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THE EFFECT OF EDUCATION LEVEL AND WORK EXPERIENCE ON EMPLOYEE PERFORMANCE AT TIRTA INDRA RENGAT REGIONAL DRINKING WATER COMPANY

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Abstract

This research was conducted at the Regional Drinking Water Company (PDAM) Tirta Indra Rengat, Indragiri Hulu Regency. The address is Jl. R.A. Hakim of the village of Kampung Besar, the city of Rengat District. The purpose of this study is to determine the effect of the variable level of education and Work Experience on Employee Performance at the Regional Drinking Water Company (PDAM) Tirta Indra Rengat, Indragiri Hulu Regency. Sampling used the Surakhmad formula (Winarno Surakhmad) with 44 samples as respondents. The analytical method used is quantitative descriptive method, data analysis is carried out by path analysis (with the help of the IBM SPSS Statistics Program Version 21.00). The results of the study indicate that the level of education and work experience has an effect on employee performance at the Regional Water Company (PDAM) Tirta Indra Rengat, Indragiri Hulu Regency. Education level affects employee performance at Tirta Indra Rengat Regional Drinking Water Company (PDAM) Indragiri Hulu Regency and Work Experience has no effect on Employee Performance at the Regional Water Company (PDAM) Tirta Indra Rengat, Indragiri Hulu Regency.

Keywords: *Education Level, Work Experience, Employee Performance*

INTRODUCTION

By being given the authority to regulate and manage the interests of the local community, then the Regional Government of Indragiri Hulu through Perda no. 17 of 1985 has established a regional drinking water company (PDAM) with the aim of providing clean water for the community. The Regional Drinking Water Company (PDAM) as one of the clean water service facilities has a very important role in the effort to accelerate the improvement of the health status of the people of Indragiri Hulu. With qualifications in recruitment in selecting employees who have work experience rather than those who are not. This is because the experienced are more qualified in carrying out the work as well as the responsibilities given by the company can be carried out in accordance with the provisions and requests of the company. so that work experience is also one of the factors that affect employee performance. Measurement of work experience is reviewed as a means to analyze and encourage efficiency in carrying out work tasks. Elements of assessment and description

of behavior from the results of the assessment to assess employee performance, and adjustments to the benefits to be provided to employees. There is a policy of standardization of education in determining promotion, employee recruitment, and data from employees' tenure related to their work experience becomes an interesting topic if it is examined for its effect on employee performance, so it is hoped that this research will get more accurate results.

On the basis of these problems, the authors analyze more deeply by conducting research with the title: The Effect of Education Level and Work Experience on Employee Performance at the Regional Water Supply Company (PDAM) Tirta Indra Rengat, Indragiri Hulu Regency.

LITERATURE REVIEW

Employee Performance Theory

Human resource management (HRM) is the essence of managing a company or agency so that it can optimize the performance of its workforce to achieve the desired goals. If you think about HR for a moment, that it will be a very loss if the company pays workers with high wages but cannot work productively even though they have high work potential in order to achieve organizational goals. The emphasis of HRM is how the workforce has optimal performance. Performance is basically the result of work in quality and quantity achieved by a person in carrying out tasks according to the responsibilities that have been given to him. Performance is a result of work achieved by a person in carrying out the tasks assigned to him and how much they can contribute to the organization. Performance is also a measure of actual behavior in the workplace which is multidimensional, where performance indicators include quality of work, quantity of work, working time and collaboration with co-workers.

Performance is the result of work that can be achieved by a person or group of people in a company in accordance with their respective authorities and responsibilities in an effort to achieve organizational goals illegally, does not violate the law and does not conflict with morals and ethics (Afandi, 2018: 33).

To improve performance, there are seven steps that can be taken (Anwar: 2018: 23):

1. Recognizing any deficiencies in performance
2. Regarding the lack and level of seriousness
3. Identifying problems that may be the cause of shortages, both related to the system and related to the employees themselves.
4. Develop an action plan to address the causes of the shortage.
5. Carry out the action plan
6. Evaluate whether the problem has been resolved or not
7. Start from scratch and if necessary

Performance is a very important aspect in achieving a goal. A maximum achievement of goals is the fruit of good team or individual performance and vice versa, failure to achieve the goals that have been formulated is also a result of the performance of individuals or teams that are not optimal or not good.

Work Experience Theory

In addition to education, the thing that most often becomes a general criterion in recruiting workers is work experience. The wider a person's work experience, the more skilled he is at doing the job and the more perfect he thinks, behave in action to achieve the goals that have been set. Work experience is the number of years of service that a person has taken to do a job given to him and the results obtained are skills and knowledge that are getting better at the job. If work experience becomes a person's benchmark for understanding and analyzing tasks to encourage time and energy efficiency in dealing with a job. There are

several things that are used to measure the performance of a person's work experience are as follows :

- a. The movement is steady and smooth
Every experienced employee will make steady movements at work without any hesitation.
- b. The movement is rhythmic
The creation of habits in doing daily work.
- c. Respond more quickly to signs This means that there are signs such as an accident at work.
- d. Can predict the emergence of difficulties so that they are better prepared to face them
Because it is supported by his work experience, an experienced person can anticipate difficulties and be ready to face them.
- e. Work quietly An experienced person will have considerable self-confidence.

The experience of the learning process and the increase in the development of potential behavior from formal or informal education and can also be defined as a process that leads a person to a higher pattern of behavior.

Work experience is the process of forming knowledge or skills regarding the method of a job due to employee involvement in the implementation of work tasks. Work experience and productivity are closely related because a measure of the length of time or period of work that is seen to be taken by someone can understand the tasks of a job and have done it well.

Work experience can generate work motivation and invite a person to see all his work as an opportunity to continue to practice and learn throughout his life. A lot of work experience will determine or show how the quality and productivity of a person at work. A person's work experience in a job that is manifested in the number of years of service will increase one's abilities and work skills so that work results will increase in line with the increase in work. This will increase a person's knowledge and skills at work. Work experience is a lesson and understanding that is learned and experienced during work, meaning that a person learns from the experiences he has experienced and the work he has done.

Education Level Theory

According to the Law of the Republic of Indonesia number 20 of 2003 Education is an effort that is carried out consciously and planned to create an atmosphere and learning process so that students are actively able to develop the potential that exists within themselves to have religious spiritual strength, good personality, self-control, noble character, good personality, intelligence and skills needed by himself, society, nation and state. Education is also a teaching and learning activity at all levels, both formal and informal (BPS). Educational level is a long-term process that uses a systematic and organized procedure in which the managerial workforce learns conceptual and theoretical knowledge for general purposes. A person's education level is assessed as a person's level of knowledge, skills, and abilities in a field. The higher the level of education, the higher a person's knowledge of a job. From the above understanding it can be concluded that education is a knowledge that is obtained by a person to mature both behavior and thoughts so that they can change the perspective, think, communicate, and be able to come up with better ideas. Education can not only be obtained from school, but life experience also provides education that really builds one's life. Educated people will be seen from a good style of language, think more about how the solution to the problem is not why the problem can occur, is authoritative, can behave well.

RESEARCH METHOD

Data Types and Sources

The data used in this study concerns quantitative data. There are two types of data in this study, namely primary data and secondary data. Primary data is data obtained directly from the object of individual field research, groups and organizations. Meanwhile, according to Bungin, secondary data is data obtained from a second source for the data we need.

Population and sample

1. Population

The population is a generalization area consisting of: subject objects that have certain qualities and characteristics that are determined by researchers to be studied and then conclusions are drawn (Sugiyono, 2013:149). The population in this study were employees of the Regional Drinking Water Company (PDAM) Rengat, Indragiri Regency, amounting to 89 people.

2. Research Sample

The sampling method according to Winarno Surakhmad, namely for general guidelines, can be attributed that the population is homogeneous enough for the population below 100 to use a sample of 50% and above 1000 by 15%, so that the total sample size is $89 \times 50\% = 44.5$ So rounded the sample to 44 people.

Variables and Data

1. Variable

The variables of this research are:

- a. Level of education
- b. Work experience
- c. Employee performance

2. Data

In this study the authors use the following data:

- a. Primary data
- b. Secondary Data

Research Instruments

Research instruments are tools used by researchers in measuring natural and social phenomena in accordance with research variables (Sugiyono, 2007).

1. Questionnaires or questionnaires given to research respondents. Questionnaires are data collection by distributing a list of questions to several employees who are used as respondents.
2. Documentation in the form of documents obtained from original sources or people who become informants in research, and documentation from other people, research reports, papers, and other publications.

Data Analysis Techniques

Test Instruments Validity Test, Reliability Test. and Classical Assumption Test, Normality Test; linearity.

Path Analysis

Path analysis is used to test the amount of the independent variable's contribution to the dependent variable.

$$Y = \rho_Y X_1 + \rho_Y X_2 + e$$

Where :

- Y : Employee Performance
- X1 : Education Level
- X2 : Work Experience
- Y : Path Coefficient
- e : Standard error

Multiple Correlation Coefficient (R)

The purpose of this method is the analysis used to discuss the strength of the relationship between the variables studied, the number that shows the relationship between the variables given the notary "R".

$$R = \sqrt{\frac{(b1 \sum yx1) + (b2 \sum yx2)}{(\sum y^2)}}$$

Where the standard category of multiple correlation test is :

Table 3.2 : Guilford . Category Standards

Coefficient Correlation/Path	Category
0 – 0.20	Very low relationship closeness or very weak influence
0.20 – 0.40	Low relationship closeness or weak influence
0.40 – 0.60	Medium relationship or moderate influence
0.60 – 0.80	High relationship closeness or high influence
0.80 – 1.00	Very high relationship or very high influence

Coefficient of Determination (R2)

The purpose of this method is the analysis used to discuss how big the percentage of the influence of the variables studied is with the formula :

$$R^2 = \frac{(b1 \sum yx1) + (b2 \sum yx2)}{(\sum y^2)}$$

Model Test

a. F-Test (F-Test)

The F test (F-Test) is used to see the effect of the independent variables as a whole on the dependent variable, Gozali (2011:83). To prove the truth of the hypothesis used F test, namely to determine whether or not the influence of the independent variable is significant on the dependent variable. If from the calculation of the value of Fcount > Ftable at a significant level of 5%, it can be said that the independent variables affect the dependent variable together. On the other hand, if the value of Fcount < Ftable at a significant level of 5%, it can be said that the independent variables have no significant effect on the dependent variable together.

b. t-test (t-test)

The t-test (t-test) was used to prove whether or not the influence of each independent variable was partially significant on the dependent variable. For this reason, the decision criteria used are quoted from Ghozali (2011: 85), namely :

- If $t_{count} > t_{table}$ then H_0 is accepted, meaning that there is a significant effect of the independent variable on the dependent variable.
- If $t_{count} > t_{table}$ then H_0 is accepted, meaning that there is a significant effect of the independent variable on the dependent variable.

RESULTS AND DISCUSSION

Research Result

Test Instrument

a. Validity test

From data management with the SPSS 21.00 program, the results of the validity test on the questions (items) contained in the three variables (X1, X2 and Y) are obtained as follows : Education Level Variable (X1) of 5 questions are all valid and invalid, there are invalid questions due to the value of $r_{count} > r_{table} = 0.05$ where $r_{table} = 0.2972$. Judging from the validity test of the Education Level variable question items used in this study, it was proven that the 5 question items used in this study were declared valid. The entire value of the correlation item (r_{count}) for all questions is greater than the value of the correlation table (r_{table}) at $n = 44, = 0.05$, which is 0.2973 so that it can be continued in the study. Testing the Validity of the Work Experience variable (X2) with 5 statement items, the entire value of the Correlation Item (r_{count}) for all questions is greater than the value of the correlation table (r_{table}) $n=44, =0.05$, which is 0.2973, so it can be continued in study. Testing the validity of the employee performance variable (Y) with 5 statement items, it is proven that of the 5 question items used in this study are declared valid. The entire value of the Correlation Item (r_{count}) for all questions is greater than the value of the Correlation table (r_{table}) at $n=44$ with $=0.05$, which is 0.2973, so it can be carried out in research.

b. Reliability Test

From the results of testing the reliability of the data for all the variables used in the study. Where all variables have a Cronbach'S Alpha value of 0.60. The education level variable (X1) has a Cronbach's Alpha 0.326, the work experience variable (X2) has a Cronbach's score of 0.561 and the employee performance variable (Y) has a Cronbach's score of 0.469, this indicates that the instrument used for all variables is reliable and can be used.

Description of Respondents' Responses to Employee Performance Variables

In this study there are 5 statements used for employee performance variables with 44 respondents. About Employee Performance about I understand the job duties given by the Leader, I am able to work with new innovations to improve the results achieved, I am able to quickly complete the work assigned by the leader, I have to work carefully so that what is expected is in accordance with the wishes of the company leadership, I collaborate with other co-workers to get the job done. The average calculation value is equal to 21.52 from the statement obtained 4.31 rounded up to 4 including the agree category. o the performance of the employees of the Tirta Indra Rengat Regional Drinking Water Company (PDAM) in Indragiri Hulu Regency is good and the respondents' answers are categorized as agree.

Description of Respondents' Responses to Education Level Variables

A person's level of education is assessed as the level of knowledge, skills, and ability of a person in a field. Average Calculation Value equal to 15.26 from the statement obtained 3.06 rounded up to 3 including the category quite agree. So the education level of the employees of the Tirta Indra Rengat Regional Drinking Water Company (PDAM) in Indragiri Hulu Regency is quite good and the respondents' answers are categorized as quite agree.

Description of Respondents' Responses to Work Experience Variables

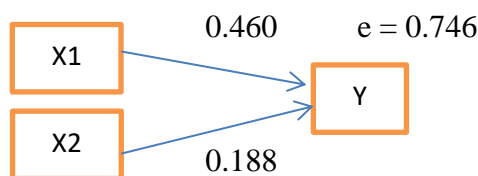
In this study, there are 5 statement items in the Work Experience variable with a total of 44 respondents. Employee work experience about I have, help reduce the mistakes I made when providing service to customers, The work I'm currently doing, really need work experience that I have, I don't waste time working with other activities that are not related to work, At work I always complete assignments / work on time, I always handle customers according to proper procedures. Average Calculation Value equal to 20.78 from the statement obtained 4.16 rounded up to 4 including the category agree. So the work experience of employees of the Tirta Indra Rengat Regional Drinking Water Company (PDAM) in Indragiri Hulu Regency is good and the respondents' answers are categorized as agree.

Path Analysis

Path analysis is the development of multiple linear regression analysis or the use of regression analysis to determine the causal relationship between variables. Both direct and indirect relationships between variables in the model can also be measured using path analysis, the point is to find out the structural relationship between the independent variable and the dependent variable and to examine the magnitude of the contribution shown by the path coefficients on each path diagram of the causal relationship between education level and work experience on employee performance.

Based on the results of the processed data obtained structural equations as follows :

$$Y = 0.460 X_1 + 0.188 X_2 + e$$



From the calculations and equations of statistical analysis of the path coefficients of the path analysis above, it can be interpreted as follows :

1. The Effect of Education Level on Employee Performance is 0.460
2. The effect of work experience on employee performance is 0.188
3. The correlation between Education Level and Work Experience is 0.044
4. The influence of other variables from the variables studied is equal to (e)
= $1 - 0.254 = 0.746$

The result of the multiple regression coefficient (R) is 0.504 because it can show the level of relationship between all independent variables and the dependent variable, which shows a moderate relationship or moderate effect.

Coefficient of Determination (R²)

Based on the results of multiple linear regression calculations using the IBM SPSS Version 21.00 program, the coefficient of determination is obtained as shown in the table below. The coefficient of determination (R²) from the summary table for the R Square value

is 0.254. So the contribution of the influence of the dependent variable is 25.4%, while the remaining 74.6 is influenced by other variables that are not examined in this study.

Test Model

a. F Test (Simultaneous Model Test)

F test is used to test the fit of the model. The influence between the independent variable and the dependent variable simultaneously. With a significant level of 5% by testing if $F_{count} > F_{table}$ it means that the two independent variables jointly affect the dependent variable, and conversely if $F_{count} < F_{table}$ then the two independent variables together have no significant effect on the dependent variable. From the table of calculation results above, it can be seen that the calculated F is 6.987 and the F table has a significant rate of 5%.

$$\begin{aligned} F_{table} &= (k):(n-k-1) \\ &= (2):(44-2-1) \\ &= 2: 41 = 0.049 \end{aligned}$$

From the results of the calculation of the F table above, it can be seen that the $F_{count} > F_{table}$ is $6.987 > 0.049$ so that the two independent variables, education level and work experience together have a significant effect on the performance of the employees of the Titra Indra Rengat Regional Drinking Water Company (PDAM).

b. t test

In this research, the influence between the independent variable and the dependent variable partially uses the t test. The t test was carried out with a significant level of 5% with the criteria used in this test, namely if $t_{count} > t_{table}$ then the level of education and work experience partially affects employee performance and vice versa if $t_{count} < t_{table}$ then the level of education and work experience has no effect on employee performance.

The results of the t-count calculation using the IBM SPSS Version 21.00. program the t-count value of each independent variable, namely Education Level and Work Experience. How to find out the t table as follows :

$$\begin{aligned} T_{table} &= /2, n-k \\ &= 0.05/2 ; 44-2 \\ &= 0.025 ; 42 \\ &= 2.01808 \end{aligned}$$

The test results of each variable are as follows :

1. Variable X1 (Education Level) is $3.404 > 2.01808$. So it can be concluded that the variable level of education partially has a significant effect on the performance of employees of the Titra Indra Rengat Regional Drinking Water Company (PDAM) Indragiri Hulu Regency.
2. Variable X2 (Work Experience) is $1.393 < 2.01808$. So it can be concluded that the work experience variable has no significant effect on the performance of employees of the Titra Indra Rengat Regional Drinking Water Company (PDAM) Indragiri Hulu Regency.

Thus it can be concluded that the variable level of education (X1) has an effect on employee performance (Y) and while the work experience variable (X2) has no effect on employee performance (Y).

Discussion

From the research results, it can be concluded that :

- a. Education level and work experience simultaneously affect employee performance.

Employee performance is the result of work achieved by a person or group of people in an organization or company, in accordance with their respective authorities and responsibilities or according to their respective duties and responsibilities in an effort to legally achieve the company's goals, does not violate the law and in accordance with morals and ethics. The results of the study indicate that the level of education and work experience simultaneously affect employee performance. This can be seen from the calculated $F > F$ table which is $6.987 > 0.049$. In addition, this research is in line with research conducted by Samosir, Azharul Anhar (2017) where the results of his research show that the level of education and work experience has an effect on employee performance at PT. Nagali Subur Jaya in Pulau District, Asahan Regency.

- b. Education level partially affects employee performance

Educational level is a long-term process that uses a systematic and organized procedure in which the managerial workforce learns conceptual and theoretical knowledge for general purposes. A person's level of education is assessed as the level of knowledge, skills, and ability of a person in a field. The higher the level of education, the higher a person's knowledge of a job. In this study, it shows that the X1 variable (Education Level) is $3.404 > 2.01808$. So it can be concluded that the variable level of education partially has a significant effect on the performance of employees of the Titra Indra Rengat Regional Drinking Water Company (PDAM).

- c. Work experience partially affects employee performance

Work experience is the number of years of work that has been taken by a person to do a job given to him and the results obtained are skills and knowledge that are getting better for the job.

In this study, the variable X2 (Work Experience) was $1.393 < 2.01808$. So it can be concluded that the work experience variable has no significant effect on the performance of employees of the Titra Indra Rengat Regional Drinking Water Company (PDAM).

CONCLUSIONS AND SUGGESTIONS

Conclusion

Based on the results of research on the effect of the variable level of education and work experience on the performance of employees of the regional drinking water company (PDAM) Tirta Indra Rengat, Indragiri Hulu Regency.

1. The level of education and work experience simultaneously affect the performance of employees of the Titra Indra Rengat Regional Drinking Water Company (PDAM) Indragiri Hulu Regency.
2. The level of education partially has a significant effect on the performance of employees of the Titra Indra Rengat Regional Drinking Water Company (PDAM).
3. Work experience partially does not have a significant effect on the performance of employees of the Titra Indra Rengat Regional Drinking Water Company (PDAM) Indragiri Hulu Regency.

Suggestion

Based on the results of the study, the researchers formulated several suggestions, namely as follows.

1. Directors should pay attention to employee education or by providing opportunities for employees to continue their education and attend trainings.

2. The director should provide a work experience measurement that is reviewed as a means to analyze and encourage efficiency in carrying out work tasks in order to produce good performance.
3. Directors should improve employee performance again by providing direction and motivation of employees so that employee morale increases.

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