

COMPETENCE, DISCIPLINE, AND WORK ENVIRONMENT ON THE EMPLOYEE PERFORMANCE OF DEPARTMENT OF PUBLIC WORKS AND SPATIAL PLANNING SURAKARTA

Aan Tejo Yulianto¹⁾ Istiatin²⁾ Bambang Mursito³⁾

Islamic University of Batik Surakarta

E-mail: aantejo669@gmail.com

Abstract: *The purpose of this study was to analyse the effect of competence, discipline and work environment on the employee performance of Department of Public Works and Spatial Planning Surakarta. The survey approach used is descriptive quantitative, and the survey data used are primary and secondary data. The sample strategy utilized in this study is a saturated sampling strategy with 70 respondents. Multiple linear regression, F test, t test, and coefficient of determination (R^2) are used to analyze the data. The survey results shows that competence, discipline, and work environment has a significant effect on the employee performance of Department of Public Works and Spatial Planning Surakarta. The results of the coefficient of determination test obtained the Adjusted R^2 value of 0,566 or 56,6%, indicating that employee performance in the Department of Public Works and Spatial Planning Surakarta is influenced by competence, discipline, and work environment variables, while the remaining 43,4% is explained by other variables.*

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

1. Introduction

Along with the escalating competition between businesses, science, technology, and the digital economy are developing quickly. Management is undoubtedly necessary for all businesses in order to work toward achieving particular objectives. Not only private companies, government agencies also need good management in order to provide good service to the public or society. The success or failure of a company in achieving its goals depends on the success of the individual company itself in carrying out its duties. Company development is related to HR (Human Resources). A company will run well if it has knowledgeable and skilled human resources. Owned human resources must be managed optimally and maximally with the aim of developing and advancing the company (Rindengan *et al.*, 2022)

Employee performance as one of the determining factors for the success of a company and can affect the company's performance as a whole. The results of the (Rindengan *et al.*, 2022) study, state that the quality and quantity of employee performance can be increased by abilities obtained from learning outcomes and the desire to excel. Performance can be declared good and successful if the real behavior displayed by each employee is work performance according to their role in the company (Harahap & Tirtayasa, 2020).

Competence plays a crucial role because it refers to a worker's fundamental capacity to perform a task. According to the study's findings (Ainanur & Tirtayasa, 2018), employees will be

more competent if they can complete tasks based on their knowledge, abilities, and the work ethic required for the position. The results of the (Elizar & Tanjung, 2018) research, assert that competence is a core and ingrained aspect of an employee's personality that enables predictable performance in a range of settings and professional activities. According to the study's findings (Rindengan *et al.*, 2022), competence has a favorable and considerable impact on employee performance..

One of the problems that is often found in various companies regarding employees is the problem of discipline. Discipline can be said as something that has great benefits for the interests of the company and employees. The results of (Harahap & Tirtayasa, 2020) research, state that discipline can reflect an attitude of respect and compliance with company regulations. The results of the (Saputri *et al.*, 2021) study, stated that discipline is important for companies because discipline contains rules that must be obeyed by employees. The results of the (Aromega *et al.*, 2019) study, assert that discipline actions have a favorable and considerable impact on employee performance.

Among the many factors that determine the success of employees in carrying out their work, one of the elements that requires consideration is the work environment. The results of the (Badrianto & Ekhsan, 2019) research, stated that the work environment can affect employees in carrying out the tasks assigned. The results of (Ahmad *et al.*, 2019) study, assert that a positive work environment promotes employee performance, and that this influences the smooth operation of firm processes. The outcomes of the (Adha *et al.*, 2019) study, assert that the work environment has a significant effect on employee performance.

This study took the object of research at the Department of Public Works and Spatial Planning Surakarta. The Department of Public Works and Spatial Planning Surakarta is a government agency involved in the service sector which has the main task and function of administering affairs in the field of public works and spatial planning based on the principle of regional autonomy and co-administration. The Department of Public Works and Spatial Planning Surakarta is tasked with realizing quality infrastructure for the City of Surakarta in accordance with its vision and mission as well as assisting the Mayor of Surakarta in carrying out their duties. The Department of Public Works and Spatial Planning Surakarta is located at Jl. Belimbing, No. 10, Kerten, Laweyan District, Surakarta. Currently the Department of Public Works and Spatial Surakarta has 70 (seventy) servant of the state (PNS).

Theoretical Basic

According to (Sinaga, 2020: 13) the definition of employee performance is the outcome of a worker's work function or actions in an organization that are influenced by a number of elements to achieve goals within a predetermined time frame. Employee performance is calculated periodically both in quantity and quality based on predetermined targets, standards, and criteria as a result of the authority and responsibility of a job in an organization. Employee performance according to (Fatah, 2017: 8) is the work behavior of an employee with other people both inside and outside the unit with the intention of increasing employee work effectiveness, including: sharing resources and information, creating productive working relationships, reaching consensus, and handling conflict in a healthy way.

As stated by (Boulter, 2013: 43), Competence is a fundamental quality of a person that enables employees to provide outstanding work performance. According to the preceding explanation, competence refers to a deep and intrinsic aspect of personality in a person who exhibits predictable conduct in a variety of contexts and work-related scenarios. The criteria or standards employed allow for the prediction of who is performing well and who is not. The majority of the time, competency analyses are performed for career growth, but they are also

necessary to assess the effectiveness of the required level of performance. As stated by (Ariyati & Sahputra, 2020: 68) Competence is a quality that stands out in a person and develops into consistent patterns of behavior and thought across a wide range of contexts over time. Based on this viewpoint, it is clear that competence is the ability to perform a job as demonstrated by one's beliefs, attitudes, and conduct.

Managers can use discipline as a communication strategy to influence an employee's readiness to change a behavior as well as to raise knowledge of and encourage adherence to all relevant societal standards and norms (Sutrisno, 2017: 120). Meanwhile, discipline according to (Istiatin & Diyah, 2016: 96) is a state of order in which a person or group of people who belong to an organization wish to comply and carry out business regulations, whether written or not, based on awareness of obtaining the desired circumstances. So that the members have a high discipline so as to achieve the goal of increasing productivity. Increased productivity shows that a person's performance is considered good.

According to (Mulia & Saputra, 2021: 7) The surroundings of employees that may have an impact on how well they complete their given responsibilities are referred to as the work environment. As stated by (Rahmisyari, 2017: 51) the work environment is an environment where these employees carry out their daily tasks and work, which includes employee service, working conditions and employee relations.

THEORITICAL FRAMEWORK

This study's frame of reference is as follows:

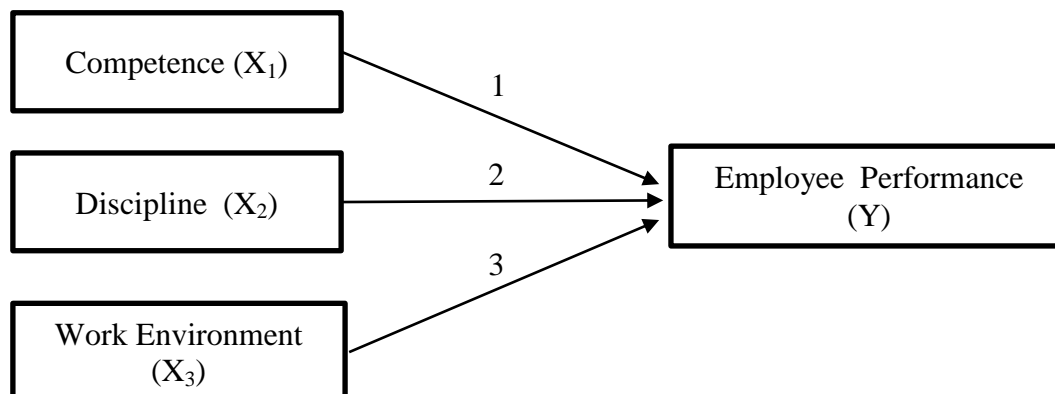


Figure 1. Theoretical framework

Hypothesis

1. It is suspected that competence has a positive and significance effect on the employee performance of Department of Public Works and Spatial Planning Surakarta.
2. It is suspected that discipline has a positive and significance effect on the employee performance of Department of Public Works and Spatial Planning Surakarta.
3. It is suspected that work environment has a positive and significance effect on the employee performance of Department Of Public Works and Spatial Planning Surakarta.

2. Research Method

This study uses descriptive quantitative research methodology. According to (Sugiyono, 2019: 13), quantitative research, or a positivist-based research approach, is used to study certain populations or samples. Data are collected using research equipment, and data processing is quantitative or statistical with the goal of evaluating the applied hypothesis. (Sugiyono, 2019:

16) defines descriptive research as an approach that uses raw data or samples acquired with further analysis or drawing generalizations to describe or provide an overview of the object under study. In this study, a saturated sample was used, which is a sampling strategy in which every person in the population was used as a sample (Sugiyono, 2019: 124). The population is all servant of the state (PNS) of Department of Public Works and Spatial Planning Surakarta, totaling 70 respondents and the population as a whole is used for the sample. The sampling technique used the saturated sampling method. And using a questionnaire to gather information. Statistical analysis was the method of data analysis used, namely multiple linear regression, F test, t test, and coefficient of determination (R^2).

3. Results and Discussion

3.1. Results

Validity Test

Here are the outcomes of the validity test for employee performance.

Table 1. Employee performance validity test result

Questions	r_{count}	r_{table}	Conclusion
Employee Performance 1	0,859	0,444	Valid
Employee Performance 2	0,586	0,444	Valid
Employee Performance 3	0,847	0,444	Valid
Employee Performance 4	0,726	0,444	Valid
Employee Performance 5	0,641	0,444	Valid

According to the data above, it is evident that the 5 item statements submitted by respondents regarding employee performance have a value of $r_{\text{count}} > r_{\text{table}}$, so they are declared valid.

Here are the outcomes of the validity test for competence

Table 2. Competence validity test result

Questions	r_{count}	r_{table}	Conclusion
Competence 1	0,866	0,444	Valid
Competence 2	0,841	0,444	Valid
Competence 3	0,618	0,444	Valid
Competence 4	0,788	0,444	Valid
Competence 5	0,767	0,444	Valid

According to the data above, it is evident that the 5 item statements submitted by respondents regarding competence have a value of $r_{\text{count}} > r_{\text{table}}$, so they are declared valid.

Here are the outcomes of the validity test for discipline

Table 3. Discipline validity test result

Questions	r_{count}	r_{table}	Conclusion
Disicipline 1	0,737	0,444	Valid
Disicipline 2	0,782	0,444	Valid
Disicipline 3	0,608	0,444	Valid
Disicipline 4	0,693	0,444	Valid
Disicipline 5	0,737	0,444	Valid

According to the data above, it is evident that the 5 item statements submitted by respondents regarding discipline have a value of $r_{\text{count}} > r_{\text{table}}$, so they are declared valid.

Here are the outcomes of the validity test for work environment

Table 4. Work environment validity test result

Questions	r_{count}	r_{table}	Conclusion
Work Environment 1	0,810	0,444	Valid
Work Environment 2	0,712	0,444	Valid
Work Environment 3	0,838	0,444	Valid
Work Environment 4	0,560	0,444	Valid
Work Environment 5	0,564	0,444	Valid

According to the data above, it is evident that the 5 item statements submitted by respondents regarding work environment have a value of $r_{\text{count}} > r_{\text{table}}$, so they are declared valid.

Reliability Test

Table 5. Reliability test result

Variable	<i>Cronbach's Alpha</i>	<i>N of Items</i>	Mark
Employee Performance	0,766	5	Reliable
Competence	0,828	5	Reliable
Discipline	0,755	5	Reliable
Work Environment	0,730	5	Reliable

The Cronbach's Alpha value for each variable is greater than 0.60, which is a sign that all variables are considered reliable according to the reliability test findings in the table above. So that the questionnaire used in this study is reliable or can be trusted.

Classic Assumption Test

Table 6. Normality test result

<i>Kolmogorov-smirnov Z</i>	<i>Asymp. Sig. (2-tailed)</i>	Border	Information
0,068	0,200 ^{c,d}	0,05	Normal

According to the aforementioned Kolmogrov-Smirnov test results, the regression model's significance value is 0.200 or greater than 0.05. This reveals the normal data distribution of the regression equation used in this study's model.

Table 7. Heteroscedasticity test result

Variable	<i>Sig (P Value)</i>	Conclusion
Competence	0,472	No heteroskedasticity occurs
Discipline	0,398	No heteroskedasticity occurs
Work Environment	0,158	No heteroskedasticity occurs

Since all independent variables have significance values larger than 0.05 and the findings are displayed in the table above, it can be deduced that there are no heteroscedasticity issues with any of these independent variables.

Table 8. Multicollinearity test result

Variable	Collinerarity Statistic		Conclusion
	Tolerance	VIF	
Competence	0,995	1,005	Multicollinearity free
Discipline	0,995	1,005	Multicollinearity free
Work Environment	0,991	1,009	Multicollinearity free

Since all independent variables in the table have tolerance values more than 0.10 and VIF values lower than 10, it can be said that multicollinearity is not found.

Multiple Linier Regression Test

Table 9. Multiple linear regression test result

Variable	Unstandardized Coefficients	
	B	Std. Error
(Constant)	4,256	3,609
Competence	0,313	0,145
Discipline	0,188	0,077
Work Environment	0.301	0,087

The multiple linear regression model used in this study can be formulated using the results mentioned above as follows:

$$Y = 4.256 + 0.313X_1 + 0.188X_2 + 0.301X_3 + e$$

It is possible to interpret the regression equation as follows:

- The constant value (α) is 4.256, which means that if the independent variables, competence, discipline, and work environment, the value is 0 (zero), then the employee performance variable is at 4.256.
- The coefficient of the competence variable (β_1) from the calculation of multiple linear regression coefficients (β) = 0.313. This shows that if the discipline and work environment variables equal 0, then the addition of competence variable will result in an increase in employee performance by 0.313. So that the competence variable has a positive association with the employee performance of Department of Public Works and Spatial Planning Surakarta.
- The coefficient of the discipline variable (β_2) from the calculation of multiple linear regression coefficients (β) = 0.188. This shows that if the competence and work environment variables are equal to 0, then with the addition of the discipline variable, the employee performance will increase by 0.188. So that the discipline variable has a positive association with employee performance of the Department of Public Works and Spatial Planning Surakarta.
- The coefficient of the work environment variable (β_3) from the calculation of multiple linear regression coefficients (β) = 0.301. This shows that if the competence and discipline variables are equal to 0, then with the addition of work environment variables the employee performance will increase by 0.301. So that the work environment variable has a positive association with the employee performance of the Department of Public Works and Spatial Planning Surakarta.

- e. Based on the outcomes of the above multiple linear regression analysis, it can be seen that the competence variable has the most powerful impact on employee performance, because the regression coefficient has the greatest value among the other variables, which is equal to 0.313.

F Test (Simultaneous Test)

F test is used to determine the significance of the influence of competence, discipline, and work environment simultaneously on the employee performance of the Department of Public Works and Spatial Planning Surakarta. The results of the F test can be seen from the results of the data analysis output as follows:

Table 10. F Test result

<i>Model</i>	F	<i>Sig.</i>	Information
Regression	8,368	,000 ^b	H ₀ is rejected, H _a is accepted

Based on the results of the analysis of the data that have been obtained, it can be seen that the F_{count} value is 8.368 while the F_{table} is 2.742 and a significance of $0.000 < 0.05$ H₀ is rejected. It can be concluded that H_a is accepted, which means that there is a simultaneous influence between competence, discipline, and work environment variables on employee performance variable.

t Test (Partial Test)

Table 11. t Test result

Variable	t_{count}	t_{table}	<i>Sig.</i>
Competence	2,158	1,996	0,035
Discipline	2,431	1,996	0,018
Work Environment	3,466	1,996	0,001

According to the preceding table, the following can be explained:

- On the competence variable, the calculation results show $t_{\text{count}} > t_{\text{table}}$ ($2.158 > 1.996$) and a significance value ($0.035 < 0.05$), then H₀ is rejected. It can be concluded that the competence variable (X₁) partially has a positive and significant effect on employee performance (Y).
- On the discipline variable, the calculation results show $t_{\text{count}} > t_{\text{table}}$ ($2.431 > 1.996$) and a significance value ($0.018 < 0.05$), then H₀ is rejected. It can be concluded that the discipline variable (X₂) partially has a positive and significant effect on employee performance (Y).
- On the work environment variable, the calculation results show $t_{\text{count}} > t_{\text{table}}$ ($3.466 > 1.996$) and a significance value ($0.001 < 0.05$), then H₀ is rejected. It can be concluded that the work environment variable (X₃) partially has a positive and significant effect on employee performance (Y).

Coefficient of Determination (R^2)

Table 12. Coefficient determination (R^2) result

<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>
0,765^a	0,585	0,566

It is clear from the calculation's outcomes that the final coefficient of determination (R^2) was 0.566. Accordingly, competence, discipline, and work environment variables can account for 56.6% of variances in employee performance variable, while additional variables not included in this study can account for the remaining 43.4%. Motivation, organizational culture, experience, and other factors, for instance.

3.2.Discussion

From the description above, the conclusions of this study are as follows:

- Based on the calculation results of SPSS version 25 it is known that $t_{\text{count}} > t_{\text{table}}$ ($2.158 > (1.996)$) with a significance value of $(0.035) < (0.05)$, indicating that competence has a positive and significant effect on the employee performance of the Department of Public Works and Spatial Planning Surakarta.
- Based on the calculation results of SPSS version 25 it is known that $t_{\text{count}} > t_{\text{table}}$ ($2.431 > (1.996)$) with a significance value of $(0.018) < (0.05)$, indicating that discipline has a positive and significant effect on the employee performance of the Department of Public Works and Spatial Planning Surakarta.
- Based on the calculation results of SPSS version 25 it is known that $t_{\text{count}} > t_{\text{table}}$ ($3.466 > (1.996)$) with a significance value of $(0.001) < (0.05)$, indicating that work environment has a positive and significant effect on the employee performance of the Department of Public Works and Spatial Planning Surakarta.

4. Conclusion

Based on the results of the analysis from the discussion that has been described previously and the tests that have been carried out, the following conclusions can be drawn:

- Competence has a positive and significant effect on the employee performance of the Department of Public Works and Spatial Planning Surakarta.
- Discipline has a positive and significant effect on the employee performance of the Department of Public Works and Spatial Planning Surakarta.
- Work environment has a positive and significant effect on the employee performance of the Department of Public Works and Spatial Planning Surakarta.
- Results of the coefficient of determination analysis (R^2) obtained a result of 0.566 or 56.6%. This means that the variables of competence, discipline, and work environment are able to explain 56.6% of the employee performance of the Department of Public Works and Spatial Planning Surakarta. While the remaining 43.4% is explained by other variables not included in this research, such as motivation, experience, leadership, and others.
- From the regression equation above it can be interpreted as follows:
 - The constant value (α) is 4.256, which means that if the independent variables, namely competence, discipline, and work environment, the value is 0 (zero), then the employee performance variable is at 4.256.
 - The coefficient of the competence variable (β_1) from the calculation of multiple linear regression coefficients (β) = 0.313. This shows that if the discipline and work

environment variables equal 0, then the addition of competence variables will result in an increase in employee performance by 0.313. So that the competence variable has a positive association with the employee performance of the Department of Public Works and Spatial Planning Surakarta.

- 3) The coefficient of the discipline variable (β_2) from the calculation of multiple linear regression coefficients (β) = 0.188. This shows that if the competence and work environment variables are equal to 0, then with the addition of the discipline variable, the employee performance will increase by 0.188. So that the discipline variable has a positive association with the employee performance of the Department of Public Works and Spatial Planning Surakarta.
- 4) The coefficient of the work environment variable (β_3) from the calculation of multiple linear regression coefficients (β) = 0.301. This shows that if the competence and discipline variables are equal to 0, then with the addition of work environment variables the employee performance will increase by 0.301. So that the work environment variable has a positive association with the employee performance of the Department of Public Works and Spatial Planning Surakarta.
- 5) From the results of the multiple linear regression analysis above, it can be seen that the competence variable has the most dominant influence on employee performance, because the regression coefficient has the greatest value among the other variables, which is equal to 0.313

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