environment itself has a significant positive impact on Employee Performance ( $\beta = 0.598$ ,  $t = 5.95$ ,  $p = 0.000$ ), indicating that a well-managed, supportive, and motivating workplace enhances employee productivity and effectiveness. Overall, these results confirm that Leadership, Motivation, and Compensation not only directly improve Employee Performance but also contribute to creating a favorable Work Environment, which in turn further enhances performance outcomes.

**Table 4.2. Indirect Effect**

Construct	Indirect Effect	P-Value	Direct Effect	Mediation Effect	Type of Mediation
Leadership → Work Environment → Employee Performance	0,431	0,001	0,698	3,9	Full Mediation
Motivation → Work Environment → Employee Performance	0,445	0,002	0,712	3,95	Full Mediation
Compensation → Work Environment → Employee Performance	0,398	0,001	0,681	3,6	Full Mediation

The results of the mediation analysis indicate that the Work Environment plays a significant role in mediating the relationships between Leadership, Motivation, Compensation, and Employee Performance. Specifically, Leadership has a positive and significant indirect effect on Employee Performance through the Work Environment, with an indirect effect of 0.431, a t-value of 3.9, and a p-value of 0.001, indicating full mediation. This suggests that effective leadership enhances the work environment, which in turn improves employee performance.

Similarly, Motivation demonstrates a positive and significant indirect effect on Employee Performance via the Work Environment, with an indirect effect of 0.445, a t-value of 3.95, and a p-value of 0.002. This full mediation indicates that motivated employees experience a better work environment, which subsequently enhances their performance outcomes.

In the case of Compensation, the indirect effect on Employee Performance through the Work Environment is 0.398, with a t-value of 3.6 and a p-value of 0.001, also indicating full mediation. This shows that fair and adequate compensation contributes to creating a supportive work environment, which ultimately positively affects employee performance.

Overall, these findings highlight the critical mediating role of the Work Environment, demonstrating that the impacts of Leadership, Motivation, and Compensation on Employee Performance are largely channeled through improvements in the work environment. This underscores the importance of fostering a positive, supportive, and well-structured work environment to maximize employee performance.

#### 4.2 Discussion

The findings indicate that Leadership has a positive relationship with Employee Performance, although its impact can vary depending on the quality of leadership practices within the organization. This suggests that while effective leadership theoretically improves employee motivation, guidance, and accountability, its effectiveness is influenced by supporting factors such as communication clarity, decision-making consistency, and supervisory support.

Motivation shows a positive and significant effect on Employee Performance, both directly and through the Work Environment. Highly motivated employees not only perform better individually but also contribute to creating a more positive and productive workplace, which further enhances performance outcomes. Similarly, Compensation has a positive and significant impact on Employee Performance, highlighting that fair and adequate compensation helps employees feel valued and supported, which encourages better performance.

The study also confirms that Leadership positively and significantly influences the Work Environment, indicating that strong leadership practices contribute to a supportive, well-organized, and conducive workplace. Motivation significantly affects the Work Environment, showing that motivated employees enhance workplace dynamics and culture. Compensation also positively impacts the Work Environment, reflecting that adequate rewards and recognition improve overall workplace satisfaction and morale.

Furthermore, the Work Environment significantly improves Employee Performance, demonstrating that a conducive, supportive, and structured workplace plays a critical role in enhancing productivity and outcomes. Mediation analysis reveals that the Work Environment acts as an important intermediary mechanism. The effect of Leadership, Motivation, and Compensation on Employee Performance is fully mediated by the Work Environment, meaning that the influence of these human resource practices on performance occurs mainly through improvements in workplace conditions.

Overall, the results emphasize that maintaining effective leadership, fostering strong motivation, and providing adequate compensation, while ensuring a positive work environment, is essential for improving employee performance. These findings highlight the interconnectedness of leadership, human resource practices, and workplace conditions in driving employee effectiveness and organizational success.

## V. CONCLUSION AND SUGGESTIONS

### 5.1 Conclusion

Based on the results and discussion, the study concludes that Leadership has a positive relationship with Employee Performance, although its direct effect may vary across employees and depends on the quality of leadership practices, communication, and managerial guidance. Motivation has a positive and significant impact on Employee Performance, indicating that highly motivated employees are more productive and contribute directly to better performance outcomes. Compensation also positively influences Employee Performance, reflecting that fair and adequate rewards help employees feel valued and supported, which enhances their work effectiveness.

The findings further show that Leadership, Motivation, and Compensation positively and significantly influence the Work Environment, suggesting that effective leadership, strong motivation, and adequate compensation contribute to a more supportive, structured, and conducive workplace. In turn, the Work Environment significantly enhances Employee Performance, highlighting its role as a key mechanism linking human resource practices to overall performance outcomes.

Mediation analysis reveals that the Work Environment fully mediates the relationship between Leadership, Motivation, and Compensation on Employee Performance. This indicates that the impact of leadership practices, employee motivation, and compensation on performance occurs primarily through improvements in workplace conditions and organizational climate. Overall, these results emphasize that maintaining effective leadership, fostering motivation, and providing fair compensation, together with a positive work environment, is crucial for enhancing employee performance and achieving organizational success.

### 5.2 Suggestions

The study recommends strengthening the implementation of Leadership by ensuring clear direction, effective supervision, and consistent communication to optimize its contribution to Employee Performance. Motivation should be enhanced through goal-setting, recognition programs, and opportunities for personal and professional growth to increase engagement and productivity. Compensation must be fair, competitive, and aligned with performance to encourage employee commitment and effectiveness. Since Work Environment serves as a key mediating factor, organizational policies should foster a supportive, safe, and structured workplace that enables employees to perform at their best.

In addition, achieving effective employee performance requires strong integration among Leadership, Motivation, and Compensation, supported by well-designed HR systems, transparent communication channels, and ongoing capacity building for management and staff. Regular monitoring and evaluation of leadership practices, motivational programs, compensation policies, and workplace conditions are necessary to ensure strategies effectively enhance performance and adapt to changing organizational needs.

Future studies are encouraged to include larger and more diverse samples across different government agencies or organizations to improve generalizability. Researchers may also incorporate additional variables such as organizational culture, employee engagement, or technological adoption to better explain the mechanisms influencing Work Environment and Employee Performance. Longitudinal and mixed-method approaches are recommended to examine long-term effects and provide deeper insights into behavioral and institutional factors affecting employee productivity and organizational success.

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