

The Work Productivity of Employees Perspective By Work Discipline And Work Environment

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ABSTRACT

The purpose of this study is to examine how PT staff' work environments and work discipline affect their productivity. Margarita Works. Quantitative approaches are employed in this study. using methods for gathering data such as interviews and questionnaires. The study included 61 workers from PT Jasa Marga Palikanci as respondents. Multiple linear regression is the analytical technique employed, and the regression coefficient values are $Y = 0.516 + 0.171 X_1 + 0.137 X_2$. The research hypothesis test results indicate that PT employees' job productivity is influenced by work environment and work discipline. Jasa Marga, either in part or entirely at once.

Keywords:

Work Productivity;
Work Discipline; work
Environment

INTRODUCTION

Every organization uses employee work productivity as a benchmark for conducting business operations, taking into account both the amount and quality of items produced. As is the situation in today's trade competition, when businesses have to compete on the basis of the caliber and well-being of their workforce. In addition to having a lot of money, businesses also need to consider other production variables like labor, expertise, and nature, all of which are interdependent and require each other's assistance in order to accomplish goals successfully and efficiently. As of 2019 (Wirawan et al.).

When a corporation increases its efficacy and efficiency, management gains access to capital. Being the best at satisfying customer wants and turning a profit are the company's two key objectives. Among these objectives, businesses must constantly provide high-quality products that are both sustainable and useful. Utomo & Saleh (2018). Workplace productivity, the work environment, and discipline must all be prioritized, among other things. (Kandhita & Jufrizen, 2021). Managers use work discipline as a strategy to try and raise an employee's knowledge of and willingness to follow all applicable social norms and organizational rules. As a result, a worker with strong work ethics and a pleasant workplace will be able to complete his tasks in accordance with the highest possible work productivity goal.

Work discipline is also an important factor that also determines the key to the success of a company. "Discipline is the awareness and willingness of a person to obey all company regulations and applicable social norms," as stated by Arif et al. (2020). Workplace discipline is vital to ensure that all operations proceed as planned and continue to do so. When there is work discipline, employees are less likely to take acts that could hurt the organization. This is demonstrated by the fact that employees who nonetheless arrive late for work and other reasons seldom leave the office.

The physical work environment is another factor that might contribute to poor work discipline among employees. The physical surroundings of the workplace that have the potential to directly or indirectly impact employees are collectively referred to as the physical work environment. (Priatna & Pramaswara, 2021) Employees will feel more at home at work and be more motivated to finish tasks if the physical work environment is tidy, healthful, cozy, and pleasant. Conversely, employees will feel less

at ease and motivated to finish their work if the physical work environment is less encouraging.

The public corporation PT. Jasa Marga (Persero) is in charge of building and managing toll roads, including a ring road that will likely lessen the number of arterial routes in the city and improve traffic flow to the west, south, and east. One of them is the State-Owned Enterprise PT. Jasa Marga (Persero) Palikanci Branch, which provides services for toll roads. There are operational issues in the Palikanci Branch of PT. Jasa Marga (Persero). There are many problems within the Company. Especially the issue of human data sources. There are some employees who have poor performance as seen from late attendance, decreased employee achievement or productivity. After an interview with one of the human resource staff of PT. Jasa Marga (Persero) Palikanci Branch, this happened because of work dissatisfaction which was also caused by lack of encouragement from fellow colleagues. PT. Jasamarga Palikanci Branch relies heavily on human resources to carry out its mission and company goals to be achieved. To get the achievement of good company performance, management in its implementation conducts employee performance appraisals. The success of the performance level is also influenced by several factors, one of which is by prioritizing discipline at work, the Work Environment and work productivity must be appropriate. (Jufrizen & Kandhita, 2021) Managers use work discipline as a strategy to try and raise an employee's knowledge of and willingness to follow all applicable social norms and organizational rules.

If staff members perform their operational duties, a company can function efficiently and have a healthy work environment. A safe and supportive work environment is essential to improving employee productivity. Because a suitable work environment can offer convenience, enjoyment, security, and safety in completing the duties allocated to them, employee productivity can rise when its surrounding conditions are favorable.

METHOD

This research was conducted at PT. Jasamarga Palikanci Cirebon. This research uses quantitative research method, which is an objective research approach, covering research and quantitative data analysis using statistical testing methods. In the study, the sample taken amounted to 61 respondents. In order to ascertain whether all independent or independent variables, such as discipline and work environment (X), have a significant influence on related or dependent variables, such as work productivity (Y), researchers employed multiple linear regression analysis techniques as well as simple linear regression analysis in this study. Data obtained from employees at PT. Jasamarga Palikanci Cirebon. The methods used to collect this data are questionnaires and interviews.

RESULTS AND DISCUSSION

Test Instrument

1. Validity Test

		Test the validity of all variables			
Variable	Item	No.	R Calculate	R Table	Information
Work Discipline		WD.1	0.760	0.252	V
		WD.2	0.651	0.252	V
		WD.3	0.633	0.252	V
		WD.4	0.743	0.252	V
		WD.5	0.754	0.252	V
		WD.6	0.737	0.252	V
		WD.7	0.716	0.252	V
		WD.8	0.656	0.252	V
		WD.9	0.710	0.252	V
		WD.10	0.647	0.252	V
		WD.11	0.625	0.252	V
		WD.12	0.781	0.252	V
		WD.13	0.622	0.252	V
Work Environment		WE.1	0.760	0.252	V
		WE.2	0.708	0.252	V
		WE.3	0.724	0.252	V
		WE.4	0.642	0.252	V
		WE.5	0.696	0.252	V
		WE.6	0.749	0.252	V
		WE.7	0.674	0.252	V
		WE.8	0.791	0.252	V
		WE.9	0.681	0.252	V
		WE.10	0.741	0.252	V
		WE.11	0.667	0.252	V
		WE.12	0.642	0.252	V
Work Productivity		WP1	0.742	0.252	V
		WP2	0.760	0.252	V
		WP3	0.778	0.252	V
		WP4	0.771	0.252	V

Source: SPSS 26 data processing

The aforementioned table indicates that all items are deemed legitimate due to the fact that the coefficient obtained is bigger than 0.252. Therefore, there's no need to add or remove any statements.

2. Reliability Test

After applying SPSS version 26 to compute the Alfa Cronbach formula, the reliability coefficient choice was derived from the subsequent research.

Work Discipline Variable Reliability Test (WD)

Reliability Statistics		
Cronbach's Alpha	N of Items	
.911	13	

Work Environment Variable Reliability Test (WE)

Reliability Statistics		
Cronbach's Alpha	N of Items	
.909	12	

Work Productivity Variable Reliability Test (Y)

Reliability Statistics		
Cronbach's Alpha	N of Items	
.760	4	

Source: SPSS 26 data processing

All of the statement variables have values that fall into the acceptable reliability category, according to the above table, since they are all higher than the Cronbach's alpha value of 0.6.

Classical Assumption Test

1. Normality Test

SPSS Output Normality Test

One-Sample Kolmogorov-Smirnov Test			
		Unstandardized Residual	
N		Mean	61
Normal Parameters ^{a,b}		Std. Deviation	.0000000
Most Extreme Differences	Absolute		1.75152775
	Positive		.079
	Negative		.079
Test Statistics			-.061
Asymp. Sig. (2-tailed)			.079
			.200 ^{c,d}

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

Source: SPSS 26 data processing

The value of Asymp. Sig. (2-tailed) of 0.200 is more than 0.05, as can be determined from the table. demonstrates the normal distribution of the data.

2. Heteroscedasticity Test

SPSS Output Glejser Heteroscedasticity Test

Coefficients ^a						
Type		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	T	
	(Constant)	1.011	.7		1.421	.161
	Work Discipline	-.014	11	-.131	-.393	.696
	Work	.024	36	.216	.649	.519
	Environment		38			

a. Dependent Variable: ABS_Res

Source: SPSS 26 data processing

Since the significance value (Sig.) for each of the variables above is known based on the spss output above, it can be concluded that the regression model does not exhibit any signs of heteroscedasticity.

3. Multicollinearity Test

SPSS Output Multicollinearity Test

Coefficients ^a								
Type		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Error Std.	Beta	T	Sig.	Tolerance	VIF
1	(Constant)	.516	1.233	.418	.677			
	Work	.171	.062	.491	2.761	.008	.153	6.521
	Discipline							
	Work	.137	.065	.374	2.101	.040	.153	6.521
	Environment							

a. Dependent Variable: Work Productivity

Source: SPSS 26 data processing

Given that the tolerance value is near to 1 and the VIF value for each variable is less than 10.00 in the result above, it can be said that multicollinearity does not exist in the regression model.

Regression Test

1. Multiple Linear Regression Test

Multiple Linear Regression SPSS Output

Coefficients ^a								
Type		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	T	Sig.	Tolerance	VIF
1	(Constant)	.516	1.233	.418	.677			
	Work	.171	.062	.491	2.761	.008	.153	6.521
	Discipline							
	Work	.137	.065	.374	2.101	.040	.153	6.521
	Environment							

a. Dependent Variable: Work Productivity

Source: SPSS 26 data processing

A regression coefficient analysis is performed as follows in order to get the multiple regression equation for the relationship between work environment and work discipline and work productivity:

$$Y = 0.516 + 0.171 \text{ WD} + 0.137 \text{ WE}$$

The following interpretation of the regression equation above is possible:

- 1) 0.516 indicates that if the values of WD and WE are fixed (unchanged) then the value of the constant WP is 0.516.
- 2) 0.171 states that if WD increases, then WP will increase by 0.171 assuming there is no constant addition to the value of WE.
- 3) 0.137 states that if WE increases, then WP will increase by 0.137 assuming there is no addition to the constant value WD.

Test the hypothesis

1. Partial T Test

The resultant Work Discipline (WD) score was 2,761. Give the t Table details next. After obtaining tTable 2.002, the distribution table t is found at $\alpha/2 = 0.05 = 0.025$ with free degrees $N-k-1$, which is $61 - 2 - 1 = 58$. Given that the significance value (Sig.) is $0.000 < 0.05$ and the tcount is more than the ttable ($2.761 > 2.002$), it may be concluded that work discipline and productivity are significantly influenced by one another.

The Work Environment variable (WE) yielded a calculated value of 2,101. Next, give the tTable. After obtaining tTable 2.002, the distribution table t is found at $\alpha/2 = 0.05 = 0.025$ with free degrees $N-k-1$, which is $61 - 2 - 1 = 58$. Given that the significance value (Sig.) is $0.000 < 0.05$ and the tcount is more than the ttable ($2.101 > 2.002$), it may be concluded that the work environment has a substantial impact on productivityWP.

2. Simultaneous F Test

SPSS Output Simultaneous F Test

ANOVAa					
Type	Sum of Squares	Df	Mean Square	F	Sig.
Regression	470.159	2	235.079	74.073	.000b
Residuals	184.071	58	3.174		
Total	654.230	60			

a. Dependent Variable: Work Productivity

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

Source: SPSS 26 data processing

The spss output table is used to calculate an Fcalculate of 74,073, which is used to determine the Ftable. Following the discovery of the distribution table F at $\alpha = 0.05$ and free degrees $N-k$, or $61 - 2 = 59$, Ftable 3.16 is produced (as seen in the distribucent ftable). Therefore, it can be inferred that work environment and discipline have a substantial impact on work productivity because Fcalculate is bigger than Ftable ($74,073 > 3.16$ with a significant value of $0.000 < 0.05$).

1. Coefficient of Determination Test

SPSS Output Coefficient of Determination

Model Summary ^b					
Type	R	R Square	Adjusted Square	R the Estimate	Std. Error of
1	.84	.719	.709		1.781
8a					

a. Predictors: (Constant), Work Environment, Work Discipline

b. Dependent Variable: Work Productivity

Source: SPSS 26 data processing

The Summary of the Coefficient of Determination Test yielded a R square of 0.719, or $0.719 \times 100 = 71.9\%$, based on the spss output table above. This indicates that the independent variables (WD and WE) have a 71.9% influence on the

dependent variable (Y), with the remaining 28.1% being influenced by other factors that the researcher did not look into.

Analysis and discussion

The study results indicate that all variables exhibit adequate levels of validity and reliability. All items in the work discipline (WD), work environment (WE), and work productivity (WP) variables have correlation coefficients greater than 0.252, indicating strong validity. Furthermore, the Cronbach's alpha values for each variable exceed 0.6, demonstrating high reliability for each variable.

Classical assumption tests also yielded positive results. Data is normally distributed based on an Asymp. Sig. (2-tailed) value of 0.200, which is greater than 0.05. Additionally, there is no significant evidence of heteroscedasticity or multicollinearity in the regression model. The multiple linear regression analysis revealed a positive and significant relationship between work discipline and work environment on work productivity. These findings align with the theory of organizational behavior, which suggests that a well-structured work environment and disciplined work practices can lead to increased productivity (Robbins & Judge, 2019). The coefficient of determination test shows that 71.9% of the variance in work productivity can be explained by work discipline and work environment, while 28.1% is influenced by other unexamined factors. Overall, this research provides strong evidence that work discipline and work environment play a crucial role in enhancing employee productivity.

CONCLUSION

This research was conducted at PT. Jasamarga Palikanci Cirebon. Factors affecting the success of company projects, especially in the context of human resources in the era of globalization. The research was conducted at PT. Jasamarga Palikanci Cirebon using quantitative research methods. The sample amounted to 61 respondents, and data were obtained through questionnaires. The findings of multiple linear regression and simple linear regression analysis demonstrate that work environment and discipline have a major impact on employee productivity. With a coefficient of determination of 71.9%, correlation analysis reveals a very strong positive association between the variables of work environment, work productivity, and work discipline.

Validity, Reliability, and Hypothesis Testing in Research Validity testing shows that all questionnaire items are valid, while reliability testing shows that all variables have acceptable reliability values. Testing classical assumptions shows that the data are normally distributed and there is no problem of heteroscedasticity or multicollinearity in the regression model. The hypothesis test showed that both independent variables, i.e. work discipline and work environment, significantly influenced the dependent variable, i.e. productivity at work, in models of multiple linear regression. 71.9% of the variability in the dependent variable (work productivity) was explained by the independent variables (work environment and discipline), according to an analysis of the coefficient of determination. Other factors accounted for the remaining 28.1% of the variability.

Conclusions and Implications of Research on Work Productivity Overall, this study highlights the importance of work discipline and work environment in increasing employee productivity in a company. These findings can provide guidance for

companies in improving project performance and success through improving human factors such as work discipline and work environment.

Reference

- Afandi, P. (2018). *Human resource management : theory, concepts and indicators*. Zanafafa Publishing.
- Arif, M., Maulana, T., & Lesmana, M. L. (2020). The Effect of Work Discipline and Work Ability on Employee Work Performance. *Journal of Humanities*, 4(1), 106–119.
- Dwi Haryo, B., & Djoko, H. W. (2018). The Effect of Job Training, Work Motivation and Work Environment on the Work Productivity of Production Department Employees of Pt. Metec Semarang. *DIPONEGORO JOURNAL OF SOCIAL AND POLITICAL Years*, 1–6. <http://ejournal-s1.undip.ac.id/index.php/>
- Hartati, E., Musodiqoh, N. A., Nurlina, E., & Permadi, D. A. (2020). Effect of hyphomicrobium sp. In biogas formation from organic waste treated by batch mode anaerobic digestion. *Environment and Natural Resources Journal*, 18(3), 257–267. <https://doi.org/10.32526/ennrj.18.3.2020.24>
- HJ Sedarmayanti. (2018). *Work Procedures and Work Productivity*. CV Mandar Forward.
- Jufrizen, J., & Kandhita, E. S. (2021). The effect of organizational justice on employee performance by job satisfaction as an intervening variable. *Journal of Business Management Studies*, 10(1), 1. <https://doi.org/10.24036/jkmb.11219200>
- Karimuddin Abdullah. (2022). *QUANTITATIVE RESEARCH METHODOLOGY*. Muhammad Zaini Publishing Foundation Member of IKAPI (026/DIA/2012).
- Lilia, W., Lombu, J. W., Napitupulu, P., Laoly, A. K., & Nainggolan, A. (2020). The Influence Of Transformational Leadership, Organizational Culture, And Job Satisfaction On Employee Work Productivity At Pt. Intertama Trikenca Bersinar Medan. *MIRROR: Journal of Research*, 4(1), 24. https://doi.org/10.36841/cermin_unars.v4i1.569
- Mbate'e, M. M. (2020). The role of work discipline in increasing employee productivity at the Botolakha Village Center, Tuhemberua District, North Nias Regency. *Jesya (Journal of Sharia Economics & Economics)*, 3(1), 98–110. <https://doi.org/10.36778/jesya.v3i1.136>
- Ngalimun. (2019). THE INFLUENCE OF THE WORK ENVIRONMENT ON EMPLOYEE PERFORMANCE AT PT PERUSAHAAN GAS NEGARA (PERSERO) Tbk SBU DISTRIBUTION REGION I Jakarta. *Parameters*, 4(2). <https://doi.org/10.37751/parameter.v4i2.42>
- Pramaswara, S., & Priatna, I. A. (2021). Employee Performance Pt . Planetmas Superpower Boga. *PERCUSSION (Marketing, Finance and Human Resources)*, 1(2), 339–345.
- Prof. Dr. Sugiyono. (2019). *QUANTITATIVE, QUALITATIVE AND R&D RESEARCH METHODS*. Alfabet.
- Rampisela, V. A. ., & Lumintang, G. G. (2020). The Effect of Work Motivation, Work Environment and Wages on the Work Productivity of PT Dayana Cipta Employees. *EMBA Journal: Journal of Economic, Management, Business and Accounting Research*, 8(1), 302–311.
- Saleh, A. R., & Utomo, H. (2018). The Influence Of Work Discipline, Work Motivation, Work Ethic And Work Environment On The Work Productivity Of Production

- Department Employees At Pt. Inko Java Semarang. *Among Makarti*, 11(1), 28–50. <https://doi.org/10.52353/ama.v11i1.160>
- Santoni, N. P. C. C., & Suana, I. W. (2018). The effect of compensation, motivation, work discipline on the work productivity of sales division employees at Honda Denpasar Agung. *E-Journal of Management Udayana University*, 7(10), 5379. <https://doi.org/10.24843/ejmunud.2018.v07.i10.p07>
- Wibowo, F. P., & Widiyanto, G. (2019). The influence of occupational safety and health and work environment on the performance of production employees at Tom's Silver Yogyakarta Company. *Primanomics : Journal of Economics & Business*, 17(2), 23. <https://doi.org/10.31253/pe.v17i2.170>
- Wirawan, P. J., Haris, I. A., & Suwena, K. R. (2019). The Influence Of Work Discipline On The Work Productivity Of Production Department Employees At Pt. Tirta Mumbul Jaya Abadi In 2016. *Journal of Economic Education Undiksha*, 10(1), 305. <https://doi.org/10.23887/jjpe.v10i1.20149>