Effect of Work Environment and Work Discipline on Employee Performance at Perumda Tirta Patriot in North Bekasi

Maya Fajarratih¹, Ari Sulistyowati²*, Hadita Hadita³

1) Universitas Bhayangkara Jakarta Raya, mayafajarratih25@gmail.com
2) Universitas Bhayangkara Jakarta Raya arisulistyowati22@gmail.com
3) Universitas Bhayangkara Jakarta Raya hadita@dsn.ubharajaya.ac.id

*Corresponding Author: Ari Sulistyowati

Abstract: The influence of Work Environment and Work Discipline on Employee Performance at Perumda Tirta Patriot in North Bekasi. This research aims to determine the effect of the Work Environment and Work Discipline at Perumda Tirta Patriot. The method used in this study is a quantitative method, which in this study uses the Probability Sampling technique. The population in this study were all employees of Perumda Tirta Patriot, totaling 133 respondents. Based on the results of the study, it showed that in the partial test (t) the work environment variable had a significant effect on employee performance with a sig value of 0.005 < 0.05 and a t-count of 2.870 > table 1.978. And the work discipline variable has a significant effect on employee performance with a sig value of 0.000 < 0.05 and a t count of 2.870 > t table 1.978. Furthermore, in the simultaneous test (f) the variables of Work Environment and Work Discipline jointly affect the dependent variable, namely Employee Performance with a sig value of 0.000 < 0.05 and an f-count of 283.131 > f-table 3.07. Then for the test of determination (R²), it was found that the correlation between the two variables of Work Environment (X1) and Work Discipline (X2) on Employee Performance (Y) was 81.3%. Based on the identification of the problems that have been described, there are several problems encountered at Perumda Tirta Patriot such as performance, work environment, and work discipline. Other factors besides the work environment, motivation, and work discipline that can significantly impact employee performance, such as competence, organizational culture, workload, and other factors related to improving employee performance, need to be investigated further for further research.

Keywords: Work Environment, Work Discipline, and Employee Performance

INTRODUCTION

People's lives are affected by technology very quickly, and these changes are unavoidable. Human resource management is part of organizational management that deals with human resources. The purpose of human resource management is to effectively fight for
individual components to maintain a satisfied workforce (Wijaya & Susanty, 2017). All companies need to work more efficiently and effectively to deal with dynamic changes in the economy and competition. Founding a company also has a very important purpose. It's all about increasing profits and surviving in an increasingly competitive business environment to achieve organizational goals. In addition, the establishment of the company aims to improve the welfare of the owners and employees. The company or organization that acts as an employee or the place where the company's activities are carried out by the employee (Meutia et al., 2019).

The term “Performance” comes from the term "job performance" or "actual performance", which refers to the success of work or individual success at work. Performance according to (FoEh & Papote, 2021) is a qualitative and quantitative achievement that is achieved when the work is completed with full accountability for the main responsibilities and functions. The foundation for achieving organizational goals is performance. The excess of human resources involved when working while in the company is very important for the organization's ability to improve its performance (Sustrisnoputri et al., 2018). Human resource decisions must also be able to encourage efficiency and even produce superior organizational results, as well as increase community satisfaction (Lobubun, 2021). Efforts to improve employee performance can be done by improving the work environment. If the work environment does not meet the needs of employees, it will make them feel uncomfortable at work, and vice versa, if the workplace atmosphere complements their needs, they will feel comfortable in carrying out work activities so that it creates enthusiasm and motivation for employees to perform better. If employees do a good job, the company will make a lot of profit. In other words, when employee performance deteriorates, the company will decline (Kusniawari et al., 2019). Employee performance is influenced not only by external conditions but also by internal factors, one of which is employee work discipline. Work discipline refers to a person's understanding and willingness to follow all voluntary policies follow the rules and be aware of his duties and responsibilities. Meanwhile, willingness refers to a person's attitudes, behavior, and actions by organizational norms, both written and unwritten (Aini & Ariefiantoro, 2018). Bermuda Tirta patriot, one of the regionally owned business units, the community's need for clean water creates environmental pressures that have major consequences for the vision and management of clean water management organizations. Every province, district, and city in Indonesia has a Perumda Tirta Patriot or drinking water company, Perumda Tirta Patriot is a regional company fronted by the executive and legislative officials as a means of providing clean water. Since 2006, a modernly managed drinking water company has been operating. Thus, regions/cities are given greater control over the management of natural resources, especially clean water, which is under the responsibility of the state.

The mission of Perumda Tirta Patriot is to provide facilities and infrastructure to the surrounding community with high-quality and safe drinking water. Employee performance has decreased due to various problems, most of which have an impact on the work environment and work discipline, according to observations and interviews conducted by one of the workers in the human resources department. The physical work environment in an organization that needs to be well organized, and a work atmosphere that is still not conducive is an inhibiting factor in improving employee performance. In addition to physical conditions, it turns out that non-physical conditions in Perumda Tirta Patriot are still missing communication between superiors and subordinates, family problems that cause employee performance to decline, and long working hours. Because it is a discipline that has been determined according to company standards or company standard operating procedures, therefore the employees of Perumda Tirta Patriot need to be analyzed.
In terms of the discipline of Perumda Tirta Patriot, there are still violations of company rules that are often violated by employees. For example, delays in working time, many employees are often absent at work, employees are also less disciplined in completing work, resulting in a buildup of work, and employees who violate company regulations will be given sanctions such as deductions from allowances that are cut by 50% and if the employee making a fatal mistake the sanction is dishonorable dismissal but some stage be passed such as an examination based on the president director's assignment letter, holding a meeting with a team of managers and assistant managers and having to coordinate with the Bekasi city workforce. Previous analysis shows that the characteristics of the work environment and work discipline have a good and large influence on employee performance, according to the survey results. This shows that the relationship is strong and the correlation is substantial. Accept and test the opinion that the workplace and work discipline have a positive and significant effect on employee performance (Kusniawati et al., 2019). Previous research has proven that the work environment has a significant influence on employee performance, as evidenced by research (Aini & Ariefiantoro, 2019). It is clear from these findings that the work environment has a significant impact on employee performance. According to Utami and Hartanto (2010), the work environment has a significant effect on employee performance. While research related to the effect of work discipline on employee performance has been proven by (Aini & Ariefiantoro, 2019), it is known that work discipline has a large enough effect on employee performance based on the results of this study. Similarly, Priyo W, Alhabsji, and Musadieq (2014) found that discipline has a large impact on employee performance based on their research findings. The work environment of a company is a working condition that provides a pleasant working environment and conditions for employees to fulfill organizational goals.

Employees who work in poor conditions tend to be unhealthy, stressed, have difficulty concentrating, and are less productive. Imagine an uncomfortable workspace, hot, poor air circulation, too crowded workplace, unclean and noisy work environment. Of course, this has a significant impact on the comfort of employees at work. The results of testing hypothesis 2 prove that the work environment at PT. Armando has a significant impact on employee performance. This finding supports the research of Widari (2016), the variables of work discipline and work environment have a positive and significant effect on employee performance, according to this study. In other words, the Yogyakarta Regional Civil Service Office performs better in a better work environment.

This research was conducted because of the inconsistency of results and limitations in previous studies, researchers are interested in re-examining the variables of work environment and work discipline on employee performance. The object of observation used in this study is different from that used in previous studies. Researchers conducted observations at Perumda Tirta Patriot for this study. And the samples used in this study are also different from those used in previous studies. Researchers used a sample of 133 respondents for this study.

**METHODS**

The scientific method is a problem-solving method using logical concepts for discovery, validation, and explanation of the truth or the scientific method to obtain scientific truth. Appropriate research procedures are used to minimize speculative problem solving and to increase objectivity in knowledge exploration (Siregar, 2017).

The authors in this study adopted the quantitative method, which requires a thorough scientific evaluation of the components and phenomena, as well as their interactions. Quantitative research is used to create and test mathematical models, ideas, and hypotheses about natural events. Measurement procedures are very important in quantitative research.
because they establish a fundamental relationship between actual observations and the numerical representation of the relationship (Wijaya & Susanty, 2017).

This research relies on primary data. Primary data is used to collect information needed for this study, including data collected through observation, researchers also conduct direct interviews with respondents after asking questions or distributing questionnaires used in research to complete research data, research journals, reference books, and data collection. at Perumda Tirta Patriot (Abdul Hanafi, 2018).

RESULT AND DISCUSSION
1. Work Environment Validity Test

By comparing the estimated count with the value of stable, it can be tested for validity. The value of the r-count is collected from the output of SPSS (Statistical Product and Service). To test the validity, the SPSS program with the Pearson Correlation approach was used, which correlated each item with the total score of the questionnaire items. The following is the basis for making validity test decisions:

a. Test $r_\text{arithmetic} > r_\text{table}$ then the statement item is declared valid.

b. Test $r_\text{count} < r_\text{table}$ then the item statement is declared invalid.

The formula $df = n - 2$ is used to calculate the value of $r_\text{table}$, namely $df = 133 - 2 = 131$. So 0.1703 is the tabler-table for 1 - tailed. If the results of the questionnaire validity test have a calculated $r$ value greater than the $r_\text{table}$, then the questionnaire is considered valid. The complete results of the validity test are in the following table:

<table>
<thead>
<tr>
<th>Items</th>
<th>R - Count</th>
<th>R -table</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 1</td>
<td>0.713</td>
<td>0.1703</td>
<td>Valid</td>
</tr>
<tr>
<td>Item 2</td>
<td>0.850</td>
<td>0.1703</td>
<td>Valid</td>
</tr>
<tr>
<td>Item 3</td>
<td>0.842</td>
<td>0.1703</td>
<td>Valid</td>
</tr>
<tr>
<td>Item 4</td>
<td>0.844</td>
<td>0.1703</td>
<td>Valid</td>
</tr>
<tr>
<td>Item 5</td>
<td>0.497</td>
<td>0.1703</td>
<td>Valid</td>
</tr>
<tr>
<td>Item 6</td>
<td>0.515</td>
<td>0.1703</td>
<td>Valid</td>
</tr>
<tr>
<td>Item 7</td>
<td>0.434</td>
<td>0.1703</td>
<td>Valid</td>
</tr>
</tbody>
</table>

The results of the validity test of all Work Environment statements have $r_\text{count} > r_\text{table}$. So it can be concluded that the results of the validity test are declared valid or valid for use in the research instrument test.

2. Work Discipline Validity Test

<table>
<thead>
<tr>
<th>Items</th>
<th>R - count</th>
<th>R table</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 1</td>
<td>0.794</td>
<td>0.1703</td>
<td>Valid</td>
</tr>
<tr>
<td>Item 2</td>
<td>0.744</td>
<td>0.1703</td>
<td>Valid</td>
</tr>
<tr>
<td>Item 3</td>
<td>0.817</td>
<td>0.1703</td>
<td>Valid</td>
</tr>
<tr>
<td>Item 4</td>
<td>0.561</td>
<td>0.1703</td>
<td>Valid</td>
</tr>
<tr>
<td>Item 5</td>
<td>0.719</td>
<td>0.1703</td>
<td>Valid</td>
</tr>
<tr>
<td>Item 6</td>
<td>0.393</td>
<td>0.1703</td>
<td>Valid</td>
</tr>
</tbody>
</table>

The results of the validity test of all Work Discipline statements have $r_\text{count} > r_\text{table}$. So it can be concluded that the results of the validity test are declared valid or valid for use in the research instrument test.
3. Employee Performance Validity Test

<table>
<thead>
<tr>
<th>Items</th>
<th>R-Count</th>
<th>R-table</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 1</td>
<td>0,383</td>
<td>0,1703</td>
<td>Valid</td>
</tr>
<tr>
<td>Item 2</td>
<td>0,320</td>
<td>0,1703</td>
<td>Valid</td>
</tr>
<tr>
<td>Item 3</td>
<td>0,668</td>
<td>0,1703</td>
<td>Valid</td>
</tr>
<tr>
<td>Item 4</td>
<td>0,626</td>
<td>0,1703</td>
<td>Valid</td>
</tr>
<tr>
<td>Item 5</td>
<td>0,740</td>
<td>0,1703</td>
<td>Valid</td>
</tr>
<tr>
<td>Item 6</td>
<td>0,736</td>
<td>0,1703</td>
<td>Valid</td>
</tr>
</tbody>
</table>

The results of the validity test of all employee performance statements have $r_{count} > r_{table}$. So it can be concluded that the results of the validity test are declared valid or valid for use in the research instrument test.

4. Work Environment Reliability Test

The consistency of a measuring instrument is determined by a reliability test, which determines whether the measuring instrument is reliable and consistent when repeated. After the statement items are verified, the reliability test can be carried out. If the Cronbach Alpha value of a variable is more than 0.60, it is said to be reliable. If the Cronbach Alpha value is less than 0.60, the variable being examined is considered unreliable.

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
</tr>
<tr>
<td>N of Items</td>
</tr>
<tr>
<td>0.798</td>
</tr>
<tr>
<td>7</td>
</tr>
</tbody>
</table>

The results of the Work Environment reliability test gave a Cronbach Alpha value of 0.798. 0.798 > 0.60, meaning that the value is greater than 0.60. As a result, it can be concluded that the results of the distributed questionnaires have a high or constant level of reliability, making it possible to be used as a research instrument.

5. Work Discipline Reliability Test

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
</tr>
<tr>
<td>N of Items</td>
</tr>
<tr>
<td>0.760</td>
</tr>
<tr>
<td>6</td>
</tr>
</tbody>
</table>

The results of the Work Discipline reliability test resulted in a Cronbach Alpha value of 0.760. 0.760 > 0.60, meaning that the value is greater than 0.60. As a result, it can be concluded that the results of the distributed questionnaires have a high or constant level of reliability, making it possible to be used as a research instrument.

6. Employee Performance Reliability Test

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
</tr>
<tr>
<td>N of Items</td>
</tr>
<tr>
<td>0.607</td>
</tr>
<tr>
<td>6</td>
</tr>
</tbody>
</table>
The results of the reliability test of employee performance have a Cronbach Alpha value of 0.607. The value is greater than 0.607 > 0.60, meaning that the value is greater than 0.60. As a result, it can be concluded that the results of the distributed questionnaires have a high or constant level of reliability, making it possible to be used as a research instrument.

**Structural Model Testing (Inner Model)**

The coefficient of determination (R²) is used to calculate the magnitude of the influence of the independent variable on the dependent variable. This study is used to calculate the independent contribution of the Work Environment (X₁) and Work Discipline (X₂) to the dependent variable Performance (Y). Table R square can show whether or not the influence of the independent variable on the dependent variable is as follows:

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. The error in the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.902*</td>
<td>.813</td>
<td>.810</td>
<td>1.281</td>
</tr>
</tbody>
</table>

It can be seen that the results of the coefficient of determination test, obtained an R square value of 0.813. This shows that the performance of Perumda Tirta Patriot employees is influenced by 0.813 or 81.3% by the Work Environment and Work Discipline. While the remaining 18.7% is influenced by other variables not examined in this study.

**Hypothesis test**

**Partial Test (T-Test)**

It is important to do a partial test (t test) to assess the effect of the independent variables Work Environment and Work Discipline on the dependent variable, namely Performance. The t-table value in this study was 1.978 with a significant level of a = 5% or 0.05. The number of respondents was 133 people.

Criteria:
- If $t_{count} > t_{table}$ then $H_a$ is accepted and $H_o$ is rejected
- If $t_{count} < t_{table}$ then $H_a$ is rejected and $H_o$ is accepted

Or
- If $p < 0.005$ then $H_a$ is accepted and $H_o$ is rejected
- If $p > 0.05$ then $H_a$ is rejected and $H_o$ is accepted

The following conclusions can be drawn:
- **Work Environment (X₁) has a significant and significant effect on Performance (Y)**
  
  According to the results of the t-test, the calculated $t$ value for the work environment variable is $2.870 > 1.978$, with a value of sig. 0.005 < 0.05. As a result, it can be said that $H_a$ is accepted and $H_o$ is rejected. This shows that the work environment has a partial and significant effect on employee performance.
b. Work Discipline (X2) has a significant effect on Performance (Y)

According to the results of the t-test, the calculated t value for the Work Discipline variable is 11.470 > 1.978, with a value of sig. 0.000 < 0.05. So it can be concluded that Ha is accepted and Ho is rejected. This shows that Work Discipline partially and significantly influences employee performance.

Simultaneous Test (F Test)

Simultaneous testing is conducted to see how the independent variables of Work Environment and Work Discipline affect the dependent variable of employee performance simultaneously (simultaneously). If f count > f table and the p-value is less than 0.05, then Ha is accepted and Ho is rejected, this indicates a significant effect.

![Table 9. Simultaneous Test (F Test)](https://dina.stirpub.org/DIJEMSS)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>928,751</td>
<td>2</td>
<td>464,375</td>
<td>283,131</td>
<td>0.000*</td>
</tr>
<tr>
<td>Residual</td>
<td>213,219</td>
<td>130</td>
<td>1,640</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1141,970</td>
<td>132</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results of statistical calculations show that the value of f - count > f - table is 283.131 > 3.07 from the results of df = (k,n-k) = (2, 131) with a significant level of a = 5% then the significant value obtained is 0.000 < 0.05. So it can be concluded that Ha is accepted and Ho is rejected, this shows that the variables of Work Environment and Work Discipline have a significant and quite large effect on the performance of Perumda Tirta Patriot employees.

Discussion

Effect of Work Environment (X1) on Employee Performance (Y)

Researchers not only found a work environment that had been maximized, but researchers found that there were still less than optimal work environment factors such as the relationship between superiors and subordinates, workspaces that were not neatly arranged, and less conducive workspaces. In addition, the researchers assessed working hours and undisciplined breaks.

Based on the results of data analysis, it is evident that the work environment at Perumda Tirta Patriot North Bekasi has a good and significant effect on employee performance. This statement is evidenced by the results of the calculation of the hypothesis test through the t-test, Work Environment (X1) obtained a t-count value of 2.870 > t-table 1.978 and a coefficient value of 0.156 with a significance value of 0.005 smaller than the value of a = 0.05 (0.005 < 0.05). So it can be concluded that Ho1 is rejected and Ha1 is accepted, meaning that there is an influence of the Work Environment on the performance of Perumda Tirta Patriot employees.

The findings of this study are in line with research conducted (Novriani Gultom & Nurmaysaroh, 2021) which shows that the work environment affects employee performance.

According to (Ludiya, 2017) the work environment is one of the most important factors in achieving organizational goals. Employee performance can be influenced by the work environment in the company. This work environment consists of physical and non-physical elements that are closely related to initiatives to improve employee performance.

The Effect of Work Discipline (X2) on Employee Performance (Y)

Based on the results of hypothesis testing through the t-test, Work Discipline (X2), the t-count value is 11.470 > t-table 1.978, and the coefficient value is 0.662 with a significance
value of 0.000 which is smaller than the value of \( a = 0.05 \) (0.000 < 0.05). So it can be concluded that \( Ho2 \) is rejected and \( Ha2 \) is accepted, meaning that there is an influence of Work Discipline on the performance of Perumda Tirta Patriot employees. The work discipline referred to here is arriving on time, carrying out work according to a specified schedule, leaving work at the specified hour, and complying with predetermined regulations.

Work discipline has a good and significant effect on performance, according to research published by (Wairooy, 2017). Work discipline is a mindset that everyone must have to improve performance and achieve company goals. Employee discipline is expected to improve employee performance but must be accompanied by a good work environment that prioritizes smoothness, security, safety, cleanliness, and comfort at work, as well as the availability of adequate facilities so that employees feel safe, calm, and happy at work. carry out the tasks that have been given to him and carry out his obligations (Pangestika, 2018).

**Effect of Work Environment (X1) and Work Discipline (X2) simultaneously on Employee Performance (Y)**

Based on the results of the simultaneous hypothesis testing of the f test, the F-count value is 283.131 > F-table 3.07 and has a significance value of 0.000 < 0.05. So it can be concluded that \( Ho3 \) is rejected and \( Ha3 \) is accepted, meaning that it shows that there is a positive and significant relationship between Work Environment and Work Discipline on the performance of Perumda Tirta Patriot employees.

Both work environment and work discipline have a beneficial impact on employee performance. The Lack of a pleasant and productive work environment and lack of staff discipline prevent the organization from achieving its goals as planned. This is because employees often work in unfavorable conditions due to laziness and poor discipline, failing to fulfill some of the set goals. Employees will play an active role in improving the work environment and work habits to increase productivity.

The work environment at Perumda Tirta Patriot is less conclusive because the workspace is not spacious enough, resulting in an accumulation of goods in various places. The work discipline applied by Perumda Tirta Patriot is still not optimal because it has not used good standards so employees tend to take disciplinary actions. The indiscipline carried out by Perumda Tirta Patriot employees makes the targets set by the company unable to be achieved optimally. The occurrence of staff delays in handling the work to completion. This indicates that the performance of Perumda Tirta Patriot employees is not optimal, which is influenced by discipline factors.

**CONCLUSION AND RECOMMENDATION**

**Conclusion**

Based on the results of the analysis carried out in research and the analysis that has been carried out on all employees of Perumda Tirta Patriot, the following conclusions can be drawn based on the available data:

a. From the results of the partial test (t test) the work environment variable has a significant effect on employee performance at Perumda Tirta Patriot. This is evidenced by the results
of hypothesis testing through the t-test, namely the t-count value of 2.870 is greater than the t-table, which is 1.978 and the significance value is 0.005 less than the sig value. ie 0.05

b. From the results of the partial test (t test) the work discipline variable has a significant effect on employee performance at Perumda Tirta Patriot. This is evidenced by the results of hypothesis testing through the t-test, which is obtained by the t-count value of 11.470 which is greater than the t-table which is 1.978, and the significance value of 0.000 which is smaller than the sig value. ie 0.05.

c. From the results of the simultaneous test (f test) that all the variables of the Work Environment and Work Discipline simultaneously affect the Employee Performance variable, it is proven that the result of f count is 283.131 which is greater than the f table which is 3.07 and a significance value of 0.000 is smaller. from sig. ie 0.05.

**Recommendation**

Based on the findings of the analysis and conclusions of this study, it is hoped that it can help several parties, both future researchers and especially Perumda Tirta Patriot. The following are the managerial implications of this research:

1. **For the Company**
   a. It is hoped that Perumda Tirta Patriot will provide facilities, namely the physical work environment such as a large room so that employees are not disturbed by other employees. And not only does the physical work environment affects performance but the non-physical environment also affects performance as the relationship between leaders and other employees is also harmonious and can affect the performance of Perumda Tirta Patriot. This condition further creates enthusiasm to unite the company organization to achieve the goals of Perumda Tirta Patriot by improving the performance of its employees.
   b. To employees to continue to improve their performance, especially by increasing discipline such as being on time, leaving work according to predetermined hours, and following various regulations set by the company.

2. **For Researchers**
   The findings of this study should be used as input for researchers because they can help researchers gain better knowledge about the impact of the Work Environment and Work Discipline on Employee Performance.

3. **For Study Programs**
   The results of this study are recommended as input for interested parties to find out more about the impact of the Work Environment and Work Discipline on Employee Performance, especially for the Management Study Program.

4. **For Further Researchers**
   Other factors besides the work environment, motivation, and work disciplines that can significantly impact employee performance, such as competence, organizational culture, workload, and other factors related to improving employee performance, can be used as determining variables in further research.

**REFERENCES**


