

The Influence of The Work Environment On Employee Performance Through Job Satisfaction As An Intervening Variable

Tarissa Aura Aulia^{1*}, Sumarni², Dwi Kurniawan³

Faculty of Economics and Business, Jambi University, Indonesia

Corresponding Author: Tarissa Aura Aulia tarissaauraaulia@gmail.com

ARTICLE INFO

Keywords: Employee Performance, Work Environment, Job Satisfaction

Received : 17, July

Revised : 15, August

Accepted: 25, August

©2025 Aulia, Sumarni, Kurniawan :

This is an open-access article distributed under the terms of the [Creative Commons Attribution 4.0 International](https://creativecommons.org/licenses/by/4.0/).



ABSTRACT

This study aimed to examine the influence of the work environment on employee performance at the Jambi Provincial Transportation Agency, with job satisfaction serving as a mediating variable. A quantitative research design was employed, involving 61 respondents selected through simple random sampling from a total population of 154 employees. Data were collected using a Likert scale questionnaire and analyzed through Structural Equation Modeling (SEM) with the assistance of SmartPLS 4 software. The findings revealed that the work environment had a positive and significant impact on both job satisfaction and employee performance. Furthermore, job satisfaction significantly influenced employee performance and mediated the relationship between the work environment and performance outcomes.

INTRODUCTION

One of the most important aspects in an organization is human resources (HR). High-quality HR is managed professionally and is always encouraged to improve efficiency and effectiveness in working. Employee performance reflects the extent to which they can carry out their duties and responsibilities in accordance with the standards set by the organization. This opinion is supported by experts who state that performance is the result of employee work as a whole within a certain period of time, where they carry out their duties, including achieving work results and targets that have been mutually agreed upon (Manu et al., 2022).

The work environment includes all the tools, materials, and atmosphere in the place where a person carries out their duties, as well as the way they work and the existing arrangements, both in individual and group contexts (Jodie Firjatullah et al., 2023). Job satisfaction is a pleasant condition or positive feeling that arises when an individual evaluates their work or work experience.

Although several previous studies have confirmed that the work environment has a positive effect on employee performance (Ahmad et al., 2022; Badrianto et al., 2022; Nugrahaningsih & Julaela, 2019), most of these studies emphasized only the direct relationship between the work environment and performance. Few have examined in depth the **mediating role of job satisfaction**, particularly in the context of local government agencies such as the Jambi Provincial Transportation Agency. Job satisfaction may serve as an important psychological factor that bridges the influence of the work environment on employee performance improvement. In addition, previous studies have predominantly focused on the private sector or manufacturing industries, thereby limiting the generalizability of their findings to public service institutions. Therefore, this study carries both academic and practical urgency by providing empirical evidence of the mediating role of job satisfaction in the relationship between the work environment and employee performance within the public sector.

THEORETICAL REVIEW

Employee Performance

Performance refers to the extent of an individual's accomplishments in fulfilling assigned tasks within a given timeframe. This concept refers to mutually agreed-upon work standards and targets (Manu et al., 2022). Performance can be understood as an employee's work output, measured through two main aspects: quality and quantity. This assessment is conducted when employees carry out their tasks according to their assigned responsibilities. The measures used to measure performance (Ayunasrah et al., 2022) include: understanding of job duties, innovation, work speed, work accuracy, and collaboration.

Work Environment

The work environment encompasses all the tools, materials, and atmosphere in which a person performs their duties, as well as work methods and arrangements, both individually and in groups (Jodie Firjatullah et al., 2023). This

environment also reflects the social, psychological, and physical dimensions within a company, which influence the performance of its workers. The social aspects referred to include values, attitudes, views, and patterns or lifestyles that develop in their surroundings. Measurement of the work environment can be divided into two categories, namely (Sihaloho & Siregar, 2020): 1. The physical work environment includes the workplace building, adequate work equipment, facilities and equipment. 2. The non-physical work environment includes relationships with superiors, relationships with colleagues at the same level, and relationships with subordinates.

Job Satisfaction

Job satisfaction is an emotional state that reflects an employee's positive or negative feelings about their job. This condition is unique and diverse, influenced by the values held by each individual. Therefore, the more aspects of a job align with a person's expectations and desires, the higher the level of satisfaction they experience. According to Hasibuan (in Mardiana et al., 2020), job satisfaction is measured by: loving and enjoying one's job, work morale, discipline, and work performance.

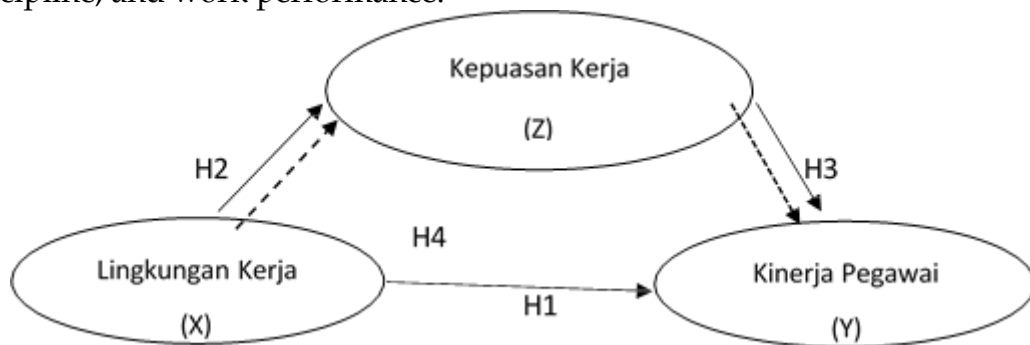


Figure 1. Conceptual Framework

METHODOLOGY

This research employs a quantitative descriptive approach. The study population consists of all 154 employees at the Jambi Provincial Transportation Agency. By applying the Slovin formula, a sample of 61 respondents was determined using a simple random sampling method.

The data utilized in this research include both primary and secondary sources. Primary data were collected through questionnaires developed based on the indicators of each variable, namely the work environment (X), job satisfaction (Z), and employee performance (Y), measured using a Likert scale. Secondary data were gathered from books, journals, articles, internal organizational records, and other relevant literature.

The data analysis technique was carried out using the Structural Equation Modeling (SEM) method with the Partial Least Square (PLS) analysis tool through SmartPLS 4 software. Tests were carried out on direct and indirect relationships based on four formulated hypotheses. This study employed Structural Equation Modeling–Partial Least Squares (SEM-PLS) using SmartPLS 4 software. The choice of SEM-PLS as the analytical tool was based on several

considerations. First, SEM-PLS is particularly suitable for research models that involve **mediation or intervening variables**, as in this study where job satisfaction mediates the effect of the work environment on employee performance. Second, SEM-PLS can be effectively applied even with a relatively **small to medium sample size** ($n = 61$), compared to covariance-based SEM which generally requires larger samples. Third, SEM-PLS does not assume multivariate normality, making it more flexible when analyzing data obtained from Likert-scale questionnaires, which often deviate from normal distribution. Lastly, SEM-PLS allows simultaneous testing of measurement models (validity and reliability) and structural models (hypothesis testing), thereby providing more comprehensive results for both theoretical and practical purposes.

Table 1. Research Variable Indicators

Variable	Indicator	Item Code	Source
Work Environment (X)	Physical conditions of the workplace (room, lighting, ventilation, cleanliness)	X1	Sihaloho & Siregar (2020)
	Availability of facilities and work equipment	X2	Sihaloho & Siregar (2020)
	Relationship with supervisor	X3	Jodie Firjatullah et al. (2023)
	Relationship with colleagues	X4	Jodie Firjatullah et al. (2023)
	Relationship with subordinates (for those who have staff)	X5	Jodie Firjatullah et al. (2023)
Job Satisfaction (Z)	Enjoying and loving the job	Z1	Hasibuan in Mardiana et al. (2020)
	Work morale	Z2	Hasibuan in Mardiana et al. (2020)
	Discipline in carrying out tasks	Z3	Hasibuan in Mardiana et al. (2020)
	Satisfaction with work performance	Z4	Hasibuan in Mardiana et al. (2020)
Employee Performance (Y)	Understanding of duties and responsibilities	Y1	Ayunasrah et al. (2022)
	Ability to innovate	Y2	Ayunasrah et al. (2022)
	Speed in completing tasks	Y3	Manu et al. (2022)

	Accuracy of work results	Y4	Manu et al. (2022)
	Ability to collaborate with colleagues	Y5	Ayunasrah et al. (2022)

RESULTS

Validity and Reability Test

Table 2. Validity and Reability Test

Variable	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Work Environment (X)	0.885	0.886	0.912	0.635
Employee Performance (Y)	0.948	0.948	0.955	0.681
Job Satisfaction (Z)	0.936	0.937	0.947	0.692

The Cronbach's Alpha and Composite Reliability scores for each variable in this study were greater than 0.70, based on the data in the table above. Therefore, the instrument used has a high level of reliability. Furthermore, the Average Variance Extracted (AVE) value for each variable was above 0.50, indicating that the test construct has strong convergent validity.

Test R-Square

Table 3. Test R-Square

Variabel	R-Square	R-Square Adjusted
Kinerja Pegawai (Y)	0.739	0.730
Kepuasan Kerja (Z)	0.784	0.780

Referring to the data presented in the table, the R-Square value for the Job Satisfaction (Z) variable is 0.739, indicating that employee performance accounts for 73.9% of the variation in job satisfaction. In addition, organizational support together with job satisfaction explains 78.4% of the variation in work motivation, as reflected by the R-Square value of 0.784 for work motivation (Y). These results demonstrate that the model possesses strong and reliable predictive power.

Boostraping Hypotesis Testing

Table 4. Boostraping Hypotesis Testing

Variabel	Original Sampel (O)	Sample Mean (M)	Standar d Deviaton (STDEV)	T Statistics (/O/STDEV/)	P Values
Lingkungan kerja (X) -> Kinerja Pegawai (Y)	0.845	0.842	0.046	18.441	0.000
Lingkungan Kerja (X) -> Kepuasan kerja (Z)	0.885	0.882	0.034	26.039	0.000
Kepuasan Kerja (Z) -> Kinerja Pegawai (Y)	0.333	0.319	0.164	2.027	0.043

According to the data presented in the table above, all correlations between the variables are positive and significant ($p\text{-value} < 0.05$ and $T > 1.96$). This implies the following:

1. Work Environment (X) and Employee Performance (Y)

The statistical results indicate that the T-values exceed 1.96 and the p-values fall below 0.05. These outcomes validate the first hypothesis, showing that the work environment has a positive and significant influence on employee performance.

2. Work Environment (X) and Job Satisfaction (Z)

The table clearly shows that the T-values are greater than 1.96 and the p-values are less than 0.05. These findings support the second hypothesis, confirming that the work environment exerts a positive and significant effect on job satisfaction.

3. Job Satisfaction (Z) and Employee Performance (Y)

The statistical evidence also demonstrates that the T-values exceed 1.96 and the p-values are below 0.05. This result affirms the third hypothesis, indicating that job satisfaction has a positive and significant effect on employee performance.

Indirect Testing Hyphotesis

Table 5. Indirect Testing Hyphotesis

Variabel	Original Sampel (O)	Sample Mean (M)	Standar d Deviaton (STDEV)	T Statistics (/O/STDEV/)	P Values
Lingkungan Kerja (X) -> Kepuasan Kerja (Z) -> Kinerja Pegawai (Y)	0.295	0.282	0.147	2.004	0.045

The data in the table indicate that job satisfaction serves as a significant mediating variable in the relationship between the work environment and employee performance. This conclusion is supported by the statistical results, where the T-

value exceeds 1.96 and the p-value is below 0.05, confirming that the mediation hypothesis is accepted.

DISCUSSION

The findings of this research demonstrate that the work environment exerts a positive and significant effect on employee performance. An improved work environment contributes to higher performance levels, while an unfavorable environment tends to reduce performance. In addition, the results indicate that the work environment has a positive and significant effect on job satisfaction. A supportive and conducive environment increases job satisfaction, whereas an unsupportive environment lowers it.

Moreover, the study highlights that job satisfaction significantly enhances employee performance. Employees who experience greater satisfaction with their jobs are more likely to perform better, while those with lower satisfaction tend to show weaker performance. The results also confirm that the work environment positively influences employee performance at the Jambi Provincial Transportation Agency, with job satisfaction functioning as a mediating (intervening) variable in this relationship.

Interestingly, the mediation analysis indicates that **job satisfaction acts as a significant intervening variable** between the work environment and employee performance. This means that the effect of the work environment is not only direct but also channeled through the psychological state of employees. In practical terms, even if an organization invests in modern infrastructure and equipment, the expected improvement in performance may not be realized unless employees feel satisfied with their roles and responsibilities. This finding extends the literature by emphasizing the need to consider psychological mediators in HRM models, especially in government institutions where non-financial factors often play a stronger role than material incentives.

From a broader perspective, these results contribute both theoretically and practically. Theoretically, the findings enrich the body of knowledge on human resource management in the public sector, an area that has been relatively underexplored compared to studies in manufacturing or private companies. While most previous studies highlighted direct relationships, this research shows that indirect effects through psychological variables provide a more comprehensive understanding of employee behavior. Practically, the study implies that managers and policymakers within government institutions need to focus not only on the physical dimensions of the work environment but also on fostering social relationships, recognition, and emotional well-being of employees.

The results also invite further reflection on the **unique challenges of public sector organizations**. Unlike private firms, government agencies such as the Jambi Provincial Transportation Agency operate under regulatory frameworks and budgetary limitations. Thus, non-financial aspects like collegial support, clear communication, and fair treatment become essential levers to boost satisfaction and performance. By addressing these aspects, public sector leaders can reduce turnover intentions, increase organizational commitment, and ultimately improve the quality of public services.

Another implication lies in the context of **organizational culture**. A conducive work environment is not merely about physical arrangements but also about shaping a culture of mutual trust, openness, and collaboration. When leaders promote a culture that values employee input, encourages innovation, and ensures fairness, job satisfaction is likely to increase, leading to higher performance. This underlines the importance of leadership style and organizational justice as complementary factors that could be explored in future studies.

Finally, the results highlight the strategic role of HRM policies in the public sector. The findings suggest that the **integration of work environment management with employee satisfaction programs** can generate synergistic effects on performance. For instance, periodic surveys on employee satisfaction, training on teamwork and communication, and investments in ergonomic workplace design can create sustainable improvements in performance levels.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the analysis and discussion, this study concludes that the work environment has a positive and significant impact on both job satisfaction and employee performance at the Jambi Provincial Transportation Agency. Job satisfaction itself was also found to significantly improve employee performance and serve as a mediating variable between the work environment and performance outcomes. These findings emphasize the dual importance of creating a supportive work environment and maintaining employee satisfaction to ensure optimal performance.

From a practical perspective, the results highlight that public sector institutions should not only focus on providing adequate facilities and infrastructure but also pay attention to non-physical aspects of the work environment, such as leadership support, communication, and collaboration among employees. A work environment that is physically comfortable but socially unsupportive will not generate sustainable satisfaction. Therefore, management is recommended to adopt a more holistic approach that integrates physical improvements with efforts to strengthen interpersonal relationships and recognition systems.

In addition, the study recommends that the Jambi Provincial Transportation Agency conduct regular evaluations of employee satisfaction to identify emerging issues and respond with timely interventions. Training programs that enhance teamwork, communication, and innovation should also be implemented to foster a more dynamic and engaging workplace. By doing so, employee satisfaction and performance can be continuously improved in line with organizational goals.

Finally, this research contributes not only to the theoretical development of human resource management in the public sector but also to practical strategies for improving service quality through employee performance. Strengthening the link between work environment and job satisfaction is expected to create a more motivated, disciplined, and high-performing workforce that can meet the increasing demands of public service delivery.

Recommendations

1. Based on the research findings, it is recommended that the Department of Transportation further enhance its facilities and equipment to ensure better adequacy, as this can increase employee job satisfaction and ultimately improve overall performance.
2. For future studies, the results of this research may serve as a useful reference and foundation for subsequent researchers.

FURTHER STUDY

This research still has limitations, and the authors recognize that there are some shortcomings that need to be corrected. Therefore, further research is needed to further examine the influence of organizational support on work motivation with job satisfaction as an intervening variable, in order to refine the findings of this study and make a broader contribution to the development of human resource management science and practice.

ACKNOWLEDGMENT

The author would like to thank the supervisor, management and employees of Dinas Perhubungan Provinsi Jambi, as well as all parties who have helped and supported the smooth running of this research, both directly and indirectly.

REFERENCES

- Ahmad, A. J., Mappamiring, & Mustari, N. (2022). Pengaruh Lingkungan Kerja Terhadap Kinerja Pegawai di Dinas Pendidikan dan Kebudayaan Kabupaten Bulukumba. *Kajian Ilmiah Mahasiswa Administrasi Publik*, 3(1), 287–298.
- Ahmad, Y. ., Tewal, B. ., & Taroreh, R. N. (2019). Pengaruh Stres Kerja, Beban Kerja, Dan Lingkungan Kerja Terhadap Kinerja Karyawan Pada Pt. Fif Group Manado. *Jurnal EMBA : Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 7(3), 2303–1174
- Badrianto, Y., Ekhsan, M., & Mulyati, C. (2022). Pengaruh Gaya Kepemimpinan, Lingkungan Kerja dan Beban Kerja terhadap Kinerja Karyawan. *Jesya (Jurnal Ekonomi & Ekonomi Syariah)*, 5(1), 401–410. <https://doi.org/10.36778/jesya.v5i1.607>
- Basyid, A. (2024). Pengaruh Motivasi Kerja Terhadap Kinerja Karyawan. *Manajerial Dan Bisnis Tanjungpinang*, 7(1), 39–43. <https://doi.org/10.52624/manajerial.v7i1.2430>
- Dwianto, A. S., Purnamasari, P., & Tukini, T. (2019). Pengaruh Kompensasi Terhadap Kinerja Karyawan Pada PT. JAEIL INDONESIA. *Jesya (Jurnal*

Ekonomi & Ekonomi Syariah), 2(2), 209–223.
<https://doi.org/10.36778/jesya.v2i2.74>

Etik Setyorini, E. S., & Hanifah Noviandari. (2022). Pengaruh Tingkat Pendidikan, Pengalaman Kerja, dan Komitmen terhadap Kinerja Karyawan. *QULUBANA: Jurnal Manajemen Dakwah*, 3(1), 47–61.
<https://doi.org/10.54396/qlb.v3i1.295>

Nugrahaningsih, H., & Julaela. (2019). Pengaruh Disiplin Kerja dan Lingkungan Kerja Terhadap Kinerja Karyawan dengan Kepuasan Kerja Sebagai Variabel Intervening pada PT Tempuran Mas. *Jurnal Online Internasional & Nasional*, 4(1), 61–76.