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ANALYSIS OF FACTORS AFFECTING LABOR PRODUCTIVITY IN THE MARINE FISH PROCESSING AGROINDUSTRY IN AMPENAN DISTRICT, MATARAM CITY

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Abstract

Increasing labor productivity in the agro-industrial sector in marine fisheries is always accompanied by factors that influence this sector so that it has an impact on increasing worker productivity, including education, wages and age factors. Therefore, researchers want to analyze how much influence education, wages and age factors have on labor productivity in the marine fish processing agro-industry sector in the Ampenan sub-district area of Mataram City. The formulation of the problem in this research reads: What is the influence of education factors, wage factors, and age factors on labor productivity in the marine fish processing agro-industry in Ampenan sub-district, Mataram City. The expected aim of this research is to reveal how big the influence of education and wage factors is, and age on labor productivity in the marine fish processing agroindustry in Ampenan sub-district, Mataram City. This research is in the form of associative quantitative research, with members of the agro-industry worker population in 5 business places, namely UD Hiudp Baru, Ud Istiqomah, UD Beriuk Bekarya, UD Namira, UD Menara and the P.W.N Institution numbered 60 people and each company took 10 people as respondents. Samples were taken using random sampling techniques so that each member of the population had the same opportunity to become a research sample. The data in this study was collected via a questionnaire with a Likert scale and processed using Multiple Linear Regression using the SPSS16 application. The results of the research concluded that education (X1) partially (individually) had a significant effect on the productivity (Y) of marine fish processing agroindustry workers in Ampenan District, Mataram City. Wages (X2) partially (individually) had no significant influence on the productivity of marine fish processing agroindustry workers in Ampenan District, Mataram City. Age (X3) partially (individually) has a significant effect on the productivity of sea fish processing agro-industry workers in Ampenan District, Mataram City. Simultaneously (together) there is a significant influence between education (X1) Wage (X2) and Age (X3) on the productivity of marine fish processing agroindustry workers in Ampenan District, Mataram City.

The author's suggestion for this research is that marine fish processing agro-industry entrepreneurs should pay more attention to the needs of workers, by meeting the needs of workers it is likely to increase work productivity, especially regarding wage levels where companies must pay more attention or use appropriate wage levels, especially adding bonuses and other food allowances that will increase labor productivity in the marine fish processing agro-industry in Ampenan District, Mataram City.

Key Words: *productivity, Labor, Education, Wages, and Age*

INTRODUCTION

Productivity is how to produce or increase the highest possible output of goods and services by utilizing resources efficiently. Many factors influence work productivity, both those related to labor and those related to the company environment and overall government policy. Increased productivity is influenced by labor factors, including worker education, wages, education level and age. These factors must take into account the changing trends in the world of work and market demands to be served appropriately, satisfactorily and quickly. This underlies the importance of developing the capabilities and quality of human resources, not only from a physical, mental and moral perspective, but also from the perspective of work productivity. Ampenan District is one of the coastal districts in the Mataram City area. The fisheries sector dominates, namely, the field of fishing and processing. The vast marine area of Mataram City means that many coastal communities make their living as fishermen. Economic growth in the fisheries sector continues to grow rapidly so that with an increase in raw materials produced from marine products there will be a big opportunity for the absorption and productivity of labor in this sector. The high production of marine fisheries has encouraged the emergence of fish processing businesses in the Ampenan sub-district area, one of which is through agro-industry techniques, where industries that process fishery products into semi-finished materials or final products involve humans, fishery commodities, capital, information technology and other factors. other factors. This is due to the sometimes abundant nature of fish production which results in fish prices tending to decline. Efforts made include various ways of processing fish to create added value to these fishery products The existence of agroindustry is very important for the progress and prosperity of a region. With fisheries as its core, the agroindustry is able to absorb a lot of workers, increase income and bring out the latest innovations that strengthen competitiveness. Labor productivity is a measure of the extent to which humans or the workforce are used well in a production process to achieve the desired results. Therefore, a professional and competitive workforce is needed so that the company can carry out its activities optimally, even though all the necessary modern equipment is available To obtain quality human resources, education is needed, because education is considered capable of producing high-quality workers who have modern patterns of thinking and ways of acting. Human resources like this are what It is hoped that it will be able to move the wheels of development forward.

Wages are an interesting and important issue for a company, because wages have a very big influence on workers. If the wages provided by a company are felt to be in accordance with the services or sacrifices provided, employees will continue to work and be more active in their work (Setiadi, 2009).

Apart from that, the influence of age on productivity has been discussed by many experts. Every company must pay attention to the age factor because it greatly influences a person's productivity

at work. The age of the workforce is sufficient to determine success in carrying out a job, both physical and non-physical. In general, older workers will have weaker and limited physical strength. And conversely, younger workers definitely have stronger physical abilities (Amron, 2009).

From the above background the question arises, what is the influence of education, wages and age factors on labor productivity in the marine fish processing agro-industry in Ampenan District, Mataram City?

LITERATURE REVIEW

Productivity

Productivity is one of the key factors in encouraging optimal life and economic growth. "The quality of life in economically developed countries is apparently higher than the quality of life in developing countries." (Setiadi, 2009)

Productivity involves the integrated utilization of human resources and skills, capital goods, technology, management, information, energy and other sources leading to the development and improvement of living standards for the entire community through the concept of universal/total productivity. Productivity is the driving force to realize quality of life, economic growth and social progress which are essentially national development targets. In other words, productivity drives growth and progress.

Labor

Workers are people who are of working age. According to Law No. 13 of 2003 concerning employment, what is called a workforce is every person who is able to do work to produce goods and/or services to meet their own needs or those of the community.

Education

Education not only increases knowledge, but also improves work skills, thereby increasing work productivity. According to Andrew, (2011), education level is a long-term process that uses systematic and organized procedures, in which workers learn conceptual and theoretical knowledge for general purposes. Mangkunegara (2015) added that an employee's education level can be increasing organizational competitiveness and improving organizational performance. For this reason, a person must have skills obtained through a high level process

Wages

The Central Statistics Agency (BPS) defines wages as compensation or remuneration received by workers/laborers from entrepreneurs or employers which is determined and paid according to a work agreement.

Age

The influence of age on labor productivity is reflected in a person's age level, where young age reflects a strong physique so that they are able to work quickly and the resulting output increases and vice versa. Age or age greatly influences the physical abilities of the

workforce. According to Hasanah and Widodoati (2011), the production produced is large, while in old age productivity decreases. According to Hasanah and Widodoati (2011). The age of workers who are in the productive age (15-60 years) has a positive relationship with labor productivity.

Types of research

This research is quantitative associative research which aims to determine the relationship between two or more variables. This research aims to determine the relationship between the independent variable and the dependent variable and is used to build a theory that functions to explain a particular phenomenon.

Population

The population of this research is marine fish processing agroindustry workers in Ampenan District, Mataram City in 5 companies, namely 149 workers as in the following table:

No Company/Entrepreneur Product number of workers

Work

No	Perusahaan/ Pengusaha	Produk	jumlah tenaga kerja
1	UD Hidup Baru	abon marlin abon tuna,abontengiri	39
2	UD Istiqomah	abon marlin abon bajo angke	36
3	UD Beriuk Berkarya	abon marlin abon tuna,abontengiri	30
4	Lembaga P.W.N	abon tongkol abon tuna	27
5	UD Namira	abon tuna	9
6	UD Menara	abon marlin	5
JUMLAH			149

Sample

The sampling technique used is simple random sampling, which is a sampling method where each member of the population has the same opportunity as the others to become a member of the sample. The number of samples is determined based on calculations from the Slovin formula with a tolerable error rate of 10% with the following formula:149

$$n = 1 + 149(0.1)^2$$

$$n = 149$$

$$2.49$$

$$n = 59.8399$$

So, sample = 60 people

Data Type

The data collected in a study is determined by the research objectives, what is to be researched and what conclusions will be drawn from the research. In this research, the data that will be collected is primary data about work productivity obtained from the results of filling out questionnaires by respondents. Meanwhile, secondary data is additional to strengthen the theory used in research via websites, etc.

Data source

The data sources for this research are agro-industry workers in the Ampenan sub-district, Mataram City, with 5 business actors, namely UD Hiudp Baru, Ud Istiqomah, UD Beriuk Bekarya, UD Namira. UD Menara and P.W.N Institute

Data Collection Tools

Data about students' learning interests is collected using data collection tools in the form of questionnaires. The questionnaire/questionnaire method is a written statement used to obtain information from respondents in the sense of their personal reports or things they know (Suharsimi in Agustine, 2014: 35). So a questionnaire is collecting data by distributing written statements or questions to be answered in writing by respondents. In this research, a questionnaire was used to measure and determine the level of labor productivity of marine fish processing agro-industry companies

Data Analysis Techniques

The data analysis used in this research is multiple linear regression analysis and uses SPSS 16 software tools to carry out data regression analysis. This analysis is used to determine the influence of the independent variables Education (X1), wages (X2), Age (X3) on labor productivity (Y) in West Nusa Tenggara Province. The form of the multiple linear regression equation used in this research is as follows:

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + e$$

Information:

Y: Labor productivity

b₀ : Constant b₁,b₂,b₃ : Regression Coefficient X₁ : Education

X₂: Wages

X₃: Age

e: Error (Error Rate)

The Likert Scale is a research scale used to measure attitudes and opinions. With this Likert scale, respondents are asked to complete a questionnaire that requires them to indicate their level of agreement with a series of questions. The level of agreement referred to in this Likert scale consists of 5 scale options whose gradations can be seen as follows:

Score 1. Strongly (disagree/bad/very little) Score 2. No (agree/good/) or less

Score 3. Neutral / Fair

Score 4. (Agree/Good/like)

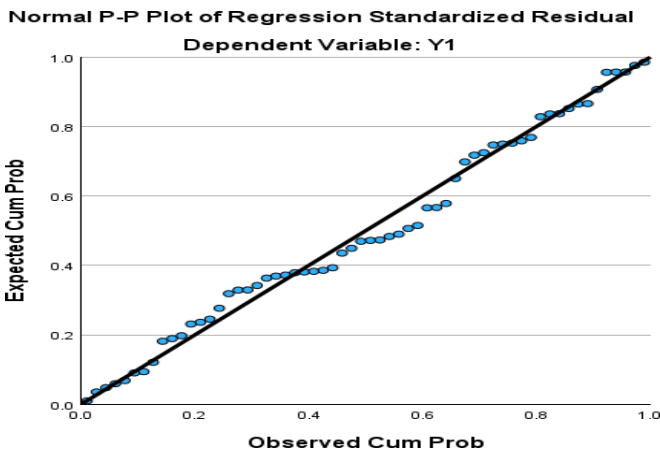
Score 5. Strongly (agree/Good/Like)

RESEARCH RESULTS AND DISCUSSION

1. Partial (Individual) Influence of Education, Wage and Age on labor productivity of the marine fish processing Agroindustry in Ampenan District, Mataram City

Data Normality Test

Based on the SPSS calculation results, it is obtained:



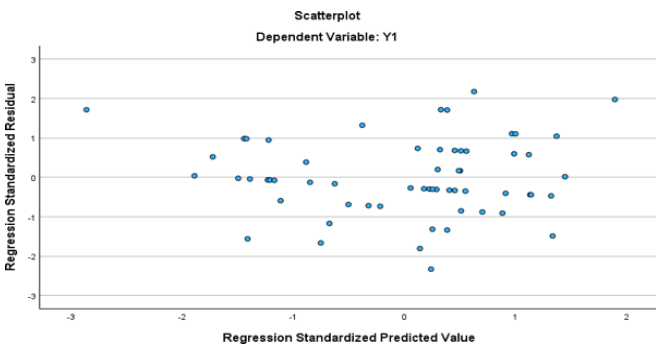
The image above shows that the distribution of points in the normal P-P plot image above approaches and forms a straight line. From the results of this image it can be concluded that the data in this study is normally distributed.

multicollinearity test

Model	Colinarity		Kesimpulan
	Tolerance	VIF	
Pendidikan(X1)	0,935	1,070	Tidak Terdapat Multikolinieritas
Upah(X2)	0,936	1,068	Tidak Terdapat Multikolinieritas
Usia(X3)	0,930	1,075	Tidak Terdapat Multikolinieritas

The table above shows that from the results of calculating the tolerance value there are no independent variables that have a tolerance value <0.10. The tolerance value for each independent variable in this research is 0.930 for the Education Variable (X1), 0.936 for the Wage Variable (X2), and 0.930 for the Age Variable (X3). independent variables in this study have a VIF > 10. The VIF value of each independent variable in this study is 1.070 for the Education Variable (X1), 1.068 for the Wage Variable (X2) and 1.075 for the Age Variable (X3). From the explanation above, it can be concluded that there is no multicollinearity of the independent variables in the regression model

Heteroscedasticity Test



There are no clear patterns and dots in the scatterplot image. The distribution of points in the scatterplot image is seen spreading above and below the number 0 on the Y axis. Thus it can be concluded that the data in this study does not occur heteroscedasticity.

Multiple Linear Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std.Error	Beta		
1	(Constant)	27.178	.951		28.576	<.001
	X1	.063	.013	.518	4.833	<.001
	X2	.024	.019	.135	1.259	.213
	X3	.080	.036	.242	2.249	.028

a. Dependent Variable: Y

The constant value (a) is 27.178, this shows that if the education variables Wage and Age are considered constant (not changing) then the productivity of marine fish processing agro-industry workers is 27,178 per unit

- a. The regression coefficient value on variable
- b. The regression coefficient value on variable
- c. The regression coefficient value on variable

Determination Coefficient Test (R2)

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.632 ^a	.399	.367	.394

a. Predictors: (Constant), X3, X2, X1
b. Dependent Variable: Y

It is known that the coefficient of determination (R2) value obtained from the results of multiple regression testing is 0.367 if the percentage is 36.7%. Thus, it can be concluded that the productivity of marine fish processing agro-industry workers in the Ampenan sub-district, Mataram City, is jointly influenced by education, wages and age by 36.7%. Meanwhile, the remaining 63.3% was influenced by other variables not examined in this research.

Simultaneous Test (f)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	5.767	3	1.922	12.389	<.001 ^b
	Residual	8.689	56	.155		
	Total	14.455	59			

a. Dependent Variable: Y
b. Predictors: (Constant), X3, X2, X1

the results of simultaneous hypothesis testing (f) obtained a calculated f value of 12.389 and a significance value of 0.001. Meanwhile, the f table value in the df (N1) distribution table is 3 and df (N2) is 56 and df (N3) is 59 with a probability value of 5% or 0.05, so the F table value is 2.77. Based on the calculation of the

calculated f value and the table f value above, it can be seen that the calculated f value is 12.389 and the table f value is 2.77. Because the calculated f value > table f value at a significance level of 5%, it can be concluded that education, wages and age simultaneously (together) have a significant influence on the productivity of marine fish processing agro-industry workers in Ampenan District, Mataram City. Thus, the hypothesis states that education, wages and age have a significant effect on the productivity of marine fish processing agro-industry workers in Ampenan District, Mataram City.

Partial t Test

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	27.178	.951		28.576	<.001
	X1	.063	.013	.518	4.833	<.001
	X2	.024	.019	.135	1.259	.213
	X3	.080	.036	.242	2.249	.028

a. Dependent Variable: Y

The results of the partial analysis (t) between the variables education (X1), wages (X2) and age (X3) on the productivity variable (Y) of marine fish processing agro-industry workers in Ampenan District, Mataram City are as follows:

The influence of education on the productivity of marine fish processing agro-industry workers in Ampenan District, Mataram City

1. Based on partial test results (t), the effect of education on the productivity of marine fish processing agro-industry workers in Ampenan District, Mataram City, obtained a t value of 4.833 with a significance level of 0.001 and a t table value of 2.002 at a significance level of 0.05. Because the tcount value is greater than the ttable value and the significance value is smaller than 0.05, it can be concluded that the education variable has a significant influence on the productivity of marine fish processing agroindustry workers in Ampenan District, Mataram City. Thus, the hypothesis which states that work experience partially (individually) influences the productivity of marine fish processing agro-industry workers in Ampenan District, Mataram City is accepted.

2. The effect of wages (X2) on the productivity of marine fish processing agroindustry workers in Ampenan District, Mataram City.

Based on partial test results (t), the effect of wages on the productivity of marine fish processing agroindustry workers in Ampenan District, Mataram City, obtained a calculated t value of 1.529 with a significance level of 0.213 and a t table value of 2.00 at a significance level of 0.05. Because the calculated t value is smaller than the t table value and the significance value is greater than 0.05, it can be concluded that the wage variable (X2) does not have a significant influence on the productivity of marine fish processing agroindustry workers in Ampenan District, Mataram City. Thus, the hypothesis is

that stating that partial (individual) wages have an effect on the productivity of marine fish processing agroindustry workers in Ampenan District, Mataram City, is rejected.

3. The effect of age (X3) on the productivity of sea fish processing agroindustry workers in Ampenan District, Mataram City.

Based on partial test results (t), the effect of age (X3) on the productivity of marine fish processing agro-industry workers in Ampenan District, Mataram City, obtained a t-count value of 2.249 with a significance level of 0.028 and a table value of 2.002 with a significance level of 0.05. Because the calculated t value is greater than the t table value and the significance value is smaller than 0.05, it can be concluded that the age variable (X3) has a significant influence on the productivity of marine fish processing agroindustry workers in Ampenan District, Mataram City. Thus, the hypothesis states that wages are partial (individual) influence on the productivity of marine fish processing agro-industry workers in Ampenan District, Mataram City is accepted

Discussion

1. Based on partial test results (t), the effect of education on the productivity of marine fish processing agroindustry workers in Ampenan District, Mataram City, obtained a t value of 4.833 with a significance level of 0.001 and a t table value of 2.002 at a significance level of 0.05. Because the tcount value is greater than the ttable value and the significance value is smaller than 0.05, it can be concluded that the education variable has an influence on the productivity of agroindustry workers
2. The Influence of Wages on the Productivity of Marine Fish Processing Agro-Industry Workers in Ampenan District, Mataram City. Based on partial test results (t), the influence of wages on the productivity of marine fish processing agro-industry workers in Ampenan District, Mataram City, obtained a t value of 1.529 with a significant level of 0.213 and The t table value obtained was 2.002 at a significance level of 0.05. Because the calculated value is smaller than the t table value and the significance value is greater than 0.05, it can be concluded that the wage variable has no influence on the productivity of sea fish processing agroindustry workers in Ampenan District, Mataram City.
3. Based on partial test results (t), the influence of age on the productivity of sea fish processing agro-industry workers in Ampenan District, Mataram City, obtained a t value of 2,249 with a significance level of 0.028 and a t table value of 2,000 at a significance level of 0.05. Because the calculated value is greater than the ttable value and the significance value is smaller than 0.05, it can be concluded that the wage variable has an influence on the productivity of marine fish processing agroindustry workers in Ampenan District, Mataram City.

Based on the results of the regression equation with a positive coefficient, this means that there is a positive influence between education, wages and age and the productivity of marine fish processing agroindustry workers in Ampenan District, Mataram City. This means that if education, wages and age increase, then

the productivity of marine fish processing agroindustry workers in Ampenan District, Mataram City will also increase. On the other hand, if the variables of education, wages and age decrease, this will result in a decrease in the productivity of marine fish processing agroindustry workers in Ampenan District, Mataram City.

4. Based on the results of simultaneous hypothesis testing (F), the calculated F value was 12.389 and the significance value was 0.001. Meanwhile, the Ftable value in the df (N1) distribution table is 3 and df (N2) is 56 with a probability value of 5% or 0.05, so the Ftable value is 2.77. Based on the calculation of the Fcount value and Ftable value, it can be seen that the Fcount value is 12.389 and the Ftable value is 2.77. Because the Fcount value > Ftable value at the 5% significant level, it can be concluded that education, wages and age simultaneously (together) have a significant influence on the productivity of marine fish processing agro-industry workers in Ampenan District, Mataram City

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