Analysis Of The Effect Of Population, Open Unemployment Rate, And Poverty As The Quality Of Human Resources In Bangkalan Regency

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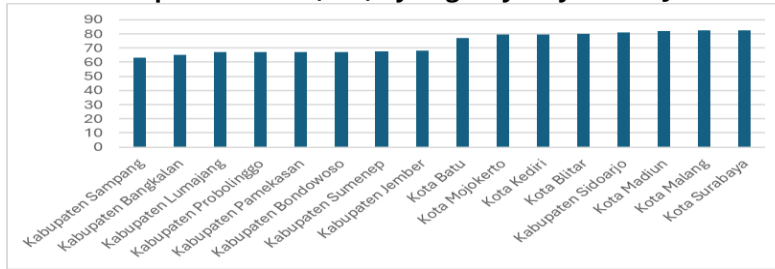
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ABSTRACT

This research aims to analyze the influence of population size, open unemployment rate, and poverty on the quality of human resources as measured by the human development index indicator. The Central Statistics Agency provides secondary data for the period 2010-2022. Multiple linear regression analysis is the method used in this research with the help of the SPSS program. Based on research results, population size and poverty have a significant effect on the quality of human resources in Bangkalan Regency. Meanwhile, the open unemployment rate has no significant effect on the quality of human resources in Bangkalan Regency.

INTRODUCTION

Humans have an important role as resources and supporting factors in the success of development. This success can be determined from the quality of human resources owned by the community. Apart from that, the quality of human resources can be used as a performance benchmark that can be seen from the progress and welfare of the population in a region (Anastashya et al., 2023). Based on the concept of the Central Statistics Agency (2021), the human development index (HDI) indicator is used as a parameter for the level of quality of human resources which can be seen from 3 basic dimensions, namely 1.) health through measuring life expectancy, 2.) education through measurement of expected length of schooling and average length of schooling, 3.) decent living standards from measuring people's purchasing power. In East Java Province, the human development index value in 2022 will be 72.5 (High category 70 ≤ HDI < 80). However, there are still districts and cities in East Java Province that have an average HDI value below 80 or are still in the medium to low category. This shows that there are still residents who are not yet optimal in getting quality education, health and a decent standard of living.

Figure 1 Human Development Index (HDI) By Regency/City In East Java Province In 2022

Sumber : BPS, East Java

Bangkalan Regency is one of the regencies that has the second lowest HDI value in East Java Province, namely 65.05 (BPS, 2022). Bangkalan Regency is one of the centers representing economic development on Madura Island (Sa'adah Nailus, 2022). The strategic location of Bangkalan Regency with the existence of infrastructure, namely access to the Suramadu toll road as a link between Madura Island and Surabaya City, means that Bangkalan Regency has quite a big opportunity to improve economic factors (Habiby, 2020). However, Bangkalan Regency still shows one of the regencies that has the second lowest HDI value after Sampang Regency in East Java Province. The low level of HDI in Bangkalan Regency, especially at the East Java provincial level, is thought to be caused by economic factors including poverty, unemployment and population size. The increasing population can cause population density which makes the quality of human resources higher. Apart from that, population density also increases the unemployment rate due to a lack of competitiveness and causes living standards to fall, resulting in poverty where people cannot meet basic needs and prevents them from getting a decent level of education, health and living standards. So, the aim of this research is to determine the influence of economic factors such as population size, open unemployment rate and poverty on the quality of human resources in Bangkalan Regency.

LITERATURE REVIEW

Human Development Indeks (HDI)

According research (Komariyah et al., 2023) states that basically development is a process of making changes in a better direction, especially for the welfare of society. According to the United National Development Program (UNDP) and BPS, the human development index indicator can be a measure of the population's ability to obtain their rights in the form of access to education and health for development purposes.

Population

According to agung (2019), demography is a tool for studying population changes with systematic calculations and statistics supported by population data regarding changes in number, distribution and composition. Meanwhile, according to BPS, the population is a group of people who reside in their geographic domicile, namely Indonesia, for a period of 6 months or more.

Unemployment

According to Sukirno (2010), unemployment is someone who is part of the workforce and is actively looking for work at a certain wage level, but has not yet found the job they want. Then, according to Ishak (2007), the factors causing unemployment are limited and uneven employment opportunities, the lack of skills possessed by the workforce, low levels of education so that they do not comply with labor market criteria and the government's inadequate efforts in providing training.

Poverty

The World Bank provides poverty criteria based on per capita income. If an individual's per capita income is less than one third of the average national income, they are included in the poor group criteria. Meanwhile, according to the United Nations Development Program (UNDP), poverty is a situation where a person experiences financial shortages and hinders the individual's ability to meet basic needs.

METHODS

This research uses a quantitative research approach carried out in Bangkalan Regency during the period 2010 to 2022. The data used is secondary data from the East Java Central Statistics Agency (BPS). The method used is multiple linear regression analysis to measure the correlation between variables with the help of statistical tools (SPSS program)

IPM = β0 + β1(JP) + β2(TPT) + β3 (KE) + e

Information :

HDI = Human Development Index

JP = Total Population

TPT = Open Unemployment Rate

KE = Poverty

RESULTS

Table 1 Normality Test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		13
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	.25274426
Most Extreme Differences	Absolute	.181
	Positive	.125
	Negative	-.181
Test Statistic		.181
Asymp. Sig. (2-tailed)		.200[c,d]

Source : Output SPSS, 2024

Based on the results of the normality test, it has a significance value of 0.200 or greater than 0.05 (0.200>0.05). So, the regression model on the dependent variable and independent variables has a normal distribution.

Table 2 Autocorrelation Test

Runs Test	
	Unstandardized Residual
Test Value[a]	.02888
Cases < Test Value	6
Cases >= Test Value	7
Total Cases	13
Number of Runs	9
Z	.606
Asymp. Sig. (2-tailed)	.545

Source : Output SPSS, 2024

Based on the results of the Autocorrelation test, the Durbin-Watson (DW) or DW test value is in the area of doubt, namely between 4-du and 4-dL. So, a run test is used to continue and ensure there is no autocorrelation. Asymp value. Sig. (2-tailed) 0.0545 > 0.05 indicates that the regression model does not have autocorrelation.

Table 3 Multicolliniearity Test

Model	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
Population	.186	5.372
Open Unemployment Rate	.281	3.556
Poverty	.389	2.572

Source : Output SPSS, 2024

Based on the results of the multicollinearity test on three independent variables, namely population, Open Unemployment Rate, and poverty, it has a tolerance value of >0.10 and VIF <10. So, in the regression model there is no multicollinearity.

Table 4 Heteroscedasticity Test

Model	Sig.
(Constant)	.350
Population	.288
Open Unemployment Rate	.571
Poverty	.509
a. Dependent Variable : Abs Res	

Source : Output SPSS, 2024

Based on the results of the heteroscedasticity test on three independent variables with the residual absolute variable having a significance value of >0.05. So, the regression model does not experience heteroscedasticity.

Table 5 Coefficient of Determination Test

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.994	.989	.985	.29184
a. Predictors: (Constant), Poverty, Unemployment Rate, Total Population				

Based on the results of the coefficient of determination test (R^2) has a value of 0.989, which means that independent variables such as population, Open Unemployment Rate, and poverty are able to explain the dependent variable, namely the quality of human resources, by 98.9%. Then, the remaining 1.1% (100% - 98.9%) is explained by other variables not included in this study.

Table 6 F Test

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	66.470	3	22.157	260.137	.000
Residual	.767	9	.085		
Total	67.237	12			

Source : Data Processed, 2024

Table 6 shows that the calculated F value is 260.137 and the table F value = F(k; n-k-1) = F(3; 13-3-1) = F(3; 9) = 3.86. Furthermore, the significance result is 0.000<0.05. It can be concluded, H0 is rejected and H1 is accepted, namely the independent variable has a simultaneous influence on the dependent variable.

Table 7 t Test

Variabel	T hitung	T tabel	Sig.
Population (X1)	9.238	2.262	0,000
Open Unemployment Rate (X2)	-2.218	2.262	0.054
Poverty (X3)	-7.437	2.262	0.000

Source : Data Processed, 2024

In table 7 the variables population size (X1) and poverty (X3) have a partial influence on the quality of human resources. This is shown by the results of T count > T table and a significance value <0.05. Meanwhile, the TPT variable does not have a partial influence on the quality of human resources.

DISCUSSION

Analysis Of The Effect Of Population On The Quality Of Human Resources In Bangkalan Regency

Based on the results of statistical tests, it can be shown that population size has a significant effect on the quality of human resources as measured by the human development index. The findings of this research are in accordance with research by (Zakaria, 2018) and (Nurnaningsih et al., 2019). The high population can expand opportunities to produce higher quality human resources provided that access to education and health is met to encourage development.

Analysis Of The Effect Of Open Unemployment Rates On The Quality Of Human Resources In Bangkalan Regency

The results of statistical tests show that the level of open unemployment does not affect the quality of human resources as measured by the human development index. This is in accordance with research (Dewi K et al., 2021) and (Khristina Kiha et al., 2021). The highest unemployment rate is for graduates of higher education such as vocational school/high school/college. Meanwhile, the lowest unemployment rate is among elementary school graduates, the majority of whom already work in the informal sector such as family workers, laborers, or own their own businesses (BPS, 2023).

Analysis Of The Effect Of Poverty On The Quality Of Human Resources In Bangkalan Regency

Based on the results of statistical tests, it can be shown that poverty has an influence on the quality of human resources as measured by the human development index. The findings of this research are in accordance with research (Komariyah et al., 2023), (Abie Rachman Muhamad & Dewi Rahmi, 2023), and (Nurnaningsih et al., 2019). Poverty can start from a decrease in purchasing power, causing a person to be unable to fulfill basic needs to limited access to good education, adequate health and a decent standard of living.

CONCLUSION

From the results of the research above, during the period 2010 to 2022 the variables of population and poverty have a significant effect on the quality of human resources. However, the

open unemployment rate variable does not have a significant influence on the quality of human resources in Bangkalan Regency.

SUGGESTION

The author's hope for the Bangkalan Regency government is that it can support and participate in improving the quality of human resources through increasing access to education and health. So, in the future, development success can be achieved well and it will become a superior district.

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