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Determinants of School Participation at the Senior High School Level in Jawa Barat in 2017

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ABSTRACT

Jawa Barat is one of the provinces with the largest population in Indonesia. However, educational problems still cannot be overcome, especially in secondary education. Seen from the Net Enrollment Ratio (APM) in 2017, Jawa Barat ranked as the eighth lowest in Indonesia and was the lowest APM achievement in Java. Even though the low level of education in human resources in a region can have many negative impacts on other social and economic phenomena. Therefore, this study aims to determine the factors that influence school participation in secondary school/ equivalent in Jawa Barat in 2017 at the individual level and the variations caused by the differences in characteristics of the regency/city at the contextual level. The analytical method used is multilevel. Binary logistic regression Based on the results of the analysis obtained, the individual variables that influence school participation are gender, age, the last educational level of the household head, the number of household members and the state of poverty. Meanwhile, the proportion between students and teachers at the context level and per capita GRDP affects the variation in school participation between regency/city in Jawa Barat in 2017.

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1. INTRODUCTION

Education is one of the important factors and must be prioritized, because education is one of the efforts to advance human life and advance the life of the nation. Through education, the quality of human resources can be improved. Quality human resources can support the quality of a nation. According to Muhandi (2004), some countries with limited natural resources but have qualified human resources and master science and technology can still enjoy the prosperity of the nation. These countries enjoy welfare and prosperity by starting their development through education.

In addition, the progress of a nation in the present and future will be determined by the young generation of the nation. The young generation, which can also be called youth, is at the forefront of the process of struggle, renewal and national development. All the potential that exists in youth determines the quality of the nation in the future. To give birth to quality youth, of course, must be supported by a quality education system as well. Thus, improving the quality of education is often focused on the younger generations who will be the successors of a country.

The issue of education has become a concern for all countries in the world. This is contained in the Sustainable Development Goals compiled by the UNDP. The SDG's are based on the Millennium Development Goals (MDG's) that have been pursued from 2000 to 2015. As a further agenda, 17 goals have been set in the SDG's which are sought to be achieved until 2030. One of the goals that must be achieved is education in SDG goal 4, which is to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. Specifically, goal 4.4 states that by 2030, ensure that all girls and boys complete free, equal and quality primary and secondary education.

Education is not only a global concern, but also in Indonesia. The Pembukaan Undang-undang Dasar 1945 even states that one of the national goals of the State of Indonesia is to educate the nation's life, which will certainly be followed by an increase in quality human resources towards sustainable national development. This is also emphasized in the UUD 1945 which states that education is a right that must be owned by citizens, the obligation of citizens to attend basic education and the obligation of the state to finance the education of its citizens. In line with the goals set out in the SDG's, Indonesia has also set global targets which are also national targets in the National Medium-Term Development Plan (RPJMN).

Related to this and considering the importance of education for Indonesia's young generation, the government has taken several steps to improve the quality of education and achieve the goals of the SDGs and RPJMN through programs including the compulsory education program. In 2010-2014, the government implemented a nine-year compulsory education program up to the regency/city level. Furthermore, in the Ministry of Education and Culture's Strategic Plan 2015-2019, there is the Indonesia Pintar Program which aims to support the implementation of 12-year compulsory education.

The purpose of the 12-year compulsory education program is to provide opportunities for all levels of society to obtain education services up to the senior high school level. To support the program, Regulation of the Minister of Education and Culture No. 80/2015 regulates the School Operational Assistance (BOS) program that will be distributed to public and private high schools throughout Indonesia. This program aims to help schools meet non-personal operational costs and other costs that support the learning process. In addition, this program also aims to provide equal opportunities for poor high school students to obtain

affordable and quality education services. Thus, the program is expected to increase school participation at the SMA/equivalent education level.

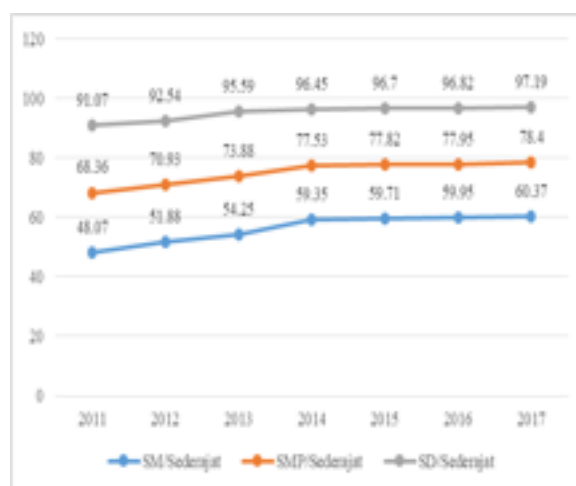
In addition to the BOS program, Minister of Education and Culture Regulation No. 20/2015 also regulates in detail the Smart Indonesia Program. The program includes cash assistance from the government provided to learners whose parents are not and/or less able to pay for their education. To benefit from the program, learners who come from families holding social protection cards or prosperous family cards will be given an Kartu Indonesia Pintar (KIP). Through the program, it is expected that access to secondary education will increase and can attract students who drop out of school so that the dropout rate can decrease.

Despite the implementation of these programs, the current situation is that school enrollment tends to decrease as the level of education increases. Enrollment rates in primary education are higher than secondary education, and secondary education is higher than tertiary education. The higher the level of education, the lower the participation rate.

In the Rencana Strategis (Renstra) Kemendikbud, there are also several strategic targets to be achieved in the 12-year compulsory education program, including increasing the participation rate of the population of primary and secondary education age through several indicators including the APM SMA/Vocation/Madrasah Aliyah/equivalent reaching at least 67.50 and the APK SMA/Vocation/Madrasah Aliyah/equivalent reaching 91.6 in 2019 (Renstra Kemendikbud, 2015).

In 2017, Kemendikbud targets for basic education in Indonesia were met. The primary/equivalent APM targeted in 2019 to reach 85.20 based on the results of Susenas 2017 Indonesia has reached 97.19. The same situation is also shown in the achievement of APM SMP / equivalent which is targeted to reach 73.72 in 2017 in Indonesia has reached 78.40. Based on these results, the government has completed in meeting the target where the participation of school-age children at the basic education level has been met. However, the decline in enrollment began to occur at the secondary school level.

Figure 1. Net Enrollment Rate of Primary School, Junior High School, Senior High School in Indonesia 2011-2017



Source : Badan Pusat Statistik

Based on the graph in Figure 1, it can be seen that the higher the level of education, the more school participation decreases. Although the SM/equivalent APM experienced a significant increase compared to the education level below, the figure is still relatively small. From the results of Susenas in 2017, Indonesia in 2017 has not been able to achieve the target set where the APK SMA / Vocational / Madrasah Aliyah / equivalent is 82.84 and the APM SMA / Vocational / Madrasah Aliyah / equivalent has only reached 60.37. This figure is still far below the 2019 target and shows that school participation of the school-age population has not yet reached the expected target.

Jawa Barat is one of the provinces in Java Island with a high school net enrollment rate that is less than the target set in the RPJMN. In 2017, the APM of senior high school in Jawa Barat Province only reached 57.22. This figure is still far below the government target and makes Jawa Barat ranked 8th with the lowest APM in Indonesia and even the province with the lowest APM in Java Island. In addition, the APK of SMA / Vocational / Madrasah Aliyah / equivalent in Jawa Barat is also relatively low at 76.48 and is ranked 3rd lowest in Indonesia. Based on these indicators, it can be seen that school participation at the high school/equivalent level in Jawa Barat Province is still relatively low and has not been able to meet the targets set by the government.

In terms of education facilities in Provinsi Jawa Barat, it is quite good. This can be seen from the ratio of senior high schools per thousand population aged 16-18 years where the province has 2 senior high schools for every 1000 population aged 16-18 years. This ratio is similar to other provinces that can achieve higher APK and APM than Jawa Barat. Based on this fact, the population in Jawa Barat should have the same school participation as other provinces. Apart from the availability of adequate schools, easy access in Jawa Barat is also one of the things that should support the high school participation of the community. According to Torberg, et al (2013) in their research, one of the factors that cause a person to participate in school is the ease of geographical conditions of the region. In terms of geography, Jawa Barat, which is located on the island of Java, does not have significant difficulties when compared to other regions such as in eastern Indonesia because the region is not an archipelago. However, when compared to provinces on islands such as Maluku and Maluku Utara, Jawa Barat is still lagging behind in terms of participation in secondary education.

Based on BPS data, 18.34% of the population in Indonesia is located in Provinsi Jawa Barat. This makes Jawa Barat the province with the largest population in Indonesia. Therefore, as a province in Indonesia with the largest population compared to other provinces, it should be balanced with better quality of human resources. Low education in a country's human resources can lead to the low quality of a nation. In addition, according to Becker (in Fahmi, 2015) education is very important to be able to improve the quality of human capital so as to increase the economic growth of a country.

In addition, when looking at the APK and APM in each regency/city there is a considerable difference where the lowest APK is Kabupaten Pangandaran at 59.18 and the highest is Kota Bandung at 106.21. Meanwhile, the lowest APM was 45.18 in Kabupaten Pangandaran and the highest was 80.4 in Kota Sukabum. The difference in enrollment rates in each regency/city in Jawa Barat shows that there are still gaps between regions and the lack of equitable education.

There have been many studies on school participation but only at the individual level. Arunatilake (2006) said that based on the results of the analysis, it can be seen that in individual characteristics, the age and gender of children significantly affect school participation. On household characteristics, it is found that family ethnicity, education of the head of household, occupation of the head of household and income level of the family have a significant effect on school enrollment. In addition, for neighborhood and community characteristics, children living in rural areas were found to have lower school enrollment than children living in urban areas.

Basically, there are many factors that can cause low school participation. Woldehanna, et al (2005) mentioned that a person's participation in school is not influenced by several factors, not only from individual characteristics but also characteristics of the environment such as family, school, region or community, and government policies. In addition, Smith (2007) also says that the factors that influence school participation are not only seen from individual factors but also based on regional factors.

Based on the facts and the description of the problems above, this research needs to be conducted. The purpose of this study is to look at the general picture of school participation at the high school/equivalent level in Jawa Barat in 2017, determine the factors that influence it and determine the tendency of these factors to school participation. In this study, the factors to be investigated are not only at the individual level but also at the contextual/regional level.

2. METHODS

The data used in this study is secondary data in the form of raw data from the National Socio-Economic Survey (SUSENAS) in March 2017. In the March SUSENAS there are 2 modules used, namely KOR and Consumption. In this research, KOR module is used.

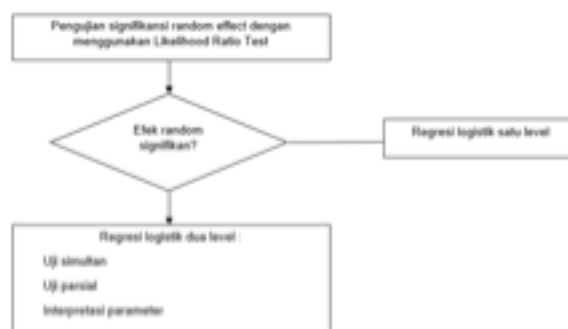
The response variable used in this study is divided into two categories, namely participating and not participating. The explanatory variables used include two levels, namely at the individual level and the contextual level in this study at the regency/city level. At the individual level, the variables used are gender, age, the education level of the head of the household, number of household members, and poverty status. Meanwhile, at the regency/city level, the variables used are the student-teacher ratio and GRDP per capita.

This study covers all regency/city in Jawa Barat Province based on the sample from the 2017 National Socio-Economic Survey (Susenas). The unit of analysis used in this study is the population with child status aged 16-18 years who have the last certificate of junior high school / equivalent. If there are 2 same units of analysis in one household, only one is selected randomly to maintain data independence in variables because there are variables that are household characteristics. The number of samples selected in this study was 2897 individuals. In addition to using raw data from Susenas March 2017, for contextual variables the secondary data used is sourced from BPS publications, namely Jawa Barat Dalam Angka Tahun 2018.

The analytical methods used in this study are descriptive analysis and inferential analysis. Descriptive analysis provides an overview of the characteristics of individual school participation status based on the explanatory variables used. The data presentation uses tables, graphs or diagrams to illustrate the relationship between response variables and

explanatory variables. Meanwhile, the inference analysis used is multilevel binary logistic regression analysis because the response variable used has two categories and it is suspected that differences in characteristics between regency/city in Jawa Barat have a relationship to school participation at the SMA/equivalent level. The stages of analysis in this study can be seen in the following figure.

Figure 2. Stages of Analysis

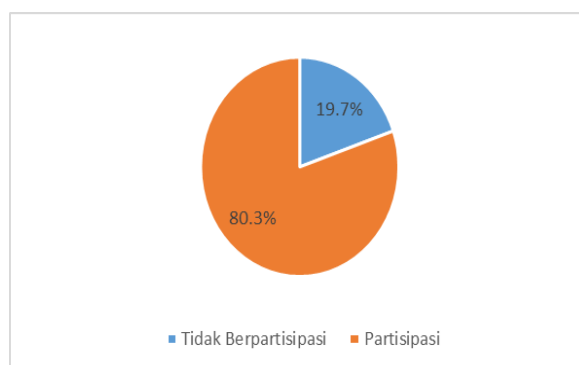


The analysis stage begins by forming a null model to test the significance of random effects using the likelihood ratio test. The multilevel analysis can proceed if the random effects test yields significant results. In addition, from the null model, the variation in school participation at the senior high school/equivalent level of the population aged 16-18 years can be determined, which is caused by differences in characteristics between regency/city using the Intraclass Correlation Coefficient (ICC). The next step if it is proven that there is a significant random effect is to form a conditional model. The conditional model is formed by including both individual and contextual explanatory variables that are thought to have an influence on school participation at the SMA / equivalent level of the population aged 16-18 years. After the conditional model is formed, the next step is to conduct a simultaneous test to determine whether there is an effect of the explanatory variables on the response variable together. If the results of the simultaneous test provide a decision to reject H_0 then the stage continues with a partial test. At the partial test stage, each explanatory variable is tested to determine whether an explanatory variable has an influence on school participation at the SMA / equivalent level of the 16-18 year old population. After partial testing, the odds ratio value of each explanatory variable is interpreted to determine its tendency to influence school participation at the senior high school level for the 16-18 year old population.

3. RESULTS AND DISCUSSION

The results of data processing regarding school participation of the population aged 16-18 years at the senior high school level are presented in the diagram in Figure 3. From this figure, it can be seen that the condition of school participation at the senior high school level, in Jawa Barat in 2017 there were around 80.3% of the population participating in school and there were still 19.7% of the population who did not participate in school. This means that out of 10 people aged 16-18 years, 8 people are attending school at the senior high school level. From these results it can be seen that not all people of senior high school age can attend school.

Figure 3. Percentage of School Participation in Jawa Barat in 2017



Source: Susenas March 2017 (processed)

The percentage of school participation varies by regency/city in Jawa Barat. Appendix 2 shows the percentage of the population participating in school at the senior high school/equivalent level by regency/city. Based on the graph, it can be seen that the highest percentage of school participation is in Kota Tasikmalaya with a percentage of 94.4%, which means that almost all residents aged 16-18 years participate in school at the senior high school level. The next highest percentage is followed by Kota Bekasi and Kota Depok with a percentage of 93.6% and 92.4%. The lowest school enrollment is in Kabupaten Cianjur where the percentage is only 64.2%, meaning that only 6 out of 10 people aged 16-18 years can get a senior high school education. Regions with high school enrollment are mostly in city areas, such as Kota Bekasi, Kota Depok, and Kota Tasikmalaya. In the top 10, the highest percentage of school participation is dominated by cities. Meanwhile, the lowest school enrollment percentages are dominated by regency. Even the regions with school enrollment percentages that are below the Jawa Barat average are all regency. This may be due to the easier access to education facilities in cities compared to regency. In addition, the graph shows that each regency/city in Jawa Barat has a different percentage of the population participating in school. The difference in the percentage of the participating population in each regency/city may be due to variations in the characteristics between regency/city, which will be discussed next.

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Table 1. Percentage of school participation at the senior high school level in Jawa Barat in 2017 based on explanatory variables

No.	Variables	School Participation (%)	
		Participate	Not Participate
1.	Gender		
	Female	78%	22%
	Male	82,6%	17,4%
2.	Age		
	16	87,8%	12,2%
	17	83,9%	16,1%
	18	68,4%	31,6%
3.	The education level of the head of the household		
	Less than high school	75,4%	24,6%
	High school and above	95,4%	4,6%
4.	Number of households		
	More than 4	80,4%	19,6%
	Maximum 4	83,5%	16,5%
5.	Poverty Status		
	Poor	67,5%	33,5%
	Not Poor	83,2%	18,7%

When looking at the percentage of school participation by gender, it can be seen that both men and women have more than 50% participating in school, but there are still differences where the percentage of participation in men is greater than that of women. The percentage of males attending school at the senior high school/equivalent level is 82.60%. Meanwhile, the percentage of females attending school is only 78%.

Furthermore, the percentage of school participation at the senior high school/equivalent level is seen by age. If we look only at the number of people participating in school, the participation rate decreases with each increase in age. 43% of the population participating in school is 16 years old, and 40.3% of the population participating in school is 17 years old. The decline in school enrollment is particularly drastic for the 18-year-old population, where only 17.7% of the 18-year-old population participated in school.

Table 1 shows the percentage of school participation based on the latest education of the head of the household. From this percentage, it can be seen that there is a considerable difference in the percentage of participation of residents whose head of household has less than a senior high school education and at least a senior high school education. Residents whose head of household has at least a senior high school education have a percentage of school participation at the senior high school level of 95.4% or it can be said that out of 100 residents there are only about 5 people who do not participate in school. A very different percentage is shown by the population whose head of household has less than a senior high school education, where there are only 75.4% who participate in school at the senior high school level.

The number of household members is categorized into households with a maximum of 4 members and households with more than 4 members. Table 1 shows the percentage of school participation based on the number of household members. 83.5% of the population from households with a maximum of 4 members participated in school. A different percentage is shown by the population from households with more than 4 members, where 80.4% are participating in school.

Table 1 shows the percentage of school participation by poverty status. Among those from non-poor households, 83.2% of the population participated in school. A very different percentage is shown for those from poor households where only 67.50% of the population participated in school. From these results it can be seen that there is a considerable difference in school participation between the population from poor and non-poor households. Among people from poor households, there are still around 32 out of 100 people aged 16-18 years who are not participating in school at the senior high school level.

School participation at the SMA/equivalent level in the population aged 16-18 years is not only described through individual variables but also through contextual variables, one of which is the student/teacher ratio. The student/teacher ratio describes the ratio between the number of students and the number of teachers, the greater the ratio, the greater the burden that must be borne by a teacher. The ideal standard of student/teacher ratio at the senior high school level according to PP No. 74/2008 Pasal 17 is a maximum of 20 students for each teacher. Appendix 3 shows the student-teacher ratio for each regency/city in Jawa Barat. The largest student-teacher ratio is in Kabupaten Karawang at 25.33, followed by Kabupaten Bogor and Kota Depok at 25.12 and 21.92. The regency/city in Jawa Barat with the smallest student-teacher ratio is Kabupaten Pangandaran at 13.82, followed by Kota Tasikmalaya at 15.85. When looking at the percentage of school enrollment in each regency/city, Kabupaten Cianjur, which has the lowest percentage of school enrollment, has a student-teacher ratio of 20.57, which exceeds the ideal number. In addition, Kota Tasikmalaya, which has the highest enrollment percentage, has a small student-teacher ratio. From the graph, there are some anomalies such as in Kota Depok and Kota Bekasi where the areas have high student-teacher ratios but high school enrollment. This may be due to people attending schools in other areas such as Jakarta. The pupil-teacher ratio figures available show the conditions in a particular region, while school enrollment does not look at where a person attends school. Therefore, it is possible that residents of Kota Depok and Kota Bekasi do not only attend school in their respective regions, but also in other regions with better education quality. There is also an anomaly in Kabupaten Pangandaran where the student-teacher ratio is the lowest but school enrollment is also low. According to the Regent of Kabupaten Pangandaran, Jeje Wiradinata, the government of Kabupaten Pangandaran in 2017 began trying to overcome the low level of education in the district by recruiting honorary teachers to increase the teaching force (harapanrakyat.com). Therefore, the low school enrollment in Kabupaten Pangandaran in 2017 may be because the program has just been implemented and has not yet had a significant impact.

Another contextual variable that is also used to describe school participation at the SMA/equivalent level of the 16-18 year old population in Jawa Barat is GRDP per capita. According to BPS, GRDP per capita is useful to determine the level of community welfare in a region in general. The higher the GRDP per capita in a region indicates the higher the level of community welfare in that region. In Appendix 4, we can see the GRDP per capita for each regency/city in Jawa Barat. From the graph, it can be seen that the highest per capita GRDP is in Kota Bandung at 96.12 million rupiah, followed by Kabupaten Karawang and Bekasi at 85.07 million rupiah and 80.70 million rupiah. In addition, it can also be seen that the lowest GRDP per capita is in Kabupaten Cianjur at 17.08 million, followed by Kabupaten Tasikmalaya at 17.47 million. When looking at the percentage of school participation, Kota Bandung is one of the regency/city that has the highest school participation. Meanwhile, Kabupaten Cianjur with the lowest GDRP per capita in Jawa Barat also has a low percentage of school enrollment.

This shows that regency/city with a high GRDP per capita also have a high percentage of school enrollment and vice versa.

Furthermore, for inferential analysis, the analysis stage begins by forming a null model to be able to test the significance of random effects with the likelihood ratio test. Based on the results of data processing which can be seen in appendix 5, the likelihood ratio value is 62.47 where the value is greater than the chi-square table of 3.14, resulting in a decision to reject H_0 , which means that there is a random effect and the multilevel model can be used. In addition, a simultaneous test is also carried out with the G statistical test whose value is 263.2812 where the value is greater than $\chi(7) = 12.017$ so as to reject H_0 and conclude that there is at least one explanatory variable that affects the response variable. In addition, the multilevel analysis also produced an ICC value of 8.12%, which means that the variation in school participation at the SMA / equivalent level can be explained by differences in characteristics between regency/city in Jawa Barat by 8.12%.

Table 2. Output of parameter estimation, partial test, and odds ratio

No	Variabel	Koefisien	SE	Odds Ratio	Z	P-value
Variabel Individual						
1	Jenis Kelamin Perempuan* Laki-laki	0,1824	0,1036	1,2000	1,76	0,078*
2	Umur	-0,5724	0,0677	0,5642	-8,45	0,000**
3	Pendidikan Terakhir KRT Dibawah SMA* Minimal SMA	1,7171	0,1672	5,5683	10,27	0,000**
4	Jumlah ART Lebih dari 4* ≤ 4	0,1828	0,1059	1,2001	1,73	0,084*
5	Status Kemiskinan Miskin* Tidak Miskin	0,6161	0,1728	1,8517	3,56	0,000*
Variabel Kontekstual						
6	Rasio Mund-Guru	-0,0732	0,0324	0,9294	-2,25	0,024*
7	PDRB Perkapita	0,0062	0,0037	1,0062	1,66	0,096**

Description:

*significant at $\alpha = 10\%$

** significant at $\alpha = 5\%$

Based on the partial test results in Table 2, it can be seen that the explanatory variables have p-values that are less than $\alpha = 10\%$. This means that it can be concluded that with a significance level of 10%, the individual variables of gender, age, latest education of the head of household, number of household members, and poverty status as well as the contextual variables of student-teacher ratio and GRDP per capita are statistically proven to have an influence on school enrollment.

Table 2 shows the results of the partial test of the gender variable, from these results it can be seen that there is a significant influence on school participation at the SMA / equivalent level of the population aged 16-18 years. Someone who are male are 1.2 times more likely than females to participate in school. This indicates that males are more likely to attend school than females. The difference in the decision to participate in school is also shown in previous research. Research conducted by Sanchez (2015) shows that gender is still one of the factors that influence school participation, from the results of his research every 2 women there are 3 men who attend school. This shows that there is a gap between women and men where women are relatively less likely to stop going to school than men. Some of the reasons associated with this are that many people view that education for women does not have to be high because later they will only become housewives, so there are still many women who do not continue their education to a higher level and choose to get married. Meanwhile, men

have higher school enrollment because they will be the head of the family in the future, so they need to be highly educated in order to have a good quality of life.

Based on the test results on the age variable, it can be seen that age has a significant and negative influence on school participation at the SMA/equivalent level of the population aged 16-18 years. The resulting odds ratio value is 0.5642, which means that every increase in a person's age, the tendency to participate in school is getting smaller. Based on several studies on school participation, age also has a negative influence. This is because the older a person is, the more likely they are to choose to work rather than go to school, and thus they decide to stop going to school.

The latest education of the head of household also has a significant and positive influence on school participation at the senior high school level for the population aged 16-18 years. People whose household head has at least a senior high school education are 5.5683 times more likely to participate in school than people whose household head has less than a senior high school education. This means that the higher the education of the household head, the greater the propensity to attend school. A person who comes from a household where the head of the household has at least a senior high school education will tend to have an equivalent or even higher education. The higher the education of a household head, the higher the awareness of the importance of education.

The number of household members also has an influence on school participation. From the results, it can be seen that the number of members has a significant influence on school enrollment at the senior high school/equivalent level for the population aged 16-18 years. People from households with a maximum of 4 members are 1.2 times more likely to participate in school than people from households with more than 4 members. This means that the more household members in a household, the less likely a person is to attend school. The greater the number of household members, the greater the burden that must be borne by the household. This becomes one of the obstacles in sending their children to school because the costs that must be incurred will be more. Several studies have shown that children from large families tend not to go to school and choose to help fulfill their family's needs.

Poverty status has a significant and positive effect on school enrollment at the senior high school level for the 16-18 year old population. The odds ratio is 1.8517. This value means that people from non-poor households are more likely to participate in school than people from poor households. This is related to the cost of attending school. People from poor households will find it difficult to fulfill the needs required to attend school. Although there is assistance or BOS up to the senior high school level, this assistance is only for school fees (SPP) and does not cover other needs such as books, stationery, uniforms, and others. Needs such as transportation to school and pocket money become one of the burdens that prevent people from poor households from attending school at a high level.

The contextual variable, the student-teacher ratio, has a significant and negative influence on school participation at the senior high school level for the 16-18 year old population. The resulting odds ratio is 0.9294. This means that the greater the student-teacher ratio in the regency/city, the less likely the population in the area to participate in school. This result is related to the burden that a teacher has to bear in teaching, where the greater the burden of a teacher in an area, the lower the quality of the education system in

that area. In addition, the student-teacher ratio can also be a consideration in determining the policy for adding student quotas each new school year. A region that has a small student-teacher ratio can increase the quota of new student admissions so that the opportunity to attend school in the area becomes greater.

GRDP per capita has a significant and positive influence on school participation at the senior high school level for the 16-18 year old population in a region. Every increase in the GRDP per capita value of a regency/city will increase the tendency of the population in the region to participate in school by 1.0062 times. This means that the greater the GRDP per capita value of a regency/city, the greater the propensity of its population to participate in school. This result is related to the use of GRDP per capita, namely as an indicator to see the welfare of the community in an area where the greater the GRDP per capita of an area means that the welfare of the community in the area is also getting better, so that it can increase the tendency of the population in the area to participate in school.

4. CONCLUSION

The percentage of the population aged 16-18 years in Jawa Barat who participated in school at the senior high school level was 80.3%. In addition, the regency/city in Jawa Barat with the highest percentage of school participation is Kota Tasikmalaya at 94.4% while the lowest is Kabupaten Cianjur at 64.2%. The five regions in Jawa Barat with the highest percentage of school participation are city areas, while the five regions with the lowest percentage of participation are regency.

The majority of school participants are male, young, from households with a maximum of four members, from households where the head of household has more than a high school education, and from households that are not poor.

Based on the results of inferential analysis with multilevel binary logistic regression, there are five individual variables and two contextual variables that significantly affect school participation of the population aged 16-18 years at the senior high school level in Jawa Barat in 2017. The individual variables include gender, age, number of household members, the latest education of the head of household, and poverty status. Meanwhile, the significant contextual variables are student-teacher ratio and GRDP per capita.

The variable with the largest tendency is the latest education of the household head, where a person with a household head who has at least a senior high school education has a 5.5683 times greater tendency to participate in school. In addition, the poverty status variable also has a large tendency, where someone from a non-poor household has a 1.8517 times greater tendency to participate in school than someone from a poor household.

5. ACKNOWLEDGEMENT

References may be preceded by an acknowledgement when necessary. Please make the acknowledgement as concise as possible.

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7. APPENDIX

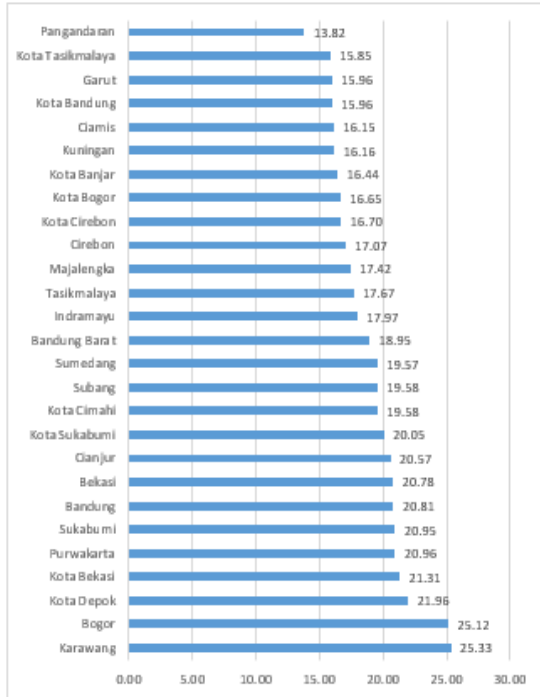
Appendix 1. APM SMA/SMK/MA/Paket C by Province in Indonesia in 2017

No	Provinsi	SM/SMK/MA/Paket C
(1)	(2)	(3)
1	PAPUA	43.48
2	KALIMANTAN BARAT	50.96
3	NUSA TENGGARA TIMUR	53.32
4	KALIMANTAN TENGAH	53.86

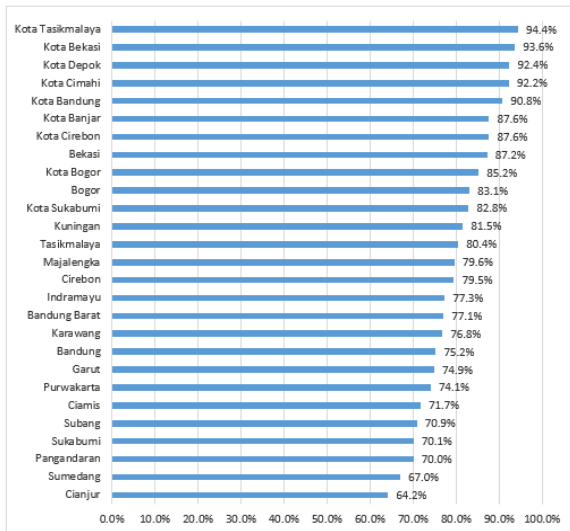
5	GORONTALO	56.82
6	KALIMANTAN SELATAN	57.15
7	JAWA BARAT	57.22
8	SULAWESI BARAT	57.46
9	KEP. BANGKA BELITUNG	57.69
10	BANTEN	57.88
11	LAMPUNG	58.97
12	SUMATERA SELATAN	59.06
13	JAWA TENGAH	59.2
14	DKI JAKARTA	59.54
15	SULAWESI SELATAN	59.86
16	JAMBI	59.98
17	JAWA TIMUR	61.49
18	SULAWESI TENGGARA	62.71
19	PAPUA BARAT	62.74
20	SULAWESI UTARA	62.81
21	RIAU	63.02
22	KALIMANTAN UTARA	63.15
23	MALUKU UTARA	63.52
24	MALUKU	63.65
25	SULAWESI TENGAH	63.8
26	BENGKULU	65.33
27	NUSA TENGGARA BARAT	65.67
28	SUMATERA UTARA	67.05
29	SUMATERA BARAT	67.3
30	KALIMANTAN TIMUR	68.23
31	DI YOGYAKARTA	69.66

32	ACEH	70.15
33	KEP. RIAU	71.98
34	BALI	72.4

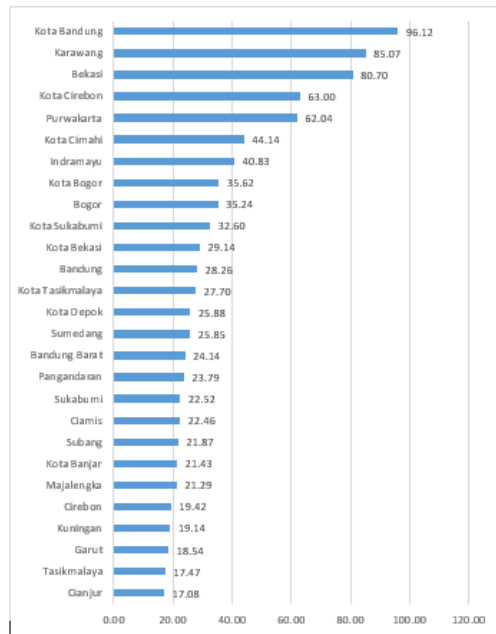
Appendix 2. Percentage of School Participation at Senior High School Level by Regency/City in Jawa Barat in 2017



Appendix 3. Student-Teacher Ratio of Senior High Schools by Regency/City in Jawa Barat 2017



Appendix 4. GRDP per Capita by Regency/City in Jawa Barat in 2017



Appendix 5. Stata Output

```

Mixed-effects logistic regression      Number of obs =    2,897
Group variable:      kodekab          Number of groups =     27

                                     Obs per group:
                                     min =      69
                                     avg =    107.3
                                     max =    158

Integration method: mvaghermite      Integration pts. =     7

Log likelihood = -1329.1305           Wald chi2(0) =      .
                                     Prob > chi2 =      .

partisipasi |      Coef.   Std. Err.   z   P>|z|   [95% Conf. Interval]
-----+-----+-----+-----+-----+-----
      _cons |  1.612268   .117119   13.77  0.000   1.382719   1.841817

kodekab     |
  var(_cons) | .2905792   .1042275           .1438626   .5869227

LR test vs. logistic model:  chibar2(01) = 62.47   Prob >= chibar2 = 0.0000
    
```



```

Intraclass correlation

+-----+-----+-----+-----+
|      Level |      ICC   Std. Err.   [95% Conf. Interval] |
+-----+-----+-----+-----+
|      kodekab | .0811572   .0267477   .0418969   .151394 |
+-----+-----+-----+-----+
    
```