# Determinants of School Participation in Riau Province in 2019

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## A B S T R A C T

*Education has an important role in economic development, not only in driving economic growth but also in breaking intergenerational poverty. For this reason, the Government of Indonesia has implemented a 12-year compulsory education program in the last decade. Through this program, it is hoped that school enrollment rates will increase and economic development will be of higher quality. However, the implementation of this program was not without obstacles. This study aims to analyze the determinants of school participation in Riau Province in 2019 using data from the National Socio-Economic Survey (SUSENAS). The results of this study indicate that the education of the head of the household, the level of welfare and gender have a significant effect on school participation of children aged 7-18 years.*

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## INTRODUCTION

Education is widely recognized as an important component of development, both economic and social. According to the Human Capital theory put forward by Gary Becker and many others, education can increase the skills, knowledge and productivity of individuals and can also increase their economic ability to develop and adopt new technologies for economic and social development purposes (Utami and Wicaksono, 2017).

Furthermore, Gary Becker, Edward Denison and Theodore Schultz argue that higher education can be measured by the length of school time. Higher education will give a person the opportunity to get a job and a better wage. When wages are associated with productivity, the more people who have higher education will encourage high productivity so that it triggers or produces a high-growing national economy (Nugroho, 2014). This is in line with the research conducted by Nugroho (2014) on the effect of education on economic growth in Indonesia. The results of the study explain that education using the literacy rate (AMH) proxy approach has a positive and significant effect on economic growth which is proxied by Gross Domestic Product (GDP).

Education is a basic need of every human being around the world. Indonesia is no exception, contained in the 1945 Constitution article 31 which reads that every citizen has the right to education. Therefore, the government is very focused on the education of its population. The low or high quality of the population can be a benchmark for development. High quality education can make Indonesians have more value and can compete both at home and abroad. On the other hand, the low quality of education can be a problem such as high unemployment, high crime rates and so on.

The issue of education is a concern for the Government of Indonesia. As stated in the direction of achieving the implementation of the Vision, Mission, and Development Agenda (Nawa Cita) of the President and Vice President, the direction of national development in the field of education is to improve the quality of life of human beings and the people of Indonesia (Part-Time Evaluation of the 2015-2019 RPJMN). To achieve this goal, the Government supports by budgeting education funds of 20 percent of the total government spending. The government also increases the education budget from year to year. In 2017 the education budget was allocated for 416.1 T and increased by 18 percent in 2019 to 492.5 T (Kemenkeu, 2019).

Not only the central government but also local governments carry out development programs in the world of education, which are contained in the Regional Medium-Term Development Plan (RPJMD). One of them is Riau Province. In the Riau Province RPJMD 2019-2024, the first mission point is to create human resources who are faithful, qualified, dignified and superior in Indonesia (RIAU BERSATU) with details of improving the quality of competitive human resources (HR) by paying attention to the quality of public education. Based on the mission points above, Riau Province has achieved this goal. This can be seen from the value of the Human Development Index (HDI) which is above the national average value and also the HDI value of Riau Province has increased from year to year. In 2015, the HDI value of Riau was 70.58 and in 2019 it was 73.00 or an increase of 2.42 points over the last 5 years.

However, the improvement in the quality of education in Riau has not been fully felt. Based on data from the Central Statistics Agency (BPS) of Riau Province in 2019, there are still 58 percent of districts in Riau that have an HDI value below the HDI value of Riau Province. One way to improve education in order to encourage the development of a region is to increase

its educational participation. The School Participation Rate (APS) describes a measure of the education system's absorption capacity of the school-age population. APS is a basic indicator used to assess access to education, especially for the school-age population. This indicator can also be used to see the structure of population activities related to schools (BPS, 2020).

Based on data from the Central Statistics Agency of Riau Province, the school participation rate always decreases from each level of education. In the age group 7-12 years, the APS value of Riau Province is 99.36. Then it decreased to 95.37 in the 13-15 year age group and decreased drastically to 77.29 in the 77.29 age group. This is a concern for the Riau government, where in the 2015-2019 RPJMN the 12-year compulsory education program is a priority. There are several studies on education participation in Indonesia. In 2006, Suryadarma et al (2006) examined the factors that led to not continuing school after graduating from elementary school. Suryadarma et al found that the level of family welfare and the availability of schools that were built had a significant effect on school participation.

Arze del Granado et al (2007) conducted a study entitled Investing in Indonesia's Education: Allocation, Equity and Efficiency of Public Expenditure. Arze del Granado et al found that the poverty rate and the school-age workforce had a significant impact on school enrollment. Listianawati (2012) conducted a study on school participation in North Sulawesi. Listianawati found that BOS funds, real spending on basic education, GRDP per capita, education of the head of the household and the ratio between students and teachers had a significant effect on junior secondary school participation. Khairunnisa et al (2014) aim to describe and analyze the determinants of the development of the Junior High School

Enrollment Rate (APS) in West Java by using the panel data method. Khairunnisa et al (2014) found that per capita GRDP, poverty rate, head of household education, work participation of children aged 13-15 years and school to school ratio had a significant effect on school participation. Based on the background and previous research, this study aims to identify several individual and household characteristics that affect school participation in Riau Province.

**METHODOLOGY**

This study uses secondary data from the National Socio-Economic Survey (SUSENAS) which was conducted in March 2019. SUSENAS is one of the surveys conducted by BPS. The purpose of this survey is to find out an overview of the social and economic conditions of the Indonesian people at that time. The dependent variable used in this study is school participation while the independent variables are the education of the head of the household, work status, welfare level and gender. The unit of analysis in this study was individuals aged 7-18 years (school age) with a total of 7,373 people.

The analytical method used in this research is descriptive and inferential analysis. Descriptive analysis was conducted to provide an overview of the characteristics of the population aged 7-18 years in Riau Province. The inferential analysis used in this study is binary logistic regression. This method is used to determine the factors that influence a person's school participation in Riau. The operational definition of each variable used in this study is as follows:
1. School participation is the school status of individuals aged 7-18 years. This variable is divided into 2 categories, namely not in school and in school. The non-school category is used as the reference code.
2. Head of household education is the highest education completed by the head

of household from the unit of analysis (highest diploma). This variable is divided into 2 categories, namely lower secondary education (maximum junior high school graduates) and upper secondary education (minimum high school graduates). The lower secondary education category is used as the reference code.

3.    Employment status states whether the household head of the unit of analysis has a job or not. This variable is divided into 2 categories, namely not working and working. The non-working category is used as the reference code.

4.    The level of welfare is seen from the poverty line of a household. The poverty line of Riau Province in 2019 is IDR 500,612. This variable is divided into 2 categories, namely pre-prosperous (per capita income less than Rp 500,612) and prosperous (per capita income greater than Rp 500,612,-).

5.    Gender is the gender of the unit of analysis. This variable is divided into 2 categories, namely women and men. The female category is used as the reference code.

The logistic regression equation can be written as follows:

$$Ln\left(\frac{p}{1-p}\right) = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4$$

$$\left(\frac{p}{1-p}\right) = \exp\exp(\beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4)$$

where, $x^1$ is the education of the head of the household; $x^2$ is working status; $x^3$ is the level of well-being and $x^4$ is a gender.

## RESULT AND DISCUSSION

Based on the March 2019 Susenas data sample of Riau Province used, there are 93.3 percent of the 7,373 population aged 7-18 years who are still in school, while 6.7 percent are not in school. Although the percentage of not attending school is smaller than the percentage of schooling, the government must pay attention. This is because school-age children are the movers of Riau's future.

The education of the head of the household in Riau is still dominated by the head of the household whose education is only a junior high school graduate or a maximum of a junior high school diploma, which is 63.8 percent, while the head of the household with a higher education is only 36.2 percent. Judging from the level of welfare, 8.3 percent of the school-age population is in a pre-prosperous economic condition where the income is below Rp 500,612,-. Meanwhile, about 5.2 percent of household heads do not work or do not have a job. In terms of gender, 48.9 percent of the population aged 7-18 years are female and 51.1 are male.

**Table 1**
**Percentage of School Participation of Population Ages 7-18 Years in Riau Province, 2019**

| Variable | School Participation | |
|---|---|---|
|  | No school | School |
| **KRT Education** |  |  |
| Middle school and below | 8.8 | 91.2 |
| high school and | 3.1 | 96.9 |

high school and
above

Working Status

| | | |
|---|---|---|
| Does not work | 9.0 | 91.0 |
| Work | 6.6 | 93.4 |

Well-being

| | | |
|---|---|---|
| Pre-prosperity | 12.4 | 87.6 |
| Prosperous | 6.2 | 93.8 |

Gender

| | | |
|---|---|---|
| Woman | 5.8 | 94.2 |
| Man | 7.6 | 92.4 |

Source: Susenas 2019, data processed

Based on table 1, if school participation is associated with the education of the head of the household, it can be seen that the higher the education of the head of the household, the higher the school participation. High education makes household heads have broad insight and thoughts so that they know the importance of education for their children. If it is related to the working status of parents and the level of household welfare, it can be seen that the school participation of children whose heads of household work is greater than that of heads of households who do not work and so is the level of household welfare. The participation of pre-prosperous household schools is lower than that of prosperous households. This is because by working, the head of the household will get a wage and the wages can be used to pay for their children's school fees.

Underprivileged families will find it very difficult to meet their basic needs such as clothing, food, and housing so that education or schooling becomes expensive goods for their children. Education requires substantial costs, both for home-to-school operations and school operations. Although currently there are many educational assistance programs launched by the Government for underprivileged families. Meanwhile, the percentage of female schools is higher than that of boys, although the difference is not too big. It can be seen that there is no difference in gender in education, where previously there was a stigma for women, namely mattresses, kitchens and wells .

Based on the results of the Classification Table, it can be seen that the model can be said to be quite good with an overall percentage value of 93.3 percent. The overall percentage value is the value of the model's accuracy in classifying observations, where the higher the value, the better (Utami and Wicaksono, 2019). To see the simultaneous test ( overall test ), it can be seen through the output of the Omnibus Tests of Model Coefficients (table 2), it is concluded that rejects the null hypothesis, which means that there is at least one independent variable that affects the dependent variable (school participation). Furthermore, a partial test was conducted to determine which independent variables had an influence

on school participation. Based on the partial test, there is one variable that is not significant, namely the working status of the head of the household, while the other three variables are significant on school participation. This can be seen from the p-value which is smaller than the level of confidence used, which is 5 percent. Partial test results can be seen in table 3.

**Tabel 2.**
**Hasil Omnibus Tests of Model Coefficients**

| Omnibus Tests of Model Coefficients | | Chi-square | df | Sig. |
|---|---|---|---|---|
| Step 1 | Step | 131.475 | 4 | .000 |
| | Block | 131.475 | 4 | .000 |
| | Model | 131.475 | 4 | .000 |

Source: Stata print-out rearranged (data processed)

**Table 3.**
**Partial Test Results**

| Variable | | Wald | Sig. | Exp ($\beta$) |
|---|---|---|---|---|
| Constant | 1,836 | 75,230 | 0.000 | 6,272 |
| KRT education ( *high school and above* ) | 1.078 | 75,443 | 0.000 | 2,940 |
| Working Status Head of household ( *working* ) | 0.136 | 0.537 | 0.464 | 1,146 |
| Level of Welfare ( *prosperity* ) | 0.625 | 21,665 | 0.000 | 1,868 |
| Gender ( *male* ) | -0.320 | 11,410 | 0.000 | 0.726 |

Source: Susenas Riau Province 2019, data processed

The resulting logistic regression equation is Ln p1-p= 1,836 + 1,078 KRT Education + 0.136 Working Status + 0.625 Welfare Level – 0.32 Gender Probability or $\left(\frac{p}{1-p}\right)$ = 6,272 + 2,940 Household Education + 1,146 Working Status + 1,868 Welfare Level + 0,726 Gender

To determine the tendency of independent variables to affect the dependent variable, we can use the likelihood ratio (*odds ratio*) obtained by exp ( $\beta$ ).

1. Head of Household Education

From the variable coefficient value of 1.078, the value of the trend ratio ( odds ratio ) is obtained by exp (1.078) = 2.940. This means that the tendency of someone who has a head of household with a high school education and above to go to school is 2,940 times compared to someone who has a head of household with a junior high school education. This is in accordance with the view of Todaro and Smith (2006) in the book Economic Development (edition 9) that one of the most important socio-economic factors is the education of

the head of the household. The higher the education of parents, the higher the awareness of parents to educate their children.

2. Working Status of Head of Household

From the variable coefficient value of 0.136, the value of the trend ratio ( odds ratio ) is obtained by exp (0.136) = 1.146. This means that the tendency of someone who has a working head of household to go to school is 1.146 times compared to someone whose head of household does not work.

3. Prosperity level

From the value of the variable coefficient of 0.625, the value of the trend ratio ( odds ratio ) is exp (0.625) = 1.868. This means that the tendency of someone with a welfare level above the poverty line (prosperous household) in Riau Province to attend school is 1.868 times compared to someone with a welfare level below the poverty line (a pre-prosperous household). In a study conducted by Tanuar et al (2016) stated that there is a relationship between poverty levels and school participation. When the poverty rate increases, school participation will decrease. Pre-prosperous households tend to prefer meeting their basic needs rather than education.

4. Gender

From the value of the variable coefficient of -0.320, the value of the trend ratio ( odds ratio ) is exp (-0.320) = 0.726. This means that the tendency of someone with the male gender to go to school is 0.726 times compared to the female gender. The trend value which does not exceed point 1 indicates that there is no gender trend in obtaining education in Riau Province.

## CONCLUSION

Based on the results of the study, it was found that 93.3 percent of the population aged 7-18 years in Riau Province are school-age residents who are currently attending school or attending school. The education of the head of the household is dominated by the head of the household with a lower secondary education of 63.8 percent. There are still 8.3 percent of families with pre-prosperous economic conditions and 51.1 percent male.

From the estimation results, it is concluded that there are factors that influence school participation, including the education of the head of the household, the level of welfare and gender. A person's tendency to go to school will be greater when the education of the head of the household is higher, has a job with a better level of welfare and is male,

Some suggestions that can be given in this research are that the government is expected to increase and expand the reach of receiving assistance from educational programs. This can help or provide opportunities for underprivileged families to send their children to school. For further research, it is possible to add other variables that can affect the level of school participation.

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