EFFECT OF EDUCATION LEVEL AND WORK ENVIRONMENT ON EMPLOYEE PRODUCTIVITY IN PT. TESO INDAH INDRAGIRI HULU REGENCY

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Abstract

The study will determine the effect of education and environment work in simultaneous and partial towards productivity employee PT Teso Beautiful Regency Indragiri Hulu. Research is using the data primary data and secondary by spreading the questionnaire to 45 samples were selected, the authors undertake the processing of data by clicking using linear regression multiple that process by using SPSS (statistical package for social science ) version 21 to obtain the output in order to conclude the results this research. From the research results can be drawn a simultaneous conclusion, there is influence significantly between levels of education and environmental work on employees’ productivity. A partial level of education affects productivity and environmental work, and the partial impact significantly on employees’ productivity.

Keyword: Management Resources Power Human, Organization, Productivity, Level of Education, and Environmental Work

INTRODUCTION

A company or organization cannot achieve its goals efficiently and effectively if employee productivity is low. Therefore, productivity becomes essential, which always wants to be increased because it can describe employee work efficiency. Human resources play an essential role because the company's activities may not be adequately done without human resources support. So a stimulus is needed to increase work productivity in order to obtain results to achieve company goals.

Every organization wants every employee to have a high level of productivity. Employees who can produce a product, goods and services with good quality and large quantity effectively and efficiently utilize the available resources to win the competition and achieve the company's goals faster—employee productivity levels at PT. Teso Beautiful Regency Indragiri Hulu in the year 2016 experienced a decline from the year 2015 became 21.83 from 21.87. For the years 2017 to 2019, productivity increased each respectively at 27.37, 33.60, and 43.63.

One of the biggest problems faced by organizations in human resources is the level of education. Society Indonesia who has access to obtain education in colleges high compared with the population, is still relatively very small, whereas with level low education course resulted in lack of skill or ability to source power of man itself. Based on researchers' data, for the year 2019, the number of employees as many as 149 people. The highest education level of employees is S1 as many as nine people or 6.04%, high school equivalent as many as 49 people or 32.89%, junior high school as many as 33 people or 22.15% and graduated from
elementary school by 58 people or 38.93%. Research on the level of education to productivity ever conducted by Princess (2016) with education results and significant positive effect on labor productivity. Saraswati (2014) primarily to the research level of education, partially favorable, and significantly impacted productivity. The results differ obtained Prabowo et al. (2016) obtained results in manner partial education level had no significant effect on work productivity and the Princess and Kusreni (2017) with fewer results level of partial education no effect on productivity.

In addition to the level of education, environment work is one factor that can raise the productivity of an employee's labor. With the comfortable environment early, bright lighting, adequate infrastructure, and work conditions are safe course would make an employee more motivated to carry out tasks charged to him. Research on environment working against productivity done by Ulum et al. (2018) with the results ENVIRONMENT work significantly influence employee productivity, Sinaga (2018) with the results work environment positively affects employee productivity parts of the oil production of palm oil. Different results were presented by Niam et al. (2018), with the work environment's results having a negative and insignificant effect on employee productivity.

From the background behind it, researchers raised the title of the study as follows: EFFECT OF EDUCATION AND WORK ENVIRONMENT PRODUCTIVITY OF EMPLOYEES IN PT. TESO INDAH INDRAGIRI HULU REGENCY

RESEARCH PROBLEMS FORMULATION

Based on the above and focus on research that will be carried out, then the formulation of the problem raised: Is the level of education and work environments simultaneously and partially significant on the productivity of employees at PT. Teso Indah, Indragiri Hulu Regency?

RESEARCH PURPOSES

Research is: To Know and analyze the Effect of Education and Work Environment Simultaneous and In Partial Against Employee Productivity at PT. Teso Indah, Indragiri Hulu Regency.

LITERATURE REVIEW

Productivity

Employees who have a high level of productivity are essential for every company to realize the programs or goals that have been set. The definition of productivity, according to some literature, is:

Yuniarsih and Suwanto (2013: 156) work productivity can be interpreted as a concrete result (product) produced by individuals or groups during a specific unit of time in a work process. According to Gaol (2014: 686), employee work productivity is an employee's achievement in his work environment. On the other hand, work productivity is the use or use of human resources effectively and efficiently.

Labor productivity is influenced by several factors, both related to the workforce itself and other factors, such as education level, skills, discipline, attitudes and work etiquette, motivation, nutrition and health, income level, social security, work environment, work climate, technology, production facilities, management, and achievements as said Ravianto 1986 cited by Sutrisno (2011: 102).

Level of education

The preamble to the 1945 Constitution of the Republic of Indonesia mandates the Government of the State of Indonesia to protect the entire Indonesian nation and all Indonesian blood and to promote public welfare, educate the nation's life, and participate in implementing
a world order based on independence, eternal peace, and social justice, the government strive for and implement a national education system that increases faith and devotion to God Almighty and noble morals in the nation which is regulated by law. The national education system must ensure equitable distribution of educational opportunities, increase the quality and relevance, and efficiency of education management to face challenges following the demands of changes in local, national, and global life. Hence, it is necessary to carry out educational renewal in a planned, directed, and sustainable manner. Here are some definitions of education: According to Law No. 20 of 2003 concerning the national education system, what is meant by education is a conscious and planned effort to create an atmosphere of learning and the learning process so that students actively develop their potential to have religious-spiritual strength self-control, personality, intelligence, morals. Noble, as well as the skills needed by him, society, nation, and state.

Sikula, in the year 2000 in pakpahan, et al. (2014: 118), stated that education is associated with an increase in general and human life to the environment as a whole and the development of knowledge, skills/skill, mind, character.

**Work Environment**

The work environment must provide a sense of comfort for every employee because a clean, safe work environment, good noise, and lighting levels will make employees feel at home at work and can even increase their motivation. Here are some definitions of the work environment:

According to Ahyari (2011: 124), the work environment is when employees carry out their duties and jobs every day.

Sunyata (2012: 43) defines the work environment as a vital component in employees carrying out work activities.

**RESEARCH METHOD**

This research was conducted at PT. Teso Indah, Indragiri Hulu Regency. The time needed to research for four months.

This study uses primary data and secondary data. Primary data is data obtained directly from the research object by observing and recording for the first time, namely through interviews and questionnaires. Secondary data is data that is already available in an organization or agency. The data source is the report of PT. Teso Indah, Indragiri Hulu Regency.

A population is a group of complete elements, usually people, objects of transactions, or events where we are interested in studying or being the research object. The population in this research are all employees of PT. Teso Indah, Indragiri Hulu Regency, as many as 149 people.

There is no final stipulation in determining the number of samples corresponding with the opinion of Arifin (2011: 224) that is taking and determining the number of samples, there are no final provisions, but as an illustration, you can follow the following instructions:

1. If there are up to 50 members of the population, it should be used as a sample of all or often called the total sample, meaning that all population members are the object of research.
2. If the population members are between 51 and 100, then the sample can be taken 50-60% or use the total sample.
3. If the population members are between 101 and 500, 30-40% of the sample is taken.
4. If the population is between 501 and 1000, then 20-25% of the sample is taken.
5. If the members of the population are above 1000, the sample is taken 10-15%.

The study population was 149 people, meaning that above 101-500 people, the authors took the sample with the formula:
So that the sample in this study amounted to 45 employees at PT. Teso Indah, Indragiri Hulu Regency. Mechanical taking samples that the researchers did by using simple random sampling.

Multiple Linear Regression Analysis is used to measure the influence of more than one independent variable, an education level (X1), work environment (X2), on productivity (Y). Regression Equations:

\[ Y = a + b_1 X_1 + b_2 X_2 + e \]

RESULTS AND DISCUSSION
RESULTS
Multiple Linear Regression
To determine the effect of variable levels of education and environment work against variable productivity, the authors use the analysis using SPSS. When in linear regression calculations, the formula is used:

\[ Y = a + b_1 X_1 + b_2 X_2 + e \]

Where \( a \) is a constant, \( b \) coefficients of the regression and \( x \) is a variable -free, then from the data below is:

Table 1: Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>(Constant)</td>
<td>4.097</td>
<td>2.703</td>
<td>1.516,137</td>
</tr>
<tr>
<td>X1</td>
<td>.433</td>
<td>.174</td>
<td>.394</td>
</tr>
<tr>
<td>X2</td>
<td>.425</td>
<td>.183</td>
<td>.369</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Y
Source: SPSS Processed Data

From the table above can we see that the regression liner of multiple :

\[ Y = 4.097 + 0.433 X_1 + 0.425 X_2 \]

As for the interpretation of the regression model above is:

\[ a = 4.097 \]
If the level of education and the work environment is equal to 0 (zero) or constant (do not increase and decrease), the magnitude of employees’ productivity amounted to 4.097.

\[ b_1 = 0.433 \]
If the level of education increases by 1 (one unit) while the work environment is constant, the employee productivity will increase by 0.433.

\[ b_2 = 0.425 \]
If the work environment increases by 1 (one unit) while the level of education remains, employee productivity will increase by 0.425.
Correlation and Determination Coefficients

To see the correlation and determination of the variable level of education and work environment on productivity can be seen in the table below:

Table 2: Model Summary

<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>.710</td>
<td>.504</td>
<td>.480</td>
<td>2.14878</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), X2, X1
Source: SPSS Processed Data

Table 3: Guilford Category Standards

<table>
<thead>
<tr>
<th>Coefficient Correlation / Path</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;0.20</td>
<td>Very low relationship closeness or very weak influence</td>
</tr>
<tr>
<td>0.20 &lt;0.40</td>
<td>Low relationship closeness or weak influence</td>
</tr>
<tr>
<td>0.40 &lt;0.70</td>
<td>Moderate closeness or moderate influence</td>
</tr>
<tr>
<td>0.70 &lt;0.90</td>
<td>High relationship closeness or high influence</td>
</tr>
<tr>
<td>&gt; 0.90</td>
<td>Very high relationship closeness or very high influence</td>
</tr>
</tbody>
</table>

The value of r or the correlation seen from the Model Summary table is 0.710, which means it has a high relationship between education level and work environment with employee productivity.

From the summary table, it can be seen that the value of R Square is 0.504. So, the contribution of the independent variable's influence is 50.40%, while the remaining 49.60% is influenced by other factors not examined in this study.

F test and t-test

a. F test

Testing the effect of the variable level of education and work environment simultaneously on employee productivity can be seen in the table below.

Table 4: Simultaneous Test Results

<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>Regression</td>
<td>197,053</td>
<td>2</td>
<td>98,526</td>
<td>21,339</td>
<td>.000 b</td>
</tr>
<tr>
<td>1</td>
<td>193,925</td>
<td>42</td>
<td>4,617</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residual</td>
<td>390,978</td>
<td>44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Y
b. Predictors: (Constant), X2, X1
Source: SPSS Processed Data

In the Simultaneous Test Results table above, the calculated F value is 21.339, while the F table value is 3.22. The significance value is 0.000, which is smaller than the significance level (α) of 0.05. Because the value of F count> F table (21.339> 3.22), the level of education and work environment simultaneously have a significant effect on employee productivity.
b. T-test

Testing the effect of variable levels of education and the work environment is partial to the productivity of employees can be seen in the table below:

Table 5: Partial Test Results

<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></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>4.097</td>
<td>2.703</td>
<td></td>
<td>1.516</td>
</tr>
<tr>
<td>X1</td>
<td>.433</td>
<td>.174</td>
<td>.394</td>
<td>2.481</td>
</tr>
<tr>
<td>X2</td>
<td>.425</td>
<td>.183</td>
<td>.369</td>
<td>2.319</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Y
Source: SPSS Processed Data

The results of the SPSS analysis above show that the value of t count to the variable level of education is equal to 2.481. Because the value of t arithmetic > t table (2.481 > 2.016) and the significance value of 0.017 is smaller than the significance level (α) of 0.05, the level of education is partially significant for productive employees.

The results of the SPSS analysis above show that the value of t count for the working environment variable is equal to 2.319. Because the value of t count > t table (2.319> 2.016) and the significance value is 0.025 less than the significance level (α) 0.05, then the working environment is a partially significant effect on the productivity of employees.

DISCUSSION

Level of Education and Environment Working in a simultaneous effect on the productivity of employees

The results of the hypothesis test conducted show that the level of education and work environment simultaneously have a significant effect on employee productivity because the P-value is small than 0.05, which means that the level of education and work environment has a significant effect in increasing employee productivity, in other words, it is increasingly being improved. Education and work environment will increase employee productivity. Based on the table in chapter 1 regarding employee productivity, we can see that the average level of employee productivity has increased, and this shows that employees can complete the company's work.

Education level is a partial effect on the productivity of employees.

The hypothesis test results show that the level of education has a significant effect on employee productivity because the P-value is small than 0.05, which means that the level of education has a significant effect on increasing employee productivity. In other words, the more education is improved, the more will increase employee productivity. Education is related to the increased general understanding of the human environment and developing knowledge, skills/skills, thoughts, character, and character. With the right level of employee education, the company will have competent human resources so that each employee's productivity will be high.

Based on law number 20 of 2003 concerning the national education system, article 13 states that the education pathway consists of formal, non-formal, and informal education, which can complement and enrich each other. Non-formal education is the most effective education
to bridge the gap between the world of education and the world of work that is currently happening. Through informal education, such as providing courses or training, the employee's job skills will get better to increase company productivity.

Based on the results of interviews with employees, information was obtained that the company's training has been able to increase the employee's visibility so that it can help carry out the work assigned to them. The attitudes and personalities formed from informal education make every employee able to work well together and foster a responsible attitude towards their work.

Environmental Working as a partial effect on the productivity of employees

The hypothesis testing results show that the work environment has a significant effect on employee productivity because the P-Value is small than 0.05, which means that the work environment has a significant effect on increasing employee productivity. In other words, the more the work environment is improved, the more will increase employee productivity.

The work environment is a vital component in the employees doing work activities. The work environment must provide a sense of comfort for every employee because a clean, safe work environment, acceptable noise levels, and lighting will make employees feel at home and can even increase employee motivation, leading to high productivity generated by each employee.

Based on the results of interviews with employees, information is obtained that the work environment in the company is right, this is because they feel that the working atmosphere and harmonious relationships have been established among employees, the work facilities provided by the company are sufficient to support the completion of the work they do, and there is an opportunity to advance for employees who excel.

CONCLUSION

Based on the research and discussion results in the previous chapter, conclusions can be drawn to answer the problem formulation. The conclusion of these are:

- The variables of education level and work environment simultaneously affect employee productivity can be proven by the calculated f value, which is greater than the f table.
- The variable level of education partially affects employee productivity; this can be seen from the t value is greater than the t table.
- Work environment variables partially have a significant effect on employee productivity; this can be seen by comparing the t value, which is greater than the t table value.

SUGGESTION

Based on the study results and the conclusions obtained, suggestions for the parties concerned in this study can be developed. The suggestions that can be given are:

- Leaders must be able to improve employee skills through informal education, such as providing courses or training on each employee's duties and functions to increase their productivity.
- Leaders must create the right work environment through a comfortable working atmosphere, create a sense of kinship and harmonious relationships, adequate work facilities, opportunities to grow and develop and create a sense of security for employees in carrying out their work. By creating a work environment that is getting better, it will be able to increase the work productivity of each employee.
- For further researchers to be able to raise other variables that can affect productivity at PT. Teso Indah, Indragiri Hulu Regency.
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