THE INFLUENCE OF EDUCATION, HEALTH, POVERTY, AND UNEMPLOYMENT ON ECONOMIC GROWTH THROUGH THE HDI IN SOUTH SUMATERA 2017-2021

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Abstract
Southern Sumatra consists of the provinces of South Sumatra, Lampung, Jambi, Bengkulu, and the Bangka-Belitung Islands. These five provinces have the fastest recovering economic growth compared to other regions in Indonesia and the highest economic growth recovery in Sumatra from 2020-2021 dibandingkan dengan. Therefore, this study aims to analyze what factors influence economic growth in 60 cities/districts in Southern Sumatra. In this study, five independent variables, one mediating variable, and one dependent variable were used, which included health, education, poverty, unemployment, HDI, and economic growth in 60 cities/districts throughout South Sumatra for five years, with a total of 1,200 samples. This study used path analysis with PLS 3.0 software. The results showed that education and poverty did not directly affect economic growth. Meanwhile, health and unemployment directly and significantly affect economic growth. The test results indirectly/through the Human Growth Index show that Education, Health, and Unemployment indirectly affect economic growth. Meanwhile, poverty has an indirect effect on economic growth. Interestingly, in this study, there was a significant shift in numbers from direct testing to indirect testing/mediated by the Human Growth Index. In particular, if tested directly, educational variables that have no effect become influential and significant for economic growth through the Human Growth Index.

Key Words: Factors, Economic Growth, Southern Sumatra

INTRODUCTION
Economic growth is one of the essential elements for Indonesia to become a developed country. One instrument that can comprehensively measure economic growth is GDP. The Central Bureau of Statistics noted that Indonesia's economic growth in 2017 grew at 5.07%, 5.17% in 2018, and 5.02% year, fell to -2.07% in 2020 so that it shot up to 3.69% in 2021, measured through constant price GDP. In the regional order, the economic growth of a region is measured through continuous price GRDP (Province and Figures, 2022).

In line with the National GDP, the GRDP in almost every province in Indonesia has the same pattern, namely increasing in 2017, 2018 & 2019, declining in 2020, and shooting back in 2021. Unlike other provinces, Southern Sumatra (SUMBAGSEL) includes South Sumatra, Lampung, Jambi, Bengkulu, and the Bangka-Belitung Islands, have GRDP that recovers more quickly than other provinces in Indonesia as well as being the five provinces that have the highest GRDP growth recovery in Sumatra (Province and Figures, 2022).
Economic growth is often related to human development. According to UNDP, economic development determines human development (Baeti, 2013). Several studies have shown factors that can affect economic growth and human development, including Health, education, poverty, and unemployment—several studies regarding health show different results. According to (Handayani, Bendesa and Yuliani, 2016) and (Dewi, 2017) and, (Akbar, Awom and Bauw, 2021), Health has no positive effect on economic growth. Conversely, according to (Muda, 2019), Health positively affects economic growth. That is, the more people infected with the disease will affect work productivity, efficiency, and the vitality of the social activities of the workforce.

The condition of human capital can be measured by Education (Maulana, Pitoyo and Alfana, 2022). Several researchers also show a different attitude toward educational research. According to (Dewi, 2017) and (Handayani, Bendesa and Yuliarmi, 2016), Education has a positive effect on economic growth. Thus, the higher the education rate, the higher the quality of Education capable of forming a professional workforce to boost economic growth.

Several researchers (Manik, 2019), (Rahmadi et al., 2019); and, (Mataheurilla and Rachmawati, 2021) say that poverty does not have a direct effect on economic growth. That is, the higher percentage of poor people who eat will not significantly impact a region's economic growth. This study does not align with the research (Novriansyah, 2018) The conclusion is that poverty significantly influences economic growth in Gorontalo.

In line with poverty, on the open unemployment rate variable, researchers have the same view. The results of research (Arifin and Fadlan, 2021) and (Prasmethi, 2013) show that the open unemployment rate has a positive but insignificant effect on economic growth. When the open unemployment rate is high, economic growth will decline.

UNDP believes that the HDI (Human Development Index) is one of the essential suggestions for improving quality which will have good implications for economic growth (Baeti, 2013) This is in line with several studies that have shown and (Prasetyo and Dinarjito, 2021) that HDI has a significant influence positive on economic growth. If the HDI is high, economic growth will also be high. According to the United Nations, several factors influencing HDI are Education, health, and welfare (Izzah, 2015) In line with this, BPS also revealed that the factors that affect HDI are Health, Education , and spending per capita (Province and Figures, 2022).

RESEARCH METHODS

The type of research used in this research is quantitative research using a path analysis model. This research method is associatively using four independent variables, one dependent variable, and one intervening variable. Source of data used using secondary data. In this study, data collection was carried out using literature and manuals. The data used in this study were obtained from the Central Bureau of Statistics from 2017-2021. The population in this study was 60 cities/regencies in 5 provinces in Southern Sumatra, including South Sumatra, Lampung, Jambi, Bengkulu, and the Bangka Belitung Islands. The sample in this study is the annual report on Health (Health), Education (Education), Poverty, and Unemployment (Open Unemployment Rate) in 5 provinces in Southern Sumatra from 2017-2021, with a total of 2,100 data. Data analysis used the Partial Least Square (PLS) method with the help of the SmartPLS 3 program with the following model and hypothesis.
Note:
1. E : Education
2. H : Health
3. P : Poverty
4. HDI : Human Development Index
5. EG : Economic Growth

Hypothesis:
1. Relationship of Health to Economic Growth
2. Relationship between Education and Economic Growth
3. The Relationship of Poverty to Economic Growth
4. The Relationship between Unemployment and Economic Growth
5. Relationship of Health to HDI
6. Relationship of Education to HDI
7. The Relationship of Poverty to HDI
8. Relation of Unemployment to HDI
9. HDI Relationship to Economic Growth
10. The Relationship of Health to Economic Growth Through HDI
11. The Relationship Education to Economic Growth Through HDI
12. The Relationship of Poverty to Economic Growth through HDI
13. The Relationship of Unemployment to Economic Growth Through HDI.

HYPOTHESIS DEVELOPMENT
Relationship of Health to Economic Growth

Based on research conducted by (Handayani, Bendesa and Yuliarmi, 2016) and (Dewi, 2017) Health has no positive effect on economic growth. This indicates that public Health only contributes a little to increase the economic growth of a region. In line with Handayani's research, research (Marquez-Ramos and Mourelle, 2019) and (Akbar, Awom and Bauw, 2021) show the results that Health also does not have a positive effect on the economic growth of an area because there are still many other factors that have not been fulfilled such as development inequality, inequality income distribution, and so on. In line with this, according to (M. Odhiambo, 2020) economic growth has a positive effect on Health. Conversely, according to (Muda, 2019) Health positively affects economic growth. That is, the more people who are infected with the disease will affect work
productivity, efficiency, and the vitality of the social activities of the workforce. In line with research (Muda, 2019).

Relationship between Education and Economic Growth

Referring to research (Ragoobur and Narsoo, 2022), (Handayani, Bendesa and Yuliarmi, 2016) and (Dewi, 2017) that Education has a positive effect on Economic Growth. Thus, the higher the education rate, the higher the quality of Education capable of forming a professional workforce to boost economic growth. In line with this opinion, (Li and Liang, 2010) also said that Education has a positive and significant effect on increasing economic growth in Singapore. The highest expected data on length of schooling and average length are in Bengkulu province, with 13.57%-13.67% and 8.47%-8.87%, and the lowest percentages for the Bangka Belitung Islands, with percentages of 11.83-12.17 and 7.68-8.08 (Province and Figures, 2022) There is a significant discrepancy, namely around 5.10% in the length of school expectation data and 0.8% in the Education data. This indicates differences in the quality of human resources from one region to another. Therefore, a larger government budget for Education can increase economic growth (Silva, Simoes and Andrade, 2018) and (Adeniyi, Ajayi and Adeleji, 2021).

The Relationship of Poverty to Economic Growth

Several researchers (Manik, 2019), (Rahmadi et al., 2019) (Mataheurilla and Rachmawati, 2021) say that poverty hurts economic growth. That is, the higher percentage of poor people who eat will not significantly impact a region's economic growth. Countries with good economic growth do not necessarily reduce poverty (Akoum, 2008). This is different from some of the research above (Novriansyah, 2018) in his research showing that poverty significantly influences economic growth in Gorontalo.

The Relationship between Unemployment and Economic Growth

In line with Poverty, researchers have the same view on the variable Unemployment. The results of research (Arifin and Fadlan, 2021) (Novriansyah, 2018) and (Prasmethi, 2013) show that the open unemployment rate has a negative but insignificant effect on economic growth. When the open unemployment rate is high, economic growth will decline.

Relationship of Health to HDI

The Central Statistics Agency/BPS (Province and Figures, 2022) notes in the 2021 South Sumatra Human Development Index publication that four factors affect the Human Development Index. Two of them, Health and Education.

The Relationship of Poverty to HDI

Based on research from (Mirza, 2012) and (Suradi, 2017) Poverty has a negative influence on the Human Development Index. This shows that if the Poverty ratio decreases by 1%, it will increase the Human Development Index. This is because, in general, the poor spend more of their energy and time on essential fulfillment. They are interested in something other than involving themselves in activities directly related to meeting essential needs. In the end, this can have good implications for economic growth.

Relation of Unemployment to HDI
Research (Baeti, 2013) shows that unemployment negatively and significantly influences the Human Development Index in Central Java from 2007-2011. The results of this study indicate that high unemployment will result in reduced community prosperity. In contrast to the research above, the study's results (Primandari, 2019) show that unemployment positively affects HDI in South Sumatra Province from 2004-2018. This shows that if unemployment increases, the HDI will also increase because people will compete to increase their potential to find work, which will have good implications for HDI.

**HDI Relationship to Economic Growth**

UNDP believes that the HDI (Human Development Index) is one of the essential suggestions for improving the quality of human resources, which will have good implications for economic growth (Baeti, 2013) This is in line with several studies that have shown (Izzah, 2015) and (Prasetyo and Dinarjito, 2021) that the HDI positively influences economic growth. If the HDI is high, economic growth will also be high. In line with this (Neeliah and Soetanah, 2016) argues that human development significantly influences economic growth in Mauritius. In addition (Duan et al., 2022) and(Sehrawat and Giiri, 2017), Human Development positively influences Economic Growth in a certain period, especially in India and the BRICS.

**The Relationship of Health and Education to Economic Growth Through HDI**

The Central Statistics Agency/BPS (Province and Figures, 2022) notes in the publication of the 2021 South Sumatra Human Development Index that there are four factors that affect the Human Development Index. Two of them, Health and Education.

**The Relationship of Poverty to Economic Growth through HDI**

Several studies show the direct effect of Poverty and Unemployment on Economic Growth. According to(Manik, 2019), (Rahmadi et al., 2019) and (Mataheurilla and Rachmawati, 2021), there is a direct negative effect of poverty on economic growth and (Baeti, 2013) an adverse effect of poverty on HDI. In the writer's opinion, the poverty variable's indirect effect on HDI and economic growth is possible.

**The Relationship of Unemployment to Economic Growth Through HDI**

In contrast to poverty, the variable Unemployment shows more varied results. According (Primandari, 2019) shows that Unemployment has a positive influence on HDI in South Sumatra Province from 2004-2018 and a negative direct effect on economic growth(Arifin and Fadlan, 2021), (Novriansyah, 2018) and (Prasmethi, 2013) Even though the results of previous research are minimal, the authors assume there is a possibility of a shift in values if the unemployment variable is tested by Economic Growth and is mediated by HDI. Due to the direct influence of HDI on Economic Growth and the direct effect of Unemployment on HDI, which is quite strong.

**RESULTS AND DISCUSSION**
H1: Health has a positive effect on economic growth

Based on the table above, it can be concluded that health directly affects economic growth with a path coefficient value of 0.331, which has a positive direction. The table above shows a P-Value of 0.000 < 0.05 with a t-statistic value of 7.284 > 1.96. This shows that health has a positive and significant influence on economic growth. However, this contradicts (Handayani, Bendesa and Yuliarmi, 2016), (Dewi, 2017) and (Marquez-Ramos and Mourelle, 2019) because there are still many other factors that have
not been met, such as development inequality and inequality in income distribution. This research is in line with (Akbar, Awom and Bauw, 2021) that health positively affects economic growth. That is, the more people infected with the disease will affect work productivity, efficiency, and the vitality of the social activities of the workforce. The author suspects differences in the indicators used in the health variable, such as the community variable with health complaints and life expectancy. So the author's perspective to obtain a different color of results from some of the studies above is booming, and hypothesis 1 can be accepted.

H2: Education Has a Positive Impact on Economic Growth

Based on the table above results, Education does not affect economic growth. This is indicated by the path coefficient value of 0.115, which has a positive direction. In addition, the P-Values were 0.260 > 0.050, and the T-statistics were 1.127 < 1.96. This indicates that Education does not influence economic growth. The results from the table above are not in line with research (Ragoobur and Narsoo, 2022), (Handayani, Bendesa and Yuliarmi, 2016), (Dewi, 2017), and (Li and Liang, 2010) which show that Education has a positive influence on Growth Economy. The higher the education rate, the better the quality of Education that can form a professional workforce to boost economic growth. Thus hypothesis 2 in this study was rejected.

H3: Poverty has a positive effect on economic growth

The table above shows that the poverty variable does not affect economic growth. This can be seen from the path coefficient value of 0.065, which has a positive direction. The results also show a p-value of 0.291 > 0.05 and a t-statistic of 0.291 <1.96. Thus poverty does not influence Economic Growth. This is in line with research (Manik, 2019), (Rahmadi et al., 2019), (Mataheurilla and Rachmawati, 2021) That is, the higher percentage of poor people who eat will not significantly impact a region's economic growth. Thus, hypothesis 3 can be rejected.

H4: Unemployment has a positive effect on economic growth

Based on the results of the research above, it can be concluded that unemployment has a positive effect on economic growth. It can be seen from the path coefficient value of 0.170 in a positive direction. In addition, the p-values are 0.050 = 0.050 and the t-statistics are 1.96 = 1.96. This shows that unemployment has a positive effect on economic growth. This is contrary to research (Arifin and Fadlan, 2021), (Novriansyah, 2018), and (Prasmethi, 2013) showing that the open unemployment rate has a negative but not significant effect on economic growth. The author suspects this is because the more people are unemployed, the higher and tighter the competition in getting a job. So that people are forced to increase their potential. Thus the fourth hypothesis can be accepted.

H5: The positive effect of Health on HDI

Based on the results above, Health has a negative influence on HDI. This is indicated by the path coefficient value of 0.311, which has a positive direction. In addition, the p-values in this hypothesis are 0.000 <0.05 with a t-statistic of 10.247 > 1.96. Thus, it can be concluded that Health has a positive and significant effect on HDI. This is in line with BPS theory (Province and Figures, 2022) which shows that health influences HDI. Therefore, the fifth hypothesis can be accepted.
**H6: The positive effect of Education on HDI**

From the table above, the value of Education positively influences HDI. The value of the path coefficient of 0.703 shows this. In addition, the p-values in this study were 0.000 < 0.05, and the t-statistic was 25.724. It can be concluded that Education has a positive influence on HDI. Thus, it can be concluded that health positively and significantly affects HDI. This is in line with BPS theory (Province and Figures, 2022) which shows that education is one of the factors that influence HDI. Therefore, the fifth hypothesis can be accepted.

**H7: The negative effect of Poverty on HDI**

Based on the table above, the influence on HDI is positive. This is indicated by p-values of 0.03 < 0.05 and t-statistics of 2.945 > 1.96. In addition, the path coefficient value is -0.071, which has a negative direction. Thus, poverty hurts HDI. This is in line with (Mirza, 2012) and (Suradi, 2017) Poverty hurts the Human Development Index. This shows that if the Poverty ratio decreases by 1%, it will increase the Human Development Index. This is because, in general, the poor spend more of their energy and time on essential fulfillment. They are not interested in involving themselves in activities that are not directly related to meeting essential needs. In the end, this can have good implications for economic growth. Thus, the seventh hypothesis can be accepted.

**H8: The positive effect of unemployment on HDI**

Based on the table above results, the effect of the Unemployment variable on HDI has a positive influence. This is indicated by the path coefficient value of 0.071, which has a positive direction. In addition, the p-value is 0.03 < 0.05, and the t-statistic is 3.145 > 1.96. Thus, unemployment has a positive but not significant effect on HDI. It means. If unemployment rises, then the HDI will also rise. These results contradict research (Baeti, 2013) showing that unemployment negatively and significantly affects the Human Development Index in Central Java from 2007-2011. High unemployment will result in reduced community prosperity. These results align with research (Primandari, 2019). Unemployment positively affected HDI in South Sumatra Province from 2004-2018. That is, if unemployment increases, HDI will also increase because people will increasingly compete to satisfy themselves to find work, which will have good implications for economic growth. Thus, the 8th hypothesis is accepted.

**H 9: The positive effect of HDI on economic growth**

Based on the results of the table above, HDI has a positive influence on economic growth. This is indicated by the path coefficient value of 0.928, the p-value of 0.03 <0.05, and the t-statistic value of 2.853 > 1.96. Thus, the HDI has a positive and insignificant influence on economic growth. These results are in line with research (Izzah, 2015) and (Prasetyo and Dinarjito, 2021) that HDI has a positive influence on economic growth. If the HDI is high, economic growth will also be high. In line with this (Neeliah and Soetanah, 2016) argues that human development significantly influences economic growth in Mauritius. In addition (Duan et al., 2022) and (Sehrawat and Giiri, 2017) Human Development positively influences Economic Growth in a certain period, especially in India and the BRICS. Thus, the 9th hypothesis can be accepted.

In addition to testing the direct effect, the author also tests the indirect effect variables with the following table details:
Table 2. Indirect test results

<table>
<thead>
<tr>
<th>Variable</th>
<th>P-Coefisien</th>
<th>T-Satistict</th>
<th>P-Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>H- &gt; EG*HDI</td>
<td>0.289</td>
<td>2.518</td>
<td>0.012</td>
</tr>
<tr>
<td>E- &gt; EG*HDI</td>
<td>0.653</td>
<td>2.775</td>
<td>0.006</td>
</tr>
<tr>
<td>P- &gt; EG*HDI</td>
<td>-0.066</td>
<td>1.839</td>
<td>0.067</td>
</tr>
<tr>
<td>U- &gt; EG*HDI</td>
<td>0.066</td>
<td>2.450</td>
<td>0.015</td>
</tr>
</tbody>
</table>

H 10: Health has a positive effect on economic growth through HDI

Based on the table above, health positively influences economic growth through HDI. This is marked by a path coefficient value of 0.289, which has a positive direction, with p-values of 0.012 < 0.05 and t-statistics of 2.518 > 1.96. Even though it is positive, there is a minor shift in value compared to direct testing of Health on Economic Growth, namely the path coefficient value of 0.115, which has a positive direction. In addition, the P-Values were 0.260 > 0.050, and the T-statistics were 1.127 < 1.96. Based on these results, the HDI variable can still mediate the effect of health on economic growth. So that hypothesis 10 can be accepted.

H11: Education has a positive effect on economic growth through HDI

Based on the test results above, Education positively influences economic growth through HDI. This is indicated by the path coefficient value of 0.653, which has a positive direction. In addition, the p-values in this study were 0.006 < 0.05, and the t-statistics were 2.775. There is a significant shift in value compared to direct testing of Education on Economic Growth, which only has a path coefficient value of 0.115 and a positive direction. In addition, the P-Values were 0.260 > 0.050, and the T-statistics were 1.127 < 1.96. This indicates that Education has a negative influence on economic growth. The results of the hypothesis above are in line with research (Ragoobur and Narsoo, 2022), (Handayani, Bendesa and Yuliarmi, 2016) and (Dewi, 2017), and (Li and Liang, 2010) which shows that Education has a positive influence on Economic Growth. The higher the education rate, the higher the quality of Education that can form a professional workforce to boost economic growth. Thus it can be concluded that the HDI variable mediates the effect of Education on economic growth. So that hypothesis 11 can be accepted.

H 12: Poverty has a negative effect on economic growth through HDI

Based on the results above, poverty indirectly negatively affects economic growth through HDI. This is marked with a path coefficient value of -0.066, which has a negative direction. Higher than direct testing of the Poverty variable on Economic Growth of 0.001. In addition, the p-values in this hypothesis are 0.067 > 0.05 and the t-statistics are 1.839 < 1.96. More significant than direct testing, which only amounted to 0.291 on p-values and 1.057 on t-statistics. Even though both have a negative effect, there is a significant shift in value from the direct test of Poverty to Economic Growth and indirectly through the HDI. The author suspects this is due to the influence of poverty on HDI, which is not strong enough. Thus it can be concluded that hypothesis 10 is rejected.
Based on the results above, unemployment positively affects economic growth. This is indicated by the path coefficient value of 0.066, which has a positive direction. In addition, the p-values in this study were 0.015 < 0.05, and the t-statistic was 2.450. There is a significant difference compared to the direct Unemployment on Economic Growth test with a path coefficient value of 0.170 in a positive direction. In addition, the p-values are 0.050 = 0.050 and the t-statistics are 1.96 = 1.96. This shows that unemployment has a negative effect on economic growth. This is contrary to research (Novriansyah, 2018) and (Prasmeithi, 2013) showing that the open unemployment rate has a negative but not significant effect on economic growth. But in line with the (Baeti, 2013) theory of the slow growth model. The author suspects that this quite significant shift in value is due to the relatively strong direct effect of Unemployment on HDI and the powerful influence of HDI on Economic Growth. Thus it can be concluded that the HDI variable can mediate the effect of unemployment on economic growth so that the 13th hypothesis can be accepted.

To see how much influence the independent variables have on the dependent variable, the coefficient of determination in this study is as follows:

<table>
<thead>
<tr>
<th>Variable</th>
<th>R-Square</th>
<th>Adjusted Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>HDI</td>
<td>0.889</td>
<td>0.887</td>
</tr>
<tr>
<td>EG</td>
<td>0.328</td>
<td>0.317</td>
</tr>
</tbody>
</table>

The table above gives a value of 0.889 for the HDI variable (Z), which means that Health (X1), Education (X2), Poverty (X3), and Unemployment (X4) can explain the HDI of 88.9% and the remaining 11.1% cannot be explained in this study. While R2 for Economic Growth (Y) is 0.32% which means Health (X1), Education (X2), Poverty (X3), Unemployment (X4), and HDI (Z) can explain Economic Growth.

Thus it can be concluded that the influence of the variables Health (X1), Education (X2), Poverty (X3), and Unemployment (X4) has a strong influence on HDI because it is 0.89/89% above 0.75/75% (Sarstedt et al., 2014) While the R2 on Economic Growth is weak because it is only above 0.25/25% (Sarstedt et al., 2014).

CONCLUSION

From the results of direct testing on economic growth, the health and HDI variables have a significant positive effect, and the unemployment variable has an insignificant effect. At the same time, the Education and Poverty variables do not influence Economic Growth. In contrast to direct testing of Economic Growth, the variables Health, Education, Poverty, and Unemployment have a positive and significant effect on HDI.

From the results of indirect testing on Economic Growth/through the HDI variable, it can be seen that the Health, Education, and Unemployment variables positively influence Economic Growth. Even though it still has a negative effect, there is a shift in value from 0.291 in the direct test to 0.067 in the indirect test/through the HDI variable. This is allegedly due to the powerful influence of HDI on economic growth.

Hopefully, this research can be developed in the future by adding variables, variations of indicators, and so on, which can broaden the knowledge in the field of Development Economics.
REFERENCES


