The Effect of Work Discipline and Work Motivation on Employee Performance At PT Perkasa Beton Batam

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Abstract

This study aims to determine the effect of work discipline, work motivation on employee performance at PT Perkasa Beton Batam either partially or simultaneously. The population in this study were employees with operator positions and office in all department with a total of 112 employees. The number of samples taken for this study were 112 respondents. The sampling technique in this study was carried out by means of the saturated sample technique. Data collection techniques in this study is used a questionnaire. This data is processed using SPSS version 26.0 software. The research method used is quantitative method. The results showed that work discipline had a positive and significant effect on employee performance at PT Perkasa Beton Batam with t value of 10.113 > t table 1.981967, and work motivation had a positive and significant effect on employee performance at PT Perkasa Beton Batam with at value of 3.679 > t table 1.981967. The results of the study also prove that work discipline and work motivation simultaneously affect employee performance at PT Perkasa Beton Batam, with a calculated f value of 498,847 > f table 3,08.

Keywords

Work Discipline, Work Motivation, Employee Performance

Introduction

The development of the era that is increasingly leading to the era of globalization requires all aspects to compete, especially in the business sector of the company. The development of the era demands high professionalism to be able to compete in the face of business competition which is followed by increasingly sophisticated technological advances. To support professionalism, adequate human resources are needed . i. This requires the ability, expertise and skills possessed by human resources in the company (Toni & Siagian, 2021) . Therefore, the development of human resources in a company requires the quality and welfare of employees (Hartono & Siagian, 2020) .Developing conducive behavior and creating the best performance of employees is the task of Human Resource Management (HRM) . This is because the best performance from employees will lead the company to its best performance as well. Performance can be seen from the results of an activity which is benchmarked and measured over a certain period of time (Hasibuan & Silvya, 2020) . The process that is passed to achieve a work result is also part of the performance. Thus, performance is not only the achievement of the tasks that are the responsibility of the person (Edison , 2016) . According to (June & Siagian, 2020) , the thing that needs to be done to maintain performance is to find out and pay attention to what is the impact on performance, one of which is discipline.Work discipline is an important element in the success of employee performance. This statement is supported by (Fitriana & Siagian, 2020) which states that maximum performance results from a high level of discipline . The sense of responsibility and discipline of employees at work must enter into every employee. But for the record, coercion should be avoided. Employees must comply not only with company rules, but also with the rules of conduct and other rules. Employees who have high work discipline will certainly be able to carry out effectively and efficiently the work that has become their obligations and responsibilities and of course accompanied by motivation.

Increased employee performance is also influenced by work motivation . Motivation is a form of initiative in a person to carry out and fulfill his job duties and with the hope of motivation, employees become more active and creative at work (Kilvin & Siagian, 2020) . Work motivation is important to increase work effectiveness. Because, with maximum work motivation, someone will wholeheartedly and try hard to complete the responsibilities he has . Motivation is often interpreted as a factor driving a person's behavior at work. Motivation seems simple in performance but motivation is one of the most important elements. Based on the discussion that has been described, the hypotheses proposed for this research are:

H1:   Work discipline has a significant effect on employee performance at PT Perkasa Beton Batam.

H2:   Work motivation has a significant effect on employee performance at PT Perkasa Beton Batam.

H3 :   Work discipline and work motivation have a significant simultaneous effect on employee performance at PT Perkasa Beton Batam
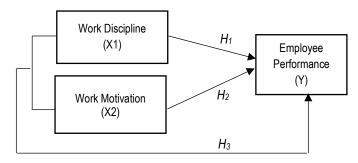

Figure 1. Research Model

Literature review
Work Discipline

According to (Attamimi et al., 2022) , work discipline is adherence to the application of rules required or expected by the organization so that employees can run work in an orderly and smooth manner. According to (Meilani & Siagian, 2022) , work discipline is an attitude of obedience and obedience of a person to the rules and norms set by the company. When the division of labor has been carried out properly and evenly, work discipline will be achieved. According to (Nurjaya, 2021) , work discipline has indicators , namely Frequency of Attendance , Level of Employee Alertness , Obedience to Work Standards , Obedience to Work Regulations , Work Ethics .

Motivation

Motivation is a form of encouragement that comes from within and outside a person by utilizing skills and abilities and self-motivation to do a job so as to achieve organizational goals (Siagian, 2018) . According to (Sembiring & Tanjung, 2021) , motivation is a stimulus to the desire and motive of a person's willingness to work, which means to encourage or arouse. In terms of encouragement, of course , many things can influence it, it can come from good teamwork or from subordinate innovation in providing solutions to problems. According to (Anjani, 2019) , motivation consists of several indicators, namely Physical needs *(Physical need),* Security needs (*Safety need*) , Social relation needs (*Social need*) , Egoistic needs (*Esteem need*) , Self-actualization need (*Self-actualization need*) .

Employee performance

According to (Fitriana & Siagian, 2020) , performance is the result of achieving employee work in accordance with the employee's personal will in seeking to achieve company goals by following established laws. The value of achieving employee performance can be seen from the nature and attitude of employees in achieving the targets set by the company. According to (June & Siagian, 2020) , employee performance is the overall result of individual work after passing a certain period of time in doing work, such as goals, objectives or work standards that have been set and agreed upon.According to (Firman et al., 2022) , performance is an achievement in quality and quantity when performing the given task , based on ability, experience, and honesty of time. Performance is an important point in improving the company's progress . The more important the

progress of the company, the more. Indicators to measure employee performance (Fitriana & Siagian, 2020) , namely *Quality of Work, Initiative, Promptness, Capability, Communication.*

Research methodology

research is a type of quantitative research. The location which is the object of this research is PT Perkasa Beton Batam . This research was conducted from March 2022 to June 2022. The population of this study were all 112 employees of PT Perkasa Beton Batam. In this study, the researcher used a saturated sample technique where all members of the population were sampled (Sujarweni Wiratna, 2020) .This study uses a questionnaire as primary data to obtain data, questionnaires were distributed to 112 respondents, namely employees of PT Perkasa Beton Batam and supporting data sourced from HRD PT Perkasa Beton Batam such as employee attendance data, data on the number of employees, data on achieving production targets. This research uses SPSS 26.0 program to process the data.

H results and discussion

The object of this research is PT Perkasa Beton Batam, which is one of the biggest concrete supplier companies in Batam . This study aims to determine how the influence of work discipline and work motivation on employee performance. Data processing in this study used the software application *"Statistical Package for Social Sciences"* (SPSS) version 2 6.0 , but before processing the data the researchers distributed questionnaires to the respondents with a total of 112 employees.

The results of research data from distributing questionnaires to 112 respondents and obtained back at the same total. After obtaining the questionnaire data, the profiles of the respondents will be detailed based on the classification according to age, gender, and length of work.

Table 1. Characteristics of Respondents Based on Age

Age	Amount	Percentage (%)
18-30 Years	6	5.4
31-40 Years	58	51.8
41-50 Years	47	42.0
>51 Years	1	.9
Total	**112**	**100.0**

Source: SPPS Data Processing Version 2 6 , 202 2

From the tab el data above, it can be seen that there are 6 respondents aged 18-30 years (5.4%), respondents aged 31-40 years are 58 people (51.8%), respondents aged 41-50 years are 47 people (42%), while respondents aged >51 years amounted to 1 person (0.9%).

Table 2. Characteristics of Respondents Based on Gender

Gender	Amount	Percentage (%)
Woman	14	12.5
Man	98	87.5
Total	**112**	**100.0**

Source: SPPS Data Processing Version 2 6 , 202 2

From the table data above, it can be seen that there are a total of 112 respondents. With the number of female respondents amounted to 14 people (12.5%) and male sex amounted to 98 people (87.5%).

Table 3. Characteristics of Respondents Based on Length of Work

Length of work	Amount	Percentage (%)
3-6 Months	10	8.9
6-12 Months	50	44.6
12-18 Months	49	43.8
>18 Months	3	2.7
Total	112	100.0

Source: SPPS Data Processing Version 26, 2022

From the data table 4.2, it can be seen that the respondents who worked 3-6 months were 10 people (8.9%), respondents who worked 6-12 months were 50 people (44.6%), respondents who worked 12-18 months months amounted to 49 people (43.8%), respondents who worked longer than 18 months were 3 people (2.7%).

Data Validity Test Results

Validity test in order to ascertain the extent to which the accuracy of the measuring instrument can reveal the concept of the event/symptom being measured. Researchers used the Pearson product t moment correlation validity test. Question items are declared valid when rcount>rtable with a significance level of 0.05. In testing the validity of the authors using a sample of 112 respondents.

Table 4. Work Discipline Variable Validity Test Results

Variable el	r count	r table	Information
X1.1	0.847	0.1857	Valid
X1.2	0.327	0.1857	Valid
X1.3	0.831	0.1857	Valid
X1.4	0.846	0.1857	Valid
X1.5	0.844	0.1857	Valid

Source: SPSS Data Processing version 26, 2022

SPSS results obtained values for statement items X1.1 as much as 0.847, X1.2 as much as 0.327, X1.3 as 0.831, X1.4 as 0.846, X1.5 as 0.844, from the results above all statement items are greater than the value of r table, so it can be concluded that all question items are valid.

Table 5. Work Motivation Variable Validity Test Results

Variable el	r count	r table	Information
X2.1	0.967	0.1857	Valid
X2.2	0.967	0.1857	Valid
X2.3	0.749	0.1857	Valid
X2.4	0.967	0.1857	Valid
X2.5	0.550	0.1857	Valid

Source: SPSS Data Processing version 26, 2022

The SPSS results obtained a value for the statement item X2.1 as much as 0.967, X2.2 as much as 0.967, X2.3 as much as 0.749, X2.4 as much as 0.967, X2.5 as much as 0.550, from the results above all statement items are greater than the value of r table, so it can be concluded that all question items are valid.

Table 6. Employee Performance Variable Validity Test Results

Variable el	r count	r table	Information
Y.1	0.865	0.1857	Valid
Y.2	0.668	0.1857	Valid
Y.3	0.873	0.1857	Valid
Y.4	0.849	0.1857	Valid
Y.5	0.879	0.1857	Valid

Source: SPSS Data Processing version 26, 2022

SPSS results obtained values for statement items Y1 as much as 0.865, Y2 as much as 0.668, Y3 as many as 0.873, Y4 as many as 0.849, Y5 as many as 0.879, from the results above all statement items are greater than the value of r table, so it can be concluded that all statement items are declared valid.

Data Reliability Test Results

Table 7. Work Discipline Reliability Test Results

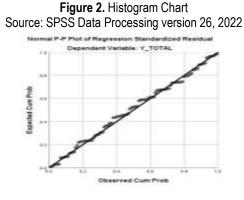| Variable	Cronbach's Alpha	Criteria	Information
Work Discipline	0.771	> 0.60	Reliable
Work motivation	0.903	> 0.60	Reliable
Employee performance	0.882	> 0.60	Reliable

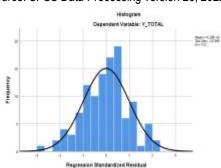Source: SPSS Data Processing version 26, 2022

Based on the table above, the results of SPSS processing for the Cronbachs Alpha variable value of work discipline, work motivation and employee performance are greater than 0.60, it can be concluded that this statement is reliable.

Normality Test Results

To find out whether there is a difference in the residual value studied has a normal or abnormal distribution, a normality test is needed. In this test, the SPSS version 26 program was made, which wanted to see the results of the Bell Shaped Curve histogram, Probalitiy Plot, and Kolmogorov-Smirnov Test. The results of the test research are:

Figure 2. Histogram Chart
Source: SPSS Data Processing version 26, 2022

From the image above, using a histogram graph shows the resulting curve in the image like a bell and the spread of data from left to right. So it is concluded that the processed data has been normally distributed.

Figure 3. Normalized PP Plot of Regression Standardized Residual Diagram
Source: SPSS Data Processing version 26, 2022

The picture above shows the results of the normality test, a probability plot which shows that the data points are scattered around the diagonal line and the points have a spread following the direction of the diagonal line. From the normal pp plot graph, it can be concluded that the data is normally distributed. The Kolmogorov-Smirnov test was used to strengthen the normality test. To ensure that the data obtained are correct and have a normal distribution. This test is used so as not to get caught in an unclear decision. The following are the results of the Kolmogorov Smirnov test, namely:

Table 8. One-Sample Kolmogorov-Smirnov Test Results

		Unstandardized Residual
N		112
Normal Parameters [a,b]	mean	.0000000
	Std. Deviation	1.25171620
Most Extreme Differences	Absolute	.057
	Positive	.047
	Negative	-.057
Test Statistic		.057
Asymp. Sig. (2-tailed)		.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 Data Processing version 26, 2022

From the tab above, the total number of data is 112. The data has a normal distribution if the value is "Asymp. Sig (2-tailed)" has a significance level > 0.05. The test results from the table above are 0.200 , it is concluded that only the data has a normal distribution.

Multicollinearity Test Results

To investigate the regression model whether the independent variable has a relationship, multicollinearity test is needed. In this study, multicollinearity was tested by looking at the Variance Inflation Factor (VIF) . If the value of VIF> 10, then the model shows no symptoms of multicollinearity, meaning that there is no relationship between the independent variables. The following are the results of the multicollinearity test, namely:

Table 9. Multicollinearity Test Results
Coefficients [a]

Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
B	Std. Error	Beta			Tolerance	VIF
.310	.556		.557	.579		
.775	.077	.710	10.113	.000	.183	5.450
.232	.063	.258	3.679	.000	.183	5.450

a. Dependent Variable: Employee Performance
Source: SPSS Data Processing version 26, 2022

From tab el above, the VIF score for the work discipline variable is 5.450, and the work motivation variable is 5.450, both of which have a VIF value < 10. So it can be concluded that the data in this study did not experience symptoms of multicollinearity.

Heteroscedasticity Test Results

Heteroscedasticity test to find out the test in the regression model that all the observations of the inequality in the residual variance. Heteroscedasticity will not occur if the regression is good

Table 10. Heteroscedasticity Test Results
Coefficients [a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.310	.337		3.884	.000		
	X1_TOTAL	-.035	.046	-.165	-.743	.459	.183	5.450
	X2_TOTAL	.015	.038	.087	.389	.698	.183	5.450

a. Dependent Variable: Abs_RES
Source: SPSS Data Processing version 26, 2022

table above shows the significance of the three variables, namely, the significance score of work discipline is 0.459 , work motivation is 0.698, which is greater than 0.05, which means that there is no heteroscedasticity.

Multiple Linear Regression Analysis Results

This study uses multiple linear regression analysis to prove the hypothesis of the research on the effect of work discipline and work motivation partially and jointly on performance.

Table 11. Multiple Linear Regression Analysis Results
Coefficients [a]

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF

1	(Constant)	.310	.556			.557	.579	
	Work Discipline	.775	.077	.710	10.113	.000	.183	5.450
	Work motivation	.232	.063	.258	3.679	.000	.183	5.450

a. Dependent Variable: Employee Performance
Source: SPSS Data Processing version 26, 2022

Y = 0.310 + 0.775 X1 + 0, 232 X2

From the multiple linear regression equation above, it can be explained , namely:

1. The constant has a value of 0.310 , which means that if the value of the work discipline and work motivation variables is zero, then the performance has a value of 0.310 .
2. The work discipline variable has a value of 0.775 , which means that if the work discipline variable gets an increase of 1 point (1%) the impact will increase the performance variable by 0.775 .
3. The work motivation variable has a value of 0.232, which means that if the work discipline variable gets an increase of 1 point (1%) the impact will increase the performance variable by 0.232.

Results of the Analysis of the Coefficient of Determination R2

The analysis of determination in this study wanted to know the number or percentage of the relationship the influence of the independent variable had on the dependent variable. Table of results of the coefficient of determination R2 in this study, namely:

Table 12. Coefficient of Determination Test Results (R2)

Model Summary [b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.949 [a]	.902	.900	1.263

a. Predictors: (Constant), Work Motivation, Work Discipline
b. Dependent Variable: Employee Performance
Source: SPSS Data Processing version 26, 2022

The table above shows the results of the coefficient of determination test (R2), the value of the coefficient of determination has a value of 0.902. This means that as much as 90.2% of performance is influenced by work discipline and work motivation, while 9.8% of performance in the company is influenced by other variables not found in this study.

T Test Results (Partial Test)

Table 13. T . Test Results

Coefficients [a]

Model	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	T	Sig.	Tolerance	VIF
1 (Constant)	.310	.556		.557	.579		
Work Discipline	.775	.077	.710	10.113	.000	.183	5.450
Work motivation	.232	.063	.258	3.679	.000	.183	5.450

a. Dependent Variable: Employee Performance
Source: SPSS Data Processing version 26, 2022

1. The first hypothesis (H1) states that it is suspected that work discipline has a positive significant effect on performance at PT Perkasa Beton Batam . It is said to be positive because the tcount score on the work discipline variable is 10.113 > 1.981967 (ttable value). It is said to be significant because the significance value of the work discipline variable is 0.0 00 < 0.05 (alpha value). This research is strengthened by research that has been conducted by (Firman et al., 2022) , (Kilvin & Siagian, 2020) which states that work discipline affects employee performance.
2. The second hypothesis (H2) states that work motivation is suspected to have a significant positive effect on performance at PT Perkasa Beton Batam . It is called positive because the tcount score on the work motivation variable is worth 3.679 > 1.981967 (ttable value). It is said to be significant because the significance value of the facility variable is 0.000 < 0.05 (alpha value). This research is strengthened by research

conducted by (Singon et al., 2022) , (Candra et al., 2022) , which states that work motivation affects employee performance.

F Test Results (Simultaneous Regression)

The F test is measured by comparing if Fcount is lower than Ftable, then H0 is accepted and Ha is rejected. However, if the value of Fcount is higher than Ftable, then H0 is rejected and Ha is accepted.

Table 14. F . Test Results

ANOVA [a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1591,863	2	795,931	498,847	.000 [b]
	Residual	173.914	109	1,596		
	Total	1765,777	111			

a. Dependent Variable: Employee Performance

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

Source: SPSS Data Processing version 26, 2022

In this study, the significance level = 0.05, df 1 (number of variables-1) or 3-1 = 2 and df 2 (nk-1) or 1 1 2-2-1 = 1 0 9 (n is the number of variable data independent). The results obtained for f table of 3.0 8 . The test results say that Fcount is 498.847 and a significance value is 0.000, where Fcount is 498.847 > 3.0 8 and a significant value is 0.000 <0.05, so it can be concluded that H0 is rejected and Ha is accepted, which shows work discipline and work motivation have a significant effect simultaneously on performance. This is in line with research conducted by (Singon et al., 2022) , (Attamimi et al., 2022) , (Kilvin & Siagian, 2020) , which states that work discipline and work motivation simultaneously have a positive effect on employee performance.

Conclusion

Based on the results of tests and studies conducted by researchers in the previous discussion about work discipline and work motivation on employee performance at PT Perksa Beton Batam, the researchers provide several conclusions from this study:

1. Work discipline has a positive and significant effect on employee performance at PT Perkasa Beton Batam.
2. Work motivation has a positive and significant effect on employee performance at PT Perkasa Beton Batam.
3. and work motivation have a simultaneous effect on employee performance at PT Perkasa Beton Batam.

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