

## The Influence Of Work Discipline And Work Environment On Employee Performance In Regional Public Water Companies

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### ABSTRACT

**Submitted:** **Purpose of the study** — This study aims to examine the effect of work discipline and work environment on employee performance.  
05-16-2024

**Accepted:** **Research method**—The research employs a quantitative approach using verification analysis, conducted at Perumdam Tirta Tarum Karawang. The population consisted of 343 employees, with a sample of 78 determined using the 10% Solvin formula. Data analysis was performed using multiple linear regression with the SPSS 27 application.  
12-21- 2024

**Published:** **Result**— The findings indicate a significant influence of work discipline on employee performance, evidenced by  $t_{table} (2.295 > 2.011)$  or  $t_{hitung} > t_{table}$ . Additionally, the work environment also significantly affects employee performance, with  $t_{table} (8.224 > 2.011)$ .  
01-15, 2025

**Conclusion**— Both work discipline and work environment significantly influence employee performance at Perumdam Tirta Tarum Karawang.

**Keywords:** *Work Discipline, Work Environment, Employee Performance.*



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### INTRODUCTION

Human resources are an important aspect to support a company's productivity in order to survive in today's tight competition. Therefore, a company must be able to manage its human resources well in order to increase productivity in the company. Companies and employees are things that need each other. The success of a company is influenced by the performance of individuals or groups. A company will strive to improve the performance of its employees with the hopes and goals of the company that it wants to achieve (Komarudin, 2022)

Perumdam Tirta Tarum is a regional company that is responsible for providing clean water services to the community in Karawang Regency. Along with the increasing population, and the development of Karawang Regency both in the construction and industrial sectors, the need for clean water continues to increase. Therefore, the demand to become a customer of Perumdam has also increased. Perumdam Tirta Tarum has been operating for approximately 32 years. This company has 343 employees. This company has been trusted to install clean water in every region, therefore Perumdam Tirta Tarum is trying various ways to improve and develop human resources in order to create good performance. Performance needs to be observed carefully, if performance increases, success will affect the achievement of a company's goals. The results of employee performance assessments for companies have an important role in determining a policy to determine a decision regarding human resources in a company (Louis, 2020).

The progress and success of an agency greatly depends on individual performance in this case, where the employee is able to work hard, proactively, loyally and highly disciplined and responsible for tasks and work which can ultimately achieve optimal performance, thus having a positive impact on agency performance. However, in reality, problems related to employee performance are still found (Pertiwi & Savitri, 2021). In addition to employee factors, performance cannot be separated from the responsibility of superiors. Because every employee is the responsibility of the leader to encourage and manage their performance (Dewi, T., & Pertiwi, 2022)

Currently, Perumdam Tirta Tarum, Karawang Regency is experiencing problems with declining performance, this can be seen from the employee performance evaluation report on the realization of 2022, as follows:

**Table 1.** Performance Evaluation Report of the Central Production Section of Perumdam Tirta Tarum, Karawang Regency, Realization in 2022

Parang, Karawang Regency, Realization in 2022							
No	Description	Unit	Realization		Difference		Evaluation
			2021	2022	Realization +/-	Percentage (%)	
I	CAPACITY						
1	Installed/Design Capacity	Liter/Sec.	1,384.5	1,351.5	-33	-2.38	Down
2	Unutilized Installed Capacity	Liter/Sec.	47	47	0	0	Still
3	Currently Utilizable Capacity	Liter/Sec.	1,071	1,088	16	1.51	Up
4	Pipe Utilization Effectiveness	%	77.38	80.47	3.09	3.99	Up
5	Remaining Capacity / Idle Capacity	Liter/Sec.	313	264	-49	-15.7	Down
II	OPERATIONAL						
6	Production Hours	Hours/Days	22.12	22.39	0.27	1.2	Up

No	Description	Unit	Realization		Difference		Evaluation
			2021	2022	Realization +/-	Percentage (%)	
7	Raw Water	M3/Year	34,320,769	34,204,557	-116,212	-0.34	Down
8	Production Water	M3/Year	32,808,211	32,531,241	-276,970	-0.84	Down
9	Water Loss Volume	M3/Year	1,512,557	1,673,315	160,758	10.63	Down
10	Installation % Water Loss In	%	4.41	4.89	0.48	11	Up
<b>III USE OF CHEMICALS</b>							
11	Alum Sulfate	Kg	1,075.49	1,174.66	99.130	9.22	Up
12	Liquid Pac	Kg	0	0	0	0	Stay
13	Chalone Blueberry	Kg	88,868	97,983	9,118	10.26	Up
14	Floculant	Kg	53,799	79,411	25,613	47.61	Up
<b>IV WATER QUALITY</b>							
15	Reservoir Water Turbidity	NTU	1.56	1.3	0	-16.82	Down
16	Chemical/Physical Examination	Σ Sample	248	229	-119	-7.66	Down
17	Meets Drinking Water Requirements	Σ Sample	142	157	15	10.56	Up
<b>ELECTRICAL POWER</b>							
<b>V USAGE</b>							
18	In Rupiah	Rupiah	15,538,371,629	14,437,126,950	-1,101,244,679	-7.09	Down

Source: Perumdam Tirta Karawang Regency

Based on table 1, it can be seen in the description of the installed/design capacity, remaining capacity, raw water, production water, reservoir water turbidity and in rupiah form, the realization of the set target has decreased or the target realization has not reached the target set at Perumdam Tirta Tarum Karawang Regency. From the explanation above, it can be concluded that the performance of employees in the central production division of Perumdam Tirta Tarum Karawang Regency has not been maximized.

Work discipline is very necessary in the company. Therefore, every company always demands that its employees are disciplined in working to achieve the productivity results desired by the Company (Rismayadi, 2020). In Perumdam Tirta Tarum Karawang Regency employees, there are employees who often come late, some employees who do not comply with the regulations. The absenteeism rate decreased due to lack of discipline so that employees often commit violations such as being sick, taking permission, being absent, taking

leave and this will have an impact on employee performance. This can be seen from the following attendance recap:

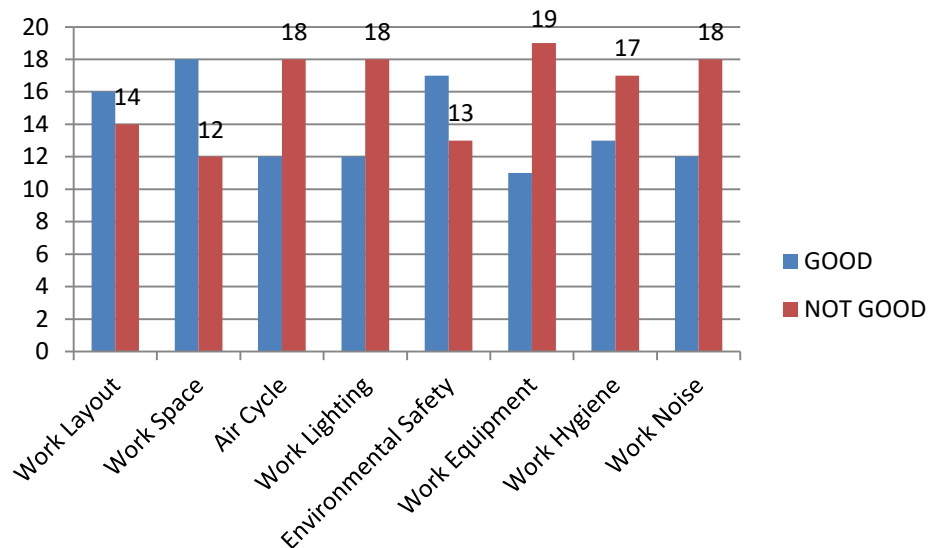
**Table 2.** Recap of Employee Attendance Data for Perumdam Tirta Tarum, Karawang Regency in 2022

No	Month	Number of Employees	Leave	Sick	Absent	Leave	Number of Absenteeism
1	January	343	58	40	63	23	184
2	February	343	34	61	31	26	152
3	March	343	34	52	18	21	125
4	April	343	33	29	8	36	106
5	May	343	15	10	58	39	122
6	June	343	8	12	3	4	27
7	July	343	42	48	13	8	111
8	August	343	72	65	36	14	187
9	September	343	44	97	14	4	159
10	October	343	72	72	19	4	167
11	November	343	14	16	5	8	43
12	December	343	5	19	4	3	31

Source: Data Processing Results, 2023

The data from table 2 above shows that there was a decrease in employee absence from January to December and it can be seen that in August there were 187 employees who did not come to work. This means that there are still many employees of Perumdam Tirta Tarum, Karawang Regency who have not complied with the working hours that have been set. In addition to work discipline, the next factor that affects employee performance is the work environment.

A poor work environment can take up employee time in carrying out work. If you are not good at managing it, employee performance can decrease (Jamil et al., 2023). Therefore, the company must provide an adequate work environment, such as a physical environment (comfortable office layout, clean environment, good air exchange, adequate color and lighting (Ohorella, 2020). The work environment at Perumdam Tirta Tarum is one of the factors that affects employee performance.



**Figure 1. Results of a Pre-questionnaire to 30 employees of Perumdam Tirta Tarum, Karawang Regency Regarding the Work Environment**

Based on the data in Figure 1 above, the conditions show that there are still many work environment conditions that are not optimal, such as air cycle conditions, lighting, work equipment, cleanliness and noise in the workplace that are not good enough. This affects employee performance because environmental conditions cause a lack of work enthusiasm which decreases employee performance. Based on the background of the problem above, there is a research gap in previous studies that have been conducted. There is research that produces work discipline variables, and the work environment has a positive effect on employee performance (Halawa, 2021). As well as research conducted by (Nina Andriyani, 2020) which produces a work environment and work discipline have a positive effect on employee performance. There is research that strengthens that work discipline has a positive effect on employee performance. while (Muna and Isnawati, 2022) state that work discipline has no significant effect on employee performance. This study aims to determine the effects related to Work Discipline and Work Environment on employee performance both partially and simultaneously.

## LITERATURE REVIEW AND HIPOTESYS DEVELOPMENT

### A. LITERATURE REVIEW

#### **Human Resource Management**

According to Ajabar (2020:4) human resources are the main key for an organization in carrying out its goals. According to (Kusmaduni, 2022) human resource management is a collection of resources in carrying out activities effectively and efficiently regarding positioning oneself in socializing with other humans with the aim of creating unity between the organization and human resources that are mutually tolerant of each other. Meanwhile, according to (Mangkunegara, 2019) Human Resource Management is

a management and utilization of resources available to individuals. This management and utilization are developed optimally in the world of work to achieve organizational goals and individual employee development. Based on several opinions above, it can be synthesized that human resource management is a process to achieve maximum work in the world of work and achieve common goals.

### ***Organizational Behavior***

Organizational behavior is a study that concerns aspects of human behavior in a particular organization or group. Organizational behavior includes aspects of the consequences caused or the influence of the organization on its members, as well as aspects of the effects of human influence on the organization (Bakri University, 2023). Organizational behavior is the study of what people do in an organization and how their behavior affects organizational performance (Maziyah Bilqis, 2021). Organizational behavior can be used to maximize the results of human resources from group members. Organizational behavior can also be defined as an important role of the field of study that investigates how organizational structure affects behavior within the organization. Organizational behavior that studies the impact of individuals, groups and structures on human behavior within the organization (Sutisna, 2020). Based on several opinions above, it can be synthesized that organizational behavior is the attitude or behavior of individuals or groups that includes important aspects that influence human influence on the organization.

### ***Work Discipline***

Surono (2020) states that discipline can be interpreted when employees always come and go home on time, do all work well, comply with all company regulations and applicable social norms. Discipline is also a force that grows within the body of workers that causes workers to adjust to voluntarily submit to decisions, regulations, and work values (Ferdinandus, 2020). In addition, work discipline is also an attitude and behavior that reflects the level of compliance or obedience to various applicable regulations and corrective actions against violations of regulations and standards set in the organization (Salim & Ernanda, 2023). Based on several opinions above, it can be synthesized regarding work discipline which means attitudes and behavior that must be carried out by each employee in accordance with the regulations that have been set. According to (Dhermawan & Pratama, 2020:540), work discipline consists of four indicators, namely: (1) Punctuality, (2) Using work equipment properly, (3) Responsibility, (4) Obedience.

### ***Work Environment***

According to (Darmadi, 2020:242), the work environment includes something that is around employees so that it influences an individual in carrying out the obligations that have been assigned to him, such as air conditioning, good lighting and others. The work

environment, both physical and non-physical, can affect employee performance in carrying out their duties, and this can affect the company in achieving its goals. To create such conditions, support is needed from various parties, because basically a comfortable and healthy work environment is a non-financial component that helps create job satisfaction for employees in doing their jobs (Lupita et al., 2019). According to (Joni & Hikmah, 2022), the work environment is a very important component when employees carry out work activities. By paying attention to a good work environment or creating working conditions that can provide motivation to work, it will have an impact on employee performance at work.

Based on several opinions above, it can be synthesized that the work environment is a very important component and can affect himself and his work while working. According to (Fachrezi & Khair, 2020:111), the indicators of the work environment are: (1) Facilities, (2) Noise, (3) Air circulation, (4) Work relationships.

### ***Employee Performance***

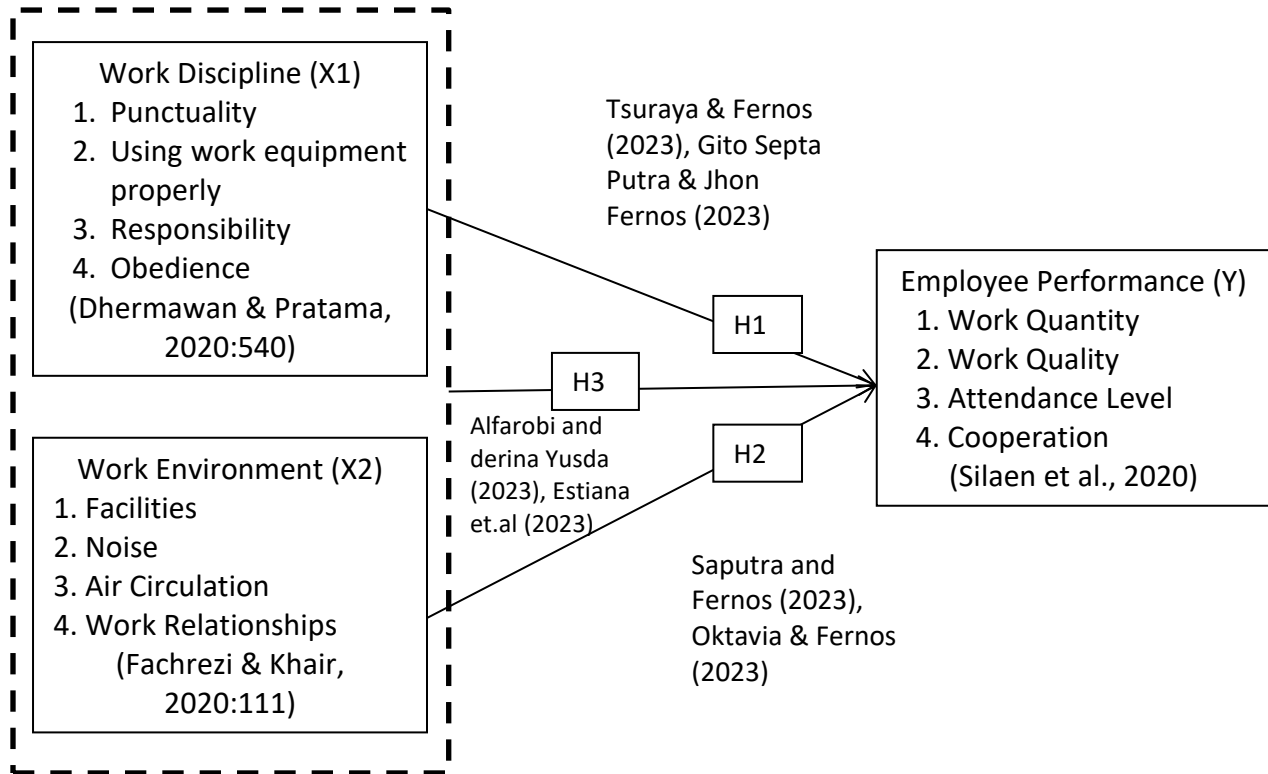
Performance is the result of work that can be achieved by a person or group of people in a company according to their respective authorities and responsibilities in an effort to achieve organizational goals illegally, not violating the law and not contrary to morals and ethics (Abidin & Sasongko 2022) performance is the result of work in terms of quality and quantity achieved by an employee in carrying out his duties according to the responsibilities given to him. According to (Ekhsan 2019) Performance refers to the meaning of behavior as a set of behaviors that are relevant to the goals of the organization or organizational unit where people work. Employee performance is an important part of implementing activity programs optimally (Pertiwi, 2022)

Based on several opinions above, it can be synthesized that employee performance is an oriented process achieved by employees according to their roles with predetermined standards to maximize the tasks and responsibilities given. The indicators used to measure employee performance are according to (Silaen et al., 2021): (1) quantity of work, (2) quality of work, (3) attendance rate, (4) cooperation.

## ***B. HYPOTESIS DEVELOPMENT***

The following is the framework of thought in this research, including:





**Figure 2. Framework of Thought**

Source: (Researcher, 2023)

A hypothesis is a temporary assumption regarding research (Dany Yudha et al., 2023) Based on the framework of thought, the following research hypothesis can be formulated, namely:

H1: Work discipline has a positive effect on the performance of Perumdam Tirta Tarum employees, Karawang Regency

H2: The work environment has a positive effect on the performance of Perumdam Tirta Tarum employees, Karawang Regency

H3: Work discipline and work environment together have a positive effect on the performance of Perumdam Tirta Tarum employees, Karawang Regency

## METHOD

This type of research is quantitative research, the quantitative method in this study uses verification analysis. Verification research according to Sugiyono (2018:36) is a study conducted on a certain population or sample with the aim of testing the established hypothesis. The



location of this study is Jl. Surotokunto No.KM.4, RW.5, Adiarsa Tim., Kec. Karawang Tim., Karawang, West Java 41314 research time September 2023-November 2023.

Population according to (Sugiyono, 2018) states that population is a generalization area of objects that have certain qualities and characteristics that are determined by researchers to be studied and then conclusions are drawn. The population in this study were all employees of Perumdam Tirta Tarum, Karawang Regency, totaling 343 employees consisting of Employees.

According to Sugiyono (2021:127) states that samples are part of the number and characteristics of the population, so the number of samples taken must be able to represent the population in the study. The sample was conducted because the researcher had limitations in conducting the research in terms of time, energy, funds and a very large population. So the researcher must take a truly representative sample (can represent). To calculate the determination of the number of samples from a certain population that is developed, the Slovin formula is used as follows:

$$n = \frac{N}{1 + Ne^2}$$

$$n = \frac{343}{1 + 343(0,1)^2}$$

$$n = \frac{343}{4,4}$$

$$n = 77,95$$

Where:

$n$  = Sample size

$N$  = Population size

$e^2$  = Tolerable error rate in selecting sample members (error rate in this sample is 10%).

Based on the calculation above, the sample size ( $n$ ) in this study was 77.95 or 78 people. This study uses a 10% error limit, meaning it has an accuracy rate of 90%. This number will be used as a sample size for research at Perumdam Tirta Tarum, Karawang Regency. Data were collected using observation, interview, documentation, and questionnaire methods with a linkert scale According to (Sugiyono, 2020) said that the Likert scale is used to measure the attitudes, opinions, and perceptions of a person or group of people about social phenomena. The researcher conducted direct observation at Perumdam Tirta Tarum Karawang, the researcher interviewed staff in the Human Resources section of Perumdam Tirta Tarum Karawang Regency and the Production section to obtain more in-depth information regarding performance at Perumdam Tirta Tarum Karawang Regency, the researcher distributed statements in the form of questionnaires to all employees of Perumdam Tirta Tarum Karawang Regency.

Validity Test

According to Priyatno (2018:21) The purpose of the validity test is to evaluate the extent to which the measuring instrument can measure what should be measured. The validity test uses

the person correlation method. This study used SPSS version 27. The validity test criteria are as follows:

1. If  $\text{sig} > \alpha = 0.05$  then the instrument is invalid
2. If  $\text{sig} < \alpha = 0.05$  then the instrument is valid

### ***Reliability Test***

According to Priyatno (2018:25) the reliability test is used to determine the consistency of the measurement instrument which usually uses a questionnaire. The range scale measurement method (such as the Liker scale 1-5) which is often used in research is Cronbach Alpha. To determine whether an instrument is considered reliable or not, a number limit is used. Criteria with the following provisions:

1. If the Cronbach alpha value  $> 0.60$  is reliable
2. If the Cronbach alpha value  $< 0.60$  is not reliable

### ***Classical Assumption Test***

#### ***Normality Test***

According to Priyatno (2018:127) data normality is an important requirement in parametric analysis. Normally distributed data is considered to be able to represent the population, so it is important to ensure data normality before conducting analysis. In the study, the data normality test used the one sample kolmogrov-smirnov test. In this test, if the asymptotic significance value (2-tailed) is greater than 0.05, it can be interpreted that the variables have a normal distribution, and vice versa. The normality test in this study was carried out using the SPSS Version 27 computer program.

#### ***Multicollinearity Test***

According to Priyatno (2018:134) the multicollinearity test is to analyze multiple regression consisting of two or more independent variables. Where the level of association of the relationship between the independent variables will be measured by looking at the tolerance and inflation factor (VIF) values. This study used SPSS Version 27. To test for multicollinearity, it can be seen from the Variance Inflation Factor (VIF).

#### ***Heteroscedasticity Test***

According to Ghazali (2018:107) the heteroscedasticity test aims to test whether the regression model has unequal variance from the residuals of one observation to another. In this study, the Glejser test was used to test for heteroscedasticity. The Glejser test is a hypothesis test to determine whether a regression model has an indication of heteroscedasticity by regressing the absolute value of the residuals against the independent variables.

### **Autocorrelation Test**

According to Ghozali, (2021) the autocorrelation test aims to test whether in the linear regression model there is a correlation between the confounding error in period t and the confounding error in period t-1 (previously). There are several ways to detect the presence or absence of autocorrelation, this study uses the Durbin-Watson Test (DW test). The Durbin-Watson test has criteria for making decisions about the presence or absence of autocorrelation, namely  $DU < DW < 4-DU$ . The following is a table of autocorrelation test results.

### **Multiple Regression Analysis**

Multiple linear regression analysis is used to test the influence of two or more independent variables on the dependent variable. According to Sugiyono (2021:258), the formula for multiple regression with two or more independent variables is as follows:

Description:

$$Y=A+b_1X_1+b_2X_2+e$$

Y = Environmental performance

A = Constant (the value of Y when both X1 and X2 are zero)

b1 = Coefficient for work discipline (X1)

b2 = Coefficient for work environment (X2)

e = Error term (standard error)

### **t-test**

The t-statistic test or commonly called the t-test is carried out to prove the influence of the independent variable on the dependent variable. The t-test is used to determine the effect of Profitability, Environmental Performance and Leverage on Carbon Emission Disclosure and to draw conclusions whether the variable is accepted or rejected using the t-test.

According to Sugiono (2022:184) the t-test formula is as follows:

$$t = \frac{r}{\sqrt{\frac{(1-r^2)}{n-2}}}$$

Description:

t: T-test value

r: Correlation coefficient

r<sup>2</sup>: Determination coefficient

n: Number of samples in the study

The guidelines for decision making in the t-statistic test are as follows:

1. Based on the significance value (Sig).

- a) If the significance value (Sig.) < 0.05 then there is an influence between the independent variable (X) on the dependent variable (Y) or the hypothesis is accepted.
- b) If the significance value (Sig.) > 0.05 then there is no influence between the independent variable (X) on the dependent variable (Y) or the hypothesis is rejected.

2. Based on the comparison of the calculated t value with the t table
  - a) If the calculated t value > t table then there is an influence between the independent variable (X) on the dependent variable (Y) or the hypothesis is accepted.
  - b) If the calculated t value < t table then there is no influence between the independent variable (X) on the dependent variable (Y) or the hypothesis is rejected.

### **F test**

To find out whether the independent variables simultaneously have an influence on the dependent variable. The statistical test used in this study is called Analysis of Variance (ANOVA). Which if the probability is less than 0.05 then the hypothesis is accepted, meaning that simultaneously the independent variables have a significant influence on the dependent variable. According to Sugiyono (2022:192), the F test formula is as follows:

$$F = \frac{R^2/k}{(1 - R^2)/(n - k - 1)}$$

Description:

F = Significant relationship between the two variables

R = Multiple correlation coefficient

k = Number of independent variables

n = Number of sample members

Decision-making guidelines in the simultaneous significance test (f test) are as follows:

1. Based on the significance value (Sig) of the Anova output
  - a) If the sig value (sig) < 0.05, it means that the hypothesis is accepted
  - b) If the sig value (sig) > 0.05, it means that the hypothesis is not accepted
2. Based on the comparison of the calculated f value with the f table
  - a) If the calculated F value > Ftable, it means that the hypothesis is accepted
  - b) If the calculated F value < Ftable, it means that the hypothesis is not accepted

## **RESULTS AND DISCUSSION**

### **A. RESULTS**

Validity Test

**Table 4. Results of Validity Test of Work Discipline Variable (X1)**

Indicator	r Account	R table	Note
X1.1	0,890	0,2787	Valid
X1.2	0,660	0,2787	Valid
X1.3	0,841	0,2787	Valid
X1.4	0,891	0,2787	Valid
X1.5	0,839	0,2787	Valid
X1.6	0,890	0,2787	Valid

Indicator	r Account	R table	Note
X1.7	0,817	0,2787	Valid
X1.8	0,856	0,2787	Valid
X1.9	0,859	0,2787	Valid
X1.10	0,834	0,2787	Valid
X1.11	0,790	0,2787	Valid
X1.12	0,835	0,2787	Valid
X1.13	0,861	0,2787	Valid
X1.14	0,799	0,2787	Valid
X1.15	0,837	0,2787	Valid

Source: SPSS Data Processing Results. 2024

The test results show that all device items are validated and that the correlation coefficient is calculated using computer correlation analysis (SPSS-27).

**Table 5. Results of the Validity Test of the Work Environment Variable (X2)**

Indicator	r Account	R table	Note	
X2.1	0,768	0,2787	Valid	
X2.2	0,787	0,2787	Valid	
X2.3	0,815	0,2787	Valid	
X2.4	0,789	0,2787	Valid	
X2.5	0,805	0,2787	Valid	
X2.6	0,871	0,2787	Valid	
X2.7	0,744	0,2787	Valid	
X2	X2.8	0,739	0,2787	Valid
	X2.9	0,796	0,2787	Valid
	X2.10	0,831	0,2787	Valid
	X2.11	0,858	0,2787	Valid
	X2.12	0,853	0,2787	Valid
	X2.13	0,877	0,2787	Valid
	X2.14	0,878	0,2787	Valid
	X2.15	0,778	0,2787	Valid

Source: SPSS Data Processing Results. 2024

The test results show that all device items are validated and that the correlation coefficient is calculated using computer correlation analysis (SPSS-27).

**Table 6. Results of the Validity Test of Employee Performance Variables (Y)**

Indicator	r Account	R table	Note
Y.1	0,874	0,2787	Valid
Y.2	0,848	0,2787	Valid
Y.3	0,842	0,2787	Valid
Y.4	0,834	0,2787	Valid
Y.5	0,804	0,2787	Valid
Y.6	0,910	0,2787	Valid
Y.7	0,877	0,2787	Valid
Y Y.8	0,860	0,2787	Valid
Y.9	0,886	0,2787	Valid
Y.10	0,816	0,2787	Valid
Y.11	0,861	0,2787	Valid
Y.12	0,811	0,2787	Valid
Y.13	0,909	0,2787	Valid
Y.14	0,829	0,2787	Valid
Y.15	0,771	0,2787	Valid

Source: SPSS Data Processing Results. 2024

The test results show that all device items are validated and that the correlation coefficient is calculated using computer correlation analysis (SPSS-27).

### Reliability Test

**Table 7. Reliability Test Results**

No Item	Variable	Cronbach's Alpha	Ket Nilai Cronbach's Alpha	Note
1	Work Discipline (X1)	0,968	0,60	Reliable
2	Work Environment (X2)	0,963	0,60	Reliable
3	Employee Performance (Y)	0,972	0,60	Reliable

Source: SPSS Data Processing Results. 2024

Based on the table above, the Cronbach's alpha value for the Work Discipline variable is  $0.968 > 0.60$  Work Environment  $0.963 > 0.60$  Employee Performance  $0.972 > 0.60$ , so the variable is reliable.

### Normality Test

**Table 8. Normality Test Results**

One-Sample Kolmogorov-Smirnov Test			
		Unstandardized Residual	
N			50
Normal Parameters <sup>a,b</sup>	Mean		.0000000
	Std. Deviation		3,02483736
Most Extreme Differences	Absolute		.110
	Positive		.110
	Negative		-0.1093
Test Statistic			.180
Asymp. Sig. (2-tailed)			.122 <sup>c,d</sup>
Exact Sig. (2-tailed)			.139

Source: SPSS Data Processing Results. 2024

Based on table 8 above, the Asymp. Sig. (2-tailed) value is 0.180. This value is greater than 0.05, so it can be concluded that work discipline, work environment and employee performance are normally distributed.

### Multicollinearity Test

**Table 9. Multicollinearity Test Results**

		Coefficients <sup>a</sup>					
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics
		B	Std. Error	Beta			Tolerance VIF
1	(Constant)	3,450	3,187		1,083	.284	
	Work Discipline	.211	.092	.211	2,295	.026	.275 3,633
	Work Environment	.744	.090	.757	8,224	.000	.275 3,633

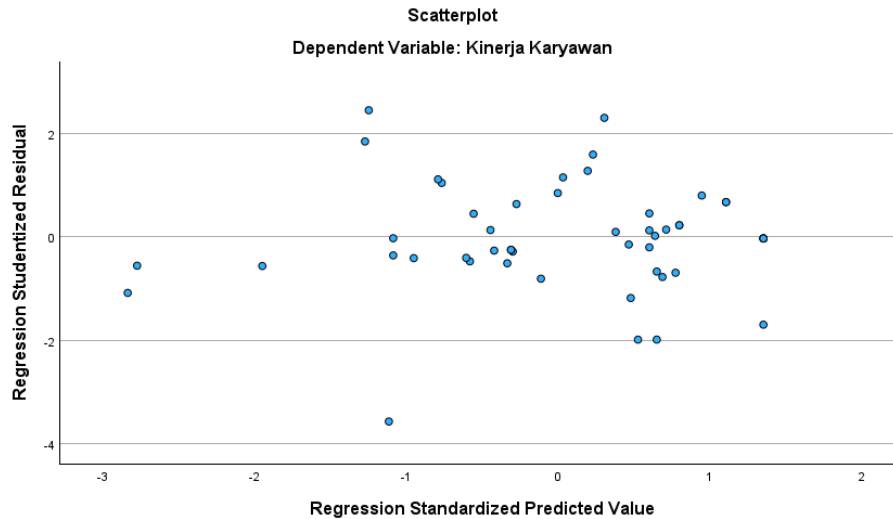
a. Dependent Variable: Employee Performance

Source: SPSS Data Processing Results. 2024

As seen in Table 9, both tolerance and VIF values are more than 0.10, indicating that there is no correlation between the free parameters. The absence of multicollinearity confirms the results of the regression model.



### Heteroscedasticity Test



**Figure 3. Heteroscedasticity Test Results**

Source: SPSS Data Processing Results. 2024

Based on Figure 3 above, it can be seen that there is no clear pattern or the data in the image can be said to be spread out and not piled up at one point. Therefore, it can be concluded that the data does not experience heteroscedasticity.

### Autocorrelation Test

**Table 10. Autocorrelation Test Results**

Coefficients <sup>b</sup>						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin Watson	
1	,944 <sup>a</sup>	,890	,886	3,08853	2,167	

a. Predictors: (Constant), Work Environment, Work Dicipline  
b. Dependent Variable: Employee Performance (Y)

Source: SPSS Data Processing Results. 2024

Based on the Model Summary output above, the Durbin-Watson value (d) is known to be 2.167. This value will then be compared with the Dubrin-Watson table value at 5% significance with the formula (k; N). The number of independent variables is 2 or k = 2 and the number of samples or N = 50. Then obtained (k; N) = (2; 50) Then based on the distribution of Durbin-Watson values, the dL value (lower limit) is 1.462 and the dU value (upper limit) is 1.628 The Durbin-Watson value (d) obtained from the output above is 2.167 greater than dU of 1.628 and less than 4-dU = 4-1.628 = 2.372. Thus, as the basis for decision making in the Durbin-Watson test above, it can be concluded that there are no problems or symptoms of autocorrelation.

### Multiple Linear Regression Analysis

**Table 11. Multiple Linear Regression Analysis Test Results**

Model		Coefficients <sup>a</sup>			t	Sig.
		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta		
1	(Constant)	3,450	3,187		1,083	,284
	Work Discipline	,211	,092	,211	2,295	,026
	Work Environment	,744	,090	,757	8,224	,000

a. Dependent Variable: Employee Performance (Y)

Source: SPSS Data Processing Results. 2024

Based on the table above, it can be concluded that the multiple linear regression equation is as follows:

$$Y = 3.450 + 0.211X_1 + 0.744X_2 + \varepsilon$$

Based on the multiple linear regression equation above, it can be seen how much influence the two independent variables have on the dependent variable, namely the company value. The explanation of the influence of each variable based on the equation above is as follows:

1. Constant (a) of 3.450 indicates that if the independent variables of work discipline and work environment remain constant, then the dependent variable of employee performance is 3.450 units.
2. The coefficient of the work discipline variable ( $X_1$ ) is 0.211, indicating that the coefficient of the work discipline variable has a positive influence in the same direction. This means that the employee performance value increases along with the work discipline value.
3. The coefficient value of the work environment variable of 0.744 indicates that the work environment value is positively correlated with employee performance. The independent variables consisting of job training and work environment have a positive influence on employee performance (Y).

#### t-test

**Table 12. t-test results**

Model		Coefficients <sup>a</sup>			t	Sig.
		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta		
1	(Constant)	3,450	3,187		1,083	,284
	Work Discipline	,211	,092	,211	2,295	,026
	Work Environment	,744	,090	,757	8,224	,000

a. Dependent Variable: Employee Performance (Y)

Source: SPSS Data Processing Results. 2024

The work discipline variable is calculated with a t-value of 2.295 with a significance level of 0.026. In addition, a comparison of the 5% significance level between the t-value and the table is carried out, resulting in a t-value > t-table (2.295 > 2.011). Therefore, H01 is rejected and Ha1 is accepted, indicating that work discipline affects employee performance at Perumdam Tirta Tarum, Karawang Regency. For the work environment variable, the t-value is 8.224 with a significance level of 0.001, compared to the t-value with a significance level of 5% of 2.011 (8.224 > 2.011, or t-value > t-table). Therefore, H02 is rejected and Ha2 is accepted, indicating that the work environment affects employee performance at Perumdam Tirta Tarum, Karawang Regency.

### **F Test**

**Table 13. F Test Results**

ANOVA <sup>a</sup>						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3639,848	2	1819,924	190,788	.000 <sup>b</sup>
	Residual	448,332	47	9,539		
	Total	4088,180	49			

a. *Dependent Variable:* Employee Performance

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

Source: SPSS Data Processing Results. 2024

Based on the F test results table above, it is known that the significance value of 0.001 means that the value is smaller than 0.05. And the Fcount value of 190.788 > Ftable of 3.195. So it can be concluded that work discipline and work environment simultaneously influence employee performance.

## **B. DISCUSSION**

### **1. The Influence of Work Discipline on Employee Performance**

This study obtained a significance value of 0.01, which is greater than 0.05, and a t-value (thitung) of 2.295, which is greater than the t-table value (ttabel) of 2.011. This indicates that work discipline has an effect on employee performance. This can be interpreted to mean that the higher the work discipline of employees—including punctual attendance, adherence to scheduled working hours, notifying supervisors when absent, maintaining a professional appearance, not using company resources for personal purposes, performing tasks with full responsibility, avoiding procrastination on additional tasks, and ensuring cleanliness and neatness of work—will enhance employee performance, particularly at Perumdam Tirta Tarum Kabupaten Karawang. These findings are consistent with the research conducted by Sadat et al. (2020), which states that work discipline positively and significantly affects employee performance.

## **2. The Influence of Work Environment on Employee Performance**

This study obtained a significance value of 0.001, which is greater than 0.05, and a t-value (thitung) of 8.224, which is greater than the t-table value (ttabel) of 2.011. This indicates that the work environment has an effect on employee performance. This shows that a good and conducive work environment can influence employees in carrying out their assigned tasks, thereby improving their performance. Employees will feel comfortable in their work environment if it aligns with their preferences and does not disrupt their work. This comfort motivates them to work effectively, leading to the successful completion of tasks and, consequently, better performance. These findings align with research conducted by Ahmad et al. (2021) and Pratama & Wismar'ain (2022), which demonstrate that the work environment positively and significantly affects employee performance.

## **CONCLUSION**

Based on the collected data and hypothesis testing using multiple linear regression analysis, it can be concluded that work discipline has a positive and significant effect on employee performance. If discipline is good, then employee performance will also be good, which directly affects the quality of human resources in a company. The work environment has a positive and significant impact on employee performance; therefore, the more comfortable the work environment, the higher the employee performance. Work discipline and the work environment simultaneously influence employee performance, meaning that the better the work discipline and work environment, the higher the employee performance. Based on the indicators of the work discipline variable, Perumdam Tirta Tarum Kabupaten Karawang should further improve employee discipline through better supervision processes. Based on the indicators of the work environment variable, Perumdam Tirta Tarum Kabupaten Karawang should enhance its facilities to improve the work environment, allowing for more optimal employee performance in their tasks. Based on the indicators of employee performance, Perumdam Tirta Tarum Kabupaten Karawang should focus on developing each employee to effectively complete their work. This study has limitations as it only uses work discipline and work environment variables as predictors of performance; future research is encouraged to consider other variables, such as organizational culture, to influence performance.

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