The Effect of Work Environment and Job Competence on the Performance of Public Facility and Infrastructure Handling Employees (PPSU) with Work Discipline as an Intervening Variable in Sub-Districts of Jakarta Special Capital Region

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ABSTRACT

This thesis was inspired by a workplace that often set unrealistically high standards for its workers without taking into account any of the elements that may be influencing their performance. Competence, Work Discipline, and Work Environment were also considered as important aspects that influenced performance in order to boost output. Employee performance was the dependent variable in this quantitative study conducted in the Sub-Districts of Jakarta Special Capital Region to test hypotheses about the influence of three independent factors (work environment, competence, and work discipline). SmartPLS 4 was used for data management on a sample size of 82 workers. The author concludes that (1) there is a favorable and substantial relationship between the work environment and work discipline. Employee performance was positively and significantly impacted by the work environment. The relationship between competence and discipline at work was a good one. A favorable and statistically significant correlation was found between employee performance and competence. Five) Workplace rules and regulations improved worker output. There was a favorable, albeit not statistically significant, relationship between work environment and employee performance. Competence positively impacted employee performance through work discipline, although the effect was not statistically significant.

ARTICLE INFO

Keywords: Work Environment, Job Competence, Work Discipline, Employee Performance

Received: 09, August
Revised: 16, September
Accepted: 20, October

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INTRODUCTION

Human Resources (HR) holds a crucial position in the efforts to achieve the organization's planned objectives. Therefore, the management of human resources is increasingly important for an organization's efforts to preserve its sustainability or development.

Handling Public Facilities and Infrastructure (Prasarana dan Sarana Umum or PPSU) in the sub-districts is an urgent and non-delayable task as it can lead to losses, dangers, and disruptions to public/community interests within the sub-districts area. The Government of Jakarta Special Capital Region initiated this program in 2015 with the aim of enhancing services to the community in the sub-districts, particularly concerning the maintenance of basic facilities and infrastructure at the sub-district level. These include, for example, roads, channels, parks, cleanliness, and public street lighting.

An institution often demands high performance from its employees without considering the effecting factors. However, it is also important to consider the underlying aspects that support performance, such as employee competency, work discipline, and the work environment, in order to maximize productivity.

THEORETICAL REVIEW

Work Environment

Raziq & Maulabakhsh (2015) state that a good work environment, among other things, enhances employee production and performance, ultimately leading to organizational effectiveness and cost reduction for the company. When workers feel safe in their workplace, they are able to give their utmost. When employees enjoy their work environment, they will be content with their workplace, perform their tasks efficiently, and utilize work time effectively.

Work Competence

According to Sunaryo (2013), Wheeler Patricia and Geneva Haertel argue that competence is a comprehensive domain that covers several elements such as information, skills, talents, personality traits, experience, and characteristics. These elements are deemed valuable in attaining desired results in the context of learning or employment.

Work Discipline

Work discipline, as described by Supomo and Nurhayati (2018), is an employee's willingness to constantly comply with, respect, and obey numerous rules and norms set by the business in order to accomplish its objectives. A strong feeling of responsibility for the duties assigned to you is reflected in your ability to maintain good work discipline. Worker morale and productivity will both increase as a result of this, helping the company reach its goals.

Employee Performance

Employee performance, as defined by Rivai and Sagala (2013), is "the actual behavior exhibited by each employee that represents the work
achievements they produce in accordance with their performance in the company." According to this understanding, an employee's performance is the consequence of the work they do, in terms of both quantity and quality, as they carry out the responsibilities placed within their purview.

The framework articulated the link between the study variables (work environment, competence, work discipline, and employee performance) in the following ways, drawing on the offered theories and prior research:

![Figure 1: Theoretical Framework](image)

The following assumptions were developed on the basis of the aforementioned theoretical framework:

- **H1**: Work Environment had a positive and significant effect on Work Discipline
- **H2**: Work Environment had a positive and significant effect on Employee Performance
- **H3**: Competence had a positive and significant effect on Work Discipline
- **H4**: Competence had a positive and significant effect on Employee Performance
- **H5**: Work Discipline had a positive and significant effect on Employee Performance
- **H6**: Work Environment had a positive and significant indirect effect on Employee Performance through Work Discipline
- **H7**: Competence had a positive and significant indirect effect on Employee Performance through Work Discipline

### METHODOLOGY

Employee performance was the dependent variable in this study of public facilities and infrastructure handlers, and the author used a quantitative methodology to examine the impact of independent factors including work environment, competence, and work discipline on this measure. Using a questionnaire designed to elicit responses on a Likert scale, this study surveyed participants' opinions.

A total of 82 eligible respondents were utilized in the study. Methods of data analysis were used to investigate the study's core questions and put the hypotheses to the test. Structural Equation Modeling (SEM) - Partial Least Square (PLS) was used for data analysis in the study's data management.
RESULTS

The data on respondent characteristics were obtained from a distributed questionnaire involving 82 individuals. Out of the respondents, 9 individuals (10.98%) were female, while 73 individuals (89.02%) were male. Concerning age, 19 respondents (23.17%) were in the 20-30 years range, 34 respondents (41.46%) were in the 31-40 years range, 28 respondents (34.15%) were in the 41-50 years range, and 1 respondent (1.22%) was over 50 years old. In terms of education level, 77 respondents (93.90%) had completed high school (SMA/SMK), 1 respondent (1.22%) had a D3 diploma, 4 respondents (4.88%) had a bachelor's degree (S1), and 0 respondents had a master's degree (S2). In terms of years in the workforce, ten percent of respondents (10.98%) had less than a year's worth of experience, while eighty-one percent (81.70%) had between one and ten years. Another six percent (6.10%) had between eleven and twenty years, and one person (1.22%) had more than twenty years. The study of the data yielded these findings.

![Figure 2: Results of loading factor values](image)

The strength of the association between each latent variable and its corresponding dimensions was represented by the loading factor values, which could be seen in the table above.

Based on the table above, it could be observed that indicators KPD11, KPD12, KPD13, KPD14, and KPD15 in the job competence variable yielded loading factor values less than 0.5. Thus, it can be stated that these indicators (KPD11, KPD12, KPD13, KPD14, and KPD15) in the job competence variable were unable to effectively measure their respective variable.

![Figure 3: Results of loading factor values after reduction](image)
Table 1. AVE Value

<table>
<thead>
<tr>
<th>Variable</th>
<th>AVE</th>
<th>Critical Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Discipline</td>
<td>0.590</td>
<td>0.5</td>
<td>Valid</td>
</tr>
<tr>
<td>Employee Performance</td>
<td>0.618</td>
<td>0.5</td>
<td>Valid</td>
</tr>
<tr>
<td>Job Competence</td>
<td>0.543</td>
<td>0.5</td>
<td>Valid</td>
</tr>
<tr>
<td>Work Environment</td>
<td>0.535</td>
<td>0.5</td>
<td>Valid</td>
</tr>
</tbody>
</table>

All four variables in Table 1 above showed AVE values greater than 0.50, with the Work Environment variable having the lowest AVE (0.535) and the Employee Performance variable having the highest AVE (0.618). Good convergent validity was found for the variables and dimensions used in this study, and indicators were deemed reliable for assessing the targeted constructs.

Table 2. Composite Reliability dan Cronbach’s Alpha

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach's alpha</th>
<th>Composite Reliability</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Discipline</td>
<td>0.860</td>
<td>0.861</td>
<td>Reliable</td>
</tr>
<tr>
<td>Employee Performance</td>
<td>0.943</td>
<td>0.945</td>
<td>Reliable</td>
</tr>
<tr>
<td>Job Competence</td>
<td>0.905</td>
<td>0.909</td>
<td>Reliable</td>
</tr>
<tr>
<td>Work Environment</td>
<td>0.825</td>
<td>0.830</td>
<td>Reliable</td>
</tr>
</tbody>
</table>

Each variable also had a Composite Reliability value more than 0.7, as shown in Table 2 of the study paper. Cronbach's alpha values for the study model also showed that all variables had reliability coefficients greater than 0.6, with the Work Environment variable having the lowest value (0.825) and the Employee Performance variable having the highest value (0.943). As a result of these analyses, it was determined that the research model was reliable and could be relied upon as a measuring instrument, satisfying the requirements of both Composite Reliability and Cronbach's Alpha.

Each variable's Composite Reliability value was found to be more than 0.7 in the study. Furthermore, the study model's Cronbach's alpha values showed that all variables had Cronbach's alpha values above 0.6, with the Work Environment variable having the lowest value at 0.825 and the Employee Performance variable having the highest value at 0.943. Results showed that the study model was reliable according to both Composite Reliability and Cronbach's Alpha, suggesting that it satisfied the reliability requirements and could be relied upon as a measuring instrument.

Table 3. Coefficient of Determination/ R Square (R²)

<table>
<thead>
<tr>
<th>Variable</th>
<th>R-square</th>
<th>R-square Adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Discipline</td>
<td>0.822</td>
<td>0.818</td>
</tr>
<tr>
<td>Employee Performance</td>
<td>0.844</td>
<td>0.838</td>
</tr>
</tbody>
</table>
Work Discipline's R Square value was 0.822, showing that the Work Environment and Job Competence factors accounted for 82.2% of the variance in Work Discipline, while other variables (not included in the current analysis) accounted for the remaining 17.8%. The moderate/moderate influence of the exogenous latent factors (Work Environment, Job Competence, and Employee Performance) in predicting the endogenous latent variable (Work Discipline) is further supported by the R Square value of 82.2% for the Work Discipline variable.

In this research, the Work Environment and Job Competence variables were found to account for 82.2% of the variance in the Work Discipline variable, while other factors accounted for the remaining 17.8%. The R Square value for the Work Discipline variable was 0.822. It is possible to infer that the exogenous latent variables (Work Environment, Job Competence, and Employee Performance) have a moderate/medium influence on predicting the endogenous latent variable (Work Discipline) from its R Square value of 82.2%.

<table>
<thead>
<tr>
<th>Effect</th>
<th>Outcome</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Discipline → Employee Performance</td>
<td>0.057</td>
<td>Weak</td>
</tr>
<tr>
<td>Job Competence → Work Discipline</td>
<td>0.634</td>
<td>Strong</td>
</tr>
<tr>
<td>Job Competence → Employee Performance</td>
<td>0.298</td>
<td>Medium</td>
</tr>
<tr>
<td>Work Environment → Work Discipline</td>
<td>0.119</td>
<td>Weak</td>
</tr>
<tr>
<td>Work Environment → Employee Performance</td>
<td>0.060</td>
<td>Weak</td>
</tr>
</tbody>
</table>

Table 4's f-square test findings demonstrate that the impact size of the Work Discipline variable on Employee Performance was 0.057, which is small. The impact size of the variable Work Environment on the outcome Work Discipline was also small, at 0.119. The impact size for the Work Environment variable on the Employee Performance outcome was 0.060, which was small. However, the impact size of the Job Competence variable on Employee Performance was moderate, at 0.298. Finally, there was a significant (0.634) impact size between Job Competence and Work Discipline.

<table>
<thead>
<tr>
<th>Variable</th>
<th>SSO</th>
<th>SSE</th>
<th>Q2 (1- SSE/SSO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Discipline</td>
<td>492,000</td>
<td>261,784</td>
<td>0.468</td>
</tr>
<tr>
<td>Employee Performance</td>
<td>984,000</td>
<td>479,460</td>
<td>0.513</td>
</tr>
<tr>
<td>Job Competence</td>
<td>820,000</td>
<td>820,000</td>
<td></td>
</tr>
<tr>
<td>Work Environment</td>
<td>492,000</td>
<td>492,000</td>
<td></td>
</tr>
</tbody>
</table>

Table 5's Q2 value of 0.468 for the exogenous measure Work Discipline indicates that it has high predictive significance in predicting the endogenous variable, which was the focus of the test. The Q Square value of 0.513 for the exogenous variable's predictive relevance to the endogenous variable, Employee Performance, is also rather high.
### Table 6. Path Coefficient Test, t-Statistics, and P-Values

<table>
<thead>
<tr>
<th>DIRECT RELATIONSHIP</th>
<th>Original Sample</th>
<th>T-Statistic</th>
<th>P-Value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Environment → Work Discipline</td>
<td>0.282</td>
<td>2.507</td>
<td>0.006</td>
<td>H1 Accepted (Positive and Significant)</td>
</tr>
<tr>
<td>Work Environment → Employee Performance</td>
<td>0.198</td>
<td>1.964</td>
<td>0.027</td>
<td>H2 Accepted (Positive and Significant)</td>
</tr>
<tr>
<td>Job Competence → Work Discipline</td>
<td>0.653</td>
<td>6.152</td>
<td>0.000</td>
<td>H3 Accepted (Positive and Significant)</td>
</tr>
<tr>
<td>Job Competence → Employee Performance</td>
<td>0.535</td>
<td>3.983</td>
<td>0.000</td>
<td>H4 Accepted (Positive and Significant)</td>
</tr>
<tr>
<td>Work Discipline → Employee Performance</td>
<td>0.223</td>
<td>1.967</td>
<td>0.047</td>
<td>H5 Accepted (Positive and Significant)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INDIRECT RELATIONSHIP</th>
<th>Original Sample</th>
<th>T Statistik</th>
<th>P values</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Environment → Work Discipline → Employee Performance</td>
<td>0.063</td>
<td>1.122</td>
<td>0.131</td>
<td>H6 Rejected (Positive and Not Significant)</td>
</tr>
<tr>
<td>Job Competence → Work Discipline → Employee Performance</td>
<td>0.146</td>
<td>1.614</td>
<td>0.053</td>
<td>H7 Rejected (Positive and Not Significant)</td>
</tr>
</tbody>
</table>

**H1: Work Environment had an effect on Work Discipline**

Table 6 shows that the first hypothesis test indicates a positive link between the two independent variables, Work Environment and Work Discipline, with an Original Sample value of 0.282. The t-statistic was 2.507 (>1.96), and the probability of a false positive was 0.006 < 0.05. Work discipline in the Jakarta Special Capital Region's districts may be attributed, at least in part, to the nature of their workplaces. Working under the assumption that "Work Environment had a significant positive effect on Work Discipline," this research accepted the H1 hypothesis.

Previous study by Ardin Putra (2020), titled "The Effect of Work Environment on Work Discipline of Employees in Camat Lambitu, Bima Regency," provided support for the hypothesis test on the effect of Work Environment on Work Discipline. According to the results, the independent variable (work setting) was able to have an effect on the dependent variable (work discipline).

**H2: Work Environment Affects Employee Performance**

Table 6's hypothesis test findings show that there is a positive correlation between workplace conditions and worker output. The Original sample value for the Work Environment towards Employee Performance variable was 0.198. The p-value was 0.0270.05, and the t-statistic was 1.964 (>1.96). As a result, in the Jakarta Special Capital Region's subdistricts, the working environment had a major impact on employee performance. Therefore, the research's second hypothesis, H2, that "Work Environment had a significant positive effect on Employee Performance," was accepted.
Moh. Amir Fiqi (2018) found support for the hypothesis test in his study "The Effect of Work Environment and Work Discipline on Employee Performance at CV. Tiara Abadi Pamekasan." Employee productivity at CV. Tiara Abadi was shown to be highly impacted by the Work Environment variable.

H3 : Work Competence Affected Work Discipline

The results of the hypothesis test are shown in Table 6, where it is concluded that the direction of the connection between Work Competence and Work Discipline is positive, with the variable Work Competence towards Work Discipline having an Original sample value of 0.653. The t-statistic was 6.152 (>1.96), whereas the probability level was 0.000 (0.05). As a result, Work Discipline was greatly influenced by Workers' Competence in the Jakarta Special Capital Area. Work Competence does have a positive and substantial influence on Work Discipline, hence H3 is accepted in this study.

Previous research by Syamsu Alam et al. (2019) that found a favorable correlation between job competence and work discipline prompted the current study's hypothesis testing. Job competence has a positive and significant effect on work discipline at Makassar Maritime Polytechnic, according to research by Syamsu Alam et al. (2019) titled "The Effect of Job Competence and Organizational Work Culture on Performance through Employee Work Discipline at Makassar Maritime Polytechnic." This means that the hypothesis is correct.

H4 : Work Competence had an effect on Employee Performance

Employee Performance as a function of Leadership Style and Work Discipline. Furthermore, there was a small but beneficial impact of the organizational culture variable on employee performance. Leadership, Work Discipline, and Organizational Culture individually impacted employee performance at the Rawalumbu Sub-districts Office, but their combined influence was far greater.

Table 6's initial hypothesis testing findings showed that there was a positive link between Work Competence and Employee Work Discipline. This was deduced from the variable's Original sample value of 0.535. The t-statistic was 3.983 (>1.96), and the probability of failure was 0.000005 (p 0.05). Therefore, in the Jakarta Special Capital Region, Work Competence had a major impact on Employee Performance. Work competence was shown to significantly positively affect employee performance, supporting H4 of the research.

Based on the findings of the study "The Effect of Competence on Employee Performance at PT. Telekomunikasi Indonesia Tbk Witel Bandung" by Annisa Putri Soetrisno and Alini Gilang (2018), this study tested the hypothesis that higher levels of competence lead to higher levels of performance among employees. Research conducted by PT. Telekomunikasi
Indonesia Tbk Witel Bandung found that the competency variable had a noteworthy impact on employee performance.

H5: Work Discipline had an effect on Employee Performance

Table 6 shows that the first round of hypothesis testing indicates a positive link between the variable of Work Discipline and the outcome of Employee Performance (Original sample value of 0.223). The t-statistic was 1.967 (>1.96), and the probability level was 0.0470.05. Therefore, in the Jakarta-based Special Capital Region, Work Discipline has a substantial impact on Employee Performance. It follows that "Work Discipline has a significant positive effect on Employee Performance" (H5) was a correct statement to make for the purposes of this research.

Previous research by Asep Suprihat and Masyhudzulhak Djamil (2018), titled "The Effect of Leadership, Work Discipline, and Organizational Culture on Employee Performance at Rawalumbu Subdistrict Office," provided support for the hypothesis that work discipline has a positive and significant effect on employee performance.

H6: Work Environment had a positive effect on Employee Performance through Work Discipline

According to the results of the first round of hypothesis testing, displayed in Table 6, the variable Work Environment on Employee Performance through Work Discipline had an Original sample value of 0.063, indicating a positive direction in the relationship between the two. At the same time, the t-statistic was 1.122 (>1.96), and the p-value was 0.131 0.05. Therefore, the Work Environment in Jakarta Special Capital Region affected Employee Performance through Work Discipline. So, the study's H6 hypothesis that "Work Environment had a positive but not significant effect on Employee Performance through Work Discipline" failed to hold up to scrutiny.

Previous research by Hikmah Megawati (2021), titled "The Effect of Work Environment on Employee Performance Mediated by Work Discipline at PT Sinar Sosro Malang," provided support for the hypothesis testing, which showed that the Work Environment had no significant effect on Employee Performance via Work Discipline. Employee performance was found not to be indirectly influenced by the work environment via work discipline, therefore rejecting the null hypothesis.

H7: Work Competence had a positive effect on Employee Performance through Work Discipline

Based on the results of the first round of hypothesis testing, it can be seen in Table 6 that there is a positive relationship between Work Competence and Employee Performance through Work Discipline. The Original sample value for
this variable was 0.146. A t-statistic of 1.614 (>1.96) and a p-value of 0.053 (0.05) were also found. Therefore, in the Jakarta Special Capital Region, Work Competence influenced Employee Performance by way of Work Discipline. Work competence was shown to have a favorable, albeit not statistically significant, influence on employee performance through work discipline, therefore negating H7.

Based on their findings, the authors of "The Effect of Work Competence and Organizational Work Culture on Performance through Employee Work Discipline at Makassar Maritime Polytechnic" (Syamsu Alam et al., 2019) conclude that "work competence has a positive effect on employee performance through work discipline." Work Competence was shown to have a favorable but non-significant influence on employee performance via the medium of Work Discipline at Makassar Maritime Polytechnic. That's why we can't accept the hypothesis as true.

DISCUSSION

The purpose of this study was to determine how "Work Environment and Work Competence on the Performance of Public Facilities and Infrastructure Handling (PPSU) Employees with Work Discipline as an Intervening Variable," based on the findings of the previously mentioned research. Here are the results:

1. Work discipline is significantly influenced by the nature of the workplace.
2. The quality of the workplace has a noticeable and beneficial influence on worker productivity.
3. Work Competence significantly improves one's dedication to their job.
4. Employee performance improves noticeably and positively when workers demonstrate competence in their roles.
5. There is a direct correlation between work discipline and productivity.
6. Workplace discipline improves employee performance, but not statistically significantly.
7. Employee Performance improves with increased work competence via self-discipline, although the benefit is small and not statistically significant.

CONCLUSIONS AND RECOMMENDATIONS

The following are some recommendations based on the findings of this study:

For Organizations

1. Work Environment
   In light of findings from hypothesis testing and assessments of work environment characteristics, the following recommendations might be communicated to the study site:
   a. In order to improve especially building facilities in the workplace, work space layout and existing work facilities. An example of what can be done is regular monitoring of building facilities at the
research site, so that they can be adequate according to the needs of workers when they are at work.

b. Can improve relationships between co-workers and relationships with superiors. Examples of what can be done are teaching a sense of openness between workers, colleagues and superiors, as well as establishing friendly relations so that the work carried out can meet the target or exceed the set target.

2. Work Competency

Accordingly, the following recommendations may be communicated to the study site based on the findings of hypothesis testing and evaluation of the Job Competency variable:

a. In order to keep workers up-to-date on the latest methods and best practices for getting work done. An example that can be used is that norms are created to mutually strengthen each other by living side by side and not conflicting with each other.

b. Can increase understanding of Standard Operational Procedures for employees. An example of what can be done is reminding employees to work according to the standards that have been set at work.

3. Work Discipline

Accordingly, the following recommendations may be communicated to the study site based on the findings of hypothesis testing and evaluation of the Job Competency variable:

a. In order to continue to comply with the established regulations, it motivates workers. For example, employees who can follow the established rules will receive rewards and employees who cannot follow will receive punishment.

b. Can increase employee accuracy in coming to and from work. For example, what can be done is to pay more attention to work discipline and the level of punctuality of each employee.

FURTHER STUDY

Despite the fact that this study was designed and executed in compliance with scientific protocols, it suffers from the following problems:

1. While there are numerous elements that impact employee performance, this study only looks at three of them (work environment, work competence, and work discipline).

2. The responses provided by the sample may not always reflect the true situation, which is a drawback of questionnaire-based research.

ACKNOWLEDGMENT

The preparation of this thesis was also inseparable from very significant guidance, assistance and support from all parties. Therefore, on this occasion the author would like to thank all parties who have helped in the preparation of this thesis.
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