



The Effect of Work Environment, Work Stress, and Compensation on Employee Performance at PT. Indomarco Adi Prima Magelang Branch

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Abstract

This study investigates the influence of work environment, work stress, and compensation on employee performance at PT. Indomarco Adi Prima Magelang Branch. The background of the research highlights performance issues reflected in suboptimal performance metrics and increased absenteeism, presumably due to unfavorable workplace conditions, heightened stress, and compensation-related concerns. A quantitative approach was employed, utilizing a questionnaire distributed to all 57 employees using saturated sampling. The data were analyzed through multiple linear regression using SPSS version 25. The findings reveal that work environment, work stress, and compensation have a simultaneous and significant positive effect on employee performance, as indicated by the F-test (significance value = 0.000). Individually, each variable also shows a significant positive influence, supported by t-test results with all significance levels below 0.05. These results underscore the importance of a supportive work environment, effective stress management, and timely compensation in enhancing employee performance. The study contributes theoretically by confirming prior models and practically by offering strategic insights for human resource development in the distribution sector. Future research is advised to explore additional variables such as leadership style and organizational culture and to consider a qualitative or mixed-methods approach for a more holistic understanding of performance determinants.

Keywords : Compensation, employee performance, distribution sector, work environment, work stress.

1. Introduction

The success of a company is largely determined by the performance of its employees. According to Mangkunegara (2011), performance refers to the output of an individual, encompassing both quality and quantity, in accordance with the assigned tasks and responsibilities. Key performance indicators include work quality, quantity, responsibility, collaboration, and initiative. At PT. Indomarco Adi Prima Magelang Branch, a distributor of Indofood products, employee performance plays a vital role in ensuring the smooth distribution of goods. However, the company's performance data from June to December 2024 revealed suboptimal outcomes, with December's performance reaching only 77.24 out of the targeted 100. In addition, frequent tardiness and absenteeism among employees indicate a decline in accountability and commitment to work.

One of the critical factors influencing employee performance is the work environment, which comprises all physical and non-physical conditions surrounding employees during their work activities (Budiasa, 2021). Sedarmayanti (2017) identifies several dimensions of the work environment, including lighting, temperature, air circulation, safety, room layout, color schemes, cleanliness, relationships with superiors, and interpersonal relationships among employees. At PT Indomarco, several work environment issues have been identified, such as high room temperature due to broken air conditioning, poor ventilation, inadequate warehouse security due to the absence of CCTV, and a cramped office layout. Although the relationship with supervisors is generally positive, interpersonal conflicts among coworkers persist. These conditions negatively impact employee comfort and concentration, ultimately affecting performance outcomes.

Another factor that significantly influences employee performance is work stress. Work-related stress refers to a psychological condition in which individuals experience pressure due to job demands that exceed their capabilities (Robbins & Judge, 2017). According to Budiasa (2021), indicators of work stress include task demands, role demands, and interpersonal demands. At PT. Indomarco, stress levels tend to increase during the launch of new products, as employees face a surge in workload and strict deadlines. Additionally, the necessity for intensive interactions with supervisors, colleagues, and clients contributes to elevated social pressure. This stress may reduce employee motivation, concentration, and overall job performance. High levels of prolonged work stress have been empirically linked to reduced employee engagement, lower productivity, and increased turnover intention in distribution sectors (Chuang et al., 2025; Üngüren et al., 2024).

In addition to work environment and stress, compensation is also a determining factor of employee performance. Compensation encompasses all forms of rewards received by employees in return for their contributions to the organization (Dessler, 2013). It includes both direct payments such as salaries, bonuses, and incentives, as well as indirect payments such as benefits, paid leave, and insurance. While PT Indomarco provides both forms of compensation, delays in bonus distribution due to data processing issues often occur. These delays may undermine employee motivation and lead to dissatisfaction, which, in turn, affects performance levels. Effective and timely compensation has been shown to enhance employee satisfaction and retention, particularly in high-pressure logistics environments (Ghani et al., 2022).

Previous studies have revealed inconsistent findings concerning the effects of work environment, stress, and compensation on employee performance. For example, Dewi & Kusumasari (2024) reported a significant positive impact of work environment on employee performance in KBPR Arta Kencana, while Nuriyah et al.,

(2022) found the relationship to be positive but not significant in Puskesmas Padang. Similarly, while Sari et al., (2021) identified a significant positive influence of work stress on performance, Dewi & Kusumasari (2024) argued otherwise. Research on compensation has also shown mixed results: Muhamad Ekhsan & Septian (2021) found a positive and significant effect on performance, whereas Hermansya & Nawatmi (2024) found a negative effect. These conflicting findings highlight the need for further investigation, especially within the specific context of the distribution sector in Indonesia.

Given these conditions, this study aims to examine the influence of work environment, work stress, and compensation on employee performance at PT Indomarco Adi Prima Magelang Branch. This research is crucial due to the limited number of studies focusing on employee performance in the distribution sector within the Magelang region and the existing inconsistencies in previous research findings. The findings are expected to contribute both theoretically and practically by providing insights for company management in formulating strategies to improve employee performance through enhancements in the work environment, stress management systems, and compensation policies.

2. Research Method

This study employs a quantitative approach, utilizing a questionnaire as the primary data collection instrument. The population in this study consists of all employees at PT Indomarco Adi Prima, Magelang Branch, totaling 57 individuals. Due to the relatively small population size, a saturated sampling technique was applied, where all members of the population were included as research respondents (Sugiyono, 2018).

Data collection was carried out through the distribution of structured questionnaires designed to measure the variables of work environment, work stress, compensation, and employee performance. Before conducting hypothesis testing, the questionnaire was subjected to validity and reliability testing to ensure that each item accurately measured the intended construct and yielded consistent results over repeated applications (Ghozali, 2018). The data analysis method used in this study is multiple linear regression to examine the influence of the independent variables (work environment, work stress, and compensation) on the dependent variable (employee performance). Hypothesis testing was performed using simultaneous (F-test) and partial (t-test) analyses. All statistical tests and data processing were conducted with the assistance of SPSS version 25 software.

3. Results and Discussion

3.1 Validity and Reliability Testing

This test was conducted to assess whether the research instruments used are both valid and reliable. Validity testing aims to measure the extent to which each statement item in the questionnaire accurately reflects the intended variables. Meanwhile, reliability testing evaluates the internal consistency of the instrument in measuring those variables. The results of the validity and reliability testing are presented in Table 1.

Table 1. Validity and Reliability Testing

Variable	Item	Significance	Description	Cronbach's Alpha	Description
Work Environment (X1)	X1.1	0,001	Valid	0,915	Reliable
	X1.2	0,003	Valid		
	X1.3	0,003	Valid		
	X1.4	0,030	Valid		
	X1.5	0,000	Valid		
	X1.6	0,001	Valid		
	X1.7	0,020	Valid		
	X1.8	0,001	Valid		
	X1.9	0,000	Valid		
	X1.1	0,002			
	0		Valid		
	X1.1	0,000			
	1		Valid		
	X1.1	0,000			
	2		Valid		
	X1.1	0,000			
	3		Valid		
	X1.1	0,000			
	4		Valid		
X1.1	0,000				
5		Valid			
X1.1	0,000				
6		Valid			
X1.1	0,000				
7		Valid			
X1.1	0,000				
8		Valid			
X1.1	0,000				
9		Valid			
X1.2	0,000				
0		Valid			
Work Stress (X2)	X2.1	0,000	Valid	0,843	Reliable
	X2.2	0,000	Valid		

	X2.3	0,000	Valid		
	X2.4	0,000	Valid		
	X2.5	0,000	Valid		
	X2.6	0,000	Valid		
	X2.7	0,000	Valid		
	X2.8	0,014	Valid		
	X2.9	0,018	Valid		
	X2.1	0,013			
	0		Valid		
	X3.1	0,000	Valid		
	X3.2	0,000	Valid		
	X3.3	0,000	Valid		
Compensation (X3)	X3.4	0,000	Valid		
	X3.5	0,000	Valid	0,907	Reliable
	X3.6	0,000	Valid		
	X3.7	0,000	Valid		
	X3.8	0,000	Valid		
	X3.9	0,000	Valid		
	Y.1	0,001	Valid		
	Y.2	0,047	Valid		
	Y.3	0,031	Valid		
Employee Performance (Y)	Y.4	0,000	Valid		
	Y.5	0,000	Valid		
	Y.6	0,000	Valid	0,747	Reliable
	Y.7	0,003	Valid		
	Y.8	0,000	Valid		
	Y.9	0,010	Valid		
	Y.10	0,000	Valid		

Source: Processed Data, 2025

Based on Table 1, it can be observed that all items included in the questionnaire for each variable are deemed valid, as indicated by the significance values being less than 0.05. Furthermore, each variable is confirmed to be reliable, as shown by Cronbach’s Alpha values exceeding the threshold of 0.70. These findings indicate that the instruments used in this research are consistent and trustworthy, and therefore, suitable for measuring the variables of interest.

This demonstrates that the questionnaire has a strong measurement foundation, allowing researchers to confidently proceed with further analysis without concerns of measurement error, which strengthens the internal validity of the study.

3.2 Multiple Linear Regression Analysis

Multiple linear regression analysis was employed to examine the extent to which the independent variables, namely work environment (X1), work stress (X2), and compensation (X3), influence the dependent variable, which is employee

performance (Y). This analysis also aims to assess both the simultaneous and individual relationships between variables. The results of the multiple regression analysis are displayed in Table 2.

Table 2. Multiple Regression Analysis

Model	Unstandardized Coefficients	
	B	Std. Error
(Constant)	27,250	0,564
1 Work Environment (X1)	0,119	0,007
Work Stress (X2)	0,101	0,014
Compensation (X3)	0,031	0,015

Source: Primary Data Processed, 2025

Based on the regression output, the regression equation can be formulated as follows:

$$Y = 27.250 + 0.119X1 + 0.101X2 + 0.031X3$$

The constant value of 27.250 indicates that if the values of work environment, work stress, and compensation are zero, the predicted employee performance score would be 27.250.

The coefficient for work environment is 0.119, which is positive, signifying that improvements in the work environment are associated with an increase in employee performance, assuming other variables remain constant.

The coefficient for work stress is 0.101, also positive, suggesting that higher work stress correlates with improved performance under certain conditions. This may imply that a moderate level of work stress can serve as a motivational factor that encourages employees to perform better, in line with the eustress concept.

The compensation coefficient is 0.031, which indicates that better compensation positively affects employee performance, albeit to a lesser extent than the other variables.

3.3 F-Test

The F test is used to determine whether the independent variables work environment, work stress, and compensation collectively have a statistically significant effect on employee performance. The results are presented in Table 3.

Table 3. F-Test Results

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	144,550	3	48,183	220,327	.000 ^b

Residual	11,591	53	0,219
Total	156,140	56	

a. Dependent Variable: Employee Performance

b. Predictors: (Constant), Compensation, Work Environment, Work Stress

Source: Primary Data Processed, 2025

Based on Table 3, the significance value is 0.000, which is less than the threshold of 0.05. This confirms that the combination of work environment, work stress, and compensation variables has a significant influence on employee performance at PT Indomarco Adi Prima Magelang Branch.

3.4 T-Test

The t-test evaluates the partial effect of each independent variable on the dependent variable. In this case, it aims to examine whether each of the three independent variables individually affects employee performance. The results are shown in Table 4.

Table 4. T-Test Results

Model	t	Sig.	Description
(Constant)	48,276	0,000	Signifikan
Work Environment (X1)	16,048	0,000	Signifikan
Work Stress (X2)	7,083	0,000	Signifikan
Compensation (X3)	2,041	0,046	Signifikan

Source: Primary Data Processed, 2025

Based on the data presented in Table 4, it can be concluded that all independent variables have a statistically significant effect on employee performance. The work environment variable has a significance value of 0.000, which is well below the 0.05 threshold, suggesting a strong and significant influence on performance. Similarly, the work stress variable also records a significance value of 0.000, indicating that stress levels play a critical role in shaping employee outcomes. Additionally, the compensation variable shows a significance value of 0.046, which, although closer to the threshold, still denotes a statistically significant effect.

These results highlight the crucial role of organizational factors in driving employee performance. A conducive work environment fosters motivation and efficiency, while effective stress management helps maintain employee well-being. Moreover, fair and competitive compensation serves as a key motivator that can directly influence productivity and job satisfaction. Therefore, organizations aiming to improve employee performance should give strategic attention to these three areas.

3.5 Coefficient of Determination (R² Test)

The coefficient of determination (R²) test is employed to assess the extent to which the independent variables work environment, work stress, and compensation explain the variation in employee performance.

Table 5. Coefficient of Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.962 ^a	0,926	0,922	0,468

a. Predictors: (Constant), Compensation, Work Environment, Work Stress

Source: Primary Data Processed, 2025

Based on Table 5, the Adjusted R Square value is 0.922, indicating that 92.2% of the variation in employee performance can be explained by the three independent variables studied. The remaining 7.8% may be attributed to other factors not included in this research.

This high level of explanatory power suggests that these three variables are critical drivers of employee performance and should be the focus of managerial attention to improve overall organizational outcomes.

3.6 Discussion

3.6.1 The Joint Effect of Work Environment, Work Stress, and Compensation on Employee Performance

According to the F-test results presented in Table 3, the variables of work environment, work stress, and compensation simultaneously have a significant influence on employee performance at PT Indomarco Adi Prima Magelang Branch. The significance value of 0.000 is less than the threshold of 0.05, indicating strong statistical evidence. Thus, the first hypothesis is accepted, demonstrating that work environment, work stress, and compensation together exert a positive and significant impact on employee performance.

This finding suggests that these three factors are crucial and collectively contribute to enhancing employee productivity within the organization. When managed synergistically, these variables can create an organizational climate that not only motivates employees but also aligns with organizational goals, resulting in overall performance improvement.

3.6.2 The Positive Influence of Work Environment on Employee Performance

Referring to the results of the t-test in Table 4, it is evident that the work environment variable has a positive and significant effect on employee performance at PT Indomarco Adi Prima Magelang Branch, as indicated by a significance value of 0.000, which is less than 0.05. Therefore, the second hypothesis is accepted, implying

that a supportive and well-structured work environment contributes meaningfully to better employee performance.

A conducive work environment fosters comfort, increases motivation, and reduces obstacles that might hinder productivity, thereby enabling employees to perform optimally. These findings are consistent with the study by Dewi & Kusumasari (2024), which confirmed the significant influence of the work environment on employee performance at KBPR Arta Kencana, Nganjuk Branch. Similarly, Sari et al., (2021) reported that a positive work environment enhances productivity and operational efficiency in the Indonesian manufacturing industry. Supporting this, Sinambela & Lestari (2021) also found that the work environment has a partial and significant effect on employee performance in a handicraft manufacturing company in Malang.

However, the findings differ from those of Nuriyah et al., (2022), who reported that the positive effect of the work environment on performance was not significant in the healthcare sector. These inconsistencies highlight that the impact of the work environment may vary across industries and is influenced by the specific nature and demands of each job. It suggests that sector-specific strategies may be required to optimize environmental factors that affect performance.

3.6.3 The Positive Influence of Work Stress on Employee Performance

Table 4 also shows that work stress has a positive and significant effect on employee performance, with a significance value of 0.000, which is well below the 0.05 threshold. This confirms the acceptance of the third hypothesis, indicating that a manageable level of work stress can positively influence employee performance at PT Indomarco Adi Prima Magelang Branch.

Moderate stress levels may encourage employees to be more focused, responsible, and driven to complete tasks effectively, thereby contributing to higher performance. This aligns with the study by Sari et al., (2021), which found that work stress positively and significantly affects employee performance in the Indonesian manufacturing sector. Likewise, Dweikat (2023) found similar results in a software company in Palestine, where work stress significantly impacted employee performance. Furthermore, Ekhsan & Septian (2021) confirmed the same effect in PT Cabinindo.

On the other hand, Dewi & Kusumasari (2024) found that work stress did not have a significant influence on employee performance at KBPR Arta Kencana. These contrasting findings indicate that the effect of work stress is highly contextual and may depend on how stress is perceived and managed within different types of work environments. Effective stress management practices could be the key to converting potential stressors into performance motivators.

3.6.4 The Positive Influence of Compensation on Employee Performance

As indicated in Table 4, compensation has a positive and significant impact on employee performance, with a significance value of 0.000, which is below the critical value of 0.05. Consequently, the fourth hypothesis is accepted, signifying that fair and adequate compensation enhances employee performance at PT Indomarco Adi Prima Magelang Branch.

Appropriate compensation increases job satisfaction and motivates employees to improve their productivity and dedication to organizational goals. This result is in line with the findings of Ekhsan & Septian (2021), who stated that compensation positively and significantly affects employee performance at PT Cabinindo. Similarly, Sugiarti (2020) found that compensation plays a crucial role in enhancing employee performance at PT. Sukses Expamet.

Conversely, Hermansya & Nawatmi (2024) reported a negative effect of compensation on performance at PT Tiki Jalur Nugraha Ekakurir. This discrepancy suggests that the influence of compensation may differ depending on the nature of the work, employee expectations, and the internal fairness of the compensation system. Organizations must ensure that compensation structures are not only financially competitive but also perceived as equitable and aligned with employee contributions.

4. Conclusion

Based on the results of the study, it can be concluded that the variables of work environment, work stress, and compensation simultaneously have a positive and significant influence on employee performance at PT Indomarco Adi Prima Magelang Branch. This is supported by the F-test results showing a significance value of 0.000, which is below the threshold of 0.05. Furthermore, each of these variables also demonstrates a significant positive effect on employee performance individually, as indicated by the t-test results, where all significance values are less than 0.05. Thus, all the proposed hypotheses in this research are accepted.

These findings highlight the critical importance of fostering a supportive and comfortable work environment, effectively managing work-related stress, and providing fair and appropriate compensation. A conducive work environment enhances motivation and productivity, while proper stress management helps prevent performance decline and burnout. Fair compensation also serves as a form of recognition for employee contributions and can significantly boost job satisfaction and loyalty. For future research, it is recommended to expand the scope of the study by incorporating additional variables such as leadership style, organizational culture, or career development. This will offer a more comprehensive understanding of the factors affecting employee performance. Moreover, future studies may consider

employing qualitative or mixed-method approaches to capture deeper employee perspectives and experiences.

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