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### **Abstract**

This study aims to determine the effect of the Work Environment on Employee Performance with Work Discipline as a mediating variable at PT. Sinar Sosro Tanjung Morawa. The sample used was 137 respondents. This study uses the Sobel Test as an analysis technique that can justify the influence of independent variables on dependent variables both directly and indirectly through mediating variables. The results of this study indicate that the Work Environment variable partially has a significant effect on Work Discipline, the Work Environment partially has a significant effect on Employee Performance, Work Discipline partially has a significant effect on Employee Performance. The Work Environment also affects Employee Performance indirectly through increasing employee Work Discipline.

Keywords: Work Environment, Employee Performance, Work Discipline

### INTRODUCTION

### Research Background

A company is a place where an activity of producing goods or services occurs which are then sold to the public. The goal is to utilize human resources and natural resources, in order to produce goods or services, in order to generate maximum profit. Companies in running their businesses really need resources such as capital, materials and machines. Human resources play a very important role in the success of an organization's goals in a company. Because humans are a living asset that must be maintained and their potential developed, this is usually regulated in human resource management. Human resource management has several definitions put forward by experts. According to Hasibuan (2019), human resource management is the science and art of managing relationships and roles of the workforce to effectively and efficiently help realize the goals of the company, employees, and society.

The work environment includes something that is around the employees so that it affects an individual in carrying out the obligations that have been assigned to him, such as air conditioning, good lighting and others (Darmadi, 2020). The problem that often arises is the lack of harmony in the work environment between employees which leads to the formation of work groups. These work groups have differences between each other and the most prominent thing is the impact on employee absences where if one employee is absent, the other employees in the group will decide not to come in either. Furthermore, another factor that affects performance is work discipline.

Work discipline is the most important operative function of human resource management, because the better the employee's work discipline, the higher the work performance that can be achieved, while if there is no implementation of good work discipline, it will be difficult for the company to achieve optimal results (Hasibuan, 2009). Another thing that is also an obstacle is one of the problems is the lack of employee discipline towards the work schedule that has been previously determined by the company, where employees often take breaks earlier than the specified hours, return to work very late, and there are still employees who

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have not completed their work according to the specified working hours, this occurs due to the company's lack of firmness in responding to employee discipline. In addition to the problems explained above, there is still a phenomenon of employee performance that is not optimal. According to Sembiring (2020), employee performance is the effect of quality work and the capacity achieved by individuals in a company to carry out their work based on pressure or tasks assigned by the company. The problems that arise are the timeliness of completing a job, especially in the production sector, and there are several employees who work only if there is a task from the leader, lack of awareness and creative independence to complete the job, if this continues to happen then the company will experience a decline in employee performance which has an impact on the production of goods and services in the company.

Based on the phenomenon that occurred in PT. Sinar Sosro related to employee performance because there were no employees who reached the Very Good category and the decrease in the number of employees in the Sufficient category can be a concern for the company to encourage employees to achieve their best potential which was caused by a less than good work environment that caused a decrease in employee attendance. In addition, the decrease in employee performance was caused by employees who were less disciplined because they received warning letters and poor attendance rates. From the explanation of the phenomenon, the researcher took the initiative to conduct further research with the title "The Influence of the Work Environment on Employee Performance at PT. Sinar Sosro Tanjung Morawa Mediated by Work Discipline".

### Research purposes

The objectives of this research are:

- 1. Knowing the influence of the work environment on work discipline.
- 2. Knowing the influence of the work environment on employee performance.
- 3. Knowing the influence of work discipline on employee performance.
- 4. Knowing the influence of work discipline on the work environment and employee performance

### LITERATURE REVIEW

### **Understanding the Work Environment**

According to Andry (2020), the work environment is everything related to the conditions around workers, which can be physical or non-physical, which can have an impact on employee comfort at work and result in a decrease in employee performance itself, which ultimately results in losses for the company.

### **Definition of work discipline**

According to Sari (2020), work discipline is a form of a person's respect for the organization and obeying the rules and being willing to accept punishment if they violate them. Discipline is the main attitude that must exist in human resource management, the higher the work discipline, the higher the work performance.

### **Understanding Employee Performance**

Hendrayani (2020) stated that performance is a form of work results produced by a person. Performance is used as a basis for assessment or evaluation and a system that is an important force in influencing employee behavior.

### RESEARCH METHODS

## **Population and Research Sample**

In this study, the population is all employees of PT Sinar Sosro Tanjung Morawa totaling 137 people. Therefore, the sample of this study is as many as the population, namely 137 employees of PT Sinar Sosro Tanjung Morawa.

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# **Research Data Analysis Techniques**

### Sobel Test

Testing the mediation hypothesis can be done with a procedure developed by the Sobel test. The Sobel test is done by testing the strength of the indirect influence of the independent variable (X) to the dependent variable (Z) through the Intervening variable (Y), where in this study is the mediation effect of Work Discipline on the influence of the Work Environment on Employee Performance:

$$Sab = \sqrt{b^2sa^2 + a^2sb^2 + sa^2.sb^2}$$

Information:

Sa = standard error of coefficient a

Sb = standard error of coefficient b

b = coefficient of mediating variable

a = coefficient of the independent variable

To test the significance of the indirect effect, it is necessary to calculate the t value of the ab coefficient using the following formula:

$$t = \frac{ab}{Sab}$$

The calculated t value is compared with the t table value, if the calculated t value > t table value then it can be concluded that there is a mediation effect (Herlina et al, 2018).

#### RESEARCH RESULTS AND DISCUSSION

**Data Quality Testing Data Validity Test** 

Table 1. Results of Validity Test X (Work Environment)

Variables	<b>Questionnaire Items</b>	Rcount	Rtable	Conclusion
	X.1	0.781	0.167	Valid
	X.2	0.758	0.167	Valid
	X.3	0.747	0.167	Valid
	X.4	0.735	0.167	Valid
Work environment	X.5	0.831	0.167	Valid
(X)	X.6	0.803	0.167	Valid
	X.7	0.713	0.167	Valid
	X.8	0.672	0.167	Valid
	X.9	0.741	0.167	Valid
	X.10	0.710	0.167	Valid

**Table 2. Results of Validity Test of Variable Y (Employee Performance)** 

Variables	Questionnaire Items	Rcount	Rtable	Conclusion
_	Y.1	0.755	0.167	Valid
	Y.2	0.816	0.167	Valid
	Y.3	0.742	0.167	Valid
Douformon oo -	Y.4	0.826	0.167	Valid
Performance -	Y.5	0.765	0.167	Valid
(Y) –	Y.6	0.515	0.167	Valid
	Y.7	0.688	0.167	Valid
	Y.8	0.764	0.167	Valid
	Y.9	0.785	0.167	Valid

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 v			
Y.10	0.758	0.167	Valid

Table 3. Results of the Validity Test of Variable Z (Work Discipline)

Variables	<b>Questionnaire Items</b>	Rcount	Rtable	Conclusion
	Z.1	0.835	0.167	Valid
	Z.2	0.781	0.167	Valid
	Z.3	0.442	0.167	Valid
	Z.4	0.787	0.167	Valid
	Z.5	0.765	0.167	Valid
	Z.6	0.791	0.167	Valid
	Z.7	0.451	0.167	Valid
Work Discipline	Z.8	0.754	0.167	Valid
(Z)	Z.9	0.767	0.167	Valid
	Z.10	0.516	0.167	Valid
	Z.11	0.757	0.167	Valid
	Z.12	0.744	0.167	Valid
	Z.13	0.791	0.167	Valid
	Z.14	0.807	0.167	Valid
	Z.15	0.832	0.167	Valid
	Z.16	0.694	0.167	Valid

Table 1 to Table 3 shows that all statement items of variable X (Work Environment), variable Z (Work Discipline) and variable Y (Employee Performance) are valid because the results of the corrected item-total correlation rhitung > r tabel (0.167) are attached. Thus, the questionnaire can be continued to the reliability testing stage.

## **Reliability Test**

Table 4. Results of the Reliability Test of the Work Environment Variable (X)

Reliability St	tatistics
Cronbach's	
Alpha	N of Items
,912	10

Table 5. Results of the Employee Performance Variable Reliability Test (Y)

Reliability St	tatistics
Cronbach's	
Alpha	N of Items
.907	10

Table 6. Results of the Reliability Test of the Work Discipline Variable (Z)

<b>Reliability</b>	Statistics
Cronbach's	·
Alpha	N of Items
,930	6 16

Based on the results of the reliability test above, it can be seen that each research instrument variable managed to obtain a Cronbach's Alpha value > 0.60. So it can be said that the instrument used in the study is reliable.

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# Classical Assumption Testing Data Normality Testing

**Table 7. Kolmogorov Smirnov Test Results** 

	One-Sample K	Kolmogorov-Smirnov Test	
		Unstandardized Residual	Unstandardized Residual
N		137	137
Normal Parametersa,b	Mean	0.0000000	0.0000000
	Std. Deviation	7.84784174	4.05941399
Most Extreme Differences	Absolute	0.053	0.046
	Positive	0.046	0.035
	Negative	-0.053	-0.046
Test Statistics		0.053	0.046
Asymp. Sig. (2-tailed)		,200c,d	,200c,d

Based on the results of the normality test using the Kolmogorov-Smirnov method, it is significant if > 0.056 (greater than 0.056) so that the data is said to be normally distributed.

## **TestingMulticollinearity**

**Table 8. Multicollinearity Test Results** 

Table 6. Multiconflicatity	1 est Nesults						
Coefficientsa							
	Unstandardized Coefficients		Standardized Coefficients			Colline Statis	-
Model	В	Std. Error	Beta	t	Sig.	Tolerance	VIF
1 (Constant)	11,466	3,031		3,782	0,000		
Work environment	0.488	0.072	0.502	6,817	0,000	0.784	1,276
Work Discipline	0.151	0.045	0.250	3,390	0.001	0.784	1,276
a. Dependent Variable: Emp	lovee Performan	nce					

Based on table 8 above, it can be seen that the results of the analysis calculations show that the VIF value of the Work Environment (X), Work Discipline (Z) is less than 10 and the tolerance value is greater than 0.10 so that it can be concluded that the regression model does not show symptoms of multicollinearity.

### **Heteroscedasticity Test**

Table 9. Gleiser test

	Coeffi	cientsa			
			Standardized		
	Unstandardized C				
Model	В	Std. Error	Beta	t	Sig.
1 (Constant)	3,099	1,727		1,794	0.075
Work environment	-0.058	0.041	-0.137	-1,426	0.156
Work Discipline	0.043	0.025	0.161	1,674	0.096
a. Dependent Variable: AbsRes					

Based on table 9 above, it can be said that the Work Environment variable (X) has a sig. value of = 0.654, Employee Performance (Y) has a sig. value of = 0.070 and Work Discipline (Z) has a sig. value of = 0.074. Thus, from the regression model above, it can be said that there is no symptom of heteroscedasticity because the variable has a significant value > 0.05.





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## **Multiple Linear Regression Equation**

Table 10. ResultsMultiple Linear Regression Test

Coefficientsa							
Unstandardized Coefficients Standardized Coefficients							
Model	В	B Std. Error Beta		t	Sig.		
1 (Constant)	30,957	5,196		5,958	0,000		
Work environment	0.745	0.122	0.465	6,099	0,000		
a. Dependent Variable: Work Di	scipline						

Table 11. ResultsMultiple Linear Regression Test

10	Table 11. Resultsiviatiple Linear Regression Test								
	Coefficientsa								
		Unstar	ndardized	Standardized			Collinea	rity	
		Coef	ficients	Coefficients			Statisti	cs	
M	odel	В	Std. Error	Beta	t	Sig.	Tolerance	VIF	
1	(Constant)	11,466	3,031		3,782	0,000			
	Work	0.488	0.072	0.502	6,817	0,000	0.784	1,276	
	environment								
	Work Discipline	0.151	0.045	0.250	3,390	0.001	0.784	1,276	
a.	Dependent Variable	e: Employee	Performance						

$$Z = 30.957 + 0.745 X$$
  
 $Y = 11.466 + 0.488 X + 0.151 Z$ 

- a. The constant value of 30.957 shows that if the Work Environment is 0, then the level of Work Discipline is 30.957.
- b. The coefficient value of the Work Environment is 0.745 with a positive direction. This can be interpreted that every time there is an increase in the Work Environment by 1 unit, the level of Work Discipline will increase by 0.745.
- c. The constant value of 11.466 shows that if the Work Environment and Work Discipline are 0, then the Employee Performance level is 11.466.
- d. The coefficient value of the Work Environment is 0.488 with a positive direction. This means that every increase in the Work Environment by 1 unit will increase Employee Performance by 0.488.
- e. The coefficient value of Work Discipline is 0.151 with a positive direction. This means that every increase in Work Discipline by 1 unit will increase Employee Performance by 0.151.

## **Hypothesis Testing Results**

F Test

**Table 12. F Test Results** 

ANOVA					
			Mean		
Model	Sum of Squares	df	Square	F	Sig.
1 Regression	1695,111	2	847,556	50,677	,000b
Residual	2241,123	134	16,725		
Total	3936,234	136			

a. Dependent Variable: Employee Performance

b. Predictors: (Constant), Work Discipline, Work Environment

Based on the table 11 above, the results of the F Test above, it can be seen that the significance value is 0.000 which is smaller than 0.05, which means that the Work Environment (X) and Work Discipline (Z) together (simultaneously) have a significant influence on Employee Performance (Y). Published by **Radja Publika** 





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t-test

Table 13, t-Test Results

Coefficientsa							
	Unstandardized Coefficients		Standardized Coefficients				
Model	В	Std. Error	Beta	t	Sig.		
1 (Constant)	30,957	5,196		5,958	0,000		
Work environment	0.745	0.122	0.465	6,099	0,000		
a. Dependent Variable: Work Discipline							

Table 14. t-Test Results

Coefficientsa								
		Unstandardized		Standardized			Collinea	rity
		Coef	ficients	Coefficients			Statisti	cs
Model		В	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	11,466	3,031		3,782	0,000		
	Work	0.488	0.072	0.502	6,817	0,000	0.784	1,276
	environment							
	Work Discipline	0.151	0.045	0.250	3,390	0.001	0.784	1,276
a. Dependent Variable: Employee Performance								

From the results of the T-test calculations above, it can be explained as follows

- a. The Work Environment variable has a significance value of 0.000, which is less than 0.05, which means that the Work Environment partially has a significant influence on Work Discipline.
- b. The Work Environment variable has a significance value of 0.000, which is less than 0.05, which means that the Work Environment partially has a significant influence on Employee Performance.
- c. The Work Discipline variable has a significance value of 0.001, which is smaller than 0.05, which means that Work Discipline partially has a significant influence on Employee Performance.

### **Determination Test**

**Table 15. Coefficient of Determination** 

Table 15. Coefficient of Determination								
Model Summaryb								
			Adjusted R	Std. Error of the				
Model	R	R Square	Square	Estimate				
1	,656a	0.431	0.422	4,090				
a. Predictors: (Constant), Work Discipline, Work Environment								
b. Dependent Variable	: Employee Performance							

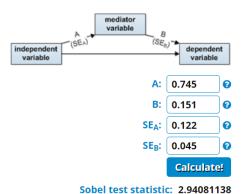
In the results of the determination coefficient test above, the R2 value obtained was 0.431 or 43.1%. This shows that Employee Performance (Y) can be influenced by 43.1% by the independent variables, namely Work Environment (X) and Work Discipline (Z). While 6.9% of Employee Performance is influenced by other variables outside the research model used in this study.



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## Sobel Test Table 16. Sobel Test



One-tailed probability: 0.00163677 Two-tailed probability: 0.00327354

The results of the Sobel test shown in the image above, the Sobel test statistic value is 2.94081138, with a one-tailed probability of 0.00163677 and a two-tailed probability of 0.00327354, all of which are smaller than the significance value of 0.05. This indicates a significant mediating effect of the Work Discipline variable in the relationship between the Work Environment and Employee Performance. In other words, the Work Environment not only directly affects Employee Performance, but also indirectly through Work Discipline as a mediating variable.

#### **Discussion**

# The Influence of Work Environment on Employee Performance

Based on the results of statistical testing, it was found that the Work Environment has a positive and significant effect on employee performance. The Work Environment variable has a significance value of 0.000, which is smaller than 0.05, which means that the Work Environment partially has a significant effect on Employee Performance. This confirms that the work environment, both in terms of physical aspects and social relations between coworkers, greatly influences employee performance. An unsupportive environment, both in terms of facilities and interpersonal relations, can cause a decline that has an impact on performance. The results of this study are in line with research conducted by Aurelia Potu (2013) which states that a satisfactory work environment for employees can improve performance.

### The Influence of the Work Environment on Work Discipline

Based on the results of statistical tests obtained, it shows that the work environment has a positive effect on work discipline. The Work Environment variable has a significance value of 0.000, which is less than 0.05, which means that the Work Environment partially has a significant effect on Work Discipline. Thus, this shows that inadequate facilities in the work environment can be a factor that reduces work discipline. Employees who feel unsupported by a good physical environment tend to show decreased compliance with company rules, which in turn can have a negative impact on the company's overall productivity and performance. Conversely, an unsupportive or inadequate environment can be a trigger for decreased work discipline. The results of this study are in line with research conducted by Muzdalifa & Jaenab (2022) which states that sufficient attention to a conducive work environment can provide a sense of security and comfort so that employees can carry out very good activities so that work discipline can be improved.

### The Influence of Work Discipline on Employee Performance

Based on the results of statistical testing, it was obtained that Work Discipline has a positive and significant effect on Employee Performance. The Work Discipline variable has a significance value of 0.001, which is smaller than 0.05, which means that Work Discipline partially has a significant effect on Employee Performance. This indicates that employees who are able to comply with the rules, carry out tasks according to established standards, and follow existing work schedules tend to have better performance in their work.

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The results of this study are in line with research conducted by Kartika Dwi Arisanti., et al (2019) which states that work discipline affects employee performance at PT Pegadaian (Persero) Nganjuk Branch.

## Work Discipline Mediates the Influence of Work Environment on Employee Performance

Based on the results of statistical testing, it was found that Work Discipline has a positive and significant effect on employee performance. This indirect effect is calculated by multiplying the coefficient of influence of the Work Environment on Work Discipline (0.745) by the coefficient of influence of Work Discipline on Employee Performance (0.151), so that an indirect effect of 0.112 or 11.2% is obtained. This shows that the Work Environment also affects Employee Performance indirectly through increasing employee Work Discipline. This means that in addition to the direct effect of the Work Environment on Employee Performance, there is an additional contribution from the Work Environment that influences through the level of employee Work Discipline.

### CONCLUSION AND SUGGESTIONS

### Conclusion

- 1. The work environment has a positive and significant influence on employee performance at PT Sinar Sosro Tanjung Morawa.
- 2. The work environment has a positive and significant influence on work discipline at PT Sinar Sosro Tanjung Morawa.
- 3. Work Discipline has a positive and significant effect on employee performance at PT Sinar Sosro Tanjung Morawa
- 4. Work discipline mediates the influence of the work environment on employee performance at PT Sinar Sosro Tanjung Morawa.

### Suggestion

- 1. Companies need to continuously improve the working environment, including physical facilities such as workspace, ventilation, lighting, and cleanliness. Employees who work in a comfortable environment are more likely to be disciplined and productive. Small improvements such as increasing cleanliness or adjusting the layout can have a positive impact on employee comfort and performance.
- 2. Improving interpersonal relationships between employees in addition to the physical environment, interpersonal relationships also need to be considered. Companies can hold team building activities or training that focuses on improving cooperation between employees. Harmonious relationships between employees will create a more conducive work atmosphere, which affects their discipline and performance.
- 3. Strengthening work discipline supervision even though the discipline policy has been implemented, the company must ensure that discipline supervision is carried out consistently and effectively. Rewards for disciplined employees and strict sanctions for disciplinary violations need to be implemented to improve compliance with existing regulations.
- 4. Focus on developing work disciplineSince work discipline mediates the influence of the work environment on employee performance, companies should pay more attention to developing employee discipline. Training, mentoring programs, and regular feedback can help employees improve their discipline, which will ultimately improve overall performance.

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