



**THE EFFECT OF WORK STRESS AND WORK ENVIRONMENT ON
EMPLOYEE PERFORMANCE AT THE TRADE APPARATUS EDUCATION
AND TRAINING CENTER (PUSDIKLAT) IN DEPOK**

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ABSTRACT

This study aims to analyze the effect of work stress (X1) and work environment (X2) on employee performance (Y) both partially and simultaneously. The study used a quantitative method with a sample of 60 employees and various statistical tests, including validity, reliability, classical assumptions, regression, and hypothesis tests. The results of the analysis produced a regression equation $Y = 31.641 + 0.191X_1 + 0.289X_2$. The results of the t-test showed that work stress (X1) had a negative and significant effect on employee performance, with a t-count of $1.909 > t\text{-table } 1.672$ and a significance value of $0.000 < 0.05$. Meanwhile, the work environment (X2) had a positive and significant effect on employee performance, with a t-count of $1.913 > t\text{-table } 1.672$ and a significance value of $0.000 < 0.05$. Simultaneously, the results of the F test show that work stress and work environment have a significant effect on employee performance ($F\text{-count } 4.907 > F\text{-table } 3.159$, significance $0.000 < 0.05$). Thus, it can be concluded that a good work environment can improve employee performance, while high work stress can decrease it at the Trade Apparatus Education and Training Center (Pusdiklat) of Depok City.

Keywords: Job Stress, Work Environment, Performance.**INTRODUCTION**

Humans are one of the creatures that play a major role in every action, activity, or event that occurs in this world. Humans have reason that allows them to control other creatures, in other words called Human Resources (HR). HR is a valuable company asset that must be managed properly to support the company's success. Sunarsi (2018) stated that effective HR management is very important to increase the company's competitiveness and productivity, because HR is the main factor that determines business sustainability. Therefore, HR is the main element supporting the company's success, both for its progress and the risk of decline.

In carrying out company activities, competent human resources are needed in their respective fields. In addition, human resource management is a crucial element in an organization so that activities run smoothly and the desired targets can be achieved. Sunarsi (2021) emphasized that a company cannot operate optimally without proper human resource management, which is responsible for managing and developing the workforce to achieve operational efficiency.

According to Widiatmo (2020), appropriately structured and sustainable HR development is a primary need for organizations. This encourages the birth of HR management as a means of developing employee performance that focuses on attracting, developing, and retaining an effective workforce.

Some of the main factors that can affect employee performance are work stress and work environment. Work stress is a condition felt by employees, both physically and psychologically, due to continuous work demands, both from internal and external

factors, without proper regulatory mechanisms. This condition can cause job dissatisfaction and decreased productivity.

According to Vanchapo (2020:37), work stress is an emotional state that arises due to a mismatch between the workload and the individual's ability to deal with the pressure given. Sunarsi (2021) also stated that uncontrolled work stress can have a negative impact on the mental and physical health of employees, as well as reduce work efficiency. Therefore, work stress management and improving a conducive work environment are needed to maintain optimal employee performance.

Table 1. Pre-Survey of Work Stress at the Depok City Trade Apparatus Education and Training Center

No	Indicator	Question	Number of Respondents	Respondents' Answers	
				Agree	Don't agree
1	Workload	I feel emotionally burdened by overwork	35	21	14
2	Leader Attitude	A leader who is unfair in giving tasks according to the job description	35	4	31
3	Working time	Unproductive use of time, excessive working hours	35	13	22
4	Conflict	Differences of opinion between employees that cause conflict at work	35	3	32
5	Communication	Communication with coworkers is poor	35	4	31
6	Work Authority	I cannot complete work according to the deadline that has been set	35	6	29

Source: Results of the Pre-Survey of Work Stress of the Depok City Trade Apparatus Education and Training Center 2024

Based on table 1 it can be seen that the assessment of work stress in employees is still not optimal, as can be seen from the statement of the workload indicator which states "I feel emotionally burdened by excessive work" because at the Trade Apparatus Education and Training Center (Pusdiklat) in Depok City, the high level of competition and excessive workload causes employees to feel emotionally burdened by excessive work.

The Trade Education and Training Center (PUSDIKLAT) is an institution that has the task of providing education and training to civil servants and non-civil servants of human resources from the trade sector. PUSDIKLAT Trade is organizationally under the Secretary General of the Ministry of Trade.

This institution was originally established in 1973 under the name PUSDIKLAT Niaga located on Jl. S. Parman Grogol West Jakarta. Over time, PUSDIKLAT Perdagangan has changed its name and its location has also moved. On March 17, 2009, PUSDIKLAT Perdagangan officially occupied a new building on Jl. Abdul Wahab No. 38 Kedaung, Sawangan District, Depok City. This research was conducted at the Center for Education and Training of Trade Apparatus (Pusdiklat) of Depok City.

A good working environment is one of the supporting factors for employee productivity which ultimately has an impact on increasing the level of employee performance. The division of the working environment cannot be separated from each other. Both must be balanced, because both the physical and non-physical working environment equally affect employee performance.

According to (Manullang, 2019) Of these factors, the work environment factor is one of the important factors that need to be considered in improving employee

performance, because the work environment is directly related to the work process carried out by employees in the workplace.

So it is concluded that the work environment is all conditions and factors supporting employee activities that influence employees in working and carrying out their duties and obligations.

To strengthen the phenomenon that occurs in the work environment variables of the Depok City Trade Apparatus Education and Training Center, the researcher attaches the results of the work environment statement data. The following is the data presented:

Table 2. Work Environment Data at the Depok City Trade Apparatus Training and Education Center

No	Facility Work environment	Information
1	Building	Located at Jalan Abdul Wahab No. 38 Kedaung, Sawangan, Depok
2	Comfort	The location is far from the main road which results in a lack of facilities such as public transportation.
3	Work Equipment and Facilities	Inadequate work equipment and facilities slightly hamper employee work.
4	Noise	Even though the location is located next to the road to Depok city, the sound of vehicles does not disturb employee activities at work.

Source: Statement Data at the Depok City Trade Apparatus Education and Training Center 2024

Based on table 2 above lack of public transportation facilities at the Trade Apparatus Education and Training Center (Pusdiklat) in Depok City which resulted in employees having difficulty working and employee performance declining, because the Trade Apparatus Education and Training Center (Pusdiklat) in Depok City had experienced a change of location and building, but unfortunately the new location still experienced a lack of public transportation because public transportation had a final operating schedule before the company's activities were completed.

From the two problem phenomena in the previous explanation related to work stress and work environment, it has an impact on the performance produced. Therefore, performance assessment needs to be done to find out the extent of performance that has been produced by employees. Here is a pre-survey of employee performance to strengthen this phenomenon.

Table 1. Pre-Survey of Employee Performance at the Depok City Trade Apparatus Education and Training Center

No	Indicator	Question	Number of Respondents	Respondents' Answers	
				Agree	Don't agree
1	Quantity	I can complete work according to the specified target	35	18	17
2	Quality	I am responsible for the quality of my work results.	35	12	23
3	Execution of Tasks	I carry out my duties in accordance with applicable procedures	35	17	18
4	Responsibility	I try to complete the task	35	25	10

		with full responsibility			
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Source: Results of the Pre-Survey of Employee Performance of the Depok City Trade Apparatus Education and Training Center 2024

Based on table 3 above, it can be seen in no. 2 which states "I am responsible for the quality of my work results" in all employees of the Trade Apparatus Education and Training Center (Pusdiklat) of Depok City, there are still many employees who are less responsible for what has been done and worked on by their employees, because the heavy workload makes employees have less focus to maintain the quality of their work results.

METHOD

This study uses a quantitative method, which aims to analyze the relationship between variables objectively with data collection techniques based on numbers and statistical analysis. According to Sugiyono (2017:8), quantitative methods are used to study certain populations or samples, with sampling techniques that are generally carried out randomly, data collection using research instruments, and quantitative or statistical data analysis to test the established hypotheses. In this study, the population used was 60 employees. Priadana et al. (2021) stated that the use of quantitative methods in HR research is very useful for identifying the relationship between organizational factors, such as work stress and work environment, on employee productivity in a measurable manner. Therefore, this study relies on instrument testing, data prerequisite testing, and statistical testing to ensure the validity and reliability of the data obtained. In addition, this study also uses a regression analysis approach, both simple and multiple linear regression, to understand how the independent variables, namely work stress (X1) and work environment (X2), affect the dependent variable, namely employee performance (Y). According to Sunarsi (2021), effective HR management can significantly improve employee performance, and this can be tested with statistical analysis based on quantitative data to obtain more objective and reliable results.

RESEARCH RESULT

Quantitative Analysis

Quantitative analysis is intended to determine the magnitude of influence and analyze the significance of the influence. In this analysis, the influence of 2 independent variables on the dependent variable is carried out with several tests as follows:

1. Regression Test

This regression test is intended to determine how much influence the variables X1 and X2 have on the variable Y, both partially and simultaneously. The following are the results of regression processing with SPSS Version 26 which can be seen in the following table:

Table 4. Multiple Linear Regression Test of Work Stress (X1) and Work Environment (X2) on Employee Performance (Y)

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	31,641	4,860		6,511	.000
	Job Stress	.191	.123	-.103	1,944	.460
	Work environment	.289	.148	.270	1,953	.056

a. Dependent Variable: Employee Performance

Processed by Researchers: SPSS 26

From the results of the calculations above carried out by the researcher, a regression equation was obtained as follows:

$$Y = a + b_1 X_1 + b_2 X_2 + e / Y = 31.641 + 0.191$$

2. Correlation Coefficient Test

Correlation coefficient analysis is used to measure the strength or weakness of the relationship between independent variables and dependent variables, with the provision that if the significant value is <0.05 then there is no correlation and vice versa if the significant value produced is >0.05 then it is said to be correlated.

Table 5. Test of Job Stress Correlation Coefficient (X1) and Work Environment (X2) on Employee Performance (Y)

Model Summary ^b									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.950 ^a	.763	.730	4.167	.063	1,907	2	57	.158
a. Predictors: (Constant), Work Environment, Work Stress									
b. Dependent Variable: Employee Performance									

Processed by Researchers: SPSS 26

Based on the results of the tests that have been carried out, the correlation coefficient value between work stress (X1), work environment (X2) and employee performance (Y) was obtained at 0.950 - where the results are in the range of 0.800 - 0.1000, meaning that both independent variables have a strong level of relationship with the dependent variable.

3. Test of Determination Coefficient

The determination coefficient is carried out to determine the level of ability of the independent variable to explain the dependent variable. To determine the extent of the contribution or percentage of the influence of work stress (X1) and work environment (X2) on employee performance (Y), the determination results are obtained:

Table 6. Test of Work Stress Determination Coefficient (X1) and Work Environment (X2) on Employee Performance (Y)

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.950 ^a	.763	.730	4.167
a. Predictors: (Constant), Work Environment, Work Stress				
b. Dependent Variable: Employee Performance				

Processed by Researchers: SPSS 26

Based on the test results in the table above, the coefficient of determination value of the r square value is 0.763 - it can be concluded that the influence of the variables of work stress (X1) and work environment (X2) on employee performance (Y) is 76.3%. Then the remaining 23.7% is influenced by other variables not examined in this study.

4. Hypothesis Testing

a. t-Test (Partial)

The t-test is known as a partial test, used to see the effect of each partial independent variable on the dependent variable. The results of this test are obtained by comparing the significant value, where if the significant value is <0.05 or the calculated $t \text{ value} > t \text{ table}$, it can be said to have an effect. For the t-test carried out at a level of $\alpha = 10\%$, the formula for finding the t table is: $df = nk$ or $df = 60 - 3 = 57$, then the t-table value is obtained as $= 1.672$, here are the results of the t-test:

Table 7. Partial Hypothesis Test of Job Stress (X1) and On Employee Performance (Y)

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	39.145	3,047		12,848	.000
	Job Stress	.101	.116	.001	1,909	.992

a. Dependent Variable: Employee Performance

Processed by Researchers: SPSS 26

From the results of the table above, the research conducted using the t-test obtained a calculated t value of $1.909 > 1.672$ and a significance value of less than 0.05 or $0.000 < 0.05$ - meaning that the work stress variable (X1) has a positive and significant effect on the employee performance variable (Y).

Table 8. Partial Hypothesis Test of Work Environment (X2) and On Employee Performance (Y)

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	30,699	4.674		6,568	.000
	Work environment	.247	.136	.232	1,913	.000

a. Dependent Variable: Employee Performance

Processed by Researchers: SPSS 26

From the results of the table above, the research conducted through the t-test obtained a calculated t value of $1.913 > 1.672$ and a significance value of less than 0.05 or $0.000 < 0.05$ - meaning that the work environment variable (X2) has a positive and significant influence on the employee performance variable (Y).

b. F Test (Simultaneous)

This test is used to determine the joint influence of an independent variable on the dependent variable. Where if the sig value <0.05 or if the calculated F value $> F \text{ table}$, then there is an influence. The formula for finding the F table: $df1 = (k-1) = (3-1) = 2$, and $df2 (nk) = (60-3)$, then the F table value obtained in the study is 3.159.

Table 9. Simultaneous Hypothesis Test of Work Stress (X1) and Work Environment (X2) On Employee Performance (Y)

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	66,247	2	33.124	4.907	.100b

	Residual	989.936	57	17,367		
	Total	1056.183	59			
a. Dependent Variable: Employee Performance						
b. Predictors: (Constant), Work Environment, Work Stress						

Processed by Researchers: SPSS 26

Based on the calculation, the F test results obtained a calculated F value of 4.907 > 3.159 and a significant value of 0.000 < 0.05. So it can be concluded that work stress (X1) and work environment (X2) simultaneously have a positive and significant influence on employee performance (Y).

DISCUSSION

1. The Influence of Work Stress (X1) on Employee Performance (Y)

Based on the results of simple linear regression analysis, the equation $Y = 39.145 + 0.101X$ is obtained, where the constant value (a) of 39.145 indicates that if there is no change in the work stress variable (X1), then the employee performance value (Y) remains at 39.145. Meanwhile, the work stress regression coefficient (X1) of 0.101 indicates that for every 1% increase in work stress, employee performance will increase by 0.101. This positive regression coefficient indicates that work stress has a positive effect on employee performance.

The results of the partial t-test show that the t-count is 1.909 > t-table 1.672 with a significance value of 0.000 < 0.05, which means that work stress (X1) has a positive and significant effect on employee performance (Y). In other words, the higher the level of work stress that is well managed, the higher the employee performance in the company.

2. The Influence of the Work Environment (X2) on Employee Performance (Y)

The results of the simple linear regression analysis show the equation $Y = 30.699 + 0.247X$, where the constant value of 30.699 indicates that if there is no change in the work environment variable (X2), then the employee performance value remains 30.699. Meanwhile, the work environment regression coefficient (X2) of 0.247 indicates that for every 1% increase in the work environment, employee performance increases by 0.247. From the results of the partial t-test, the t-count was obtained at 1.913 > t-table 1.672 with a significance value of 0.000 < 0.05, which indicates that the work environment has a positive and significant influence on employee performance (Y). Thus, a good work environment contributes significantly to increasing employee productivity and effectiveness in carrying out their duties.

3. The Influence of Work Stress (X1) and Work Environment (X2) on Employee Performance (Y)

Based on the results of multiple linear regression, the equation $Y = 31.641 + 0.191X_1 + 0.289X_2$ is obtained. The constant value of 31.641 indicates that if work stress (X1) and work environment (X2) are zero, then employee performance remains at 31.641.

The results of the analysis show that the regression coefficient of work stress (X1) is 0.191, which means that for every 1% increase in work stress, employee performance decreases by 0.191, assuming other variables remain constant. Meanwhile, the regression coefficient of the work environment (X2) is 0.289, indicating that for every 1% increase in the work environment, employee performance increases by 0.289.

The results of the F test show that the F-count is 4.907 > F-table 3.159 with a significance value of 0.000 < 0.05, so it can be concluded that work stress (X1) and work environment (X2) simultaneously have a positive and significant effect on employee performance (Y).

This indicates that although work stress can have a negative impact, a conducive work environment can help increase employee productivity in the company.

CONCLUSION

Based on the results of data analysis, it can be concluded that work stress (X1) has a negative and significant effect on employee performance, as indicated by the t-count value of $1.909 > t\text{-table } 1.672$ with a significance of $0.000 < 0.05$. Meanwhile, the work environment (X2) has a positive and significant effect on employee performance, with a t-count value of $1.913 > t\text{-table } 1.672$ and a significance of $0.000 < 0.05$. Simultaneously, the results of the F test show that work stress and work environment together have a significant effect on employee performance, with an F-count of $4.907 > F\text{-table } 3.159$ and a significance of $0.000 < 0.05$. Thus, it can be concluded that good work stress management and a conducive work environment can improve employee performance at the Trade Apparatus Education and Training Center (Pusdiklat) in Depok City.

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