



# Determinant Analysis of Motivation and Work Discipline on Employee Achievement (Case Study at PT. Chayani Megajaya Mandiri)

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## ARTICLE INFO

## ABSTRACT

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### Keywords:

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This study aims to determine the effect of motivation and discipline on employee achievement of PT. Chayani Megajaya Mandiri. This type of research is explanatory research. The Population in this study were all employees of PT. Chayani Megajaya Mandiri, totaling 63 employees. The sampling technique is to use a saturated sample where the entire population will be used as the research sample. In the study which will be distributed with questionnaires measured by a Likert scale. The data analysis used multiple linear regression analysis and the coefficient of determination as well as simultaneous test and partial test. The results showed that motivation and discipline partially or simultaneously have a positive and significant effect on employee achievement of PT. Chayani Megajaya Mandiri. Based on the results of this study, the implications for management are to further improve motivation and discipline.

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## 1. Introduction

Every organization or company needs resources to achieve its goals (earn profit or profit). Resources are sources of energy, power, and strength needed to create power, movement, activity, activity and action. These resources include natural resources, financial resources, human resources, scientific resources, and technological resources. One of the important factors in supporting the company in advancing its quality is an increase in its human resources (HR). Human resources (HR) is one of the elements in a company that has an important role where the development or progress of a company depends on the role played by the human resources in it.

To be able to provide professional human resources and work well is expected by the company because the more human resources that can provide good work results, the more developed and advanced the company will be, but also vice versa where there are fewer and fewer human resources available. provide good work results, the slower the development that will be undertaken by the company. PT. Chayani Megajaya Mandiri is a company located in Medan Jalan Pembangunan II No. 65 F and is engaged in the sale of electrical products to companies in Medan in order to complete the electrical needs that will be used by the company. In supporting its operational activities so that they can run well, getting employees with good performance is certainly very necessary. Achievement is intended as an ability to carry out or perform a job or task based on skills and knowledge and supported by the work attitude required by the job. Thus, achievement shows skills or knowledge characterized by professionalism in a particular field as the most important thing, as superior in that field.

In this case, motivation is considered to be one of the triggers for the decline in employee performance because so far employees are considered less motivated at work so that they are often lazy and not passionate about giving their best and achieving. In addition, the trigger for employees not to perform well is related to their work discipline where employees are considered undisciplined in their work so that they often experience delays both in terms of attendance and in collecting their work reports.

In a previous study conducted by Widianta, et al (2016) with the title of the effect of work motivation and work discipline on employee performance, it was found that motivation and discipline had a significant



influence on work performance. In addition, there is another study from Sakarsih (2017) with the title of the influence of motivation and work discipline on the work performance of employees of the packaging section of PT. Astra Honda Motor Parts Center where the research results show that motivation and discipline have a significant influence on work performance. The research from Snow and Makmur (2014) with the title the influence of employee motivation and commitment on work performance at PT. Marina Putra Indonesia Representative of North Luwu Regency where the results of his research found that employee motivation and commitment to work performance. Furthermore, research from Rahayu (2018) with the title the influence of motivation and discipline on employee work performance at PT. Langkat Nusantara Kepong, Langkat Regency, where the results found that motivation and discipline had a significant influence on employee performance, while the research conducted by Ariandy (2015) entitled the effect of work discipline on employee performance at PT. Amerta Indah Otsuka Jakarta where the results of his research found that work discipline had a significant influence on employee performance.

## **2. Method**

### **2.1 Location and Time**

The research was conducted at PT. Chayani Megajaya Mandiri which is located at Jalan Pembangunan II No. 65-F, Medan. The research time is planned from October 2021 to January 2022.

### **2.2 Population and Sample**

The population in this study were all employees of PT. Chayani Megajaya Mandiri, totaling 63 employees. The sampling technique is to use a saturated sample where the entire population will be used as the research sample.

### **2.3 Data Collection Method**

Collecting data through a questionnaire is done by asking questions to parties related to the problem. To assess respondents' responses, the author uses the Likert scale which uses several question items to measure individual behavior by responding to 5 choice points on each question item.

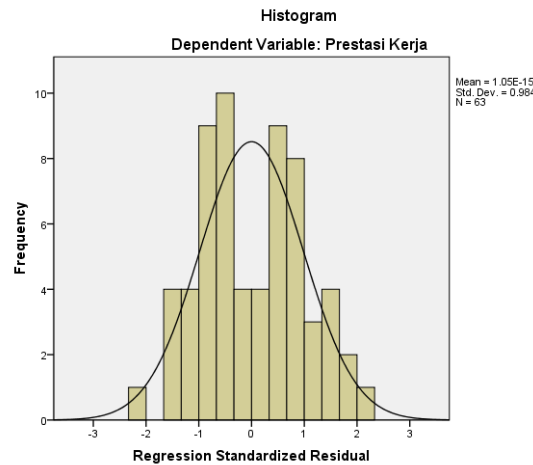
### **2.4 Validity and Reliability Test**

The data obtained needs to be tested for its accuracy and reliability so that the results of data processing can be more precise and accurate. Therefore, it is necessary to know how high the validity and reliability of the measuring instrument (instrument) used. Based on the research, each variable of the questionnaire item that was tested for validity, all the questionnaires had met the valid criteria and were eligible to be used as a questionnaire in further research. While in reliability test, all variable questionnaire item is reliable and can be used as instrument.

## **3. Result and Analysis**

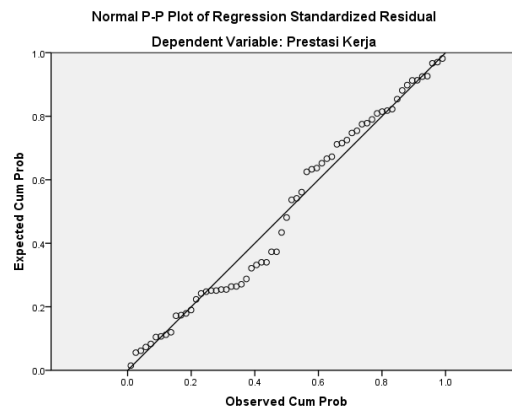
### **3.1 Normality Test**

The residual normality test is used to test whether the residual value resulting from the regression is normally distributed or not. A good regression model is to have residuals that are normally distributed. There is some method to do the normality test such as histogram graphic, normal probability plot of regression graphic and one sample Kolmogorov Smirnov statistic.



**Fig 1** Histogram Graphic

Based on the picture above, it can be seen that the line forming a bell, not going left or right. This shows that the data is normally distributed and meets the assumptions of normality.



**Fig 2.** Normal Probability Plot of Regression Graphic

Based on the picture above, it shows that the data (dots) spreads around the diagonal line and follows the diagonal line. So from this figure it is concluded that the regression model residuals are normally distributed.

**Table 1**  
One-Sample Kolmogorov Smirnov Test

		Unstandardized Residual
N		63
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	1.80546902
Most Extreme Differences	Absolute	.107
	Positive	.107
	Negative	-.071
Kolmogorov-Smirnov Z		.849
Asymp. Sig. (2-tailed)		.466

a. Test distribution is Normal.

b. Calculated from data.

Source: Research Result, 2021

Based on the table above, the results of the Kolmogorov-Smirnov normality test prove that the significant value is greater than 0.05, namely 0.466, it can be concluded that the data is classified as normally distributed.



### 3.2 Multicollinearity Test

Multicollinearity is a condition in the regression model where there is a perfect or near perfect correlation between independent variables where a good regression model should not have a perfect or nearly perfect correlation between the independent variables. The commonly used test method is to look at the Tolerance and Variance Inflation Factor (VIF) values in the regression model where the VIF value is less than 10 and has a Tolerance value of more than 0.1.

**Table 2**  
Multicollinearity Test

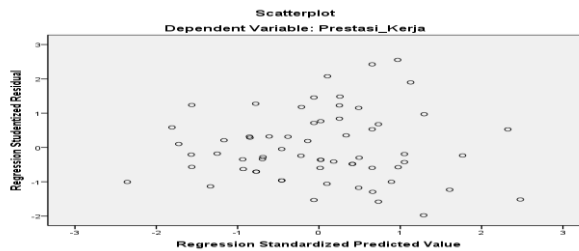
Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
Motivation	.915	1.093
Discipline	.915	1.093

a. Dependent Variable: Work Achievement  
Source: Research Result, 2021

Based on the table above show that all the variables have a tolerance value more than 0.1 and VIF value less than 10 which can be concluded that there is no problem found in multicollinearity test.

### 3.3 Heteroscedasticity Test

Heteroscedasticity is a condition where in the regression model there is an inequality of variants from the residuals from one observation to another where a good regression model does not occur heteroscedasticity.



**Fig 3** Scatterplot Graphic

Based on the scatterplot graph presented, it can be seen that the dots spread randomly and do not form a clear pattern and are spread either above or below zero on the Y axis. This means that there is no heteroscedasticity in the regression model, so the regression model can be used to predict achievement based on the input of the independent variable.

The following is a glejser test which can be seen in the table below:

**Table 3**  
Glejser Test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.773	1.377		.561	.577
Motivation	.085	.046	.246	1.876	.066
Discipline	-.034	.045	-.099	-.757	.452

a. Dependent Variable: Work Achievement  
Source: Research Result, 2021

Based on the table above, it can be seen that the significance value of the two variables is greater than 0.05 so that it can be stated that there is no problem with heteroscedasticity testing.

### 3.4 Multiple Linear Regression Analysis

Multiple regression analysis is an analysis to determine whether there is a significant influence between two or more independent variables on one independent variable.

**Table 4**  
Multiple Linear Regression Analysis Test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	3.230	2.813		1.148	.255		
Motivation	.237	.093	.265	2.549	.013	.915	1.093
Discipline	.454	.093	.508	4.890	.000	.915	1.093

a. Dependent Variable: Work Achievement

Source: Research Result, 2021

$$Work\ Achievement = 3,230 + 0,237\ Motivation + 0,454\ Discipline + e \quad (1)$$

Based on the above equation, then: Constant (a) = 3.375. This means that if the independent variable, namely motivation and discipline is 0, then the work achievement at PT. Chayani Megajaya Mandiri is 3.230. Where if there is an improvement in motivation, there will be an increase in work achievement by 0.237. Likewise with work competency where if there is an improvement in the discipline, the work achievement will increase by 0.454.

### 3.5 Coefficient Determination

Analysis of determination or also called R Square symbolized by R<sup>2</sup> is used to determine the magnitude of the influence of the independent variable (X) together on the dependent variable (Y) where the smaller the coefficient of determination, this means the effect of the independent variable (X) on the dependent variable (Y) is getting weaker. Conversely, if the coefficient of determination is closer to number 1, then the effect of the independent variable on the dependent variable is getting stronger. Thus, if coefficient determination is 0, this indicates that there is no percentage contribution of influence given by the independent variable to the dependent variable. However, if the coefficient of determination is 1, then there is a contribution that the independent variable gives to the dependent variable is perfect.

**Table 5**  
Coefficient Determination Test  
Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.638 <sup>a</sup>	.407	.387	1.835

a. Predictors: (Constant), Discipline, Motivation

b. Dependent Variable: Work Achievement

Source: Research Result, 2021

Based on the table above, the value of the R Square coefficient of determination is 0.605. This shows that the variable ability of motivation and discipline explains the effect on work achievement at PT. Chayani Megajaya Mandiri by 40,7%. While the remaining 59,3% is the influence of other independent variables not examined in this study such as conflict, commitment, workload and others.

### 3.6 Simultaneous Hypothesis Test (F Test)

F test or regression coefficient test is used to determine whether simultaneously the independent variable has a significant effect on the dependent variable. In this case, to find out whether simultaneously the independent variable has a significant effect on the dependent variable or not. The test uses a significance level of 5%. The criteria for evaluating the hypothesis in this F test are:

$$H_0\ Accepted\ if:\ F_{count} < F_{table},\ H_\alpha\ Accepted\ if:\ F_{count} > F_{table}$$

**Table 6**  
ANOVA Test

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	138.786	2	69.393	20.601	.000 <sup>a</sup>
	Residual	202.103	60	3.368		
	Total	340.889	62			

a. Predictors: (Constant), Discipline, Motivation

b. Dependent Variable: Work Achievement

Source: Research Result, 2021



Based on the table above, it is found that the value of  $F_{table}$  (3.15) and significant  $\alpha = 5\%$  (0.05), namely  $F_{count}$  (20.601) and sig.a (0.000a). This indicates that the results of the study accept  $H_a$  and reject  $H_0$ . Comparison between  $F_{count}$  and  $F_{table}$  can prove that simultaneously motivation and discipline have a significant effect on work achievement at PT. Chayani Megajaya Mandiri.

### 3.7 Partially Hypothesis Test (t Test)

The t test or partial regression coefficient test is used to determine whether partially the independent variable has a significant effect on the dependent variable or not. In this case, to find out whether partially the independent variable has a significant effect on the dependent variable or not. The test uses a significance level of 0.05 and a two-sided test. The criteria for evaluating the hypothesis in this t test are:

$H_0$  Accepted if:  $t_{count} < t_{table}$

$H_a$  Accepted if:  $t_{count} > t_{table}$

**Table 7**  
Coefficient Test

Model	t	Sig.
1 (Constant)	1.148	.255
Motivation	2.549	.013
Discipline	4.890	.000

a. Dependent Variable: Work Achievement

Source: Research Result, 2021

Based on the table above, it can be concluded that motivation and discipline partially have a positive and significant effect on work achievement at PT. Chayani Megajaya Mandiri which can be seen at the  $t_{count}$  is greater than  $t_{table}$  (2,000) and the significant is less than 0,05.

## 4. Conclusion

The conclusions that researchers can draw from the results of this study are as follows:

- a. The results of the partial test calculation obtained that work discipline has a positive and significant influence on work achievement at PT. Chayani Megajaya Mandiri can be seen from the  $t_{count}$  value of  $2.549 > t_{table}$  of 2.000 and a significant value of  $0.013 < 0.05$ .
- b. The results of the partial test calculation obtained that discipline has a negative and significant influence on work achievement at PT. Chayani Megajaya Mandiri can be seen from the  $t_{count}$  value of  $4.890 > t_{table}$  of 2.000 and a significant value of  $0.000 < 0.05$ .
- c. The results of the test calculation together obtained that motivation and discipline have a positive and significant influence on work achievement with the value of  $F_{table}$  (3.15) and significant  $\alpha = 5\%$  (0.05), namely  $F_{count}$  (20.601) and sig.a (0.000a). This indicates that the results of the study accept  $H_a$  and reject  $H_0$ . Comparison between  $F_{count}$  and  $F_{table}$  can prove that simultaneously motivation and discipline have a significant effect on work achievement at PT. Chayani Megajaya Mandiri.
- d. The value of the R Square coefficient of determination is 0.605. This shows that the variable ability of motivation and discipline explains the effect on work achievement at PT. Chayani Megajaya Mandiri by 40,7%. While the remaining 59,3% is the influence of other independent variables not examined in this study such as conflict, commitment, workload and others.

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