

# THE EFFECT OF EDUCATION AND HEALTH LEVEL ON POVERTY IN GORONTALO PROVINCE

*by Fahrudin Zain Olilingo*

---

**Submission date:** 10-May-2023 01:26AM (UTC+0800)

**Submission ID:** 2088736628

**File name:** 1645-Article\_Text-3162-1-10-20211227.pdf (130.91K)

**Word count:** 2650

**Character count:** 14270



## THE EFFECT OF EDUCATION AND HEALTH LEVEL ON POVERTY IN GORONTALO PROVINCE

Isna Ainun Batalipu<sup>1</sup>, Fahrudin Zain Olilingo<sup>2</sup>

Faculty of Economics, Department of Economics, State University of Gorontalo

Corresponding Author: [isnaainunbatalipu@gmail.com](mailto:isnaainunbatalipu@gmail.com)

| Article history:  | Abstract:  |
|---|--|
| <b>Received:</b> 22 <sup>nd</sup> October 2021<br><b>Accepted:</b> 21 <sup>st</sup> November 2021<br><b>Published:</b> 27 <sup>th</sup> December 2021 | <b>5</b><br>This study aims to determine the effect of Education and Health Levels partially and simultaneously on poverty in Gorontalo Province. The method used in this research is multiple linear analysis method using panel data. The data used is secondary data in the form of data from 6 regencies/cities (Boalemo Regency, Gorontalo Regency, Pohuwato Regency, Bone Bolango Regency, North Gorontalo Regency, Gorontalo City) sourced from the Central Statistics Agency (BPS) in the 2016-2020 observation period. , namely data on education level (pure enrollment rate, school enrollment rate, average length of schooling), health (life expectancy), and poverty in Gorontalo Province. The collected data were analyzed using classical assumption test and multiple linear regression. The results of this study indicate that partially the level of education which is seen from the variables of the Pure Participation Rate (APM) and the School Participation Rate (APS) have a positive and insignificant effect on poverty in Gorontalo Province, meaning that if the NER and APS increase, poverty will also increase. While the variable Average Length of School (RLS) has a negative and significant effect on poverty in Gorontalo Province, meaning that if the RLS increases, poverty will decrease. Health as seen from the Life Expectancy Rate (AHH) has a negative and significant effect on poverty in Gorontalo Province, meaning that if the AHH increases, poverty will decrease. Simultaneously, the level of education and health has a negative and significant effect on poverty in Gorontalo Province, meaning that if the level of education and health increases together, it will reduce poverty. |

**Keywords:** Education Level, Health, Poverty.

### INTRODUCTION

Poverty has become a topic that is discussed and debated in various national and international forums, even though poverty has existed for hundreds of years. The facts show that the development that has been carried out has not been able to reduce the number of poor people in the world, especially developing countries. Indonesia is one of the developing countries, there are still many provinces where the poverty rate is quite high, one of which is Gorontalo Province. Based on data recorded at Bappenas, Gorontalo Province is included in the 5 poorest provinces in Indonesia. Not only because the problem of poverty has existed for a long time, but until now the problem of poverty has not been resolved. Even now the symptoms are increasing along with the various crises that are still being faced by the Indonesian nation.

In this study, to improve the problem of poverty in Gorontalo Province seen from the level of education and quality of health. The level of education can be used as a reference to determine the level of welfare of the population. One of the conditions that affect poverty is the low quality of human resources, which occurs due to low levels of education. The quality of human resources is very influential on development, because humans are actors and the goal of development, is also the target of development. Therefore, improving the quality of human resources is a very important part of development.

In line with education, health is an investment that has an important role when supporting economic development with poverty reduction efforts. Poverty and health have links that are connected to each other. Generally, they whose lives are below the poverty line are susceptible to disease. This is due to an unhealthy lifestyle, to the difficulty of getting food that has high quality and nutritious. Meanwhile, for people who have a good level of health, it can reduce the poverty rate. Lack of healthy nutritious food and having diseases can affect children's lives such as reading, writing, arithmetic, and logical thinking, but in the future it can also have a bad influence on the opportunity to get a job or do work and reduce productivity in activities, especially work. Because healthy people can be more

productive, the cost for treatment can be substituted for other needs, for example to buy basic needs, for example to buy basic needs, a more positive way of life, and a lower death rate.

According to Nurkse (in Mayasari, 2020: 23-25), Poverty is a series of forces that influence each other in such a way that it creates a situation in which a country will remain poor and continue to suffer many difficulties to reach a higher level of development. Nurkse in his theory argues about being a basis that explains the importance of implementing a balanced development strategy in developing countries. In his theory, Nurkse argues that poverty is not only caused by the absence of development in the past, but also because it presents obstacles to development in the future. According to Samuelson and Nordhaus (in Rismawati, 2018: 25-26), the causes of poor people in low-income countries occur due to two main things, namely low levels of health and slow improvement in the quality of education. Therefore, the first way the government does is to improve health and nutrition, eradicate diseases, eradicate illiteracy, improve the quality of education, and improve the skills of the population. This is a way to improve the quality of Human Resources (HR). If some of these have been carried out immediately, then the community can use capital more effectively, by absorbing new technologies and learning from their mistakes. If this is supported by the availability of adequate public facilities, it can immediately overcome poverty. Therefore, low levels of health, level of education (including skills), and limited public facilities are the causes of poverty. This study aims to determine how much influence the level of education and health has on poverty in the province of Gorontalo.

## RESEARCH METHODS

This research uses approach quantitative data using panel data within a certain period of time (time series). The variables in this study are: (1) Variable X (independent variable), namely poverty. (2) Variable Y (dependent variable) is the level of education which is divided into net enrollment rate, school participation rate, average length of schooling and health, namely life expectancy. The location of this research is in Gorontalo Province which consists of 5 districts 1 city, namely Gorontalo Regency, Boalemo Regency, North Gorontalo Regency, Bone Bolango Regency, Pohuwato Regency and Gorontalo City. The data used in this study is panel data sourced from the website of the Central Statistics Agency of Gorontalo Province during 2016-2020. In estimating the regression model with panel data, There are three approaches to be chosen, namely Random Effect Model, Fixed Effect Model, and Common Effect Model. After selecting the right model, the next step is to test the classical assumptions and test the hypothesis.

## RESEARCH RESULTS

Based on the Chow test and Hausman test, the right panel data regression model for interpreting panel data regression to answer the research objectives is the Fixed Effect Model (FEM) model. The estimation results of the FEM model are presented in the following table:

**Table 1: Estimation Results (Fixed Effect Model)**

| Dependent Variable: POV                 |             |            |              |        |
|---|-------------|------------|--------------|--------|
| Samples: 2016 2020                      |             |            |              |        |
| Periods included: 5                     |             |            |              |        |
| Cross-sections included: 6              |             |            |              |        |
| Total panel (balanced) observations: 30 |             |            |              |        |
| Variable                                | Coefficient | Std. Error | t-Statistics | Prob.  |
| APM                                     | 0.099748    | 0.059477   | 1.677084     | 0.1091 |
| APS                                     | 0.234694    | 0.183785   | 1.277001     | 0.2162 |
| RLS                                     | -0.048538   | 0.010723   | -4.526429    | 0.0002 |
| AHH                                     | -0.015012   | 0.004282   | -3.506035    | 0.0022 |
| C                                       | 1.259644    | 0.229289   | 5.493698     | 0.0000 |

Source: Processed Eviews 9 software

A regression model is called a good model if the model can meet the classical assumptions, namely normality and multicollinearity. The classical assumption testing process using Eviews 9 is carried out simultaneously with the regression test process so that the steps use the same working steps as the regression test.

The results of the classical assumption test: 1) the results of the normality test based on the Jarque-Bera Probability value is 0.968490. This means that in this study the data is normally distributed, because  $0.968490 > 0.05$  (5%). 2) the results of the multicollinearity test for the APM variable are 1.00000, meaning that the APM variable has multicollinearity problems because the results are more than 0.8. While the APS variable is 0.424169, the RLS variable is 0.003704, the AHH variable is -0.303371, meaning that the three variables are free from multicollinearity problems because the results are less than 0.8.

Hypothesis test results: 1) Partial test (t) of the APM variable of  $0.1091 > 0.05$ , it means that it has no significant effect. The APS variable is  $0.2162 > 0.05$ , meaning that it has no significant effect. The RLS variable is  $0.0002 < 0.05$ , meaning that it has a significant effect. The AHH variable is  $0.0022 < 0.05$ , meaning that it has a significant effect. 2) Simultaneous test (f) based on The Prob (F-statistic) or p-value is  $0.0000 < 0.05$ , meaning that the APM, APS, RLS, and AHH variables simultaneously have a significant effect on poverty in Gorontalo Province. 3) The Coefficient of Determination Test (R2) is seen from the R-Squared (R2) value of 0.992845, meaning that variations in all independent

variables (APM, APS, RLS, and AHH) can affect the dependent variable (Poverty) by 99%. While the remaining 1% is influenced by other variables outside the study.

## DISCUSSION

Through education one can improve the quality of human resources in every society. With the education they get, humans can adjust their way of thinking and make developments in increasing their potential so that they can take part in life. A good education is a provision in the face of competition in this world which is filled with challenges. Education is often seen as an investment for the future for the community so that they are able to face competition in modern times like now. Tobing (in Rismawati, 2018: 33) suggests that people with higher education, measured by the length of time to school, will have better jobs and wages than people with lower education. If wages are a reflection of productivity, the more people who have higher education, the higher their productivity and national economic results will be.

The success of the illiteracy eradication program can make an individual more confident and able to compete in order to get out of backwardness and poverty. So it can be understood that education can help the development of a region out of underdevelopment. A low level of education can result in limited ability to develop oneself, making it difficult to find jobs to be entered. In the competition for available jobs, it is largely determined by the level of education. The low level of education will limit the ability to find and take advantage of opportunities to get a job.

Health is an investment that has an important role in supporting economic development with countermeasures poverty. Poverty and health have links that are connected to each other. In general, those who live below the poverty line are susceptible to disease. This is due to a bad lifestyle, to difficulties get food that has high quality and nutritious. Meanwhile, for people who have a good level of health, it can reduce the poverty rate. Because healthy people can be more productive, the cost for treatment can be substituted for other needs for example to buy basic needs, life habits become more positive, higher life expectancy, and lower death rate.

Health is one of the variables of people's welfare that can describe the level of public health related to the quality of life. Improvements in health services for the poor are an impetus to accelerate poverty alleviation. A healthy population is one of the assets to make the nation's development successful because when the population is healthy, development is expected to run smoothly. Paying attention to health is very important for everyone. Health is a valuable factor in life, with a healthy body can ease in carrying out various activities including work. Basically, health problems are things that are vulnerable to be faced by the poor. This happens because of their limited economy in an effort to make themselves healthy and meet their individual needs. The level of health will greatly affect the level of community welfare. According to Paul Hoffman in Rismawati (2018), everyone can know a country that is still underdeveloped when they see it. Countries marked by poverty, if rarely have industry, crowded with beggars, hospitals and institutions of higher education are very few, the government has not been able to provide adequate services, most of the population is illiterate.

14

## CONCLUSION

Based on the results of data processing on the Effect of Education and Health Levels on Poverty in Gorontalo Province, it can be concluded: 1) The effect of education level on poverty is seen from the Pure Participation Rate (APM), School Participation Rate (APS), and Average Years of Schooling (RLS). The results showed that the APM and APS variables had a positive and insignificant effect on poverty in Gorontalo Province, meaning that if the APM and APS increased, poverty would also increase. poverty will decrease. 2) The Effect of Health on Poverty in terms of Life Expectancy (AHH). The results showed that AHH had a negative and significant effect on poverty in Gorontalo Province, meaning that if AHH increased, poverty would decrease. 3) Education and Health levels together have a negative and significant effect on poverty in Gorontalo Province, meaning that if the variables of education and health levels increase simultaneously, poverty will decrease.

## REFERENCE

1. Adriani and Wahyudi, 2015. The Effect of Education, Health and Income Levels on Poverty in Jambi Province. Scientific journals Jambi Batanghari University, 15(2): 47-51.
2. Arsyad, L. 2016. Development Economics. Fifth Edition. STIE YKPN. Yogyakarta.
3. Azizah, et al. 2018. The Effect of Education, Per capita Income and Population on Poverty in East Java Province. Journal of Economics, 2(1): 167-180.
4. BPS, 2020. Life Expectancy. Gorontalo. BPS.
5. \_\_\_\_, 2020. Net Participation Rate. Gorontalo. BPS.
6. \_\_\_\_, 2020. School Enrollment Rate. Gorontalo. BPS.
7. \_\_\_\_, 2020. Education Indicators of Gorontalo Province. ©Central Bureau of Statistics Gorontalo Province. Gorontalo.
8. \_\_\_\_, 2020. Percentage of Total Population in Gorontalo Province in Percent. Gorontalo. BPS.
9. \_\_\_\_, 2020. Percentage of Poor Population in Gorontalo Province in Percent. Gorontalo. BPS.
10. \_\_\_\_, 2020. Average Length of Schooling. Gorontalo. BPS.
11. Fahmi, Ali. 2019. Education and Health Factors Affect Poverty in Jambi Province. Journal of Development. 4(1), 89-121.



12. Irhamni. 2017. The Effect of Population, Unemployment, and Government Expenditure on Poverty in Indonesia in 1986-2015. Essay. Faculty of Economics. Yogyakarta State University. Yogyakarta.
13. Maulidah and Soedjoto. 2015. The Effect of Education Level, Income and Consumption on the Number of Poor People in East Java Province. *Journal of Educational Economics and Entrepreneurship*. 3(1) : 227-240.
14. Mayasari, W. 2020. The Influence of Health Level, Population and Education Level on Poverty in Tanggamus Regency in the Perspective of Islamic Economics 2009-2018. Essay. faculty of Economics and Islamic Business. Raden Intan State Islamic University, Lampung. Lampung.
15. Priyono. 2016. Quantitative Research Methods. Sidoarjo. Zifatama Publishing.
16. Rapanna, Patta and Zulfikry Sukarno. 2017. Development Economics. Makassar. Sah Media CV.
17. Rismawati, 2018. The Effect of Population, Education Level and Health on Poverty Rates in Gowa Regency. Essay.
18. Suryandari, AN 2017. The Effect of Economic Growth, Education, and Health on Poverty Levels in the Province of the Special Region of Yogyakarta in 2004-2014. Essay. Faculty of Economics. Yogyakarta State University. Yogyakarta.

# THE EFFECT OF EDUCATION AND HEALTH LEVEL ON POVERTY IN GORONTALO PROVINCE

## ORIGINALITY REPORT

14%

SIMILARITY INDEX

4%

INTERNET SOURCES

8%

PUBLICATIONS

8%

STUDENT PAPERS

## PRIMARY SOURCES

|   |  |    |
|---|--|----|
| 1 | Submitted to Massey University<br>Student Paper  | 1% |
| 2 | <a href="http://eprints.kwikkiangie.ac.id">eprints.kwikkiangie.ac.id</a><br>Internet Source  | 1% |
| 3 | Submitted to University of California, Los Angeles<br>Student Paper  | 1% |
| 4 | Submitted to School of Business and Management ITB<br>Student Paper  | 1% |
| 5 | <a href="http://www.sciencegate.app">www.sciencegate.app</a><br>Internet Source  | 1% |
| 6 | "The Effect In Changes of Persian Gulf Country Crude Oil Production, Usa Crude Oil Production, OECD Country Oil Consumption To The World Oil Price Changes", International Journal of Management and Humanities, 2019<br>Publication | 1% |
| 7 | Submitted to King's Own Institute<br>Student Paper   |    |

1 %

8

Paidi Hidayat, Raina Linda Sari. "Linkage between financial inclusion and Indonesian welfare: a recent evidence", Cogent Business & Management, 2022

Publication

1 %

9

Submitted to University of Technology, Sydney

Student Paper

1 %

10

Edy Karno, Syahrul Syahrul. "Community Participation at the Basic Education Level in Wakatobi Regency", Shautut Tarbiyah, 2020

Publication

1 %

11

[www.rajournals.in](http://www.rajournals.in)

Internet Source

1 %

12

Mohamad Jahja, Yuyu Indriati Arifin, Andi Muhammad Nur Fitrah Syamsul, Fajar Putra Mobiliu et al. "Approaches to sustain microhydro power plants (MHPP) operation in rural areas of Gorontalo Regency, Indonesia", AIP Publishing, 2020

Publication

1 %

13

[adoc.tips](http://adoc.tips)

Internet Source

1 %

14

Lusi Sartika, Fatimah Fatimah, Diah Isnaini Asiati. "The Effect of Competence, Job

< 1 %

Placement and Job Satisfaction on Employee Performance at the Regional Office VII BKN", International Journal of Business, Management and Economics, 2022

Publication

15

[www.eajournals.org](http://www.eajournals.org)

Internet Source

<1 %

16

Agus Tri Basuki, Yunastiti Purwaningsih, Mulyanto, A. M. Susilo. "THE ROLE OF LOCAL GOVERNMENT EXPENDITURE ON ECONOMIC GROWTH: A REVIEW OF PANEL DATA IN INDONESIA", Humanities & Social Sciences Reviews, 2019

Publication

<1 %

Exclude quotes On

Exclude matches Off

Exclude bibliography On