

Analysis of the Work Environment on the Performance of Employees of the Directorate of Trade Order, Ministry of Trade with Job Satisfaction as an Intervening Variable

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ABSTRACT

The purpose of this study is to evaluate the influence of the work environment on employee performance with job satisfaction as a mediating variable. This study involved a sample of 141 employees at the Directorate of Trade Order, Ministry of Trade of the Republic of Indonesia. This study uses a quantitative approach, with primary data through questionnaires distributed to respondents, with a Likert scale ranging from 1 to 5. The analysis tool uses a path analysis model with Structural Equation Modeling (SEM) with AMOS-20 software (Analysis of Moment Structure). The findings of the study indicate that the work environment has a positive and significant effect on employee satisfaction and performance at the Directorate of Trade Order, Ministry of Trade of the Republic of Indonesia. Satisfaction mediates partially the influence of the work environment on employee performance at the Directorate of Trade Order, Ministry of Trade of the Republic of Indonesia.

Keywords: Work Environment, Job Satisfaction, Performance.

INTRODUCTION

Every organization definitely needs employees as manpower to carry out activities within an organization. Employees are the most important assets that greatly influence the success of an organization. The progress of the company depends on employee performance because employee performance is the main key that determines the survival of the organization. Good employee performance will bring progress to the organization, while poor performance will result in decreased productivity.

To create high employee performance, job satisfaction plays an equally important role. Robbins and Judge (2015) explained from a review of 300 studies that there is a fairly strong correlation between job satisfaction and performance. Where when we move from the individual to the organizational level, we also find support for the satisfaction-performance relationship. When we collect satisfaction and performance data for the organization as a whole, we find that organizations with more satisfied workers tend to be more effective than organizations with fewer.

Performance is the result of work that can be achieved by a person or group of people in an organization, in accordance with the authority and responsibility of each in order to achieve the goals of the organization concerned legally, without violating the law and in accordance with morals and ethics. So performance is important for a company or organization. Efforts to improve employee performance include paying attention to the work environment. The work environment is everything around workers that can influence them in carrying out the tasks assigned (Nitisemito, 2000).

The Directorate of Trade Order is one of the work units in the Ministry of Trade of the Republic of Indonesia which is responsible for supervision and law enforcement in the

field of trade. Where its task is to supervise trade practices to ensure that these activities are in accordance with applicable regulations. However, based on the results of a pre-survey conducted by researchers on 30 employees, it was found that employee performance was still less than optimal, this is known from the fact that employees were still unable to achieve work targets. Phenomena related to the work environment, namely the discovery of co-workers who were less supportive of employee work, and the provision of subjective rewards caused employee job satisfaction to decrease.

LITERATURE REVIEW

To create high employee performance, the role of job satisfaction is no less important. Employees who are satisfied with their jobs tend to show better performance (Judge & Bono, 2022; Harter, Schmidt & Hayes, 2021; Saks, 2020). While job satisfaction includes "the alignment between employee expectations and the reality they experience at work." (Judge & Klinger, 2022).

The next factor that can affect an employee's performance is the work environment. A supportive work environment can increase employee productivity and satisfaction. Factors such as workspace design, organizational culture, and support from coworkers have a significant impact. According to Smith & Wang (2023), organizations that create an inclusive and flexible work environment are able to increase employee engagement, which leads to higher performance.

Based on the description above, the hypothesis in this study can be described as follows:

- H1: The work environment has a positive and significant effect on employee job satisfaction at the Directorate of Trade Order, Ministry of Trade of the Republic of Indonesia.
- H2: The work environment has a positive and significant effect on employee performance in the Directorate of Trade Order, Ministry of Trade of the Republic of Indonesia.
- H3: Job satisfaction has a positive and significant effect on employee performance in the Directorate of Trade Order, Ministry of Trade of the Republic of Indonesia.
- H4: Job satisfaction mediates the influence of the work environment on employee performance at the Directorate of Trade Order, Ministry of Trade of the Republic of Indonesia.

If the research conducted is quantitative, a conceptual framework is needed. However, if the research is qualitative, *a mind map can be used*.

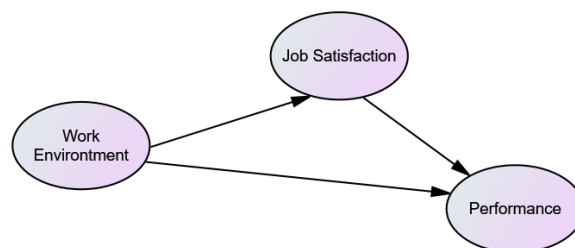


Figure 1. Conceptual Framework

RESEARCH METHODS

The type of research that the researcher uses is quantitative research. Where quantitative research uses a systematic approach to collect and analyze numerical data, which aims to explain phenomena, test theories, and produce conclusions that can be accounted for statistically.

The research location was conducted at the Directorate of Trade Order, Ministry of Trade of the Republic of Indonesia, Jalan Jenderal Sudirman Number 10, Medan, North Sumatra, Indonesia.

The research model used in this study is the Structural Equation Modeling (SEM) model, where in SEM the ideal number of samples is between 100-200 (Hair et al., 2009) and must also consider the number of indicators in the model. Hair et al. (2009) further stated that the determination of the number of samples can be 5-10 of the number of indicators. In this study there are 17 indicators so that the number of samples can range between 85-170 respondents. The number of samples is determined by multiplying the number of indicators by 8, so that the total sample is $18 \times 8 = 144$ respondents. Since the number of employees in the Directorate of Trade Order, Ministry of Trade of the Republic of Indonesia is 141 employees, all 141 employees are used as samples in this study. The sampling technique is carried out using the census method (census sampling) or another term is saturated sampling, which is a sampling technique when all members of the population are used as samples (Sugiyono, 2011).

The data analysis technique used in this study is using SEM (Structural Equation Modeling) with the AMOS (Analysis of Moment Structure) program. SEM is a combination of two statistical concepts, namely the concept of factor analysis that is included in the measurement model and the concept of regression through a structural model.

Stages in SEM modeling:

- 1). Developing Theory-Based Models in SEM
- 2). Path Diagram or Flowchart Development

The full model with mediation in this study can be described as follows:

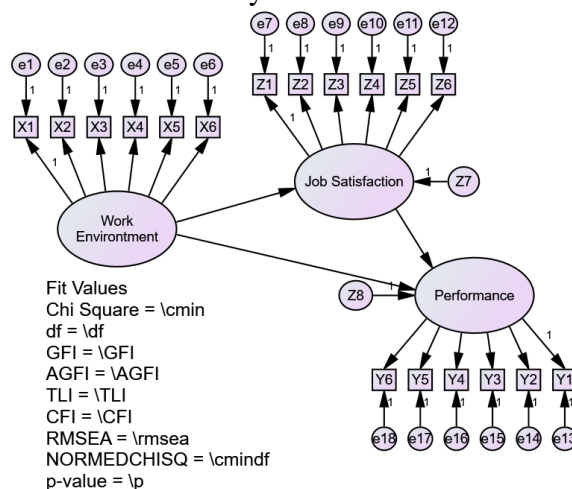


Figure 2. Full Research Model

3) Compiling Structural Equations

The developed equation is shown below:

$$Z = b_1X + Z_1 \dots\dots\dots (1)$$

$$Y = b_2X + b_2Z + Z_2 \dots\dots\dots (2)$$

Where:

- | | | |
|--------|---|------------------------|
| X | = | Work Environment |
| Z | = | Job Satisfaction |
| Y | = | Performance |
| b1-b2 | = | Estimation Coefficient |
| Z1, Z2 | = | Residual value |

- 4) Input Matrix and Model Estimation
- 5) Analyze the possibility of identification problems arising
- 6) Evaluation of Goodness of Fit Criteria

The indices used to test the feasibility of the model are:

Table 1. Model Feasibility Testing Index

Goodness Of Fit Index	Cut-off Value
χ^2 C-square Statistics	df, $\alpha = 5\%$
Probability	$\geq 0,05$
CMIN/DF	$\leq 2,00$
GFI	$\geq 0,90$
AGFI	$\geq 0,90$
TLI	$\geq 0,95$
CFI	$\geq 0,95$
RMSEA	$\leq 0,08$

Sumber: Ghozali (2013)

7) Model Interpretation and Modification

Statistical analysis was conducted by testing the significance of the relationship between variables through the Critical Ratio (CR) value which is equivalent to the t-test in regression and the probability value (P). According to Ferdinand (2014), the relationship is said to be significant if the CR value is greater than 2.58 and the P value is less than 0.05. In addition, the influence of moderating variables was analyzed using the Sobel Test theory proposed by Baron and Kenny (1986).

RESULTS AND DISCUSSION

The model fit test is conducted using a flowchart in the complete model equation, which combines all variables, both exogenous and endogenous, into a comprehensive path diagram represented by a variance or covariance matrix. This complete representation is referred to as the research model. The complete model test is conducted in two stages: 1. Complete SEM Model Before Modification: This stage evaluates the initial model to determine the extent to which the basic structure meets the fit criteria, allowing it to represent the research phenomenon without any modification. 2. Complete SEM Model After Modification: Adjustments are made to improve the model fit based on the findings from the initial assessment.

1. Complete SEM Model Before Modification

The main purpose of the pre-modification test is to assess whether the basic model adequately explains the research phenomenon while complying with the established suitability criteria. The results of the model test before modification can be seen in Figure 3 below:

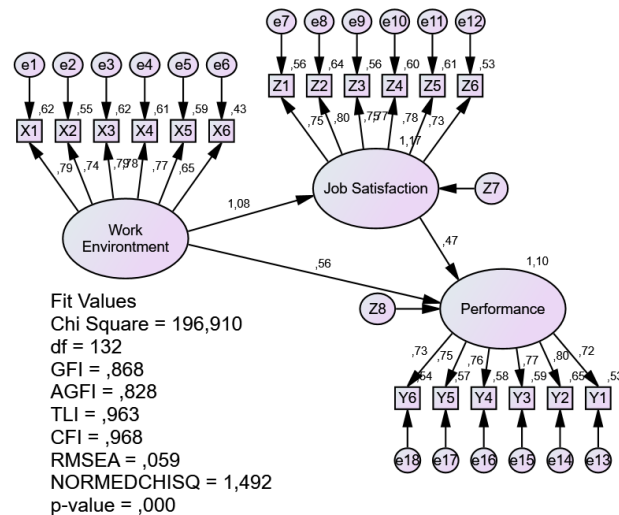


Figure 3. Full Research Model Before Modification

Based on Figure 3, it can be seen that not all Goodness of Fit (GOF) values meet the required criteria, namely the GFI value is still marginal ($0.868 < 0.90$), the AGFI value is also still marginal ($0.828 < 0.90$) and the p-value is also still bad because it is below 0.05. Thus, the research model is not yet appropriate and has not been able to explain the research model properly and well, so that the model needs to be modified.

2. Complete SEM Model After Modification

The suitability test of the model after modification is carried out by connecting (correlating) between *errors* in each indicator suggested by the system. The goal is to increase the GOF value so that the model is truly feasible and accurately explains the research model. The following are the full model results after modification:

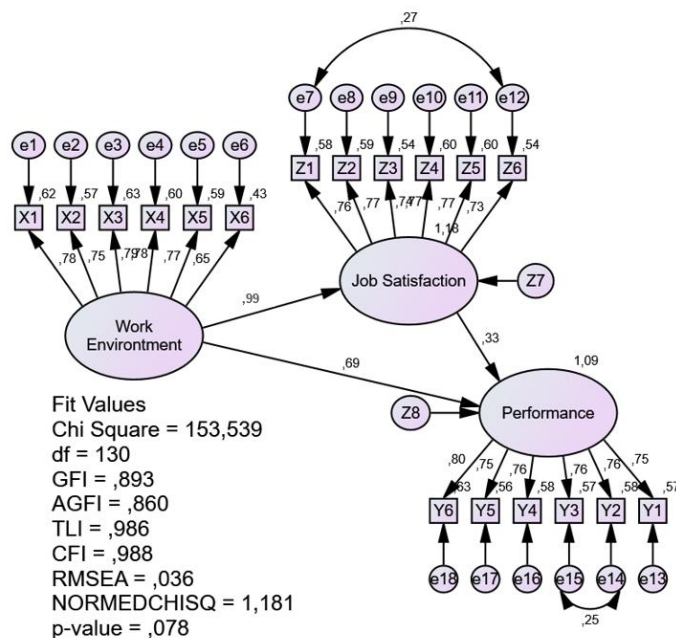


Figure 4. Full Research Model After Modification

The results of data processing as shown in Figure 4 are then entered into Table 2, showing that in general all constructs used to form this research model have met the established *goodness of fit index criteria* such as *chi-square value*, TLI value, CFI value,

RMSEA, CMIN/DF and p- value except for the GFI and AGFI values which are still marginal but are approaching good, this can be seen in Table 2.

Table 2. Goodness of Fit Criteria for Full Model After Modification

Goodness Of Fit Index	Expected Value	Yield Value	Conclusion
χ^2 C-square Statistics	Expected small	153,539	Good
GFI	≥ 0.90	0.893	Marginal
AGFI	≥ 0.90	0.860	Marginal
TLI	≥ 0.95	0.986	Good
CFI	≥ 0.95	0.988	Good
RMSEA	≤ 0.08	0.036	Good
CMIN/DF	≤ 2.00	1,181	Good
P-Value	≥ 0.05	0.078	Good

ANALYSIS AND DISCUSSION

The discussion in this section will be linked to previous theories and research, and will also emphasize testing the hypotheses that have been formed with the aim of obtaining answers to the research hypothesis statements.

Table 3. The Influence of Independent Variables on Dependent Variables

Influence between Variables			Std Estimate	Estimate	SE	CR	P	Conclusion
Job Satisfaction	<---	Work Environment	,989	,988	,088	11,223	***	Accepted
Performance	<---	Work Environment	,689	,620	,076	8,133	***	Accepted
Performance	<---	Job Satisfaction	,335	,331	,067	4,909	***	Accepted

Based on the results of data analysis as in Table 3, the structural equation is as follows:

$$\begin{aligned} \text{Structural Equation 1 : } & Z = b1X + Z7 \\ & Z = 0.989X1 \\ \text{Structural Equation 2 : } & Y = b2X + b2Z + Z8 \\ & Y = 0.689X1 + 0.335Z \end{aligned}$$

1. The Influence of Work Environment on Job Satisfaction

The influence of the work environment on job satisfaction is positive and significant with a coefficient estimate standardized regression weight of 0.989 (98.9%), a probability or significance value of 0.0001 (significant) and a CR value of 11.223 (accept H1). In other words, the work environment has a positive and significant effect on employee job satisfaction at the Directorate of Trade Order, Ministry of Trade of the Republic of Indonesia.

The work environment is one of the factors that can affect employee job satisfaction to achieve company goals. A good work environment can make employees feel happy, comfortable, and at home in the company. A comfortable work environment can increase employee job satisfaction and increase their productivity. A good work environment can reduce employee boredom and stress levels.

The results of this study are in line with the results of research by Firli and Kuswinarno (2024), Yuliantini and Santoso (2020), Sitinjak (2018) and Paendong et al. (2019) showing

that the work environment has a positive and significant effect on job satisfaction. This means that if the work environment improves, employee job satisfaction will also increase.

2. The Influence of Work Environment on Performance

The influence of the work environment on performance is positive and significant with a coefficient estimate standardized regression weight of 0.689 (68.9%), a probability or significance value of 0.0001 (significant) and a CR value of 8.133 (accept H2). In other words, the work environment has a positive and significant effect on employee performance in the Directorate of Trade Order, Ministry of Trade of the Republic of Indonesia.

The work environment includes all physical and social conditions in which employees perform their work, including physical, interpersonal, and organizational factors that affect performance (Robbins & Judge, 2021). The work environment provided by the company includes a conducive work environment and meets the criteria as a good work environment, so it can affect the performance produced by employees for the company.

A conducive work environment plays an important role in creating a sense of security and enabling employees to perform optimally. Employees who feel comfortable with their work environment tend to be more at home and more productive in carrying out their duties. Conversely, an inadequate work environment can reduce employee performance. Factors such as cleanliness, availability of adequate facilities, effective communication, support from coworkers and management, and fairness in company policies all play a role in creating a conducive work environment.

The results of this study are in line with research from Smith and Wang (2023), Ahmad et al. (2022), and Armansyah (2024) showing that the work environment has a positive and significant effect on performance. The better the employee's work environment, the more it will support the improvement of their performance.

3. The Influence of Job Satisfaction on Performance

The effect of job satisfaction on performance is positive and significant with a coefficient estimate standardized regression weight of 0.335 (33.5%), a probability or significance value of 0.0001 (significant) and a CR value of 4.909 (accept H3). In other words, job satisfaction has a positive and significant effect on employee performance in the Directorate of Trade Order, Ministry of Trade of the Republic of Indonesia.

Job satisfaction is an emotional state experienced by employees because of its relationship with their duties and obligations as workers in the company. Employees who achieve job satisfaction will do their jobs well in accordance with the goals of the organization. Employees with a high level of job satisfaction will have the drive to achieve the performance that has been set against time, quality and quantity in completing the work done in accordance with the targets set by the company. Employees who have high enthusiasm and effort will produce maximum performance.

Employees who are satisfied with their jobs tend to show better performance. This is in line with the research results of Judge & Bono (2022), Harter, Schmidt & Hayes (202), Saks (2020). Where the findings also state that job satisfaction has a positive and significant effect on performance. This means that if employee job satisfaction increases, employee performance will also increase.

4. The Intervening Effect of Job Satisfaction between Personality and Performance

To answer hypothesis 4 in this study, the researcher used Sobel software. Here are the results of the analysis:

	Masukan:		Statistik uji:	Kesalahan Standar:	nilai p :
A	0.989	Uji Sobel:	4.56829551	0.07252486	0.00000492
B	0.335	Tes Aroian:	4.55327381	0.07276413	0.00000528
adalah sebuah	0.088	Uji Goodman:	4.58346687	0.0722848	0.00000457
aku _b	0.067	Reset all	Menghitung		

Figure 4. Sobel Test Results

The calculation results presented in Figure 4 show that the path coefficients -a and -b are significant, path -c is significant, and path -c' is significant. This shows that job satisfaction mediates partially mediation in mediating the influence between the work environment and employee performance at the Directorate of Trade Order, Ministry of Trade of the Republic of Indonesia , thus supporting the H4 hypothesis.

CONCLUSION

From the results of the analysis it was found that:

1. The work environment has a positive and significant influence on employee job satisfaction at the Directorate of Trade Order, Ministry of Trade of the Republic of Indonesia.
2. The work environment has a positive and significant influence on employee performance at the Directorate of Trade Order, Ministry of Trade of the Republic of Indonesia.
3. Job satisfaction has a positive and significant effect on employee performance at the Directorate of Trade Order, Ministry of Trade of the Republic of Indonesia.
4. Job satisfaction mediates partial mediation in mediating the influence between the work environment and employee performance in the Directorate of Trade Order, Ministry of Trade of the Republic of Indonesia.

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