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# The Effect of Education and Job Training on Increasing Employee Productivity at PT. Sagami Indonesia

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#### ARTICLE INFO ABSTRACT Article history: The purpose of this study was to determine and analyze the effect of education and Received: 22-10-2020 job training on increasing employee productivity, either partially or simultaneously Revised: 12-12-2020 The approach used in this research is an associative approach. The population in this study were all employees at PT. Sagami Indonesia. The sample in this study Accepted: 01-04-2021 using the Slovin formula totaling 92 employees of PT. Sagami Indonesia. Data collection techniques in this study used interview techniques, documentation study. observation, and questionnaires. The data analysis technique in this study used the Multiple Liner Regression Analysis Test, Hypothesis Test (t test and F test), and **Keywords**: the Coefficient of Determination. Data processing in this study used the SPSS Education; (Statistical Package for the Social Sciens) software program version 24.00. The Job Training: results of this study prove that partially and simultaneously education and job Work Productivity. training have an effect on increasing the work productivity of employees at PT Sagami Indonesia Copyright © 2021 Journal of Management Science (JMAS).

#### Introduction 1.

In line with the increasingly global development of the business world, the management of an organization must be carried out professionally and productively, so that the organization can continue to survive and continue to develop along with the times. In every company, human resources (HR) are the most important assets that must be maintained by the company. In the process of achieving the goals of a company, it is strongly influenced by quality resources to produce goods or services. Training is one of the efforts made by companies to improve the quality of human resources in the world of work. Training is a process to shape and equip employees by adding to their skills, abilities, knowledge and behavior. [4] In the context of human resource development, education and training are efforts to develop human resources, especially to develop intellectual abilities and human personality. [5]. Based on the background of the problem above, the authors are interested in conducting research on the effect of education and job training on increasing employee productivity at PT.Sagami Indonesia.

#### 2. Method

This type of research is quantitative research. This study aims to the effect of education and job training on the increase in productivity of employees at PT.Sagami Indonesia. The data instrument test conducted in this study was the validity and reliability test. The analysis used in this research is to use multiple linear regression test along with the classical assumption test. The population in this study were all customers of the Medan branch of Indomaret jln industry. The sample in this study were 100 people. The sampling method used was a random sampling method

#### 3. Results and discussion

#### 3.1. Results

### a. Data Validity Test

The validity test is used by correlating the total factor score with the total score. If the correlation of each factor (r count) is positive and the magnitude is 0.360 and above, the factor is a strong construct so it can be concluded that the instrument has good construction validity.



Table 1

Validity Test Results				
Statement Items	Probability	Information		
Work Productivity Variable (Y)	0.000 < 0.05	Valid		
Y1-Y12	Probability	Information		
Statement Items	0.000 < 0.05	Valid		
Educational Variable (X1)	Probability	Information		
X1-X10	0.000 < 0.05	Valid		

Source: Primary data processed, 2020

From the table above the items of the questionnaire, namely the results of the validity test, show that the Pearson correlation value of all variables is greater than 0.3, thus all items of the measurement instrument can be said to be valid.

#### b. Reliability Test

The results of reliability testing in the table above indicate that the three variables have a coefficient of alpha ( $\alpha$ )> 0.6 so that it can be said that the questionnaire compiled is reliable or reliable as a data collection tool in this study.

Table 2

Renability Test Results				
Variable	Cronbach Alpha	R Tabel	Information	
Work productivity	0.889		Reliabel	
Education	0.890	0,60	Reliabel	
Work training	0.813		Reliabel	

Source: Primary data processed, 2020

The results of reliability testing in the table above indicate that the three variables have a coefficient of alpha ( $\alpha$ )> 0.60 so that it can be said that the questionnaire compiled is reliable or reliable as a data collection tool in this study.

### c. Multiple Linear Regression Test Results

Multiple linear regression analysis aims to measure the strength of the relationship between two or more variables, it also shows the direction of the relationship between the dependent variable and the independent variable. This study uses multiple linear regression equations because it has more than one independent variable. Following are the results of data processing using SPSS 22.

Table 3

Linear Regression Test Results							
	Coefficients <sup>a</sup>						
	Unstandardized Coefficients Standardized Coefficients						
Model	В	Std. Error	Beta	t	Sig.		
1 (Constant)	1,699	2,155		,789	,432		
Education	,443	,097	,289	4,589	,000		
Work Training	,887	,082	,684	10,875	,000		
a. Dependent Variable: Work Training							

Source: Primary data processed, 2020

These results are entered into the multiple linear regression equation so that the following equation is known:

$$Y = 1.699 + 0.4431 + 0.8872$$

So the above equation means if:

- a) A constant of 1.699 shows that if all the independent variables of education and job training are assumed to be zero, then the value of work productivity is 1.699.
- b) The education regression coefficient value of 0.443 indicates that if the value of the education variable is at least one unit, then work productivity increases by 0.443 units, assuming the other independent variables are zero.

The regression coefficient value for job training is 0.887 indicating that if the value of the job training variable is at least one unit, then work productivity increases by 0.887 units, assuming the other independent variables are zero.

# d. Partial Test Result (t test)

The t test is one of the hypothesis tests in multiple linear regression analysis research, the t test aims to determine whether the independent variable (X) partially affects the dependent variable (Y).

Table 4
T Test Results

	1 100 1100 110							
	Coefficients <sup>a</sup>							
Unstandardized Coefficients Standardized Coe		Standardized Coefficients						
Model		В	Std. Error	Beta	t	Sig.		
1	(Constant)	1,699	2,155		,789	,432		
	Education	,443	,097	,289	4,589	,000		
	Work Training	,887	,082	,684	10,875	,000		

a. Dependent Variable: Work productivity Source: Primary data processed, 2020

The results of statistical testing in the table above can be explained as follows:

- a) Effect of Education (X1) on Work Productivity (Y)
  - The t-count value for the education variable is 4.589 and the t-table with  $\alpha = 5\%$  is known to be 1.987, thus tount is greater than t-table and the significant value of education is 0.000 <0.05, meaning that from these results it can be concluded that H0 is rejected (Ha accepted) indicates that education has a significant effect. on the work productivity of PT. Sagami Indonesia.
- b) Effect of Job Training (X2) on Work Productivity (Y)

The t-count value for the job training variable is 10.875 and the t-table with  $\alpha = 5\%$  is known to be 1.987, thus tcount is greater than t-table and the significant value of job training is 0.000 <0.05, meaning that from these results it can be concluded that H0 is rejected (Ha is accepted) indicates that training work has a significant effect on the work productivity of employees of PT. Sagami Indonesia

### e. Simultaneous Test Results (Test F)

Table 5

	F Test Results							
	ANOVAa							
Model			Sum of Squares	df	Mean Square	F	Sig.	
	1	Regression	2301,554	2	1150,777	261,440	,000b	
		Residual	391,751	89	4,402			
		Total	2693,304	91				

Source: Primary data processed, 2020

From the results above, it can be seen that the F\_count value is 261,440 with a significant level of 0.000. While the value of F table is known to be 3.10. based on these results it can be seen that f\_count> ftable (261.440> 3.10) means that H\_0 is rejected. So it can be concluded that the variables of education and job training together have a significant effect on the work productivity of employees at PT. Sagami Indonesia.

#### f. Coefficient of Determination (R2)

The coefficient of determination is carried out to test the influence of the variable product quality and work experience (X) on purchasing decisions (Y).

**Table 6**Coefficient of Determination (R2) Results

Model	R	1	J	Std. Error of the Estimate
1	,714ª	,510	,500	4,296

Source: Primary data processed, 2020

Based on the table above, it can be seen that the value of the R square is 0.855 which means 85.5% and this indicates that the variables of education and job training are 85.5% to influence work productivity variables. Furthermore, the difference is 100% - 85.5% = 14.5%. this shows that 14.5% is another variable that does not contribute to work productivity research.

# 3.2. Discussion

## a. The Effect of Education on Work Productivity

Based on the research obtained regarding the effect of education on employee work productivity at PT. Sagami Indonesia, the results of the hypothesis test partially show that the t\_count value for the education variable is 4.589 and the t-table with  $\alpha = 5\%$  is known to be 1.987, thus the tcount is greater than t table and the significant value of education is 0.000 < 0.05, meaning that the conclusion is that H0 is rejected. (Ha accepted) indicates that education has a significant effect on the work productivity



of PT. Sagami Indonesia. This shows that education is able to increase the work productivity of employees at PT. Sagami Indonesia, where with the increase in employee education, employee productivity will increase, employees with a high level of education and in accordance with the position they hold, the productivity of these employees will increase.

### b. The Effect of Job Training on Work Productivity

Based on the research obtained regarding the effect of job training on employee work productivity at PT. Sagami Indonesia results of hypothesis testing partially show that the value of tcount for the job training variable is 10.875 and the ttable with  $\alpha = 5\%$  is known to be 1.987, thus tcount is greater than ttable and the significant value of job training is 0.000 <0.05, meaning that the results are concluded that H0 rejected (Ha accepted) indicates that job training has a significant effect on the work productivity of PT. Sagami Indonesia.

This shows that job training is able to increase the work productivity of employees at PT. Sagami Indonesia, where the increasing training provided by the company for employees who support the work of these employees, the productivity of these employees will increase.

### c. Effect of Education and Job Training on Work Productivity

Based on the research obtained regarding the effect of education and job training on the work productivity of employees at PT. Sagami Indonesia, the results of simultaneous hypothesis testing show that the value of F\_count for the job training variable is 10.875 and the F table with  $\alpha = 5\%$  is known to be 1.987, thus F\_count is greater than F table and the significant value of job training is 0.000 < 0.05, meaning that the results are concluded that H0 rejected (Ha accepted) indicates that job training has a significant effect on the work productivity of PT. Sagami Indonesia.

This shows that education and job training together can increase the work productivity of employees at PT. Sagami Indonesia where with the higher education of each employee and according to the position of the employee and followed by training that the company verifies for these employees to support work, the productivity of these employees will increase.

#### 4. Conclusion

The results of the study led to the following conclusions:

- a. Partially education has a significant effect on the work productivity of employees at PT. Sagami Indonesia where the value of t count 4.589> t table 1.987 and a significant value of 0.000 <0.05 so that H0 is rejected (Ha is accepted)
- b. Partially job training has a significant effect on employee work productivity at PT. Sagami Indonesia where the value of t count 10.875> t table 1.987 and a significant value of 0.000 <0.05 so that H0 is rejected (Ha is accepted)
- c. Simultaneously education and job training together have a significant effect on employee work productivity at PT. Sagami Indonesia where the value of F\_count 10.875> F table 1.987 and a significant value of 0.000 <0.05 so that H0 is rejected (Ha is accepted).

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