

The Effect of Discipline and Facilities on Employee Productivity, Mediated by Supervision at PT. Semar Badranaya, Pelalawan Regency."

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ABSTRACT

This study aims to examine the influence of discipline and facilities on employee productivity as well as the role of supervision in mediating the influence of discipline and facilities on employee productivity. The respondents in this study were 40 employees. The data obtained was processed using the PLS application. The results of the study show that discipline and facilities have an effect on employee productivity. Supervision mediates the influence of discipline on employee productivity and supervision does not mediate the effect of facilities on employee productivity.

INTRODUCTION

A company or organization cannot achieve its goals efficiently and effectively if employee productivity is low. Therefore, productivity is crucial and should always be improved, as it reflects the level of employee efficiency. Human resources play a vital role in meeting productivity targets, since a company's operations cannot be carried out effectively without the support of its workforce. Consequently, incentives are needed to boost work productivity in order to achieve the company's objectives. Work productivity refers to a state in which a company's employees can work to their full potential, ensuring that production outcomes align with plans.

According to Gaol (2014:686), employee work productivity is defined as an employee's performance within their work environment. On the other hand, work productivity refers to the effective and efficient utilization of human resources. According to Nitisemito (2002:173), fluctuations in productivity levels can also be influenced by several factors: leadership, compensation, supervision, work environment, education and training, work discipline, work facilities, absenteeism, workload, employee turnover rate, and the selection process. According to Ravianto, as cited by Sutrisno (2011:102), labor productivity is influenced by several factors – both those related to the workforce itself and other factors – such as educational level, skills, discipline, work attitude and etiquette, motivation, nutrition and health, income level, social security, training, work climate, technology, production methods, management, and performance.

One factor that influences employee productivity is discipline. The more disciplined an employee is in carrying out their duties, the better they will be able to complete the work assigned to them by the company. Hasibuan (2012:193) states that discipline is a person's awareness and willingness to comply with all company regulations and applicable social norms. Research on the relationship between discipline and productivity has been conducted by Gaurifa (2024), who found that discipline influences work productivity; Setyanti et al. (2022) found that work discipline has a positive and significant effect on work productivity; and Irfan and Mahargiono (2023) also reported that work discipline influences employee productivity. Contrasting findings were reported by Assagaf and Dotulong (2015) and Patmarina and Yulandari (2021), whose studies indicated that, when analyzed in isolation, work discipline did not have a significant effect on work productivity. Furthermore, research by Saleh and Utomo (2018) also showed that while the work discipline variable yielded positive results, it did not have a significant effect on work productivity.

Another factor influencing employee productivity is facilities. Complete, high-quality, and modern work facilities will certainly facilitate every employee's tasks, enabling them to work effectively and efficiently, which ultimately leads to an increase in employee productivity. According to Moekijat as cited in Asnawi (2019:25), facilities are physical resources that can process an input into a desired output. Research on the relationship between facilities and productivity has been conducted by Seri et al. (2022), which found that facilities have a significant effect on work productivity; Putri et al. (2023) found that workplace facilities have a significant effect on employee work productivity; and

a study by Marhadi et al. (2025) indicated that workplace facilities have a positive and significant effect on work productivity. A different finding was reported by Atika (2018), who concluded that the work facilities variable had no effect on employee work productivity.

Productivity is also influenced by supervision; according to Imron (2013:139), supervision is an activity that consistently ensures that planned tasks are carried out as intended. To the best of the researcher's knowledge, no previous study has used supervision as a mediating variable for productivity. Research conducted by Dafit et al. (2021) examined job satisfaction as a mediating variable for work productivity; Puspitasari et al. (2021) used compensation as a mediating variable for productivity; and the study by Widodo and Retnosari (2020) employed motivation as a mediating variable for productivity. Based on logical reasoning, the novelty of this study lies in addressing the issue of employee productivity by employing a mediation model using supervision as the mediating variable.

Based on the background presented by the researcher, it is evident that this study's problem relates to productivity; furthermore, the researcher observes that the results of previous studies regarding the effects of discipline and workplace facilities on employee productivity remain inconsistent. This research gap provides an opportunity for the researcher to conduct further research, and it is hoped that supervision, as a mediating variable, will serve as a solution to this gap. The title of the study is **"The Effect of Discipline and Facilities on Employee Productivity, Mediated by Supervision, at PT. Semar Badranaya, Pelalawan Regency."**

RESEARCH OBJECTIVES

Based on the background described above, the objectives of this study are as follows:

1. To examine and analyze the effect of discipline on employee productivity at PT. Semar Badranaya in Pelalawan Regency.
2. To examine and analyze the effect of facilities on employee productivity at PT. Semar Badranaya in Pelalawan Regency.
3. To examine and analyze the effect of discipline on employee productivity, mediated by supervision, at PT. Semar Badranaya in Pelalawan Regency.

To test and analyze the effect of facilities on employee productivity, mediated by supervision, at PT. Semar Badranaya in Pelalawan Regency.

LITERATURE REVIEW

1. Productivity

Employee productivity is the ratio of results achieved to workforce participation (Ardana et al., 2014:270). To measure productivity, the following indicators are required: ability, improvement in results, work enthusiasm, self-development, quality, and efficiency (Dewi and Harjono, 2019:73–74).

2. Discipline

Muchdarsyah defines discipline as a mental attitude reflected in the actions or behavior of individuals, groups, or society in the form of compliance with

actions or regulations established by the government, or with the ethics, norms, and rules that apply in society for specific purposes. (Tsauri, 2013:129). According to Singodimedjo, as cited in Sutrisno (2011:94), the indicators of work discipline are: adherence to time schedules, adherence to company regulations, adherence to rules of conduct at work, and adherence to other company regulations.

3. Facilities

According to Moenir (2016:120), work facilities, when viewed in terms of their utilization, consist of three categories, namely:

1. Work Equipment. These are all types of items that serve directly as production tools to manufacture goods or to process one good into another with a different function and purpose.
2. Work Supplies. These are all types of items that serve as indirect aids in production, speeding up processes, and enhancing comfort in the workplace. Examples include communication equipment, data processing equipment, and furniture;
3. Support Equipment or Facilities. These are all types of items that facilitate smooth movement during work, such as elevators, air conditioners, time clocks, and power generators.

According to Riva'i (2004: 244), the indicators of employee benefits are as follows: 1) Facilities and Infrastructure 2) Health Insurance 3) Incentives 4) Compensation 5) Career Path

4. Supervision

According to Schermerhorn, as cited in Ernie and Saefullah (2005: 317), monitoring is defined as the process of establishing performance metrics and taking actions that support the achievement of expected results in accordance with those established metrics. According to Handoko (2014), monitoring indicators are: accurate, timely, objective, comprehensive, and accepted by members.

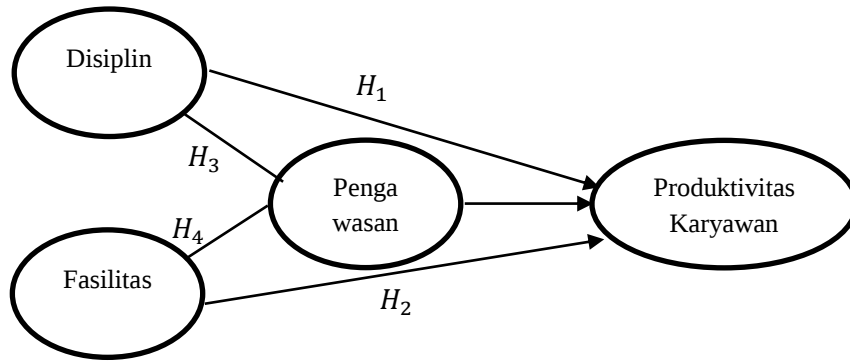
5. Hipotesis

The hypotheses in this study are as follows:

1. It is hypothesized that discipline influences employee productivity at PT. Semar Badranaya in Pelalawan Regency.
2. It is hypothesized that facilities influence employee productivity at PT. Semar Badranaya in Pelalawan Regency.
3. It is hypothesized that discipline influences employee productivity, mediated by supervision, at PT. Semar Badranaya in Pelalawan Regency.
4. It is hypothesized that facilities influence employee productivity, mediated by supervision, at PT. Semar Badranaya in Pelalawan Regency.

6. Research Framework

The research framework is as follows:



METHODOLOGY

This study was conducted at PT. Semar Badranaya in Pelalawan Regency and took 6 months to complete. The population for this study consisted of employees of PT. Semar Badranaya in Pelalawan Regency. The sampling method used was saturation sampling. Saturation sampling involves including all members of the population as the study sample. The researcher used a variance-based application employing the Smart PLS (Partial Least Squares) statistical technique.

RESEARCH RESULT

a) Convergent Validity Test

The following shows the convergent validity for the outer loadings of each variable's indicators:

Table 1: Convergent Validity Test

	DIS	FAS	PEN	PRO
DIS1	0.840			
DIS2	0.737			
DIS3	0.797			
DIS4	0.821			
FAS1		0.771		
FAS2		0.883		
FAS3		0.843		
FAS4		0.809		
PEN1			0.723	
PEN2			0.763	
PEN3			0.753	
PEN4			0.836	
PRO1				0.731
PRO2				0.851
PRO3				0.830
PRO4				0.798
PRO5				0.849
PRO6				0.787

Source: Processed Data

The outer loadings in Table 1 for the exogenous variable indicators are all greater than 0.70; therefore, these indicators validly measure the variables under study, meet the criteria for convergent validity, and can be used for further analysis. Meanwhile, for the endogenous variable—employee productivity—there are six indicators with outer loadings greater than 0.70 that meet the validity criteria.

b) Discriminating Validity Test

Discriminant Validity Test

A discriminant validity test is conducted to ensure that the variables are not correlated with one another and that they measure different constructs. To assess discriminant validity, calculations are performed based on the Fornell-Larcker criterion, as shown in Table 2:

Table 2: Discriminant Validity Test

	DIS	FAS	PEN	PRO
DIS	0.800			
FAS	0.773	0.827		
PEN	0.757	0.709	0.770	
PRO	0.780	0.805	0.605	0.809

Source: Processed Data

Table 2 shows that the AVE values for each variable are all greater than the correlations between the constructs and other constructs; therefore, it can be concluded that all variables are discriminant valid.

c) Reliability Test

Construct Reliability Test

Here are the results of *Cronbach's alpha* and *composite reliability* calculations:

Table 3: Reliability Test

	Cronbach's alpha	Keandalan komposit (rho_a)	Keandalan komposit (rho_c)	Rata-rata varians diekstraksi (AVE)
DIS	0.811	0.812	0.876	0.640
FAS	0.846	0.851	0.896	0.684
PEN	0.774	0.803	0.853	0.593
PRO	0.894	0.895	0.919	0.654

Source: Processed Data

Table 3 shows that the Cronbach's alpha and composite reliability values are greater than 0.70; thus, the research model—comprising discipline, facilities, supervision, and employee productivity—is reliable.

d) Structural Model Analysis (*Inner Model*)

The results of the analysis of the Coefficient of Determination (*R-Square*) of 0.67, 0.33 and 0.19 in the structural model indicate a good, moderate and

weak model (Ghozali and Latan, 2015). Based on table 4, the determination coefficient is obtained:

Table 4: R-Square Values

	R-square	Adjusted R-square
PEN	0.612	0.591
PRO	0.839	0.825

Source: Processed Data

The goodness of fit of the PLS model, it is known from the R2 value that the higher the R2, the more fit the model is said. The results of the calculation of R2 of the employee productivity variable showed a value of 0.839 greater than 0.67 ($0.839 > 0.67$), meaning that the diversity of data can be explained by a structural model and has a relevant value both because the value is almost close to one.

e) Hipotesis

In testing the hypothesis, the researcher used *t-statistics values*. Abdillah and Jogiyanto (2015:197) that the path coefficient score or *inner model* indicated by the *statistical T-value* must be above 1.96 for hypothesis testing at alpha 5 percent. The effect of the results of the study, by comparing the *t-statistics* value of 1.96, on the other hand, if the *t-statistics value* is small than 1.96, there is no effect. The following are the results of the hypothesis testing:

Table 5: Hypothesis Testing Results

	Sampel asli (O)	T statistik (O/STDEV)	Nilai P (P values)
DIS -> PRO	0.773	7.622	0.000
FAS -> PRO	0.390	3.263	0.001
DIS -> PEN -> PRO	-0.133	2.192	0.028
FAS -> PEN -> PRO	-0.079	1.329	0.184

Source: Processed Data

Table 5 shows the results of hypothesis testing which can be explained as follows:

1. 1st hypothesis testing

The magnitude of the influence of the discipline variable on employee productivity is 0.773 with a *t-statistics* value of 7.622, where the *t-statistics value* is large from 1.96, it is concluded that the discipline variable has an effect on the employee productivity variable.

2. 2nd hypothesis testing

The magnitude of the influence of the facility variable on employee productivity is 0.390 with a *t-statistics* value of 3.263, where the *t-statistical value* is large from 1.96, it is concluded that the facility variable has an effect on the employee productivity variable.

3. 3rd hypothesis testing

The magnitude of the influence of the discipline variable on employee productivity through the supervision variable was -0.133 with a *t-statistics* value of 2.192, where the *t-statistics* value was large from 1.96 so it was concluded that supervision mediated the influence of discipline on employee productivity.

4. 4th hypothesis testing

The magnitude of the influence of facility variables on employee productivity through the supervision variable is -0.079 with a *t-statistics* value of 1.329, where the *t-statistics* value is small from 1.96 so it is concluded that supervision does not mediate the influence of facilities on employee productivity.

CONCLUSIONS AND RECOMMENDATIONS

Discipline variables affect employee productivity variables; facility variables affect employee productivity variables; Supervision mediates the influence of discipline on employee productivity and supervision does not mediate the effect of facilities on employee productivity.

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