The Effect of Motivation on Work Achievement at PT. Tjipta Rimba Djaja Plywood Factory

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ABSTRACT: The purpose of this study was to determine and analyze the effect of intrinsic motivation and extrinsic motivation on work performance. The number of research samples is active employees of PT. Tjipta Rimba Djaja Plywood Factory in 2020 has as many as 79 people. Methods of data analysis using multiple linear regression. The results showed that intrinsic motivation had a positive and significant effect on work performance, with a t-count of 4.464> a t-table of 1.991 or a significance value of 0.000 <α (0.05). Extrinsic motivation has a positive and significant effect on work performance, with a t-count value of 3.845> a t-table value of 1.991 or a significance value of 0.000 <α (0.05). Intrinsic motivation and extrinsic motivation have a positive and significant effect on work performance, with a Fount value of 41.026> F-table value of 3.120 or a significance value of 0.000 <α (0.05).

Keywords: Intrinsic Motivation, Extrinsic Motivation, Work Achievement

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INTRODUCTION

Employees are the movers and implementers of the company's operational activities that are useful for achieving company goals. The company's goals are not easy to achieve, so it will make the company consider accepting employees who work in the company through competence, experience, education level, and others. This is useful to make it easier for companies to assign or assign duties and responsibilities to employees by the position or position required by the company. Company's efforts to increase employee motivation are very important. Companies must understand that there are needs that can motivate employees, such as the need for achievement, the need for power, and the need for affiliation. The need for achievement in question is the opportunity given to employees to achieve high work performance which will have a relatively large impact on their income so that the income can be used by employees to meet their needs.

Knowing the influence or relationship of motivation to work performance, of course, requires the object of research, so the authors choose PT. Tjipta Rimba Djaja Plywood Factory is the object of this research. PT. Tjipta Rimba Djaja Plywood Factory has been engaged in the plywood/plywood industry in Indonesia since 1972. Problems that can arise are regarding the workload of employees, which tend to be heavy or many that must be completed in a relatively short time which can make employees feel tired and the work results are less optimal. Then, support or encouragement from the leadership is less effective which makes employees feel less cared for, this will result in lower levels of motivation and productivity. The level of competition between employees and co-workers tends to be low, this can be caused by a lack of morale in employees. Employees are not familiar with the regulations or policies that apply in the company, this can be caused by a lack of socialization among each employee about these regulations or policies. Furthermore, there are employees who are not present on time, this will certainly disrupt the company's operational activities so that it is not smooth.

The formulation of the problem to be studied is as follows:
1. How does intrinsic motivation affect work performance?
2. How does extrinsic motivation affect work performance?
3. How do intrinsic motivation and extrinsic motivation affect work performance?

THEORETICAL REVIEW

Motivation

According to Suryani, Sugianingrat, and Laksemini (2020:81) that employees in an organization or company in carrying out their work tasks require enthusiasm and motivation to be able to work, and have high
productivity. Work motivation is very important and needed to achieve work targets so that organizational or company goals can be achieved. An organization or company does not only need capable, capable, and skilled employees, but also most importantly they have the desire to achieve optimal work results, so in this case, motivation is needed. According to Sudaryo, Ariwibowo, and Sofiati (2018:62) if someone has the motivation to achieve their personal goals, then they must be able to improve performance. Increasing a person's performance will also improve the performance of the organization or company. In addition, increasing one's motivation will also improve individual, group, and organizational performance.

According to Hadi and Hunarawan (2017: 42), Motivation is an impulse that moves an employee to carry out efforts to achieve a work behavior. Therefore, motivation is an impulse that arises in employees to carry out activities or activities in achieving company goals.

**Intrinsic Motivation**

According to Indahingwati and Nugroho (2020:148), that intrinsic motivation exists because it arises from within employees. Individual factors that encourage employees to do something are as follows:

1. **Interest**
   Employees will feel compelled to carry out an activity if the activity is an activity that matches their interests.

2. **Positive attitude**
   Employees who have a positive attitude towards a job will be willing to participate and be involved in these activities and will try to complete the work optimally.

3. **Needs**
   Employees have certain needs and try to fulfill these needs by carrying out a series of activities or activities.

**Extrinsic Motivation**

According to Indahingwati and Nugroho (2020:148), Extrinsic motivation arises because of external stimuli. Two main factors related to the extrinsic motivation of employees in an organization, namely:

1. **Motivator**
   Motivators are related to work performance, awards, responsibilities given, opportunities to develop themselves, and the work itself.

2. **Occupational health**
Good organizational policies and administration, adequate technical supervision, satisfactory salary, supportive working conditions, and work safety.

Work performance

According to Suryani, Sugianingrat, and Laksemini (2020:2) that "The expected work achievement is the result of productivity by the provisions or standards that are prepared as a work reference so that employees can see the performance of employees on the results and compare them with the standards that have been set".

According to Ratnasari (2019:169) "Work performance is the level of task execution that can be achieved by a person, unit, or division by using existing capabilities and established boundaries in achieving organizational or company goals".

Based on the expert opinion above, it is concluded that work performance is the achievement made by employees in carrying out work by the standards set to achieve company goals.

Framework of thinking

The framework of thinking can be described as follows:

![Figure 1. Framework of thinking](image)

Source: Processed by the Author (2020)

- Indicates a partial relationship.
- Indicates a simultaneous relationship.

The research hypotheses used in this study are as follows:

H₀ = It is suspected that there is no influence of intrinsic motivation and extrinsic motivation on work performance.
H₁ = It is suspected that there is an influence of intrinsic motivation on work performance.
H₂ = It is suspected that there is an influence of extrinsic motivation on work performance.
H₃ = It is suspected that there is an influence of intrinsic motivation and extrinsic motivation on work performance.

RESEARCH METHODOLOGY

This type of research uses associative analysis with a quantitative approach. This study has a population of all active employees of PT. Tjipta Rimba Djaja Plywood Factory in 2020 has as many as 79 people. The total population in this study is not more than 100, so the entire population will be used as a research sample of 79 people or commonly referred to as a saturated sample. The method of data analysis in this study used multiple linear regression analysis.

RESULTS

Validity test

The validity test is used to measure the validity of the statement or research instrument with the following criteria:

a. If the value of \( r_{\text{count}} > \) the value of \( r_{\text{table}} \), then the statement is declared valid
b. If the value of \( r_{\text{count}} < \) value of \( r_{\text{table}} \), then the statement is declared invalid.

Testing of this questionnaire was carried out on all 79 research respondents. In determining whether a research instrument is valid or not, it is necessary to determine the value of the \( r_{\text{table}} \), using the formula: \( \text{df}=nk \), \( \text{df}=79-3 \), \( \text{df}=76 \), at (0.05) of 0.223.

<table>
<thead>
<tr>
<th>No.</th>
<th>Corrected Item-Total Correlation</th>
<th>( r_{\text{table}} )</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Intrinsic Motivation</td>
<td>Extrinsic Motivation</td>
<td>Work performance</td>
</tr>
<tr>
<td>1</td>
<td>0.443</td>
<td>0.668</td>
<td>0.616</td>
</tr>
<tr>
<td>2</td>
<td>0.452</td>
<td>0.546</td>
<td>0.763</td>
</tr>
<tr>
<td>3</td>
<td>0.573</td>
<td>0.426</td>
<td>0.599</td>
</tr>
<tr>
<td>4</td>
<td>0.672</td>
<td>0.712</td>
<td>0.631</td>
</tr>
<tr>
<td>5</td>
<td>0.583</td>
<td>0.462</td>
<td>0.669</td>
</tr>
<tr>
<td>6</td>
<td>0.696</td>
<td>0.591</td>
<td>0.250</td>
</tr>
<tr>
<td>7</td>
<td>0.655</td>
<td>0.566</td>
<td>0.761</td>
</tr>
<tr>
<td>8</td>
<td>0.717</td>
<td>0.614</td>
<td>0.777</td>
</tr>
</tbody>
</table>
Table 1 above the *Corrected item-total Correlation column* (r \text{count}) shows the correlation between item scores and total item scores that can be used to test the validity of the variables of intrinsic motivation, extrinsic motivation, and work performance variables. The results of the validity test showed the value of the $r_{\text{arithmetic}} > r_{\text{table}}$, and it was concluded that the statement of intrinsic motivation, extrinsic motivation, and work performance variables was declared valid.

**Reliability Test**

This test is used to determine whether a research instrument is suitable for use as a measuring instrument or not. The reliability criteria are as follows:

a. If the value of *Cronbach's Alpha* > 0.60, then the research instrument is declared reliable (fit to be used as a measuring instrument).

b. If the value of *Cronbach's Alpha* < 0.60, then the research instrument is declared unreliable.

**Table 2. Data Reliability Test Results**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number of Statements</th>
<th><em>Cronbach's Alpha</em></th>
<th>Reliability Standard</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrinsic Motivation</td>
<td>10</td>
<td>0.862</td>
<td>0.60</td>
<td>Reliable</td>
</tr>
<tr>
<td>Extrinsic Motivation</td>
<td>10</td>
<td>0.853</td>
<td>0.60</td>
<td>Reliable</td>
</tr>
<tr>
<td>Work performance</td>
<td>8</td>
<td>0.870</td>
<td>0.60</td>
<td>Reliable</td>
</tr>
</tbody>
</table>

Source: Processed Data (2020)

Table 2 above shows that all research instruments have a *Cronbach's Alpha value* > 0.60, meaning that all research instruments are reliable (fit to be used as a measuring instrument).

**Normality Test**

This study tested the level of normality of the data using the *P-Plot, and the Kolmogorov-Smirnov* Non-Parametric Statistical Test (KS).
Figure 2. Normality Test Results with $P-P$ Plot
Source: Processed Data (2020)

Figure 2 above shows that the $PP$ Plot graph provides a distribution pattern that is close to normal, where the distribution of data is around the diagonal line.

**Heteroscedasticity Test**

A good regression model does not occur heteroscedasticity. To see if there is heteroscedasticity, see the scatterplot below.

Figure 3. Heteroscedasticity Test Results with Scatterplot
Source: Processed Data (2020)

Figure 3 shows that the data (dots) are spread above and below the number 0 on the Y-axis or do not form a certain pattern. Based on these results, it was concluded that there was no heteroscedasticity in this study.
**Multicollinearity test**

This test will be used to determine whether the independent variables are correlated with each other or not. In detecting the presence or absence of symptoms of multicollinearity between independent variables in the regression model, *Variance Inflation Factors* (VIF) and *Tolerance* are used. The test results show that the *Tolerance value* of each independent variable is 0.665 > 0.10 and VIF of 1.503 < 10, it can be concluded that there is no correlation between the independent variables.

**Multiple Linear Regression Analysis**

Multiple linear regression analysis aims to measure the strength of the relationship between two or more independent variables and shows the direction of the relationship between the independent variables and the dependent variable.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Constant)</td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td></td>
<td>8.143</td>
<td>2.656</td>
<td>3.067</td>
<td>.003</td>
<td>.665</td>
</tr>
<tr>
<td>Intrinsic Motivation</td>
<td>.392</td>
<td>.088</td>
<td>.435</td>
<td>4.464</td>
<td>.665</td>
</tr>
<tr>
<td>Extrinsic Motivation</td>
<td>.366</td>
<td>.095</td>
<td>.375</td>
<td>3.845</td>
<td>.665</td>
</tr>
</tbody>
</table>

The structural equation to the regression results above, namely:

\[ Y = 8.143 + 0.392X_1 + 0.366X_2 + e \]  \[ (1) \]

The interpretation of the results of the above equation is as follows:
1. **Constant Value (a) = 8.143**
   The variable is not influenced by other variables, it will still have a value of 8,143.
2. **Regression Coefficient (b₁) = 0.392**
   The value of the regression coefficient of intrinsic motivation is positive at 0.392, meaning that an increase of 1 unit of intrinsic motivation variable
will be able to increase work performance by 0.392 units, assuming other variables are constant.

3. Regression Coefficient \( b_2 = 0.366 \)

The regression coefficient value of extrinsic motivation is positive at 0.366, meaning that an increase of 1 unit of extrinsic motivation variable will be able to increase work performance by 0.366 units, assuming other variables are constant.

Based on these results, it is concluded that the variable having the most dominant relationship to work performance is intrinsic motivation with a regression coefficient of 0.392.

**Partial Hypothesis Testing (t-Test)**

The partial hypothesis test (t-test) on (0.05) degrees of freedom has the decision making criteria, namely:

a. If the value of \( t_{\text{count}} < \text{value of } t_{\text{table}} \), there is no partial effect of the independent variable on the dependent variable.

b. If the value of \( t_{\text{count}} > \text{value of } t_{\text{table}} \), there is a partial effect of the independent variable on the dependent variable.

The \( t \) value is calculated in the Coefficients table, while the \( t_{\text{table}} \) value is obtained using the formula: \( df=n-(k-1) \); \( df=79-2; \) \( df = 77 \), then the value of \( t_{\text{table}} \) at (0.05) is 1.991.

**Table 4. Results of Partial Hypothesis Testing (t-test)**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>(Constant)</td>
<td>8.143</td>
<td>2.656</td>
<td>.3067</td>
</tr>
<tr>
<td>Intrinsic Motivation</td>
<td>.392</td>
<td>.088</td>
<td>.435</td>
</tr>
<tr>
<td>Extrinsic Motivation</td>
<td>.366</td>
<td>.095</td>
<td>.375</td>
</tr>
</tbody>
</table>

\( a. \) Dependent Variable: Job Performance

Source: Processed Data (2020)
Table 4.11 above can be interpreted as follows:

a. calculated t value for intrinsic motivation to work performance is 4,464 > the \( t_{table} \) value is 1,991 or a significance value of 0.000 < (0.05) . From these results, it was concluded that intrinsic motivation has a positive and significant effect on work performance, so the alternative hypothesis is accepted.

b. calculated t value for extrinsic motivation to work performance is 3,845 > the \( t_{table} \) value is 1,991 or a significance value of 0.000 < (0.05) . From these results, it was concluded that extrinsic motivation has a positive and significant effect on work performance, so the alternative hypothesis is accepted.

**Simultaneous Hypothesis Test Results (F-Test)**

The partial hypothesis test (t-test) on (0.05) degrees of freedom has the decision making criteria, namely:

a. If the calculated \( F \) value < the \( F_{table} \) value, there is no partial effect of the independent variable on the dependent variable.

b. If the calculated \( F \) value > \( F_{table} \) value, there is a partial effect of the independent variable on the dependent variable.

calculated \( F \) value in the Anova table, while the \( F_{table} \) value is obtained using the formula: \( df1=k-1; df1=3-1; df1=2, \) and \( df2=nk; df2=79-2; df2=77, \) then the value of \( F_{table} \) at (0.05) is 3.120 .

**Table 5. Results of Simultaneous Hypothesis Testing (Test F)**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>535,076</td>
<td>2</td>
<td>267,538</td>
<td>41.026</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>495,608</td>
<td>76</td>
<td>6.521</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1030,684</td>
<td>78</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Job Performance
b. Predictors: (Constant), Extrinsic Motivation, Intrinsic Motivation

Source: Processed Data (2020)

calculated \( F \) value for intrinsic motivation and extrinsic motivation on work performance is 41,026 > the \( F_{table} \) value is 3,120 or a significance value of 0.000 < (0.05) . From these results, it was concluded that intrinsic motivation and extrinsic motivation had a positive and significant effect on work performance, so the alternative hypothesis was accepted.
Coefficient of Determination

The coefficient of determination using the $R$-Square value is in Table 6 below.

Table 6. Results of the Coefficient of Determination

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.721 a</td>
<td>.519</td>
<td>.506</td>
<td>2.55365</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Extrinsic Motivation, Intrinsic Motivation
b. Dependent Variable: Job Performance
Source: Processed Data (2020)

The $R$-Square value obtained is 0.519. These results mean that 51.9% of the variation in the value of work performance is explained or determined by the variation of the value of intrinsic motivation and extrinsic motivation. Therefore, it can be concluded that intrinsic motivation and extrinsic motivation in influencing work performance is 51.9% while 48.1% is the influence of other variables not included in this study, such as work discipline, training and development, and others.

DISCUSSION

The discussion of the research results is as follows:

1. The Influence of Intrinsic Motivation on Work Performance

   Intrinsic motivation has a positive and significant effect on work performance, with a $t$-count value of 4.464 > a $t$-table value of 1.991 or a significance value of 0.000 < (0.05). Intrinsic motivation has four indicators, namely recognition, responsibility, progress, and job satisfaction. The majority of respondents gave a positive response (agree) to all these indicators, thus indicating that the creation of work performance will be influenced by the intrinsic motivation that exists within employees. This is supported by research from Yuliantini (2017) on Analysis of the Influence of Intrinsic Motivation and Extrinsic Motivation on Employee Performance at the Surakarta Pratama Tax Service Office, the results showed that intrinsic motivation had a significant effect on the performance of KPP Pratama employees in Surakarta.

2. The Effect of Extrinsic Motivation on Work Performance

   Extrinsic motivation has a positive and significant effect on work performance, with a $t$-count value of 3.845 > a $t$-table value of 1.991 or a significance value of 0.00 < (0.05). Extrinsic motivation has four indicators, namely policy and administration, supervision, interpersonal relations, and working
conditions. The majority of respondents gave positive responses (agree) to all of these indicators, thus indicating that the creation of work performance will be influenced by extrinsic motivation within employees. This is supported by research from Yuliantini (2017) on the Analysis of the Effect of Intrinsic Motivation and Extrinsic Motivation on Employee Performance at the Surakarta Pratama Tax Service Office, the results show that extrinsic motivation has a significant effect on the performance of KPP Pratama Surakarta employees.

3. The Influence of Intrinsic Motivation and Extrinsic Motivation on Work Performance

Intrinsic motivation and extrinsic motivation have a positive and significant effect on work performance, with a calculated F value of 41.026 > F table value of 3.120 or a significance value of 0.000 < (0.05). Intrinsic motivation arises in employees if they complete a job well because they feel safe and comfortable when carrying out their duties and responsibilities in the company. The extrinsic motivation that arises from satisfied employee motivation comes from outside the employee, such as working conditions and environment, work relationships, and so on. An employee who has self-motivation will certainly be able to provide better work results, of course, good results that are carried out consistently will be able to create work performance for employees. This is supported by research from Waruwu (2017), Analysis of the Effect of Intrinsic Motivation and Extrinsic Motivation on Employee Performance Case Study: at Rajawali Hospital and STIKES Rajawali Bandung (Bandung Humanitarian Foundation Indonesia), the results show that intrinsic and extrinsic motivation together with the same or simultaneously influence employee performance at Rajawali Hospital and STIKES Rajawali Bandung.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the research in the previous chapter, below are the conclusions from the results of the study, namely:

1. Intrinsic motivation has a positive and significant effect on work performance, with a t- count value of 4.464 > a t - table value of 1.991 or a significance value of 0.000 < (0.05).
2. Extrinsic motivation has a positive and significant effect on work performance, with a t value of 3.845 > a t table value of 1.991 or a significance value of 0.000 < (0.05).
3. Intrinsic motivation and extrinsic motivation have a positive and significant effect on work performance, with a calculated F value of 41.026 > F table value of 3.120 or a significance value of 0.000 < (0.05).
RECOMMENDATION

Some rekomendation according to the author of the results of this study are as follows:

1. Companies can continue to build and maintain good relationships with employees by giving appreciation to employees who can provide satisfactory work results, and must create a conducive work environment so that employees can feel more secure and comfortable when carrying out their duties and responsibilities.

2. The next researcher can add other factors that can affect work performance, such as work discipline, training and development, and others so that the results obtained are getting better.

ACKNOWLEDGMENT

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