The Effect of Motivation, Education Level, And Work Experience on Employee Work Productivity

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Abstract. This research aims to look into: (1) motivation's consequences, education level, and experience in the workplace on the productivity of workers at PT. Lampung Distribusindo Raya Kalianda, South Lampung; (2) the effect of employee motivation on work productivity at PT. Lampung Distribusindo Raya Kalianda, South Lampung; (3) the impact of education level on employee work productivity at PT. Lampung Distribusindo Raya Kalianda, South Lampung; and (4) the research was place between March and August of 2020. Employees of PT. Lampung Distribusindo Raya Kalianda, South Lampung, conducted the research at Kalianda, Lampung Selatan. This study employs a quantitative survey method. The number of samples taken was a sample of 52 employees were selected randomly. A random sample of 52 employees was chosen for the study. Multiple Linear Regression Models were used to analyze the data. The regression model is \( Y = 5.487 + 0.516X_1 + 0.310X_2 + 0.141X_3 + e \), which is based on the data analysis results. The determinant's coefficient \( (R^2) = 0.878 \), indicating that desire, educational level, and years of service can explain 87.8% of productivity, while the remaining 13.2% is due to external factors not included in the model. According to the F-test, \( F_{count} (115.24) > F_{table} (2.80) \), indicating that motivation, degree of education, employee performance, productivity, and tenure all have a significant impact on one other. The t-test results for the motivation variable were \( t_{count} (6,081) > t_{table} (2,011) \), indicating that motivation has a significant impact on the productivity of employees. The education level variable's T-test findings were \( t_{count} (2.744) > t_{table} (2.011) \), showing that education had a significant impact about employee labor productivity. The t-test result for the variable of tenure was \( t_{count} (2,231) > t_{table} (2,011) \), showing that the variable of working tenure had a negative impact on employee productivity.

Keywords: work productivity; motivation; educational level

1 Introduction

Employee productivity is a critical aspect in a company’s long-term success. Work productivity is another component that a firm should hold in order to fulfill its objectives. High productivity will benefit both businesses and employees, especially in terms of their well-being. When people are less productive, a firm or organization cannot accomplish its objectives efficiently and effectively. As a result, productivity can be used to describe an employee's work efficiency and performance. Additionally, employee performance must be enhanced.
The company's activities cannot be carried out efficiently without the support of human resources, human resource management play a significant role in the implementation of productivity targets. As a result, increasing labor productivity is required to accomplish the company's objectives. (Handoko, 2012). Productivity is one of the elements that a firm must possess in order to fulfill its objectives. Because it involves the company's output, companies must be able to boost productivity. When people are less creative, a firm or organization cannot achieve its objectives. Employee productivity must be improved because it has an impact on their degree of work efficiency. Human resource management play a significant part in achieving productivity goals because company activities cannot be carried out efficiently without their assistance. As a result, we require a stimulus to enhance work productivity in order to fulfill company goals.

Motivation is among the factors that affects work outcomes. An individual's motivation is their desire to take action in order to achieve a specific objective. Motivation can be defined as an internal state that motivates us to take action, drives us to attain concrete objectives, and keeps us interested in certain activities. Motivation can be defined as an internal and driving force within a person manifested by the presence of desires, interests, urges, and needs; dreams and ideals; appreciation and respect. Without proper education, efforts to boost employee productivity are hard to achieve. Improving employee education is critical to the development of dependable human resources. The best way to improve education quality is to provide a pleasant educational environment that motivates and encourages students to learn and maximizes their skills. The implementation of work activities is assisted by work experience.

According to the information gathered, the staff of PT. Lampung Distributions are predominantly male (42 individuals, or 80.80 percent) and female (ten people, or 19.20 percent). However, the majority of employees at PT. Lampung Tribusindo are high school graduates/equivalents, with 42 people (84.80%) and 10 persons (19.20%) having graduated from elementary/junior high school, Diploma III, and bachelor's degrees, respectively. An employee's job experience influences his or her ability to perform well at work. An employee has sufficient work experience to carry out their responsibilities and contribute to the company's efficiency. In order to achieve its objectives, the company requires personnel who are experts in the field.

Employee work productivity is measured in order to examine and enhance performance efficiency, so that increased productivity allows organizations to increase employee pay, which in turn boosts employee morale and motivation. New and veteran employees' motivation, education level, and work experience all are elements that can affect their productivity. This has an impact on how people develop and improve their professionalism in the workplace, as well as how they adapt to current changes and innovations. As a result, motivation, education, and job experience all play an essential influence in the company's production.

These factors greatly affect the company's productivity to achieve the goals. Therefore, in this research entitled “The Influence of Motivation, Education Level, and Work Experience on Employee Work Productivity at PT. Lampung Distribusindo Raya, Kalianda, South Lampung”.

2 Theoretical Basis

The Definition of Work Productivity

Labor productivity, according to Mochtar (2010: 102), is a comparison of productivity and input efficiency activities, which refers to the mental attitude required to produce improvements and improvements in any profession. Labor productivity, on the other hand, is a spiritual attitude, according to Sutrisno's Tohardy (2010: 100). A spiritual mindset that is continually
looking for methods to better what already exists. The notion that we can improve on yesterday's performance today.

**The Definition of Motivation**

Motivation, according to George and Jones (2015: 175), is the psychological force that dictates a person's conduct inside an organization, moving and directing in the face of barriers to attaining goals. Motivation is a psychological element that demonstrates interest in work, enjoyment, and ownership of the activities and labor that are being done (Masrukhin and Waridin, 2014). Rivai (2014), contends, on the other hand, that inspiration is a set of attitudes and ideas that drive a person to attain a specific goal based on their personal interests.

Motivation is described as the capacity to invest substantial effort in order to arrive at the aims of an institution. Motivation is defined as the capacity to exert high levels of effort in order to achieve an organization's goals, which is influenced by the capacity to meet the needs of distinct individuals (Robbins and Mary, 2015). It can be concluded, based on some current opinion, that motivation is an urge to attain greater goals that originates inside a person, from others, and from himself.

**The Definition of Education**

Human resource development relies heavily on education. Education broadens knowledge while also improving work abilities, resulting in higher worker productivity. Education gives knowledge that is not only immediately relevant to the completion of tasks, but also serves as a foundation for self-development and the ability to utilize all of the resources available to us. The higher one's level of education, the higher one's labor productivity.

Presidential Decree No. 15 of 1974, Sedarmayanti's definition of education (2009: 32). All education aims to strengthen the Indonesian people's personalities, physical and mental capacities. Inside and outside of the school, it lasts a lifetime. In relation to Indonesia's unity and the development of a just and prosperous society. The National Education System of the Republic of Indonesia is governed by Law No. 20 of 2003 "Education is cognizant of creating a learning environment and a learning process that actively engages students' potential for religious spirituality. It's a well-thought-out strategy. Strength, self-control, personality, and intellect are all important qualities.", Self, society, nation, noble personality, and abilities that the nation requires

**The Definition of Work Experience**

Employees with past job experience indicate their capacity to work in the previous position. It can also be used to indicate how long the individual has been employed. The more work experiences a person has, the better trained and skillful they will be at performing all tasks. According to the Big Indonesian Dictionary, experience refers to all that has been encountered, whereas work refers to the act of doing something.

Work experience refers to a workforce's ability to perform a specific task; it is indicated in the work that must be completed and the amount of time spent doing so (Yuniarsih and Suwanto) (2013: 117). Work experience is a measurement of how much time or how long someone has worked. Work experience, based on years of service, understanding of tasks, capacity to execute tasks, and completion of the work effectively, can be defined as a person's skills in the workplace.
3 Research Method

A quantitative descriptive method is used in this research. The goal of this research is to determine how motivation, education level, and work experience affect PT. Lampung Distribusiindo Raya's productivity in Kalianda, South Lampung. The variables employed in this study are linked variables (Y) and independent variables (I) (X). Work Productivity is the dependent variable, while the independent variable is made up of three variables: (X1) Motivation, (X2) Education Level, and (X3) Work Experience. Employees of PT. Lampung Distribution Indo Raya, Kalianda South Lampung, made up the population of this study, which totaled 52 people.

Primary and secondary data sources were used in this study. Questionnaires, interviews, and documentation were distributed as data collecting techniques. A Likert scale was used to measure the scale's results and to measure the scale's measurement. Validity and reliability are tested as part of the data quality test. Normality, multicollinearity, autocorrelation, and heteroscedasticity tests were used to perform the traditional assumption test.

4 Result and Discussion

Data Validity Test
a. The Result of Validity Test
   Twenty (20) respondents were subjected to a validity test. The product moment correlation is used in the validity test. It may be claimed that even a value of R is substantial. R count > R table is obtained for all statement items in each variable; these findings show that each variable is valid.

b. Reliability Test
   The Chronbach's alpha formula was used to test the questionnaire's reliability by comparing the Chronbach's alpha value to the r-table value. The value of Chronbach's alpha > r table (0.60), indicating that the data is credible. The alpha coefficient (Cronbach) variables Motivation (0.802), Education Level (0.637), Working Period (0.839), and Productivity were calculated based on the results (0.880). This result exceeds the r-table value of 0.60. It indicates that the study tool is trustworthy.

![Figure 1. The Result of Normality Test](image)
Classic Assumption Test

a. Normality Test
The confounding variable or residual has a normal distribution, according to the results of graphical analysis (Plot of Regression on a Normal P-P Scale Residuals that are standardized) and normality test using the one sample method of Kolmogrov Simirnov in regression model. It's used to check whether the residual data is accurate. The points of the responders are scattered follow the diamond shape around the line, as shown in graph 1. It indicates that the residuals of the regression model are normally distributed.

\[
\text{Table 2: One-Sample Kolmogrov-Smirnov Test}
\]

The significant value (asym.sig 2-tailed) is > 0.05, according to table 2. The information is evenly distributed.

b. Multicollinearity Test
The multicollinearity test is used to demonstrate that independent variables are linearly related (X1 Motivation and Work Discipline X2). The VIF (Variance Inflation Factor) and Tolerance Level values can be used to diagnose multicollinearity symptoms. There should be no correlation between the independent variables in a decent regression model. If the VIF value is - than 10 and the Tolerance Value is + than 0.1, there are no symptoms of multicollinearity.

\[
\text{Table 3: The Result of Multicollinearity}
\]

According to the table above, each variable's VIF value is - than ten, or its Tolerance Value is greater than zero. In the individual components of motivation, education level, and years of service, there is no evidence of multicollinearity.

c. Heteroscedasticity Test
The heteroscedasticity test is used to assess if there might be a divergence from the classical assumption of heteroscedasticity when residual observations from the regression model have an inequality of variance. The outcomes of measuring heteroscedasticity to use a Scatter Plot diagram are provided below:
The dots on the Y axis spread arbitrarily above and below the zero point, as shown in the diagram above. The regression model exhibits no heteroscedasticity, as can be seen.

Multiple Linear Regression Test
Motivation is one of the variables in this research (X1), education level (X2), and years of service (X3) (X3). Employee Productivity (Y) is the dependent variable, which is investigated using Multiple Linear Regression to determine the effect of the independent variable. The outcomes of data acquisition in multiple linear regression analysis are included in the table below:

<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></td>
<td>B</td>
<td>Std. Err</td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>5.487</td>
<td>1.396</td>
<td>0.000</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Motivation</td>
<td>0.516</td>
<td>0.310</td>
<td>0.310</td>
<td>0.000</td>
<td>0.291 1.041</td>
</tr>
<tr>
<td>Education</td>
<td>0.310</td>
<td>0.135</td>
<td>0.262</td>
<td>0.000</td>
<td>0.279 1.765</td>
</tr>
<tr>
<td>Work Period</td>
<td>0.141</td>
<td>0.034</td>
<td>0.174</td>
<td>0.000</td>
<td>0.412 1.728</td>
</tr>
</tbody>
</table>

The following multiple linear regression equation is derived from table 4:

\[ Y = 5.487 + 0.516X1 + 0.310X2 + 0.141X3 + e \]

The following is an explanation of the equation:

1) The constant value is 5.587, which means that the Employee Productivity equals 5.587 units when the incentive variable (X1), education level (X2), and work period (X3) are all zero.
2) The motivation regression coefficient (X1) = 0.516, implying that adding one unit to the motivation variable (X1) increases Productivity (Y) by 0.516 units.
3) Education level regression coefficient (X2) = 0.310, implying that for every extra education level (X2) of one unit, Productivity (Y) will rise by 0.310 units.
4) The education level regression coefficient (X3) = 0.141, implying that each additional working time (X3) adds 0.141 units to Productivity (Y).
Hypothesis Test

a. Coefficient of Determination Test (R2)

The coefficient of determination (R2) is a metric for determining how well a model can explain variance in a dependent variable. The independent variables offer practically all of the information needed to predict the payout variable, with such a coefficient of determination close to 1. This shows that motivation, educational attainment, and years of service may all be used to explain variances in job productivity. The coefficient of determination medical reports is shown in the table below.

Table 5. The Result of Coefficient of Determination Test

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Squared</th>
<th>Adjusted R Squared</th>
<th>Std. Error of Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.937*</td>
<td>.878</td>
<td>.870</td>
<td>.021084</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Work Period, Motivation, Education Level
b. Dependent Variable: Productivity
Source: Primary Data Proceed in 2020

According to the table above, the correlation coefficient value (R2) that explains the relationship between independent variables is 0.860. The independent variables of motivation and work discipline can explain 72.9 percent and 27.2 percent of variations in employee performance productivity, respectively, influenced by other factors not included in the model, including an Adjusted R Square coefficient of determination of 0.727, or 72.7 percent.

b. F-Test

The Anova test was used to examine the level of influence of the independent variables Motivation (X1) and Work Discipline (X2) on the dependent variable Y (Productivity) (Analysis of Variance). The denominator's degree of freedom was nk = 52-3 = 49, while the numerator's level of flexibility was nk = 52-3 = 49. The numerator's degree of freedom was k (the number of distinct variables was reduced by one or (k-1) = 3 - 1 = 2. The F-test results are shown in the table below.

Table 6. The Result of F-Test

<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 Regression</td>
<td>233.082</td>
<td>4</td>
<td>58.27</td>
<td>115.242</td>
<td>0.000</td>
</tr>
<tr>
<td>Residual</td>
<td>32.361</td>
<td>48</td>
<td>.674</td>
<td>0.05</td>
<td>0.05</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Work Period, Motivation, Education Level
b. Dependent Variable: Productivity
Source: Primary Data Proceed in 2020

Based on the results of the computations in the table above, Fcount = 115.242 > Ftable = 2.56 with = 0.05 (significant) suggests that Ho is rejected and H1 is approved. It can be concluded that the independent elements of desire (X1), education level (X2), and years of
service (X3) have a substantial concurrent effect on PT. Lampung Distributiondo Raya Kalianda South Lampung personnel productivity variable (Y).

c. T-Test
The T-test has been used to determine the effect of each independent dependent variable separately or partially (partial test). An t-test was performed in two directions with just an alpha level of 5% and degrees of freedom of n – 2 = 52 – 2 = 50. The t-test findings are as follows:

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>5.487</td>
<td>1.365</td>
<td>4.019</td>
<td>0.000</td>
</tr>
<tr>
<td>Motivasi</td>
<td>5.16</td>
<td>0.365</td>
<td>15.69</td>
<td>0.000</td>
</tr>
<tr>
<td>Tingkat Pendidikan</td>
<td>3.110</td>
<td>0.113</td>
<td>2.744</td>
<td>0.009</td>
</tr>
<tr>
<td>Waktu Kerja</td>
<td>1.41</td>
<td>0.044</td>
<td>3.422</td>
<td>0.002</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Work Period, Motivation, Education Level
b. Dependent Variable: Productivity
Source: Primary Data Proceed in 2020

1) Motivation Variable (X1)
The motivation variable is tcount = 6.081 > ttable = 1.67, which indicates Ho is rejected and H1 is accepted with a confidence level of 0.05, based on the results of the calculations in table 7. To employees of PT. Lampung Distribution Indo Raya Kalianda South Lampung, it may be determined that the motivation variable (X1) has a partial impact on productivity (Y).

2) Education Level Variable (X2)
The education level variable had a value of tcount = 2.744 > ttable = 1.67, which indicates Ho is rejected and H1 is accepted with a confidence level of 0.05, based on the results of the calculations in table 7. It may be stated that the education level variable (X2) has a partial impact on PT. Lampung Distribution Indo Raya Kalianda South Lampung employees' productivity (Y).

3) Variable Working Period (X3)
The variable duration of service is achieved by the value tcount = 2.213 > ttable = 1.67, which indicates Ho is rejected and H1 is accepted with a confidence level of 0.05, based on the results of a computations in table 4.12. It can be concluded that the education level variable (X2) influences productivity to some extent (Y) to PT Lampung Distribution Indo Raya Kalianda South Lampung staff.

Discussion
1) The Effect of Motivational Variable on Productivity
Based on the results of the computations in table 4.12, the motivation variable is produced by the value of tcount = 4.924 > ttable = 1.67, implying that Ho is rejected and H1 is accepted with an alpha of 0.05. It may be concluded that the motivation variable (X1) has a partial impact on productivity at PT. Lampung Distributiondo Raya Kalianda South Lampung (Y).

2) The Effect of Education Level Variables on Productivity
The education level variable (X2) has a value of tcount = 2.744 > ttable = 1.67, suggesting that Ho is rejected and H1 is accepted with a level of confidence of 0.05, implying that the education level variable (X2) has a minor impact on productivity. (Y) to PT Lampung Distribution Indo Raya Kalianda South Lampung staff. Firmansyah's (2018) results that the
amount of schooling has a substantial impact on employee productivity are supported by this research.

3) The Effect of Variable Period of Service on Productivity

Based on the results of the calculations in table 4.12, the variable duration of service is obtained by the value $t_{\text{count}} = 2.213 > t_{\text{table}} = 1.67$, which means $H_0$ is rejected and $H_1$ is accepted with a confidence level of 0.05. It may be stated that the education level variable ($X_2$) has a partial impact on worker productivity at PT. Lampung Distribusindo Raya Kalianda South Lampung (Y).

5 Conclusion

Based on the outcomes of data analysis, hypothesis testing and discussion can be summarized as follows.

a. The Adjusted R Square Coefficient of Determination is 0.878, indicating that 87.8% of the independent variables, which include Motivation, Education Level, and Work Period, can explain the variation in the Variable Productivity of Employee Performance at PT. Lampung Distribusindo of Kalianda Raya South Lampung is 12.2%, which is influenced by other factors not included in the model.

b. Employees of PT. Lampung Distribusindo Raya Kalianda South Lampung have a somewhat significant effect on Productivity, according to the results of the Hypothesis Test using the t-test on the independent variable Motivation ($X_1$) (Y).

c. Employees of PT. Lampung Distribusindo Raya Kalianda South Lampung have a somewhat significant effect on Work Efficiency, according to the results of the Hypothesis Test using the t-test on the independent variable Education Level ($X_2$) (Y).

d. Employees of PT. Lampung Distribusindo Raya Kalianda South Lampung have a somewhat significant effect on Work Efficiency, according to the findings of the Hypothesis Test using the t-test on the independent variable Working Period ($X_3$) (Y).

e. Based on the hypothesis test results, use the F-Test to identify the level of interaction between the independent variables of Motivation ($X_1$), Education Level ($X_2$), and Working Period ($X_3$) that simultaneously affect Production Efficiency (Y). The findings of the Hypothesis Test are used to perform a t-test.

References


