Impact of Work Environment and Transformational Leadership on Employee Performance in Government Institutions: Mediating Role of Job Satisfaction

Denuri Isnanda1), Karmila2), Muhammad Nur Fauzan Akbar3), D Hardjowikarto4)
1,2,3,4) Management, Faculty of Economy and Business, Universitas Swadaya Gunung Jati Indonesia

*Corresponding Author
Email: lisaharry@ugj.ac.id

Abstract
This research aims to determine how the work environment and transformational leadership style in government agencies influence performance through job satisfaction. This research used quantitative methods; out of 114 civil servants, 89 people filled out the survey based on Slovin’s calculations against Umar. The survey was then conducted via Google Forms using proportional stratified random sampling to select the sample. The data were analyzed using the structural equation modeling (SEM) approach with the partial least squares (PLS) method. According to research, the work environment and transformational leadership improve employee performance, with or without the mediating influence of job satisfaction. It can be seen from the test results that the work environment influences the level of job satisfaction (p < 0.05, t > 3.005), transformational leadership influences job satisfaction (p < 0.001, t > 3.224), the work environment influences employee performance (p < 0.017, t > 2.386), and transformational leadership influences employee performance (p < 0.000, t > 18.026). A supportive work environment, transformational leadership, and employee performance are positively related to job satisfaction, mediating these three aspects, as seen from job satisfaction mediating the relationship between the work environment and employee performance (p < 0.000, t > 4.603). Also, job satisfaction mediates the relationship between transformational leadership and employee performance (p < 0.003, t > 2.922). This shows that job satisfaction mediates the relationship between the company's work environment, transformational leadership, and employee performance. We expect future research to expand our examination to include other public and private sector factors influencing employee performance and job satisfaction.

Keywords: Work Environment, Transformational Leadership, Job Satisfaction, Employee Performance

INTRODUCTION
In the era of globalization, improving human resources (HR) quality is the primary key to developing organizational management, which aims to increase organizational competitiveness in facing increasingly complex challenges and opportunities. Improving employee performance is critical in improving human resources quality. Optimal employee performance will result in productivity and quality service. Employee performance is not just an internal aspect of the organization but is also a determinant of success in providing quality services to the public. Employee performance has a significant influence on the growth of an organization. An organization performs well if it can achieve its goals with the workload given to someone according to their abilities.

Rivai and Basri (2005), quoted by Sinambela (2019), define performance as the level of achievement achieved by a person or group within a certain period about predetermined benchmarks, standards, targets, or objectives. An employee's current or previous performance is compared with predetermined performance benchmarks (Gary, 2017). The performance metrics used in this research, as referred to by Sutrisno (2016) from Bernadin and Russell, include quality, quantity, timeliness, cost-effectiveness, supervisory demands, and influence on interpersonal interactions with colleagues (Susijawati et al., 2023). Understanding the elements influencing employee performance is critical to achieving optimal results. Both internal and external factors may have an impact on the company. The work environment is an essential internal aspect. According to Robbins and Timothy A. (2015), comfort and ease of completing work are two
aspects of the work environment that may influence employee performance. Workers who make extra efforts to improve the atmosphere of their workplace are more likely to reach their full potential. The relationship between the quality of employee work and non-physical aspects of the work environment was investigated by Rahmawanti (2014). The findings show that factors other than the physical workplace, such as interpersonal dynamics and company culture, positively impact worker productivity (Kurniawan, 2022). According to previous research (Hakim et al., 2023), the work environment positively and significantly influences employee performance.

Leadership is another essential internal component. Strong leaders use a transformational leadership style to motivate their followers to prioritize the organization's needs above their own (Robbins et al., 2018). According to Meildy Louisa Kese and Dylmoon Hidayat, transformational leadership motivates and encourages followers to exceed their expectations and interests to achieve common goals (Kese et al., 2021). Usman (2009) defines transformational leadership as a solid and visionary leadership style. Transformational leaders set ambitious goals, inspire followers, and implement effective long-term strategies. They also have high integrity, understand their subordinates well, and can build harmonious relationships (Y. et al., 2020). Previous research by Jopanda, H. (2021) shows that transformational leadership positively and significantly influences employee performance.

Internal and external influences, including job satisfaction, can influence employee performance. An employee's view of his work measures his job happiness. Retention and performance are influenced by employee satisfaction with their job. According to Sree, R., and Satyavathi (2017), quoted from Sriwardani et al., 2021, job satisfaction has been identified as a factor that may explain organizational success and employee intentions to leave. "job satisfaction" means how happy or unhappy the worker is with his job (Sutrisno, 2012, p. 75). The three main factors contributing to overall job satisfaction are each employee, the nature of the job, and the company they work for. Therefore, to achieve job satisfaction, it is necessary to consider the quality of each of these parts (Haryono, 2022). According to previous research (Sulastiningtiyas B & Nilasari, 2018), job satisfaction mediates between leadership and the work environment, ultimately influencing performance.

Government agencies have a strategic role in providing quality public services. The success of government agencies in achieving their goals and satisfying their constituents depends significantly on their employees' work. The issue of performance has become a strategic issue in government bureaucracy, considering that its impact is vast in the political and economic fields. In general, performance is viewed as the level of success or work results of an employee in carrying out his duties, which can increase economic growth and spearhead public trust (Mangkunegara, 2001). In the dynamics of organizational development, especially in the public sector, emphasis on efficiency and effectiveness is becoming increasingly important. As government institutions, government institutions strategically provide quality public services. Good management depends on the organizational structure and policies implemented and the quality of individual employee performance (Nadjib, 2020).

The previous research above shows the positive influence of the work environment, transformational leadership, and job satisfaction on employee performance. However, further research is still needed to examine the impact of these two variables simultaneously, with job satisfaction as the mediator, in the government context. Workplace factors, transformative leadership, and employee performance may be influenced by how satisfied workers are with their jobs.
RESEARCH METHODS

Type of Research

This research aims to determine the relationship between work environment, transformational leadership, job satisfaction, and employee performance at Government Institutions. It uses a quantitative methodology with explanations to conclude. This research approach is applied to a specific sample based on positivism. Data is collected using research tools to evaluate previously established hypotheses and examined quantitatively and statistically. The associative problem formulation used in this research asks about the nature of the causal relationship between many variables (Sugiyono, 2017).

Research Design

This research was carefully designed to examine the relationships between variables using a causal-comparative approach; this research systematically analyzes the relationship between dependent, independent, and intervention variables and explains how these components interact (Wahjudi, 2020). These elements show how a transformational leadership style and a positive work environment can influence employee performance by increasing or decreasing job satisfaction. Workers will feel more satisfied working in a supportive atmosphere led by a transformational approach. When workers feel confident with their work, they give their best effort. Therefore, proper work environment management and a transformational leadership style can improve employee performance. Making this decision deepens our comprehension of the intricate processes that underlie organizational behavior. This investigation employed a quantitative methodology to understand the complicated interactions better.

Figure 1. Conceptual Framework

Population and Sample

The research population involved all civil servants at the Government Institutions. Population is defined by Sugiyono (2017: 8) as a collection of objects or people who have the same characteristics that researchers choose to study to reach conclusions. The research population was 114 people who worked at the Government Institutions. Participants in this study will be randomly selected from a pool of potential respondents using random selection techniques. Therefore, we want to guarantee that our sample truly represents the population as a whole. A sampling technique representing the whole population has an equal chance of being sampled. Quote: Sugiyono (2017:82).

https://ijhess.com/index.php/ijhess/
This research uses a random stratified proportional sampling method for probability sampling. This approach is applied because the population has proportionally stratified components or members (Sugiyono, 2017). The population in this study was 114 employees. Because the population exceeded 100 respondents, the researcher determined the sample size using the Slovin formula in Umar (2014:78). Based on calculating a population of 114, a sample size of 89 samples was obtained. Researchers used groups and sections of government institutions to determine the sample strata for this research. The proportional stratified random sampling method was used to calculate sampling.

**Data Collection Technique**

Researchers collect information through several means, such as G-form questionnaires, interviews, field studies (which involve searching for answers on-site), and literature reviews (which include reading topics in books, journals, and reports). Data for this research was collected using a questionnaire. Respondents are asked to rate written statements or questions using a Likert scale. There are five levels of answers: strongly agree (5), agree (4), entirely agree (3), disagree (2), and strongly disagree (1) (Sugiyono, 2017).

**Data Analysis Technique**

Data must be processed and analyzed to comprehend this research's conclusions fully. The author employed Partial Least Squares (PLS) software to assess the research model and hypothesis. Partial Least Squares Structural Equation Modeling (PLS-SEM) is a modern approach to multivariate analysis. In theory, it can approximate a cause-and-effect model. PLS-SEM predicts and prioritizes complicated correlations without overwhelming the data or requiring strict relationship criteria. This method identifies factors with flexible residual covariance structures using factor determination, directly examining latent variable scores. It produces dependable predictions even when the short sample size, asymmetric distribution, and observations are interdependent. (Zeng et al., 2021).

**Outer Model**

Outer Model Analysis explains the relationship between abstract concepts (latent variables) and their measurements in the real world (indicators). In reflective models, where latent variables “cause” their indicators, this analysis focuses on the validity and reliability of the measurements. Outer Model Analysis for reflective indicators ensures that the selected indicators reflect the latent variable you want to measure. This is done by testing the validity and reliability of indicators through several criteria such as factor loading, Composite Reliability, AVE (Average Variance Extracted), and Cronbach Alpha (Nasution et al., 2020).

**Inner Model**

An R² value > 0.67 indicates a robust model, > 0.33 indicates a medium model, and > 0.19 indicates a weak model. These values describe the strength of the relationship between dependent and independent latent variables, which are used to explain the structural model in PLS (Jumardi, 2020). When testing the influence of factors, whether direct (path coefficient) or indirect (specific indirect effect), two criteria are used: the path coefficient and the t-statistic. The statistical value must be greater than 1.96, and the hypothesis is judged significant if the P-value is less than 0.05.
RESULT AND DISCUSSION

Profile Respondent

Respondent profiles are based on gender, age, and length of employment. Men comprise 62.2% (55 out of 89) of the workforce. The most common age group is 30-40 years (36.7%), and the length of service is 11-15 years (42.9%). The respondent profile shows that the Government Institutions currently have employees who work predominantly with mature men and have sufficient work experience.

Average Variance Extracted (AVE)

The Average Variance Extracted (AVE) test results suggest that this measurement model's elements effectively explain the observed variability. Table 1 shows that the AVEs for the Work Environment, Transformational Leadership, Job Satisfaction, and Employee Performance constructs are 0.723, 0.673, 0.633, and 0.693, respectively. These AVE values above the 0.5 criterion indicate that each construct could account for the observed variability in data.

<table>
<thead>
<tr>
<th>Variable</th>
<th>AVE</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Environment</td>
<td>0.723</td>
<td>Valid</td>
</tr>
<tr>
<td>Transformational Leadership</td>
<td>0.673</td>
<td>Valid</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>0.633</td>
<td>Valid</td>
</tr>
<tr>
<td>Employee Performance</td>
<td>0.693</td>
<td>Valid</td>
</tr>
</tbody>
</table>

Source: Primary Data Processing 2024 with SEM-PLS

Reliability Test

The Cronbach's Alpha value in Table 2 surpasses 0.8, higher than the usually accepted minimum requirement of 0.7. It denotes that each variable has high reliability, with indicators within the construct regularly and reliably assessing the desired construct. As a result, each variable's measurement is reliable within the framework of this study.

In addition to Cronbach's Alpha, dependability was assessed using the Composite Reliability (CR) approach. The analytical results indicate that the Composite Reliability value for all constructions is more significant than 0.8. This value exceeds the minimal predicted threshold of 0.7, suggesting strong reliability. The findings reveal that each construct is dependable, with signs that correlate well and remain stable when assessing the intended construct. So, the measurements of each component in this study are correct.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach’s Alpha</th>
<th>Composite Reliability</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Environment</td>
<td>0.952</td>
<td>0.959</td>
<td>Valid</td>
</tr>
<tr>
<td>Transformational Leadership</td>
<td>0.879</td>
<td>0.885</td>
<td>Valid</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>0.918</td>
<td>0.922</td>
<td>Valid</td>
</tr>
<tr>
<td>Employee Performance</td>
<td>0.911</td>
<td>0.914</td>
<td>Valid</td>
</tr>
</tbody>
</table>

Source: Primary Data Processing 2024 with SEM-PLS
Path Model
The graphic below illustrates the results of the bootstrapping process.

![Path Model Diagram]

**Figure 2.** Bootstrapping Path Coefficient
Source: Primary Data Processing 2024 with SEM-PLS

Path Coefficients
The analysis in Table 3 shows a strong relationship between the Work Environment variable and Job Satisfaction, as well as between the Transformational Leadership variable and Job Satisfaction, the Work Environment variable and Employee Performance, and between the Satisfaction variable and the Employee Performance variable. This relationship's t-statistic and path coefficient values were more significant than 1.96, and the p-value was less than 0.05. There is a clear and favorable correlation between the variables, as seen in the table below.

| Variable Relationship | Sample Mean (M) | T Statistics (|O/STDEV|) | P Values | Hypotesis       |
|-----------------------|----------------|-----------------|----------|---------------|
| Work Environment -> Job Satisfaction | 0.316 | 3.005 | 0.003 | Significant Positive |
| Transformational Leadership -> Job Satisfaction | -0.294 | 3.244 | 0.001 | Significant Positive |
| Work Environment -> Employee Performance | 0.133 | 2.386 | 0.017 | Significant Positive |
| Transformational Leadership -> Employee Performance | 0.767 | 18.026 | 0.000 | Significant Positive |
| Job Satisfaction -> Employee Performance | -0.230 | 4.603 | 0.000 | Significant Positive |

Source: Primary Data Processing 2024 with SEM-PLS

Specific Indirect Effect
The purpose of indirect influence analysis is to find out how one variable (X) influences another variable (Y) through a third mediating variable (M). Based on the data in Table 4, it is clear that both "work environment" and "transformational leadership" have a good and significant influence on employee performance in the workplace. Because it meets the requirements, the t-statistics and p-value are considered acceptable.
Table 4. Specific Indirect Effect

| Hypothesis | Work Environment \( \rightarrow \) Job Satisfaction | T Statistics \(|O/STDEV|\) | P Values | 
|------------|--------------------------------------------------|--------------------|----------|  
|            | Employee                                        |                    |          |  
|            |                                                  | 0.030              | 2.338    | 0.019 | Significant Positive  
|            | Transformational Leadership \( \rightarrow \) Job Satisfaction |                    |          |  
|            | Employee                                        | 0.023              | 2.922    | 0.003 | Significant Positive  

Source: Primary Data Processing 2024 with SEM-PLS

**Direct Effect Hypothesis 1: Work Environment has a positive influence on Job Satisfaction**

There is a statistically significant correlation between a positive work environment and high levels of job satisfaction. The fact that the p-value is less than 0.05 and the t-statistic is greater than the crucial value (3.005) proves this. According to research, job satisfaction is greatly influenced by the work environment. Therefore, this hypothesis is accepted because a person's work environment influences their level of job satisfaction. Job satisfaction arises because of the comfort workers feel when doing their work. The work environment, such as work facilities and worker relationships, influence this.

The relationship between work environment and job satisfaction has been confirmed by researchers such as Schultz and Schultz (2010), Belwalkar et al. (2018), and Latifah et al. (2023). They illustrate that workers' happiness and productivity can be increased by creating a welcoming workplace that meets their physical, mental, and regulatory needs. Workers' physical health and productivity can be improved using ergonomic and enjoyable workplace design principles that include lighting, ventilation, and furniture that aligns with the view of Anasi (2020), who believes that workers will be more productive if they are not afraid of their safety at work (Meku Lelo, 2024).

**Direct Effect Hypothesis 2: Transformational Leadership has a positive influence on Job Satisfaction**

This test shows a statistically significant correlation between transformational leadership and satisfaction in one's work life. Both the t-statistic (3.224) and the p-value (0.001) are more significant and smaller than the critical threshold (1.96 and 0.05, respectively), proving this. The research results show that transformational leadership has a positive and statistically significant influence on job satisfaction, thus indicating that this hypothesis is accepted. Employees report higher happiness at work due to the transformational leadership style adopted by their superiors.

Transformational Leadership Theory, based on the ideas of Burns (1978) (in Saragih, 2007), assesses the effectiveness of a leader based on his impact on subordinates. Transformational leaders can inspire feelings of trust, admiration, loyalty, and respect in subordinates, motivating them to exceed expectations. (Anggraeni and Santosa 2013), as well as other research, found a positive and statistically significant correlation between transformational leadership and satisfaction in one's job, reinforcing that transformative leaders can increase employee happiness by creating an inspiring workplace.

**Direct Effect Hypothesis 3: The work environment has a positive influence on employee performance**

There is a statistically substantial correlation between workplace and productivity. The t-statistic of 2.386 (exceeding the crucial threshold of 1.96) and p-value of 0.017 (below 0.05) provide evidence of this. The data supports this theory due to the influence of a favorable work environment on employee performance. Workplace factors, including physical space and interpersonal dynamics, play a role.
Suparyadi (2015) states that everything around workers that can influence their mental and physical performance is part of the work environment. Although workers are more productive in enjoyable and supportive workplaces, they are less productive in unpleasant workplaces. According to research conducted by Josephine and Harjanti (2017), there is a strong correlation between workplace and productivity, implying that workers will be more productive in a pleasant workplace (Noviantoro et al., 2022).

Direct Effect Hypothesis 4: Transformational Leadership has a positive influence on Employee Performance

A strong and statistically significant correlation exists between transformational leadership and organizational effectiveness. The t-statistic value of 18.026 is much higher than the crucial value of 1.96, and the p-value of 0.000 is significantly lower than 0.05, proving this. There is consensus that transformational leadership is effective because of its positive impact on worker productivity. This is, of course, influenced by how company leaders use a transformational leadership style. This leadership style makes employees more productive, resulting in increased employee performance.

Leadership and job performance are critical interrelated elements that greatly influence organizational success. According to Jiang et al. (2017), transformational leadership is the best way to inspire your team to achieve your goals. Using the healthcare industry in Pakistan as a case study, Naeem and Khanzada (2018) investigated the role of transformational leadership in influencing employee happiness at work. According to their findings, transformational leadership is critical in increasing work productivity. Employees are encouraged to perform better through transformational leadership qualities, which motivate and inspire them. These results were confirmed by Wang et al. (2022), who show that transformative leadership increases emotional investment in the company and its productivity. Santa and Dewi’s (2022) findings are consistent with each other and provide further evidence that transformative leadership has a good and substantial influence on employee performance. Research by Hongdao et al. (2019) showed that high-quality transformational leadership techniques encourage and inspire team members to achieve personal and collective goals, leading to increased productivity (Ortega, 2024).

Direct Effect Hypothesis 5: Job Satisfaction has a positive influence on Employee Performance

A strong and statistically significant correlation exists between happy workers and productive businesses. The very high t-statistic (4.603, much higher than the required threshold of 1.96) and the very modest p-value (0.000, much lower than 0.05) demonstrate this. The findings show that job satisfaction significantly influences employee performance favorably, thus supporting the acceptance of this theory. Employee morale directly correlates with performance quality; in other words, if workers are happy with their work, they will try harder.

When workers like what they do for a living, it is called job satisfaction. Many things contribute to these emotions, including pay, working conditions, and relationships with coworkers. Employee performance is influenced by how satisfied they are with their work. According to research, workers who like their work tend to put in extra effort and produce better results. According to research conducted at PT ABC by Berliana et al. (2018), job satisfaction positively influences employee performance. In other words, workers will do their jobs better if they are happy. According to research by Sununta Siengthai et al. (2016), job satisfaction positively and significantly influences employee performance. Additionally, they found a strong relationship between satisfied employees and higher work productivity (Aisyah et al., 2021).

Indirect Effect Hypothesis 6: The work environment has a positive influence on employee performance through the mediation of job satisfaction

Through the mediation of job satisfaction, statistical testing reveals a substantial relationship between the work environment and employee performance. We can establish this
with a p-value of 0.019 (less than 0.05) and a t-statistic of 2.338 (higher than the crucial threshold of 1.96). A happy work atmosphere is associated with higher productivity, and job satisfaction mediates between the two. This data supports that job satisfaction mediates between the Work Environment and Employee Performance.

Workers who feel happy at their workplace are more likely to feel satisfied overall, encouraging them to work more orderly and smoothly, improving performance. Ultimately, this will have a positive impact on achieving company goals. Research by Portatiro Iashara Purba (2017) supports this conclusion. According to his findings, a pleasant workplace influences employee happiness and productivity. Research supports this conclusion. (Hakim et al., 2023) The results show a favorable and statistically significant correlation between workplace factors, employee happiness, and productivity.

**Indirect Effect Hypothesis 7: Transformational Leadership has a positive influence on Employee Performance through the mediation of Job Satisfaction**

The statistical analysis results show a strong relationship between transformational leadership, employee performance, and job satisfaction. The p-value of 0.003, which is less than 0.05, and the t-statistic value of 2.922, higher than the crucial value of 1.96, confirms this. According to research, job satisfaction mediates between transformational leadership and employee performance. These findings support the idea of a positive correlation between transformational leadership, employee performance, and job satisfaction.

Employees are more likely to feel satisfied with their jobs when their bosses adopt a supportive, transformational approach. Happy workers will be more invested in their work and produce better results. Therefore, a good technique for improving overall employee performance is to manage the work environment and use a transformational leadership style effectively. Yukl (1994) outlined the development of leadership theory or path goals to understand how a leader's actions impact staff happiness and productivity.

**CONCLUSION**

The research results indicate that the work environment and transformational leadership positively and significantly influence job satisfaction and performance in government institutions, confirming all predictions. It can be seen from the research results that a positive work environment is correlated with a high level of job satisfaction (p < 0.05, t > 3.005), transformational leadership correlates with job satisfaction (p < 0.001, t > 3.224), work environment is correlated with employee performance (p < 0.017, t > 2.386), transformational leadership is associated with employee performance (p < 0.000, t > 18.026). Also, job satisfaction mediates the relationship between work environment and employee performance (p < 0.000, t > 4.603), and job satisfaction mediates the relationship between transformational leadership and employee performance (p < 0.003, t > 2.922). Research shows that job satisfaction mediates the relationship between the company's work environment, transformational leadership, and employee performance. Organizational leaders can increase employee happiness and performance by implementing a transformational leadership style and making the workplace enjoyable and conducive to work. Suggestions for further research: This research can be continued by examining other factors influencing job satisfaction and employee performance and learning more about the mediating mechanism of job satisfaction in the relationship between the work environment and employee performance.
REFERENCES


