





FACTORS INFLUENCING HIGHLY EDUCATED ADOLESCENT IN DETERMINING THE NUMBER OF CHILDREN DESIRED

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Abstract

Background: The birth rate in Indonesia has decreased from 2.41 in 2010, to 2.18 in 2020 and is predicted to keep on decreasing in the following years. If this continues, Indonesia's population will be dominated by the elderly. This research aims to find out what factors influence highly educated adolescents in determining the number of children desired. **Method:** This research is a quantitative study with a cross-sectional approach. The selected sample in this study was 193 adolescents, involving unmarried adolescents aged 17-24 years. Sampling was carried out using cluster sampling where samples from each cluster were divided proportionally. Data was collected using a questionnaire distributed via Google Forms **Result:** Multivariate analysis using multiple logistic regression found that the variables that simultaneously influence adolescents in determining the number of children are family size (p-value = 0.009) and age (p-value = 0.043) **Conclusion:** Variables related to determining the number of children adolescents desire are age and family size, while variables that influence the number of children adolescents desire are family size, age, and gender.

Keyword: *Adolescents, children desired, family planning*

INTRODUCTION

The Indonesian Central Bureau of Statistics stated that in the 2010 Population Census, the Total Fertility Rate in Indonesia was 2.41% and decreased in 2020 to 2.18%. According to the 2020 Population Census Long Form, the TFR for Central Java Province has reached 2.09% (Badan Pusat Statistik 2021). Based on data from SIPERINDU (Population Control Early Warning Information System) by BKKBN (National Population and Family Planning Bureau) predicted

that in 2023 the total fertility rate (TFR) of Central Java Province will reach 2.06 and will continue to decline in 2024 reach 2.02. This is a good sign as it shows that Indonesia has started to reach its intended TFR target of 2.1 (Badan Kependudukan dan Keluarga Berencana 2023). However, if this continues, and the TFR keeps on declining the population in Indonesia and Central Java will be dominated by the elderly.

Various efforts have been made by the Indonesian government to maintain a balanced proportion of



the population which does not only involve adults but also adolescents, including university students. Adolescents will later have their own families and give birth to children to create the next generation. Therefore, they must be equipped with knowledge and careful planning to create a prosperous family, one of which is by planning the number of children desired. (Yulianti 2017; Rini & Tjadikijanto 2018) Diponegoro University is one of the best state universities in Indonesia which accommodates thousands of students every year. With the large number of students at Diponegoro University, it is hoped that students can play an active role in helping the government in maintaining a balanced population proportion, especially in the city of Semarang.

Research conducted on teenagers in Bali Province, found that gender has a significant influence on the desire to have children, where female teenagers who want more than 2 children are 1.7 times more likely than male teenagers (Krismayanthi et al. 2020). It was also explained by Agushybana et al (2019) on his research to find factors related in

deciding the number of children among Indonesian adolescent found that factors that influence teenagers in determining the number of children are their level of education, level of knowledge about contraception, and area of residence (rural or urban) (Agushybana et al. 2019). Another research conducted on young women in Zambia found that age, place of residence, level of education, household wealth status, number of living children, and exposure to mass-media family planning messages were significantly associated in deciding the number of children. (Phiri et al. 2023) According to the background above, this research aims to find what factors that influence high educated adolescent in determining the number of children desired at Diponegoro University.

METHOD

An examination of cross-sectional data is conducted in this quantitative study. The research was conducted in 2023 at Diponegoro University, Tembalang District, Semarang City. The population of this study were undergraduate students of Diponegoro University who were in

semesters 1-8. The sampling procedure was carried out using probability sampling techniques in the form of Cluster Sampling. Cluster selection was carried out randomly by drawing 6 faculties from 11 to be researched. The selected faculties were the Faculty of Fisheries and Marine Sciences, Faculty of Economics and Business, Faculty of Medicine, Faculty of Social and Political Sciences, Faculty of Public Health, and Faculty of Engineering. The sample is calculated using the Lemeshow formula for testing hypothesis for a single population proportion and 193 samples was obtained.

The data were collected by using a questionnaire, which has been tested for validity and reliability, that is distributed to respondents through Google Forms. The questionnaire's

link was distributed by key persons that have been chosen from each faculty selected. The sample criteria in this study were unmarried adolescents aged between 17-24 years old. The data obtained was analyzed univariably to describe the characteristics of each variable by presenting the frequency distribution for gender, age, area of residence, family size, family economic status, level of knowledge about contraception, and the number of children desired. A multivariate analysis was conducted using a multiple logistic regression test to determine the influence of the independent variable on the dependent variable simultaneously with 95% CI of $\alpha = 0,05$, means that the result is significant if the p-value is $\leq 0,05$.

RESULTS

Based on the results in Table 1, it was found that the respondents in this study were dominated by female adolescents (76.7%). The age range of respondents in this study started from 17 years old to 23 years old with the largest number being adolescents aged ≥ 20 years old (52.3%). Most of The respondents come from rural areas (53.4%). The family background of most respondents comes from large families (57.5%) and high family economic status (82.4%). Most respondents have a good knowledge of contraception (57.0%). Most respondents want a small number of children (67,9%).

Table 1. Characteristic of Respondents

Variable	N (Total)	Percentage (%)
Gender		
Male	45	23.3
Female	148	76.7
Age (years)		
17	3	1.6
18	55	28.5
19	34	17.6
20	39	20.2
21	49	25.4
22	10	5.2
23	3	1.6
Area of Residence		
Rural	103	53.4
Urban	90	46.6
Family Size		
Small Family (<2 siblings)	82	42.5
Large Family (≥ 2 siblings)	111	57.5
Family Economic Status		
High Economic Status	159	82.4
Low Economic Status	34	17.6
Level of Knowledge about Contraception		
High (score ≥ 65)	110	57.0
Low (score <65)	83	43.0
Number of Children Desired		
Less (≤ 2 children)	131	67.9
Many (>2 children)	62	32.1

Table 2. Multiple logistic regression result between independent variables and dependent variables

Variable	B	aOR	p-value	95% CI		Remark
				Lower	Upper	
Gender	-0.141	0.869	0.710	0.413	1.825	Not Significant
Age	0.237	1.268	0.043	1.008	1.594	Significant
Family size	0.392	1.480	0.009	1.102	1.987	Significant
Family Economic Status	-0.469	0.625	0.252	0.280	1.397	Not Significant
Area of Residence	-0.272	0.762	0.405	0.402	1.444	Not Significant
Level of Knowledge about Contraception	0.069	1.071	0.835	0.560	2.049	Not Significant
Constant	-6.131	0.002	0.008			

The regression model created that the independent variables could explain the variance of the number of children desired as 9.3% (R-square = 0.093). The result revealed that variables that simultaneously influence determining the number of children adolescents desired are family size (p-value = 0.009; aOR 95% CI = 1.480) and age (p-value = 0.043; aOR 95% CI = 1.268). The most dominant factor influencing adolescents in determining the number of children desired is family size.

DISCUSSION

The results of this study show that the majority of adolescents want fewer children (67.9%). This shows that the desire to have a large number of children is decreasing. This result is what is predicted by the BKKBN (National Population and Family Planning Bureau) that the total fertility rate in Indonesia will decrease over time (Badan Pusat Statistik 2021). Some factors are stated to be influential in determining the number of children that adolescents want. According to Agushyana et al (2019), factors that influence adolescents in determining the number of children are education level, level of knowledge about contraception, area of residence (rural or urban), and employment status and according to Krismayanthi et al (2020), the factor that influences adolescents in determining the number of children they want is gender (Agushyana et al. 2019; Krismayanthi et al. 2020).

Based on the results of the multivariate analysis test using the backward method of multiple logistic regression, On the variable of age, it is obtained a p-value of 0.043 with an

aOR = 1.268, means that as the age increases, the number of children desired will also increase 1.268 times more than adolescents that are younger with the influence of other variables. Research conducted by using secondary data of Demography and Health Survey in Kenya, it is found that older teenagers (aged 18-19 years old) prefer more children than younger ones. (Monari, Orwa & Agwanda 2022) According to Indrastuti and Salim (2021), there is a significant influence between age and the number of children adolescents want. In this research, it was found that as adolescents get older, the more number children they desire. This happens because older adolescents have started to enter the adult stage, so they have started to plan about their future, including their married life and the number of children they desire. (Indrastuti & Salim 2021).

On the variable of family size, it is obtained a p-value of 0.009 with an aOR = 1.480, means that the greater the size of the family, the greater the number of children adolescents' desire with the influence of other variables. The size of a family is determined by the number of

children in a family. The greater number of children, the bigger the size of a family. (Sitorus, Simarmata & Siregar 2020) Adolescents who come from large family size prefer a greater number of children compared to adolescents who come from smaller family size. This happens because adolescents who come from larger families are used to the crowds, warmth, and happiness that come from a large family size, so they want to create a similar family to maintain the habits that they have acquired since childhood. (Rahayu & Iskarni 2019)

CONCLUSION AND SUGGESTION

Factors that are associated with determining the number of children among adolescents are age and family size. Adolescents with higher education levels (university) decide to have only one or two children in the future. This shows that there is a higher risk of decreasing fertility rates in the future. Therefore, the government should strengthen the policy to maintain a balanced proportion of the population.

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