

## Analysis of Influencing Factors Age at First Marriage and Female Fertility in Tembuku District, Bangli District

## Kadek Helia Rayani

Bachelor of Economics at the Faculty of Economics and Business, Universitas Udayana Email: heliarayaniii@gmail.com

## Ni Nyoman Reni Suasih

Bachelor of Economics at the Faculty of Economics and Business, Universitas Udayana Email: renisuasih@unud.ac.id

#### Corresponding author: <u>heliarayaniii@gmail.com</u>

Abstract: The population problem faced by almost all developing countries, including Indonesia, is the rate of population growth. A general indicator in population control efforts is the birth rate. Fertility is one of the natural components that determines the rate of population growth, so it is the main indicator in population control efforts. The aim of this research is to determine the effect of education level, employment status, family income, and number of family members, on women's fertility through the age of women's first marriage in Tembuku District, Bangli Regency. This research was conducted in Tembuku District, Bangli Regency. The respondents in this study were 98 female couples of childbearing age using an accidental sampling method. The variables examined in this research are education level, employment status, family income, number of family members, age at first marriage, and female fertility using observation methods, structured interviews and in-depth interviews. The data analysis technique uses path analysis. The results of the research state that 1) Education level, employment status, family income and number of family members have a significant effect on the age at first marriage of women in Tembuku District, Bangli Regency, 2) Education level, employment status, family income and number of family members have a significant effect on women's fertility in Tembuku District, Bangli Regency, 3) Education level, employment status, family income, and number of family members influence women's fertility indirectly through the age of women's first marriage in Tembuku District, Bangli Regency. The level of education, employment status, family income and number of family members will increase the average age at first marriage for women, which will indirectly have an impact on reducing fertility so that it can control the rate of population growth and improve the quality of development economic activities.

Keywords: Education level, employment status, family income, number of family members, age at first marriage of women, fertility

#### BACKGROUND

The population problem faced by almost all developing countries, including Indonesia, is the rate of population growth. A large population and uneven population distribution are classic population problems in Indonesia. Through the results of the population census conducted by the Indonesian Central Statistics Agency in 2020, it is said that Indonesia has experienced symptoms of a fairly large population explosion. Since Indonesia held its first population census in 1961, the population has continued to increase. The results of the 2020 Population Census compared to the 2010 Population Census show an increase in population of 32.56 million people or an average of 3.26 million every year. A population explosion could occur if the rate of population growth is not controlled, in 2045 it will reach 450 million people (Aditya Catra, 2014). Population growth that is uncontrolled and not balanced with adequate facilities and infrastructure will cause various negative impacts in the future (Harsoyo and Sulistyaningrum, 2018).

A general indicator in population control efforts is the birth rate. Fertility is one of the natural components that determines the rate of population growth, so it is the main indicator in population control efforts. Research from Kertzer *et al* . (2008) stated differently, that very low fertility actually causes big problems for a region. Population control aims to balance population growth with the rate of economic growth so that an increase in social welfare can be realized. Fertility has a positive influence on the rate of population growth. Increasing fertility will result in a higher population growth rate. This is inversely proportional to mortality which has a negative effect on population growth. The more the number of deaths increases in an area, the lower the population growth rate will be . Mantra (2003:145) says that, fertility or birth is a term in demography which is often used to indicate the number of children born alive by a group of women who are in the reproductive period so that in other words fertility can be said to be the result of reproduction from a woman to giving birth. According to Mekonnen and Worku (2011), a wife's ability to produce children is limited by the age of the woman who gives birth to the child (fertile age) which ranges from 15 to 49 years.

One factor that can be used as a basis for controlling fertility levels is the age of first marriage (BKKBN, 2017). In many societies, birth can occur through the relationship between husband and wife who are currently married. Therefore, marital behavior is a determinant of birth (fertility) (Prayogi and Sudibia, 2022). The age of first marriage in a marriage means the start of a relationship between a woman and a man who are bound by a marriage bond. The younger the age of a person's first marriage, the longer the reproductive period, which in turn can increase the birth rate. On the other hand, the older the age of a person's first marriage, the shorter the reproductive period, which in turn can reduce the birth rate (Haryanti, 2022).

The implications of marriage and pregnancy at an early age are for the subsequent growth of offspring. Marriage at an early age usually also occurs in poor families with low levels of education and has the potential to give birth to babies with low birth weights, so it is feared that this will happen again in the next life cycle, which is called "*Intergeneration Cycle Growth Failure*". It is this cycle that influences the quality of the next generation of children which needs to be of concern to various parties (Affifah, 2016). The younger a woman's age at first marriage, the greater the risk for the safety of the mother and child. This is because the physical condition during pregnancy and childbirth will be greatly influenced by the mother's age at pregnancy and childbirth. Apart from having a negative impact on the mother's health, less than ideal age will also have an impact on the health level of the child she is born with

(Haryanti, 2022). Apart from having an impact on the health level of the child being born, this will also have an impact on the occurrence of *stunting* in children. *Stunting* in children is a dangerous thing because *stunting* is a condition when a child has a lower height or is shorter (stunted) than his age standard based on *World Health Organization* (WHO) standards. The main cause of *stunting* in children is chronic malnutrition resulting from a lack of nutritional intake over a long period of time, resulting in impaired growth in children. Mothers' lack of knowledge about health due to having a too young age at first marriage can be a cause of *stunting* in children.

Women's employment status also affects fertility. Women who work tend to have fewer children than women who don't work. Differences in the characteristics of women's employment status are closely related to fertility. Apart from that, differences in characteristics between the employment status of working and non-working women also influence the age at first marriage. Widyastuti (2012) also explains that a person's job will influence the income and welfare of that person and their family. Women think that marriage requires careful preparation, especially in the economic field, so that getting a good job will make one mature and delay one's marriage age.

Family income influences fertility. According to Becker in Suandi (2010), there are differences in orientation in developed societies and underdeveloped communities regarding the value of a child. The value of children for poor people is more in the nature of production goods, where children born are more pressured on the aspect of the number or number of children they have (quantity). Disadvantaged communities believe that the quantity of children born will help the family's economy. Research conducted by Sunarko and Cahyani (2013) found that low family economic conditions influence the low age at first marriage, and vice versa. Parents who have a low economic level are more likely to marry off their children earlier than those who have a high economic level (Wulanuari, 2017). Parents also have the possibility of marrying their children outside the area where they live.

Economic difficulties due to the large number of family members can affect fertility and the age at first marriage of women. The level of number of family members, the more family members mean the more needs the family must fulfill, and vice versa, so that in a family with a large number of members, there will be more needs that must be met. Parents often think that by having a marriage involving their children, the burden they have to bear on family members will be slightly reduced. The socio-cultural habits that exist in an area can be the reason someone marries at a young age . In general, behavior related to fertility is often grouped into cultural systems such as marriage practices, inheritance, and the rules that apply in society (Notoatmodjo, 2012).

Delaying the age of marriage is not just postponing it until a certain age but ensuring that the first pregnancy occurs at a mature age. The maturation of women's marriage age will influence the maturity of the household, which means it will also increase household stability. This will cause a decrease in the divorce rate so that remarriage will decrease and as a result will reduce the fertility rate. Increasing the age of marriage is part of the family planning program which can have an impact on increasing the age at first marriage, thereby reducing fertility. The number of children they currently have is one of the influences on decisions made by couples of childbearing age to use contraception.

According to Sarmita (2019), what is often faced by couples of childbearing age today, especially in Bali Province, is mostly caused by people implementing the Krama Bali family planning program, namely, having four children without eliminating the elements of the Balinese name by giving each a first name. -for each child, the first child is named "Wayan/Putu", the second child is "Made/Kadek", the third child is "Nyoman/Komang", the fourth child is "Ketut", the fifth child and so on repeats the naming in accordance with the order of beginning. The Bali Family Planning Program occurred because most Balinese people tend to adhere to a patriarchal culture, so this will influence the increase in the number of births. Balinese people with varying levels of economic ability to meet their needs certainly have to rationally plan the number of children they should have.

If the rate of early marriage increases and low awareness of contraceptive use continues, it will have a negative impact on population density in Bali Province, especially in Bangli Regency because the population explosion is closely related to the high fertility rate caused by the average of each woman having many children. , so this led to a rapid increase in population.

Table 1. Number of Population in 2020-2022 and Population Growth Rate of Bali ProvinceAccording to Regency/City in Bali Province in 2010-2020 and 2020-2022

Degenery/City	Population (	thousand)	Population Growth Rate (percent)		
Regency/City	2020	2021	2022	2010-2020	2020-2022
Jembrana	317.1	321.9	327.9	1.88	1.93
Tabanan	461.6	465.3	469.3	0.90	0.95
Badung	548.2	549.3	549.5	0.09	0.14
Gianyar	515.3	519.5	524.0	0.90	0.95
Klungkung	206.9	210.1	214.0	1.89	1.94
Bangli	258.7	262.5	267.1	1.79	1.85
Karangasem	492.4	500.8	511.3	2.12	2.17
Buleleng	791.8	806.6	825.1	2.33	2.38
Denpasar City	725.3	726.6	726.8	-0.81	0.12
Bali province	4.317.4	4.362.7	4.425.1	1.01	1.29

#### Source: Bali Province in Figures, 2023

Population census is a process of collecting, processing, disseminating and analyzing demographic data carried out on the entire population of a country or region at a certain time

(Central Statistics Agency, 2012). Based on the results of the population census in (2010-2020), it was recorded that the population in Bali Province continues to increase every year as in Table 1. In the last ten years (2010-2020), the average population growth rate of Bali was 1,000. 01 percent per year. Meanwhile, in the period (2020-2022) there was an increase in the population growth rate in Bali Province by 1.29 percent.

Bangli Regency is one of the districts whose population continues to increase from 2020 to 2022 with details such as, the population in 2020 was 258.7 thousand people, the population in 2021 was 262.5 thousand people and the population in In 2022 there will be 267.1 thousand people. The population in Bangli Regency has increased from 258.7 thousand people in 2020 to 267.1 thousand people in 2022. In the last ten years (2010-2020), the average population growth rate of Bangli was 1.79 percent per year. In the period (2020-2022), there was an increase in the population growth rate of 1.85 percent per year, proving that this increase could occur because it was influenced by the presence of residents with migrant (immigrant) status and the low age of a woman's first marriage, which caused high fertility rates. To obtain information about fertility conditions in Bali Province, you can explore Table 2.

 Table 2 Values Age Specific Fertility Rate (ASFR) and Total Fertility Rate (TFR) According to

 Regency/City in Bali Province in 2020

	ASFR							TFR
Regency/City	15-19 (soul)	20-24 (soul)	25-29 (soul)	30-34 (soul)	35-39 (soul)	40-44 (soul)	45-49 (soul)	(children per woman)
Jembrana	30.60	108.90	134.30	87.20	53.90	15.70	1.30	2.15
Tabanan	16.10	92.20	126.30	71.20	37.90	16.90	0.50	1.81
Badung	12.0	77.0	147.0	87.0	41.0	14.0	1.0	1.89
Gianyar	16.90	94.00	120.30	100.50	37.90	12.60	0.20	1.91
Klungkung	16.20	102.10	152.30	105.60	45.40	8.60	1.40	2.16
Bangli	32.80	118.60	135.70	82.20	45.40	13.30	2.80	2.15
Karangasem	23.70	115.20	135.90	103.20	63.20	18.50	3.00	2.31
Buleleng	31.9	116.8	139.4	89.9	53.9	14.8	1.3	2.24
Denpasar City	10.00	68.50	128.80	99.20	49.80	11.20	1.90	1.85
Bali province	19.76	96.51	140.53	90.75	46.24	13.35	1.40	2.04

Source: Bali Province Central Statistics Agency, 2020

In Table 2, the ASFR and TFR values for districts/cities of Bali Province are presented. It can be seen that the TFR in Bangli Regency is 2.15 children per woman and the lowest is in Tabanan Regency at 1.81 children per woman. Buleleng Regency also has the highest TFR, namely 2.24 children per woman. ASFR in Bangli Regency at the age of 15-19 years is 32.80 people per thousand women, which makes Bangli Regency have the highest ASFR compared to other districts. This shows that the age at first marriage is very low.

The peak of ASFR lies in women aged 25-29 years. There are 136 births out of 1000 women aged 25-29 years. The ASFR pattern is inverted U-shaped. The birth rate is 33 births among 1000 women aged 15-19 years. Increased sharply to 119 births per 1000 women aged 20-24. Then it reaches its peak in the 25-29 year age group. In the next age group, the birth rate decreases to 3 births per 1000 women aged 45-49 years. Based on generation, births are

dominated by women from the millennial generation (age range 26-41 years) (Bali Province Central Statistics Agency, 2020). Girl child marriage has a serious impact on sustainable development goals and millennium goals in developing countries. This awareness is important to reduce the number of birth rates on the basis of reducing the number of early marriages .

## Table 3. Percentage of Ever Married Female Population Aged 10 Years and Over According toAge Group at First Marriage in Bali Province in 2020

	Group at Firs	st Marriage	•	0		0 0
Regency/City	< BKKBN M	Iarriage Age	Marriage Age According to BKKBN			
	≤16 Years	17-18 Years	19-20 Years	Amount	≥ 21 Years	Amount
Jembrana	9.19	21.58	25.95	56.72	43.28	100.00
Tabanan	4.74	16.62	23.60	44.96	55.03	100.00
Badung	3.33	11.38	18.71	33.42	66.58	100.00
Gianyar	5.27	10.40	24.68	40.35	59.66	100.00
Klungkung	3.89	8.02	24.30	36.21	63.79	100.00
Bangli	7.05	16.24	30.18	53.47	46.52	100.00
Karangasem	7.73	11.41	27.78	46.92	53.08	100.00
Buleleng	9.41	20.92	25.51	55.84	44.15	100.00
Denpasar City	3.56	8.32	20.99	32.87	67.14	100.00
Bali province	5.77	13.56	23.74	43.07	56.93	100.00

Source: Bali Province Central Statistics Agency, 2020

In Table 3, women aged <20 years in Bali Province account for 43.07 percent . The district with the highest number of women aged <20 years is Jembrana District, numbering 56.72 percent . The lowest number of women aged <20 years was in Denpasar City with 32.87 percent .

In Bangli Regency the number of women who have been married at the age of  $\leq 16$  years is 7.05 percent . In the 17-18 year age group, the number of women who have ever been married is 16.24 percent . Women who have ever been married in the 19-20 year age group are around 30.18 percent . The number of women aged <20 in Bangli Regency is 53.47 percent , which is the third highest compared to other districts, while those aged >21 years in Bangli Regency are 46.52 percent (Central Statistics Agency for Bali Province, 2020). Bangli Regency experiences an increase in early marriage every year , so that this can increase fertility and the rate of population growth in an area.

Based on population data and population growth rates according to sub-districts in Bangli Regency in Table 4, it is known that Tembuku District experiences an increase in population every year, even though it has the lowest population, the population growth rate in 2022 in Tembuku District is the highest among other districts, reaching 2.51 percent. Meanwhile, Susut District is the district with the lowest population growth rate of 1.11 percent . The high rate of population growth in an area will cause the population to increase rapidly in that area. The increase in population is influenced by the low age of marriage for women which causes high fertility rates.

Carl diadariad	Population (thousand)			Population Growth Rate (percent) 2020-2022	
Subdistrict	2020 2021 2022				
Shrink	48,682	49,085	49,629	1.11	
Bangli	54,438	54,894	55,507	1.12	
My claws	43,138	44,022	45,048	2.51	
Kintamani	112,463	114,525	116,949	2.26	
Bangli Regency	258,721	262,526	267.133	1.85	
	a	D 11 I	· ·	E: 0000	

 Table 4. Population and Population Growth Rate by District in Bangli Regency 2020-2022

Source: Bangli Regency in Figures, 2023

The large rate of population growth in Tembuku District, Bangli Regency, makes it interesting to examine the causal factors. This is influenced by cultural factors related to Balinese society, especially men have a privileged position and role, so this gives rise to injustice among women in Bali which makes the desire to have sons higher compared to having daughters so this will influence the increase number of births (Darmawati, 2017).

The majority of Balinese culture shows a tendency to prefer the birth of boys over the birth of girls. A survey conducted by Williamson (2016) shows that parents generally prefer to have sons, or at least have an equal number of sons and daughters . In this phenomenon, the Balinese people try hard to have male offspring who they hope will later become the next generation (Sujana, 2016). In Balinese society, the importance of heredity is because a child is the successor of the bloodline and is the preserver of customs and traditions.

Based on the previous explanation, new research is needed on the age of first marriage which is more specific to women so that it can provide the right solution to increase the average age of first marriage for women in Tembuku District, Bangli Regency.

Solutions that can be implemented to increase the age at first marriage for women in Tembuku District, Bangli Regency, according to Swastuti (2013), women are very potential and have competence so that the quality and professionalism of women needs to be improved through increasing their abilities and skills. Apart from that, it also builds awareness for each family so that they have adequate attention and support for social, cultural, economic, educational and health issues so that life becomes more prosperous. So that women, especially in Tembuku District, Bangli Regency, will have knowledge that can be developed in the future which will have an impact on improving their quality in economic and development activities. By delaying marriage by a woman who has played an active role in economic and development activities, this will indirectly have an impact on reducing fertility rates so that it can control the rate of population growth in Tembuku, Bangli Regency.

In this study, researchers also wanted to analyze the factors that influence the age of first marriage and female fertility in Tembuku District, Bangli Regency. Based on the description in the previous background, the researcher chose to use the influence of the variables level of education, employment status, family income, and number of family members on the age of first marriage and female fertility in Tembuku District, Bangli Regency.

#### **RESEARCH METHODS**

The research design used in this research is an associative quantitative research design. According to Sugiyono (2017:7), quantitative research is research that uses data in the form of numbers and is analyzed using statistical tools. Meanwhile, associative research is research that aims to determine the relationship of several variables, namely, education level, employment status, family income, number of family members, on age at first marriage and female fertility in Tembuku District, Bangli Regency.

#### **RESEARCH RESULTS AND DISCUSSION**

#### **Data Analysis Results**

• Hypothesis test

#### **Direct Effect Testing**

- The direct influence of education level (X<sub>1</sub>) on the age at first marriage of women (Y<sub>1</sub>) in Tembuku District, Bangli Regency
  - a) Hypothesis Formulation
     H<sub>0</sub>:β<sub>1</sub> ≤0 level of education does not have a positive and significant effect on the age at first marriage of women in Tembuku District, Bangli Regency
     H<sub>1</sub>:β<sub>1</sub> >0 level of education has a positive and significant effect on the age at first marriage of women in Tembuku District, Bangli Regency
  - b) Real Level Real level 5% confidence level 95% (  $\alpha$  0.05 )
  - c) Testing Criteria

If the probability value is greater than value  $\alpha = 0.05$  (p > 0.05), then H<sub>0</sub>it is accepted and H<sub>1</sub>rejected. If the probability value is smaller than value  $\alpha = 0.05$  (p < 0.05), then H<sub>0</sub>it is rejected and H<sub>1</sub>accepted.

d) Calculation

Based on calculations using the SPSS Version 24.0 assistance program, the *standardized coefficient value was obtained beta* is 0.307 and the probability value is 0.000.

e) Conclusion

*The standardized coefficient beta* value is 0.307 and the probability value is 0.000 <0.05, which means  $H_0$  rejected and  $H_1$  accepted, meaning that the education level variable (X<sub>1</sub>) has a positive and significant effect on the age at first marriage of women (Y<sub>1</sub>) in Tembuku District, Bangli Regency.

- The direct influence of employment status (X<sub>2</sub>) on the age at first marriage of women (Y<sub>1</sub>) in Tembuku District, Bangli Regency
  - a) Hypothesis Formulation

 $H_0:\beta_2 \leq 0$  women with working status have a lower age at first marriage than women with non-working status in Tembuku District, Bangli Regency.

 $H_2:\beta_2 > 0$  women with working status have a higher age at first marriage than women with non-working status in Tembuku District, Bangli Regency.

- b) Real Level Real level 5% confidence level 95% (  $\alpha$ - 0.05 )
- c) Testing Criteria

If the probability value is greater than value  $\alpha = 0.05$  (p > 0.05), then H<sub>0</sub>it is accepted and H<sub>2</sub>rejected. If the probability value is smaller than value  $\alpha = 0.05$  (p < 0.05), then H<sub>0</sub>it is rejected and H<sub>2</sub>accepted.

d) Calculation

Based on calculations using the SPSS Version 24.0 assistance program, the *standardized coefficient value was obtained beta* is 0.477 and the probability value is 0.000.

e) Conclusion

*The standardized coefficient beta* value is 0.477 and the probability value is 0.000 < 0.05, which means H<sub>0</sub>rejected and H<sub>2</sub>accepted, meaning that the variable for women with working status has a higher age at first marriage than women with non-working status in Tembuku District, Bangli Regency.

- The direct influence of family income (X<sub>3</sub>) on the age at first marriage of women (Y<sub>1</sub>) in Tembuku District, Bangli Regency
  - a) Hypothesis Formulation

 $H_0$ :β<sub>3</sub> ≤0 family income does not have a positive and significant effect on the age at first marriage of women in Tembuku District, Bangli Regency

 $H_3:\beta_3 > 0$  family income has a positive and significant effect on the age at first marriage of women in Tembuku District, Bangli Regency

b) Real Level

Real level 5% confidence level 95% (  $\alpha \! - \! 0.05$  )

c) Testing Criteria

If the probability value is greater than value  $\alpha = 0.05$  (p > 0.05), then H<sub>0</sub>it is accepted and H<sub>3</sub>rejected. If the probability value is smaller than value  $\alpha = 0.05$  (p < 0.05), then H<sub>0</sub>it is rejected and H<sub>3</sub>accepted. d) Calculation

Based on calculations using the SPSS Version 24.0 assistance program, the *standardized coefficient value was obtained beta* is 0.173 and probability value is 0.005.

- e) Conclusion standardized coefficient beta value is 0.173 and the probability value is 0.005 <0.05, which means H<sub>0</sub>rejected and H<sub>3</sub>accepted, meaning that the family income variable (X<sub>1</sub>) has a positive and significant effect on the age at first marriage of women (Y<sub>1</sub>) in Tembuku District, Bangli Regency.
- The direct influence of the number of family members (X<sub>4</sub>) on the age at first marriage of women (Y<sub>1</sub>) in Tembuku District, Bangli Regency
  - a) Hypothesis Formulation
     H<sub>0</sub>:β<sub>4</sub> ≤0 number of family members does not have a negative and significant effect
     on the age at first marriage of women in Tembuku District, Bangli Regency
     H<sub>4</sub>:β<sub>4</sub> >0 number of family members has a negative and significant effect on the age
     at first marriage of women in Tembuku District, Bangli Regency
  - b) Real Level

Real level 5% confidence level 95% (  $\alpha \! - \! 0.05$  )

c) Testing Criteria

If the probability value is greater than value  $\alpha = 0.05$  (p > 0.05), then H<sub>0</sub>it is accepted and H<sub>4</sub>rejected. If the probability value is smaller than value  $\alpha = 0.05$  (p < 0.05), then H<sub>0</sub>it is rejected and H<sub>4</sub>accepted.

d) Calculation

Based on calculations using the SPSS Version 24.0 assistance program, the *standardized coefficient value was obtained beta* is -0.239 and the probability value is 0.000.

e) Conclusion

*The standardized coefficient beta* value is -0.239 and the probability value is 0.000 <0.05, which means  $H_0$  rejected and  $H_4$  accepted, meaning the variable is the number of family members. (X<sub>4</sub>) has a negative and significant effect on the age at first marriage of women (Y<sub>1</sub>) in Tembuku District, Bangli Regency.

- Direct influence of education level (X<sub>1</sub>) on women's fertility (Y<sub>2</sub>) in Tembuku District, Bangli Regency
  - a) Hypothesis Formulation

 $H_0:\beta_5 \leq 0$  level of education has no negative and significant effect on women's fertility in Tembuku District, Bangli Regency  $H_5:\beta_5 > 0$  level of education has a negative and significant effect on women's fertility in Tembuku District, Bangli Regency

b) Real Level

Real level 5% confidence level 95% (  $\alpha \! - \! 0.05$  )

c) Testing Criteria

If the probability value is greater than value  $\alpha = 0.05$  (p > 0.05), then H<sub>0</sub>it is accepted and H<sub>5</sub>rejected. If the probability value is smaller than value  $\alpha = 0.05$  (p < 0.05), then H<sub>0</sub>it is rejected and H<sub>5</sub>accepted.

d) Calculation

Based on calculations using the SPSS Version 24.0 assistance program, the *standardized coefficient value was obtained beta* is -0.159 and the probability value is 0.008.

e) Conclusion

standardized coefficient beta value is -0.159 and the probability value is 0.008 <0.05, which means  $H_0$  rejected and  $H_5$  accepted, meaning that the education level variable (X<sub>1</sub>) has a negative and significant effect on women's (Y<sub>2</sub>) fertility in Tembuku District, Bangli Regency.

- 6) The direct influence of employment status (X<sub>2</sub>) on women's fertility (Y<sub>2</sub>) in Tembuku District, Bangli Regency
  - a) Hypothesis Formulation

 $H_0$ :β<sub>6</sub> ≤0 women with working status have lower fertility than women with nonworking status in Tembuku District, Bangli Regency.

 $H_6:\beta_6 >0$  women with working status have higher fertility than women with nonworking status in Tembuku District, Bangli Regency.

b) Real Level

Real level 5% confidence level 95% (  $\alpha$ - 0.05 )

c) Testing Criteria

If the probability value is greater than value  $\alpha = 0.05$  (p > 0.05), then H<sub>0</sub>it is accepted and H<sub>6</sub>rejected. If the probability value is smaller than value  $\alpha = 0.05$  (p < 0.05), then H<sub>0</sub>it is rejected and H<sub>6</sub>accepted.

d) Calculation

Based on calculations using the SPSS Version 24.0 assistance program, the *standardized coefficient value was obtained beta* is -0.308 and the probability value is 0.000.

e) Conclusion

*The standardized coefficient beta* value is -0.308 and the probability value is 0.000 < 0.05, which means H<sub>0</sub>rejected and H<sub>6</sub>accepted, so it means that the variables of women

with working status have higher fertility than women with non-working status in Tembuku District, Bangli Regency.

- The direct influence of family income (X<sub>2</sub>) on women's fertility (Y<sub>2</sub>) in Tembuku District, Bangli Regency
  - a) Hypothesis Formulation

 $H_0:\beta_7 \le 0$  family income does not have a positive and significant effect on women's fertility in Tembuku District, Bangli Regency

 $H_7:\beta_7 > 0$  family income has a positive and significant effect on women's fertility in Tembuku District, Bangli Regency

b) Real Level

Real level 5% confidence level 95% (  $\alpha \! - \! 0.05$  )

c) Testing Criteria

If the probability value is greater than value  $\alpha = 0.05$  (p > 0.05), then H<sub>0</sub>it is accepted and H<sub>7</sub>rejected. If the probability value is smaller than value  $\alpha = 0.05$  (p < 0.05), then H<sub>0</sub>it is rejected and H<sub>1</sub>accepted.

d) Calculation

Based on calculations using the SPSS Version 24.0 assistance program, the *standardized coefficient value was obtained beta* is 0.139 and probability value is 0.011.

e) Conclusion

*standardized coefficient beta* value is 0.139 and the probability value is 0.011 <0.05, which means  $H_0$  rejected and  $H_7$  accepted, meaning that the family income variable (X<sub>1</sub>) has a positive and significant effect on women's (Y<sub>2</sub>) fertility in Tembuku District, Bangli Regency.

- The direct influence of the number of family members (X<sub>4</sub>) on women's fertility (Y<sub>2</sub>) in Tembuku District, Bangli Regency
  - a) Hypothesis Formulation

 $H_0:\beta_8 \le 0$  number of family members does not have a positive and significant effect on women's fertility in Tembuku District, Bangli Regency

 $H_8:\beta_8 >0$  number of family members has a positive and significant effect on women's fertility in Tembuku District, Bangli Regency

b) Real Level

Real level 5% confidence level 95% (  $\alpha \! - \! 0.05$  )

c) Testing Criteria

If the probability value is greater than value  $\alpha = 0.05$  (p > 0.05), then H<sub>0</sub>it is accepted and H<sub>8</sub>rejected. If the probability value is smaller than value  $\alpha = 0.05$  (p < 0.05), then H<sub>0</sub>it is rejected and H<sub>8</sub>accepted.

### d) Calculation

Based on calculations using the SPSS Version 24.0 assistance program, the *standardized coefficient value was obtained beta* is 0.396 and the probability value is 0.000.

e) Conclusion

*The standardized coefficient beta* value is 0.396 and the probability value is 0.000 <0.05, which means  $H_0$  rejected and  $H_8$  accepted, meaning the variable is the number of family members. (X<sub>4</sub>) has a positive and significant effect on women's (Y<sub>2</sub>) fertility in Tembuku District, Bangli Regency.

- The direct influence of the age at first marriage of women (Y<sub>1</sub>) on women's fertility (Y<sub>2</sub>) in Tembuku District, Bangli Regency
  - a) Hypothesis Formulation

 $H_0:\beta_9 \le 0$  age at first marriage of women does not have a negative and significant effect on women's fertility in Tembuku District, Bangli Regency

 $H_9:\beta_9 > 0$  age at first marriage of women has a negative and significant effect on women's fertility in Tembuku District, Bangli Regency

b) Real Level

Real level 5% confidence level 95% (  $\alpha$ -0.05 )

c) Testing Criteria

If the probability value is greater than value  $\alpha = 0.05$  (p > 0.05), then H<sub>0</sub>it is accepted and H<sub>9</sub>rejected. If the probability value is smaller than value  $\alpha = 0.05$  (p < 0.05), then H<sub>0</sub>it is rejected and H<sub>9</sub>accepted.

d) Calculation

Based on calculations using the SPSS Version 24.0 assistance program, the *standardized coefficient value was obtained beta* is -0.349 and the probability value is 0.000.

e) Conclusion

*standardized coefficient beta* value is -0.349 and the probability value is 0.000 < 0.05, which means H<sub>0</sub>rejected and H<sub>9</sub>accepted, meaning that the variable age at first marriage for women has a negative and significant effect on fertility in Tembuku District, Bangli Regency.

## **Indirect Effect Testing**

 Indirect Effect of Education Level(X<sub>1</sub>) on Women's Fertility (Y<sub>2</sub>) in Tembuku District, Bangli Regency through the Age of First Marriage of Women(Y<sub>1</sub>) as an intervening variable

2)

a) Hypothesis Formulation

 $H_0:\beta_1 = 0$ : the age at first marriage of women  $(Y_1)$  does not act as an intervening variable for the influence of education level $(X_1)$  on women's fertility $(Y_2)$ 

 $H_1:\beta_1 \neq 0$ : age at first marriage of women (Y<sub>1</sub>)acts as an intervening variable for the influence of education level(X<sub>1</sub>) on women's fertility(Y<sub>2</sub>)

b) Significant Level

 $\alpha = 5\% (0.05)$ e = 1.96

c) Testing Criteria

If  $p - value \ge 0.05$  or z calculated  $\le z$  table, then H<sub>0</sub>it is accepted which means the age at first marriage (Y<sub>1</sub>)is not an intervening variable. If p - value < 0.05 or z calculated >z table, then it is rejected H<sub>0</sub>, which means the age at first marriage (Y<sub>1</sub>)is an intervening variable

d) Test Statistics

$$S\beta_{1}\beta_{9} = \sqrt{\beta_{9}^{2}S\beta_{1}^{2} + \beta_{1}^{2}S\beta_{9}^{2}}$$

$$= \sqrt{(-0.142)^{2}(0.054)^{2} + (0.270)^{2}(0.036)^{2}}$$

$$= \sqrt{(0.020164)(0.0029) + (0.0729)(0.001296)}$$

$$= \sqrt{0.0000585) + (0.0000945)}$$

$$= \sqrt{0.000153}$$

$$= 0.012$$

To test the significance of the indirect effect, calculate the z value using the following formula.

$$Z = \frac{\beta_1 \beta_9}{s \beta_1 \beta_9} \\ = \frac{(0.270)(-0.142)}{0.012} \\ = \frac{(-0.00383)}{0.012} \\ = -3.19$$

e) Conclusion

Because zcount is (-3.19) and |zhitung| = 3.19 > 1.96, meaning H<sub>0</sub>it is rejected, then the age at first marriage of women (Y<sub>1</sub>) is a mediating variable on the indirect effect of education level (X<sub>1</sub>) on fertility (Y<sub>2</sub>) in Tembuku District, Bangli Regency.

- Indirect Effect of Employment Status(X<sub>2</sub>) on Women's Fertility (Y<sub>2</sub>) in Tembuku District, Bangli Regency through the Age of First Marriage of Women(Y<sub>1</sub>) as an intervening variable
  - a) Hypothesis Formulation

 $H_0:\beta_2 = 0$ : age at first marriage of women  $(Y_1)$  does not play a role as an intervening variable in the influence of employment status  $(X_2)$  on women's fertility  $(Y_2)$ 

 $H_2:\beta_2 \neq 0$ : age at first marriage of women (Y<sub>1</sub>)acts as an intervening variable for the influence of employment status(X<sub>2</sub>) on women's fertility(Y<sub>2</sub>)

b) Significant Level

 $\alpha = 5\% (0.05)$ e = 1.96

c) Testing Criteria

If  $p - value \ge 0.05$  or z calculated  $\le z$  table, then H<sub>0</sub>it is accepted which means the age at first marriage (Y<sub>1</sub>)is not an intervening variable. If p - value < 0.05 or z calculated >z table, then it is rejected H<sub>0</sub>, which means the age at first marriage (Y<sub>1</sub>)is an intervening variable

d) Test Statistics

$$S\beta_{2}\beta_{9} = \sqrt{\beta_{9}^{2}S\beta_{2}^{2} + \beta_{2}^{2}S\beta_{9}^{2}}$$

$$= \sqrt{(-0.142)^{2}(0.342)^{2} + (2.784)^{2}(0.036)^{2}}$$

$$= \sqrt{(0.020164)(0.116964) + (7.750656)(0.001296)}$$

$$= \sqrt{0.0023585) + (0.0100449)}$$

$$= \sqrt{0.0124034}$$

$$= 0.111$$

To test the significance of the indirect effect, calculate the z value using the following formula.

$$Z = \frac{\beta_2 \beta_9}{s \beta_2 \beta_9} \\ = \frac{(2.784)(-0.142)}{0.111} \\ = \frac{(-0.395328)}{0.111} \\ = -3 .56$$

e) Conclusion

Because zcount is (-3.56) and |zhitung| = 3.56 > 1.96, meaning H<sub>0</sub>it is rejected, then the age at first marriage of women (Y<sub>1</sub>) is a mediating variable on the indirect effect of employment status (X<sub>2</sub>) on fertility (Y<sub>2</sub>) in Tembuku District, Bangli Regency.

- Indirect Effect of Family Income(X<sub>3</sub>) on Women's Fertility (Y<sub>2</sub>) in Tembuku District, Bangli Regency through the Age of First Marriage of Women(Y<sub>1</sub>) as an intervening variable
  - a) Hypothesis Formulation

 $H_0:\beta_3 = 0$ : the age at first marriage of women  $(Y_1)$  does not play a role as an intervening variable in the influence of family income $(X_3)$  on women's fertility $(Y_2)$  $H_3:\beta_3 \neq 0$ : age at first marriage of women  $(Y_1)$  acts as an intervening variable for the

influence of family income( $X_3$ ) on women's fertility( $Y_2$ )

b) Significant Level

 $\alpha = 5\% \ (0 \ .05 \ )$ 

*e*=1.96

c) Testing Criteria

If  $p - value \ge 0.05$  or z calculated  $\le z$  table, then H<sub>0</sub>it is accepted which means the age at first marriage (Y<sub>1</sub>) is not an intervening variable. If p - value < 0.05 or z

calculated >z table, then it is rejected  $H_0$ , which means the age at first marriage ( $Y_1$ ) is an intervening variable

d) Test Statistics

$$S\beta_{3}\beta_{9} = \sqrt{\beta_{9}^{2}S\beta_{3}^{2} + \beta_{3}^{2}S\beta_{9}^{2}} \\ = \sqrt{(-0,142)^{2}(0,001)^{2} + (0,003)^{2}(0,036)^{2}} \\ = \sqrt{(0,020164)(0,000001) + (0,000009)(0,001296)} \\ = \sqrt{(0,00000002) + (0,00000001)} \\ = \sqrt{0,00000003} \\ = 0.00018$$

To test the significance of the indirect effect, calculate the z value using the following formula.

$$Z = \frac{\beta_3 \beta_9}{s \beta_3 \beta_9}$$
  
=  $\frac{(0,003)(-0,142)}{0,00018}$   
=  $\frac{(-0,000426)}{0,00018}$   
= -2.36

e) Conclusion

Because zcount is (-2.36) and |zhitung| = 2.36 > 1.96, meaning H<sub>0</sub>it is rejected, then the age at first marriage of women (Y<sub>1</sub>) is a mediating variable on the indirect effect of family income (X<sub>1</sub>) on fertility (Y<sub>2</sub>) in Tembuku District, Bangli Regency.

- 5) Indirect Effect of Number of Family Members(X<sub>4</sub>) on Women's Fertility (Y<sub>2</sub>) in Tembuku District, Bangli Regency through the Age of First Marriage of Women(Y<sub>1</sub>) as an intervening variable
  - a) Hypothesis Formulation

 $H_0:\beta_4 = 0$ : the age at first marriage of women  $(Y_1)$  does not play a role as an intervening variable for the influence of the number of family members $(X_4)$  on women's fertility $(Y_2)$ 

 $H_4:\beta_4 \neq 0$ : the age at first marriage of women (Y<sub>1</sub>)acts as an intervening variable for the influence of the number of family members(X<sub>4</sub>) on women's fertility(Y<sub>2</sub>)

- b) Significant Level  $\alpha = 5\% (0.05)$ e = 1.96
- c) Testing Criteria

If  $p - value \ge 0.05$  or z calculated  $\le z$  table, then H<sub>0</sub>it is accepted which means the age at first marriage (Y<sub>1</sub>)is not an intervening variable. If p - value < 0.05 or z calculated >z table, then it is rejected H<sub>0</sub>, which means the age at first marriage (Y<sub>1</sub>)is an intervening variable

#### d) Test Statistics

$$S\beta_4\beta_9 = \sqrt{\beta_9^2 S\beta_4^2 + \beta_4^2 S\beta_9^2}$$
  
= $\sqrt{(-0,142)^2(0,089)^2 + (-0,388)^2(0,036)^2}$   
= $\sqrt{(0,020164)(0,0079) + (0,1505)(0,001296)}$   
= $\sqrt{(0,0001592) + (0,0001950)}$   
= $\sqrt{0,0003542}$   
= 0.0 19

To test the significance of the indirect effect, calculate the z value using the following formula.

 $Z = \frac{\beta_4 \beta_9}{s \beta_4 \beta_9} \\ = \frac{(-0.388)(-0.142)}{0.019} \\ = \frac{(0.055096)}{0.019} \\ = 2.90$ 

e) Conclusion

Because zcount is (2.90) and |zhitung| = 2.90 > 1.96, which means H<sub>0</sub>it is rejected, then the age of a woman's first marriage (Y<sub>1</sub>) is a mediating variable on the indirect effect of number of family members (X<sub>4</sub>) on fertility (Y<sub>2</sub>) in Tembuku District, Bangli Regency.

### **In-depth Interview Results**

Interviews were conducted with female couples of childbearing age (PUS) in Tembuku District, Bangli Regency, with a marriage range between the ages of 15-49 years. The interviews were conducted in an unstructured manner, namely free interviews where the author did not prepare systematic questions for data collection. The topics discussed in this interview were women's marriage age and women's fertility as well as the variables that influence them such as education level, employment status, family income and number of family members in Tembuku District, Bangli Regency.

The large rate of population growth in Tembuku District, Bangli Regency is caused by cultural factors related to Balinese society, especially men who have a privileged role, thus making the desire to have sons higher than having daughters. In the community in Tembuku District, Bangli Regency, the importance of heredity is because a child is the successor of the bloodline and the preservation of customs and traditions. In many traditional cultures, it is considered customary to marry at a young age . There is encouragement from families to marry their children young, especially for women, marrying young is seen as a way to ensure economic security, so that the family's burden shifts to the husband's burden. Lack of information about the Family Planning (KB) program and delaying pregnancy also triggers the desire to have children to increase. These results are strengthened by interviews conducted with Ni Wayan Murniasih (32 years) who stated that:

"I chose to get married at the age of 18 because I was pregnant out of wedlock, apart from that because I lacked knowledge about the marriageable age. Environmental factors and family encouragement also influence where most of my siblings married at a young age. Because both of my parents died, I just lived with my grandmother, so I decided to just get married. I consider marriage as a solution because my husband helps with the economy. I have four children because all three are daughters, so I want to have sons as successors to the family's inheritance rights, especially in land ownership."

The respondent's statement implies that there is an influence of a woman's age at first marriage on fertility. On the other hand, in terms of education, the majority of respondents on average only completed their education up to junior high school (Junior High School) level. This is because education at higher levels such as high school (Senior High School) and college usually requires higher costs. Families with limited economic conditions may not be able to afford their children's education to a higher level. Female respondents are often expected to help with household or agricultural work, or even look for work to help the family financially. This can cause them to stop going to school after graduating from junior high school. These results were strengthened by an interview conducted with Ni Wayan Desiani (28 years) who stated that:

" In my opinion, because limited education causes knowledge about marriage and marriage ages to be low, so many people marry young, apart from that, parents also have low incomes, so it's only natural that after graduating from junior high school, some people are married and high school people already have children ."

This states that the level of education indirectly influences women's fertility through the age of women's first marriage. Low marriage age and high fertility are often closely related to the employment status and economic conditions of the community in Tembuku District, Bangli Regency. When job opportunities are limited, especially for women, getting married and starting a family may be considered a more viable alternative. The absence of work can encourage people to marry early due to lack of other activities. The absence of work may also be linked to dropping out of school at an early age , which reduces the time that can be spent in education and increases the likelihood of early marriage. Most female PUS respondents in Tembuku District choose not to work, although many female respondents choose to focus on family roles, but they also have the potential or desire to work outside the home. These results were strengthened by an interview conducted with Ni Ketut Kariani (30 years old) who stated that: " I don't work because my education is low, only finishing elementary school, and also because I don't have the skills. I run out of time to take care of my children and the house, but I also really want to work to help the family financially but my husband doesn't give me permission to work. "

Low family income and large family members in Tembuku District, Bangli Regency can have a significant impact on marriage age and fertility. Many families in Tembuku depend on agriculture as their main source of income. Income from this sector is often low and unstable. Low incomes and large families can create a cycle of poverty that is difficult to break. Expenditures for basic needs increase as the number of family members increases. Respondents in Tembuku District, Bangli Regency, which is agriculturally based, may consider children as additional labor, which increases the value of having many children. In societies with large family cultures, there is a tendency to marry earlier and have more children. Children in large families are often considered assets who help with household and agricultural work. Children are often expected to support the family economically through work at home or on the farm, which can encourage high fertility. The results show that PUS women in Tembuku District have an average of 6 family members. These results were strengthened by an interview conducted with Ni Putu Eka Dewi Hindrayani (38 years) who stated that:

" I have a large number of members because in one house there are many members, a nuclear family (father, mother, four children), and two parents. Apart from that, the factor of having many children even though the number of members is large is because it is hoped that the children will be able to help the family economically. "In this neighborhood, there are a lot of family members because there are lots of families in the house, so they all live in one place, but there are only a few families who have migrated."

age and fertility in Tembuku District are closely related, influenced by factors such as education level, employment status, family income and number of family members. A low marriage age tends to increase fertility, which can worsen economic and health conditions. Low marriage age is often associated with more frequent pregnancies due to a lack of understanding or access to family planning. Good health education can delay the age of marriage and reduce fertility by providing couples with knowledge about how to plan their families more effectively. Families with better economic conditions may be able to delay marriage and support their children's education, which can reduce fertility rates.

#### **DISCUSSION OF RESEARCH RESULTS**

## Direct Influence of Education Level on the Age of First Marriage of Women in Tembuku District, Bangli Regency

The results of data analysis show that the level of education has a positive and significant effect on the age at first marriage of women in Tembuku District, Bangli Regency. The results of this test could mean that if the level of education of women in Tembuku District is lower, the age at first marriage will be lower, while women who have a high level of education will generally postpone their marriage because they are oriented towards education and decent work. Supported by research data which found that on average women in Tembuku District were only able to complete education up to junior high school/equivalent level due to economic factors and out-of-wedlock pregnancies, so this encouraged parents to marry off their children early.

The results of this research are supported by research from Kurniawati, et al (2016) and Hotnatalia (2012) which explains that the level of education has a positive and significant effect on the age of first marriage. The lower the education, the lower the age at first marriage, and vice versa, the higher a person's education, the higher the age at first marriage. This is also confirmed by the research results of Qibtiyah (2015) and Febriyanti (2017) that the level of education has a positive and significant effect on the age of first marriage. This determines that the level of women's education is a factor in determining the age of first marriage. The lower the level of education encourages young marriages to take place.

## Direct Influence of Employment Status on Age at First Marriage of Women in Tembuku District, Bangli Regency

The results of data analysis show that women who do not work have a lower age at first marriage compared to women who work in Tembuku District, Bangli Regency. The results of this test could mean that the status of not working or working will influence a woman's decision in determining her marriage age, where women who do not work will tend to marry at a young age with the assumption that their husband will help ease the burden on their parents financially, whereas women who working tends to delay marriage. Supported by research data which found that the average woman in Tembuku District is unemployed. The reasons why women in Tembuku District do not work are due to taking care of children, limited education and skills. In addition, after marriage, women experience economic dependence on their partners, especially if the partner has sufficient income to meet family needs. This dependency may reduce incentives to work outside the home. The results of this research are supported by research from Anggraini et al. (2021) which explains that employment status has a positive effect on the age at first marriage of women. This means that if the woman does not work, the age at first marriage tends to be low. These results are also reinforced by the research results of Apsaryanthi (2017) and Saraswati (2019) which stated that employment status has a positive effect on the age of a woman's first marriage, working or not working status will influence a woman's decision to determine her marriage age.

## Direct Influence of Family Income on the Age of First Marriage of Women in Tembuku District, Bangli Regency

The results of data analysis show that family income has a positive and significant effect on the age at first marriage of women in Tembuku District, Bangli Regency. The results of this test could mean that if family income is low, the age at first marriage for women will be lower and vice versa. This is because parents with low incomes tend to marry off their children because they feel they cannot afford to support their children. Supported by research data which found that the average family income in Tembuku District, Bangli Regency is relatively low because most of them earn their living as farmers and planters, indicating that in general the income of rice farming families tends to be low. Apart from that, the education of respondents in Tembuku District, Bangli Regency only completed junior high school/equivalent level so that their abilities and skills were limited, causing the income they received to be low.

The results of this research are supported by research from Aristyana (2023) and Lira, et al (2019) which states that income has a positive effect on the age of women's first marriage. This means that the lower the income earned, the lower the age at first marriage. Research is also strengthened by Isrokiyah (2017) who concluded that there is a positive and significant relationship between family income and the age of first marriage for women in the age range of 15-19 years, that the economic burden of parents will lead to marrying off their daughters at a young age.

## Direct Influence of Number of Family Members on Age at First Marriage of Women in Tembuku District, Bangli Regency

The results of data analysis show that the number of family members has a negative and significant effect on the age at first marriage of women in Tembuku District, Bangli Regency. The results of this test could mean that the greater the number of family members, the higher the consumption expenditure, indirectly the family's economy becomes unstable, the possibility of having a lower age at first marriage compared to families that have a stable economic condition. Supported by research data which found that the average number of family members in Tembuku District, Bangli Regency is 6 people. In situations like this, marrying off children at a young age is one solution to ease the family's economic burden. Marrying children off as early as possible will help ease the family's economic burden because there is financial income from working in-laws.

Based on research conducted by Stang (2011) and Yulanda (2019), the results showed that the number of family members had a negative and significant effect on the age at first marriage. The number of family members has a significant effect on the respondent's age at first marriage, so that the more family members there are, the higher the risk of marrying young. The larger the number of family members, the greater the possibility of parents marrying their children at a young age with the assumption of easing the burden on parents.

## Direct Influence of Education Level on Women's Fertility in Tembuku District, Bangli Regency

The results of data analysis show that the level of education has a negative and significant effect on women's fertility in Tembuku District, Bangli Regency. The results of this test can mean that the higher the level of education, the less likely it is that the number of children will be planned because women who have received education will be more likely to improve the quality of children by reducing the number of children so that it will be easier to care for them, provide guidance, and provide proper education. Supported by research data which found that the level of education in Tembuku District, Bangli Regency is relatively low with the average school completion at junior high school/equivalent level. This shows that there is a lack of knowledge about the ideal age of first marriage for women.

The results of this research are supported by research from Apriwana (2019) and Agustia (2018) which states that women have a negative influence on the number of children born. Likewise, research from Utomo and Aziz (2020) explains that the level of education has a negative effect on fertility because education offers understanding among highly educated people. The higher a person's education, the more likely they are to choose to have a small number of but quality children rather than having a large number of children but are not taken care of because fertility is not only limited to producing offspring, but also caring for and nurturing children until they reach adulthood.

## Direct Influence of Employment Status on Women's Fertility in Tembuku District, Bangli Regency

The results of data analysis show that employment status has a negative and significant effect on fertility in Tembuku District, Bangli Regency. The results of this test could mean that employment status plays a role in a woman's fertility level. Supported by research data which found that women in Tembuku District, Bangli Regency prefer not to work. Limited job opportunities may make it difficult for women to find jobs that match their interests or skills. Apart from taking care of children, women also have other responsibilities at home, such as caring for the household, cooking, cleaning the house, women's participation in religious ceremonies, and household tasks related to ceremonial preparations , which take up their time and energy.

This result is strengthened by the research results of Wulandari et al. (2017) stated that women who do not work tend to have higher fertility because they have more time to take care of more children. According to research conducted by Mona Adria Wirda et al. (2018), that employment status has a negative and significant effect on fertility levels for women in Laut Dendang Village. Women's employment status has an influence on fertility levels because women who do not work generally have higher fertility levels than working women.

## Direct Influence of Family Income on Women's Fertility in Tembuku District, Bangli Regency

The results of data analysis show that family income has a positive and significant effect on fertility in Tembuku District, Bangli Regency. The results of this test could mean that if family income is low, parents' preferences for having children will change. Low family income will create an opinion about having fewer children so that they do not become an economic burden on the family. Supported by research data which found that income after marriage for women in Tembuku District, Bangli Regency is relatively low, so this means that the number of children born alive tends to be low.

The results of this research are supported by research from Sinaga, et al (2017) which explains that family income has a positive effect on fertility. This shows that the lower the household income, the greater the chance of having fewer children. This research is also in line with research conducted by Amialchuk et al. (2014) which shows that family income has a positive and significant effect. Low income can reduce fertility in young women and reduce fertility in old age.

## Direct Influence of Number of Family Members on Women's Fertility in Tembuku District, Bangli Regency

The results of data analysis show that the number of family members has a positive and significant effect on fertility in Tembuku District, Bangli Regency. The results of this test can mean that the more family members there are in the family, the higher the desire to have children or the number of new members. Meanwhile, those with fewer family members tend not to add additional family members, in this case children. Supported by research data which

found that the average number of family members in Tembuku District is 6 people, this is also related to the possibility of having more children . Although in general the costs of raising children increase with the number of children you have, respondents said that having a large family can provide certain economic benefits. For example, having more children may mean more labor available to help with work on the farm or farm.

Based on research by Wahyudin (2016), the number of family members has a positive and significant effect on fertility in Tanjung Raya Village, Kecepatan District, Bandar Lampung City. If a family has a large number of family members, then in that family the possibility of having children will increase. Apart from that, Ismail's research (2016) also states that the number of family members is a factor that causes fertility to increase.

## Direct Influence of Age at First Marriage of Women on Women's Fertility in Tembuku District, Bangli Regency

The results of data analysis show that the age at first marriage of women has a negative and significant effect on fertility in Tembuku District, Bangli Regency. The results of this test could mean that the lower the age at first marriage for women in Tembuku District, Bangli Regency, the higher the fertility and vice versa. The younger the age at first marriage will open up opportunities to have a large number of births, as a result of the length of the female reproductive period. Supported by research data which found that the average number of children born alive in Tembuku District, Bangli Regency was 3 children. Female couples of childbearing age in Tembuku District, Bangli Regency tend to have more than 2 children due to cultural factors, namely, preserving the Balinese Krama family planning, apart from that because they want to have a certain gender like men to continue the lineage in their family and at the same time as heirs who will inherit both property and the duties and obligations of their parents after they die.

The results of this research are supported by research from Yulzain (2017) and Israwati (2009) which explains that the age at first marriage has a negative effect on fertility. A woman's age has a very big influence on fertility, where this is related to the age of first marriage. Likewise, Singarimbun et al. (2018) who stated that the lower the age at first marriage, the greater the possibility of having children. For someone who marries at a relatively young age, the fertile or reproductive period will be longer in the marriage bond, thus affecting fertility.

## Indirect Effect of Education Level on Women's Fertility through Age at First Marriage of Women in Tembuku District, Bangli Regency

The results of data analysis show that the level of education influences fertility indirectly through the age at first marriage of women in Tembuku District, Bangli Regency. It

can be interpreted that the variable age at first marriage of women is a mediating variable on the indirect effect of education level on fertility in Tembuku District, Bangli Regency. The results of this research are supported by research from (Prayogi, 2022) which explains that women's education level has an indirect effect on fertility through the age of women's first marriage . A woman's tendency to marry at a young age due to non-demographic factors will influence the decision to have more children. Education is a person's process of gaining knowledge and is a transformation of science and culture that can hone abilities and change attitudes or values that prevail in society. The level of education will affect the age at first marriage which ultimately affects fertility. Women with higher education tend to delay the age of marriage . This can also be a strategy for balancing a career and getting a higher education before starting a family. Women who have a lower level of education generally have a lower age at first marriage so that the number of children born increases.

## Indirect Influence of Employment Status on Women's Fertility through Age at First Marriage of Women in Tembuku District, Bangli Regency

The results of data analysis show that employment status influences fertility indirectly through the age at first marriage of women in Tembuku District, Bangli Regency. It can be interpreted that the variable age at first marriage of women is a mediating variable on the indirect influence of employment status on fertility in Tembuku District, Bangli Regency. The results of this research are supported by research from (Jayakusuma, 2022) which explains that women's employment status has an indirect effect on fertility through the age of women's first marriage . Employment status is an activity carried out by a person to earn a living. If someone does not have a job, then the tendency to make a decision to get married immediately will occur. Most women who work have high levels of independence, which affects the age at which they first marry, which will influence the number of children born. Women who do not work have a lower age at first marriage so the number of children born is higher.

# Indirect Influence of Family Income on Women's Fertility through Age at First Marriage of Women in Tembuku District, Bangli Regency

The results of data analysis show that family income influences fertility indirectly through the age at first marriage of women in Tembuku District, Bangli Regency. It can be interpreted that the variable age at first marriage of women is a mediating variable on the indirect effect of family income on fertility in Tembuku District, Bangli Regency. Family income is the amount of reciprocity received by the family concerned which comes from the income of the head of the family and the income of household members. Income can be a reason why women will end their reproductive period earlier, where women who have low income will end their reproductive period earlier than those who have medium or high income. Women who come from families with low family income will have a low age at first marriage, so the number of children born will be low due to the lack of income so they want fewer children.

## Indirect Effect of Number of Family Members on Women's Fertility through Age at First Marriage of Women in Tembuku District, Bangli Regency

The results of data analysis show that the number of family members influences fertility indirectly through the age at first marriage of women in Tembuku District, Bangli Regency. It can be interpreted that the variable age at first marriage of women is a mediating variable on the indirect influence of the number of family members on fertility in Tembuku District, Bangli Regency. The number of family members is the total number of members in a family who are related by blood, consisting of father, mother and children who live under one roof. The number of children in a family can be one of the causes of marriage at a young age . The number of family responsibilities that must be borne can be seen from the number of each family member. The more family members there are in the family, the lower the desire to have children or add new family members. Meanwhile, those with fewer family members tend to add more family members, in this case children. A large number of family members will have a lower age at first marriage for women, so the desire to have children will be higher.

#### CONCLUSION

Based on the results of the analysis described in the previous chapter, conclusions are drawn to answer the problem formulation as follows:

- Education level, employment status and family income have a direct positive and significant effect on the age at first marriage of women in Tembuku District, Bangli Regency.
- 2. The number of family members has a direct, negative and significant effect on the age at first marriage of women in Tembuku District, Bangli Regency.
- 3. Education level and employment status have a direct, negative and significant effect on women's fertility in Tembuku District, Bangli Regency.
- 4. Family income and number of family members have a direct, positive and significant effect on women's fertility levels in Tembuku District, Bangli Regency.
- The age at first marriage of women has a direct, negative and significant effect on women's fertility in Tembuku District, Bangli Regency

6. Education level, employment status, family income, and number of family members have an indirect effect on women's fertility through the age of women's first marriage in Tembuku District, Bangli Regency.

#### REFERENCES

- Adi, E. S. (2013). Factors affecting fertility in Kandangtepus Village, Senduro District, Lumajang Regency. Thesis. Jember: FE UNEJ.
- Aditya, C. (2014). Analysis of factors affecting the population growth rate of Semarang City in 2021 using geographically weighted logistic regression. Gaussian Journal, 3(2), 161–162.
- Afifah, K. V., & Suwanda, I. M. (2016). Socioeconomic conditions of parents on parents' decisions to marry daughters early in Gedangkulud Village, Cerme District, Gresik Regency. Moral and Citizenship Studies, 2(4), 753–767.
- Agustia, T. (2018). The socioeconomic influence of wives on fertility levels in Pekanbaru City. JOM FEB, 1(1), 8–9.
- Ahmed, S., Khan, S., Alia, M., & Noushad, S. (2013). Psychological impact evaluation of early marriages. International Journal of Endorsing Health Science Research, 1(2), 84–86.
- Alfiyah. (2010). Causes of early marriage. Retrieved from <u>http://Alfiyah.Student.-umm.ac.id</u> (accessed on May 29, 2023).
- Allendorf, K., & Ghimire, D. (2012). Determinants of marital quality in an arranged marriage society. Research University of Michigan.
- Amialchuk, A., Lisenkova, K., Salnykov, M., & Yemelyanau, M. (2014). Economic determinants of fertility in Belarus. Economics of Transition, 22(3).
- Anggraini, A., Sari, N., & Dhamayanti, R. (2021). The relationship between education and work and women's age at marriage at KUA Depok Yogayakarta. Journal of Innovation Research, 1(9), 1779–1786.
- Apriawan, C. (2019). The influence of socio-economic factors on the Tembalang District level, Semarang City. Efficient: Indonesian Journal of Development Economics, 2(3), 598– 605.
- Aristyana, A. R., & Widanta, A. A. B. P. (2023). The influence of social economic factors on the age at marriage of early marriage perpetrators of women in Gianyar Regency. Udayana University Economics and Business E-Journal, 12(4), 707–715.
- Assad, R., & Zouari, S. (2003). The timing of marriage, fertility, and female labor force participation in Morocco. International Journal University of Minnesota.
- Bali Province Central Statistics Agency. (2020). Long form results of the 2020 population census for Bali Province. Bali Province Statistics: Central Statistics Agency.

- Bali Province Central Statistics Agency. (2021). Percentage of ever married female population aged 10 years and over according to age group at first marriage in Bali Province 2020. Bali Province Statistics: Central Statistics Agency.
- Bali Province Central Statistics Agency. (2023). Bali Province in Figures 2023. Bali Province Statistics: Central Statistics Agency.
- Bangli Regency Central Statistics Agency. (2023). Bangli Regency in Figures 2023. Bali Province Statistics: Central Statistics Agency.
- Bloom, D. E., & Poza, A. S. (2010). Introduction to special issue of the European Journal of Population: 'Economic consequences of low fertility in Europe'. European Journal of Population, 26, 127–139.
- Brewster, K. L., & Rindfuss, R. R. (2000). Fertility and women's employment in industrialized nations. Annual Review of Sociology, 26, 271–296.
- Cahyani, & Sunarko. (2013). The influence of parental education level and parental net income on age at first marriage in Tersono District, Batang Regency. Semarang State University Journal.
- Central Bureau of Statistics. (2012). Indonesian Statistics 2012. Central Bureau of Statistics.
- Darnita. (2013). Description of the factors that cause early marriage in the Lhok Kaju Settlement, Indra Jaya District, Pidie Regency, 2013. Midwifery Scientific Journal STIKes U'Budiyah Banda Aceh.
- Davis, K., & Blake, J. (1956). Social structure and fertility: An analytical framework. Economic Development and Cultural Change, 4(3).
- Dyastari, I. A. G. S., & Marhaeni, A. A. I. N. (2015). The influence of social, economic and demographic factors on contraceptive use in Denpasar. Journal of Applied Quantitative Economics, 8(2), 113–216.
- Fatusi, A. (2016). Young people's sexual and reproductive health interventions in developing countries: Making the investments count. Journal of Adolescent Health, 59(3), 1–3.
- Febriyanti, N. P. V., & Dewi, M. H. U. (2017). The influence of socio-economic and demographic factors on young women's decisions to marry in Indonesia. PYRAMID: Journal of Population and Human Resources Development, 13(2), 108–117.
- Hansanpoor-Azghdy, S. B., Simbar, M., & Vedhadir, A. (2015). The social consequences of infertility among Iranian women: A qualitative study. International Journal of Fertility and Sterility, 8(4), 409–420.
- Hanum, N., & Andiny, P. (2018). The influence of education level, age at first marriage and infant mortality on fertility in East Aceh Regency. Samudra Journal of Economics and Business, 9(2).
- Harsoyo, A., & Sulistyaningrum, E. (2018). The effect of fertility on women's labor force participation. Journal of Quantitative Economics, 11(2), 147–162.

- Haryanti, A. M. D., & Yasa, I. G. W. M. (2022). The influence of education level, employment status, number of family members, and reasons for marriage on the age of first marriage for women in Denpasar City. EP Unud E-Journal, 11(7), 2481–2508.
- Helliwell, J. F., & Putnam, R. D. (2004). The social context of well-being. The Royal Society Journal, 34(6), 1435–1446.
- Hill, P. (2017). The influence of length of education, economic status, and socio-culture on age at first marriage in Muaro Jambi Regency in 2015. Scientific Journal of Economics and Business, 8(2), 64–78.
- Irianto, K. (2014). Public Health Science. Bandung: Alfabeta.
- Iswarati. (2009). Proximate determinants of fertility in Indonesia. Jakarta: Family Planning and Reproductive Health Research and Development Center, BKKBN.
- Kertzer, D. I. (2008). Italy's path to very low fertility: The adequacy of economic and second demographic transition theories. European Journal of Population, 25.
- Knox, D. (1980). Trends in marriage and family: The 1980's. Family Relations Journal, 29(2), 145–150.
- Kurniawan, J. (2016). Education and income dilemma in Grobogan Regency. Journal of Applied Quantitative Economics. ISSN 2303-0186.
- Naibaho, H. (2012). Factors influencing young age marriage (case study in Hamlet IX Seroja Pasar VII Tembung, Percut Sei Tuan District, Deli Serdang Regency). Journal of the University of North Sumatra, 2(4), 1–12.
- National Family Planning Coordinating Agency. (2017). Population, family planning and family development program policies. Jakarta: BKKBN.
- National Family Planning Coordinating Agency. (2022). Number of samples of couples of childbearing age (PUS) in Tembuku District, Bangli Regency. Retrieved from <u>https://portalpk22-pdn.bkkbn.go.id/tabulasi</u>.