

Determinants of Women's Age at First Childbearing in Polonnaruwa District

Sri Lanka Journal of Social Sciences and Humanities
Volume 2 Issue 1, February 2022: 31-40
ISSN: 2773 692X (Online), 2773 6911 (Print)
Copyright: © 2021 The Author(s)
Published by Faculty of Social Sciences and
Languages, Sabaragamuwa University of Sri Lanka
Website: <https://www.sab.ac.lk/sljssh>
DOI: <http://doi.org/10.4038/sljssh.v2i1.54>



Thayaparan, A.¹, Bandara D.M.G.T.¹ and Gunathilaka G.Y.N.²

¹ Department of Business Economics, University of Vavuniya, 43000, Sri Lanka.

² Department of Economics, University of Colombo, 0070, Sri Lanka.

Received: 29 May 2021, **Revised:** 10 October, 2021, **Accepted:** 20 November, 2021.

How to Cite this Article: Thayaparan, A., Bandara, D.M.G.T. and Gunathilaka, G.Y.N. (2022). Determinants of women's age at first childbearing in Polonnaruwa district. *Sri Lanka Journal of Social Sciences and Humanities*, 2(1), 31-40.

Abstract

The study mainly focuses on identifying the factors associated with the age of the mother at the first childbirth in Polonnaruwa district in Sri Lanka. The primary data were collected through a multistage sampling technique using questionnaires from February to March 2020. The 120 samples of the study consisted of new towns, Aluth Wewa, Jayanthipura, and Kaduruwela areas which cover rural and urban married women who have at least one child belong to the age group 21 to 49 years in the district. The study found that 45.3 percent of married women got their first childbirth aged 25 to 29 years with the mean age at first childbirth to be 27 years, whereas only 6.7 percent of them start their childbearing in age between 35 and 39 years. The frequency of age at marriage reveals that 54.2 percent of them take place early married, nearly 32 percent of them were married between age 25 and 29 years. And only 3.3 percent of them got married between 35 and 39 years, with the mean age at marriage being about 25 years. Independent samples t-test results imply that the mean age of married women differs according to education level, place of residence, religion, and economic status except for the working status of the married women. Multiple linear regression analysis was performed to evaluate the impact of socio-economic characteristics on age at first childbearing and its results reveal that age at marriage, educational level, place of residence, religion, and employment status were mostly determined the childbearing in the district.

Keywords: Chi-square test, Employment status. Independent samples t-test, married women, and Socio-economic characteristics

INTRODUCTION

Age at first birth means the age when a woman gives birth to her first child, and it is one of the most significant events in a woman's life. A mother's age at the first childbirth plays a crucial role in both mother's and child's life. Childbearing at an early age can have a negative impact on occupational attainment, marital stability, asset accumulation, woman's health as well as a positive impact on the spacing of subsequent children and completed family size (Bumpass et al., 1978; Coombs & Freedman, 1970; Menken, 1972; Presser, 1971). Starting childbearing at an early age also lengthens the reproductive period and eventually increases the women's fertility (Rabbi & Kabir, 2013; Sibanda et al., 2005). Giving birth to the first child at an early age can severely damage a female's reproductive and general health, causing such problems as pregnancy complications, maternal mortality, and vision-vaginal fistula, resulting in social ostracism (World Health Organization, 2004; Harrison and Rossiter, 1985). The conditions under which a first birth occurs at an early age can restrict the opportunities of socio-economic and educational empowerment, shelter in which children are raised (Rabbi & Kabir, 2013; Zajonc, 1976).

Data from The World Factbook shows that a mother's mean age at first birth in Afghanistan was 19.9 years in 2015. 18.6 was recorded for Bangladesh in 2017/2018, for Pakistan

22.8 in 2017/2018. These countries have a lower mean age at first birth. It could be due to cultural and religious factors. According to data from the national vital statistics system, women's age at first birth in the United States has increased from 24.9 years in 2000 to 26.3 years in 2014. Data from Statistics Bureau of Japan, the average age at first birth of women in Japan was 25.7 years in 1975 and 29.1 years in 2005. The figure was 29.9 years in 2010 and further increased to 30.7 years in 2020.

When looking at Sri Lanka at present, more and more women are having access to higher education and, with the increase of their workforce participation, women tend to delay their marriage. Subsequently, the mean age at first birth for Sri Lankan women also has increased over the years. As discussed by Rindfuss & St. John, (1983), trends in age at first birth have important effects on the pace of social change, period fertility trends, and the state of the economy. As shown by the World Data Atlas/ Central Intelligence Agency (CIA) World Factbook, the mean age of the first childbearing for Sri Lanka was 25.6 years in 2016 and the mean age rose to 28.9 years in 2020. The fertility rate of Sri Lankans fell gradually from 5 children per woman in 1963 to 2.17 children per woman in 2020, according to the statistics from

* Corresponding author: Tel.: +94 77 614 3582; Email: aruppillaithayaparan@yahoo.com.

<https://orcid.org/0000-0003-1864-2020>



This article is published under the Creative Commons CC-BY-ND License (<http://creativecommons.org/licenses/by-nd/4.0/>). This license permits use, distribution, and reproduction, commercial and non-commercial, provided that the original work is properly cited and is not changed in any way.

World Data Atlas. The decline in fertility rate will lead to a fall in the birth rate. If this trend continues for a longer period, it will reduce the country's overall population.

Early initiation of childbearing subsequently increases the fertility level and population of a country, but it has been proven to have negative implications on the health of the mother and the infant. It would also hinder a woman's attainment of the higher level of educational, professional qualifications, career development, career progression. Delaying the first childbearing would be risky too, as it can increase the possibility of pregnancy complications and high child mortality. At the same time, postponing childbearing will help achieve a higher level of education and a better career path. Hence, deciding on the age to give birth to the first child and identifying its determinants is important.

Although many studies have been conducted on this topic regarding other countries, not much attention has been given to identifying the issues arising from this early and delayed childbearing in Sri Lankan context and specifying to a particular area in the country. Therefore, researcher carried out this study regarding Polonnaruwa district to find out the determinants of women's age at first childbearing in the study area also to address the problems and give suggestions and recommendations based on the findings.

This study is important to government officials and non-profit organizations to get a generalized idea about the mean age at first childbirth of women in Polonnaruwa district and further take decisions to empower these women. Population growth-related policies are often formulated depending on fertility trends. Therefore, this study of age at first birth is important, as it enables researchers and policy-makers to forecast subsequent fertility behavior in the study area. Also, this research can be used as a reference by researchers who wish to expand this research topic to different geographical areas in the future.

The study mainly focuses on identifying the factors associated with the age of a mother at the first birth of a child in Polonnaruwa District in Sri Lanka.

REVIEW OF LITERATURE

A number of researchers studied the factors which influence the age at first birth among married women in the world. According to the finding of World Health Organization data (2008), in low and middle-income countries, 10 percent of all girls enter motherhood before they reach 16 years of age, with the highest levels being reported in Sub-Saharan Africa, south-central and south-eastern Asia. When considering the median age at first birth of women across the world, as estimated by National Center for Family & Marriage Research (NCFMR) data in 2017, from 1980 to 2015, women's median age at first birth rose from 22.6 to 26.7 years, a 12 percent increase.

Age at marriage has long been considered as one of the dominant determinants of fertility (Bongaarts, 1982; Davis & Blake, 1956; Westoff & Macro, 2003) but few studies examined the significance of age at marriage in determining the age at first birth.

Education is the most important factor determining the age at first birth (Rindfuss & St. John, 1983). Many other studies further discussed that the years and level of education delay childbearing and decrease years dedicated to childbearing (Sibanda et al., 2005). Rabbi & Kabir, (2013) discussed that when a woman spends more time on schooling, it is less likely she will get married early and start childbearing early, also when women educate themselves more, they tend to

postpone their marriage and childbearing because they are willing to focus on their careers first. Chandrasekhar (2010) noted that women with primary and higher education are more likely to delay their marriage compared to women with no education.

Rabbi & Kabir, (2013) indicated that place of residence has been shown as one of the factors that affect the age at first birth of women. The first birth interval for women living in rural, urban and coastal areas significantly differed in a study carried out by Kumar & Danabalan, (2006) on delayed first birth. As examined by Namkee & Shariff, (1992) in his study there was a substantial delay in the age of first birth of women living in urban areas than those who live in rural areas. Also, Chandrasekhar, (2010) stated that women who grew up in the countryside are more likely to enter motherhood earlier. Stolnitz, (1983) and Bulatao, (1984) noted that mean age at first birth is lower for women residing in rural areas compared with those residing in urban areas. This is because it is assumed that urban women have better knowledge and access to modern contraceptive forms than women in rural areas (Cohen, 1993). In contrast, Ngalinga, (1998) observed in Tanzania that place of residence played the greatest role in influencing age at first birth, but the rural residents had a higher mean age at first birth than women living in urban areas. Urban women residents had the lowest mean age at first birth. The regression results showed that urban women had first child 0.2 years earlier than their rural counterparts.

According to Rabbi & Kabir, (2013) occupation is one of the factors that determines the age at first birth of women in Bangladesh. However, a study carried by Kumar & Danabalan (2006) on delayed first birth showed that employment of a woman or a husband had no significant relationship with delayed first birth of women.

A study in Bangladesh examined that age at first birth is associated with using contraceptive methods (Sarkar, 2010). It was found that an increase in the prevalence rate of contraceptives from 9.6 percent in 1975 to 53.6 percent in 2005 found that the absence of intentional contraceptive methods leads to population growth because women start childbearing at an early age (Kumar & Danabalan, 2006).

In many societies, the economic status or financial stability of the family is significantly influencing the age at which people marry and have children. According to Mkhize, (1995), young females who grew up in poor households tend to get life partners older than they are for them to support their livelihood. This results in a high risk for these young females being vulnerable to their partners and sexual decision such as using condoms or any form of contraceptives, which next leads to the risk of childbearing. Young females who lived in poor households may also decide to drop school to go find jobs in order to fulfill their needs, if they cannot find jobs because they are lacking the necessary skills, they end up deciding to get married so they can be taken care of which leads to childbearing at a young age (Anthony et al., 2000).

One of the most important variables for marriage and childbearing can be the influence of religious beliefs and practices, which therefore became a significant background variable for age at first birth. Studies carried out in India showed that Hindus enter to marriage and bear children at younger ages than non-Hindus (Bloom & Reddy, 1986). In a study by Chandrasekhar, (2010), he indicated that Muslim women are 1.14 times more likely to give birth to their first child at an early age than Hindu women while Christians and women belong to other religions are less likely to have their

first child at an early age than the Hindu women. Whereas in Ghana, Catholics seemed to have a higher risk of first birth compared to other Christians, correspondingly in Tanzania, Muslims were found to have lower age at first birth compared to Catholics, because Muslims encourage early marriages. Muslims had a lower mean age at first birth of 18 years than women of other religions. Although the Catholics and Protestants have different views and opinions relating to the use of contraception. Catholics seemed to have higher mean age at first birth, such as 18.6 years, compared to Protestants for 18.5 years (Ngalinda, 1998).

METHOD OF DATA COLLECTION

To attain the objectives of the study, primary data were collected through a self-administrated questionnaire, which consists of mainly two parts, such as the socio-economic conditions of the respondents. The researcher distributed questionnaires directly to the selected women who are over 20 years of old are the eligible aged respondents and based on that age, 30 respondents from four villages such as Newtown, Jayanthipura, Aluthwewa, and Kaduruwela were selected as the sample with a total of 120 in the study. The data relating to the dependent variable which is the age at first childbearing and other variables related to socio-economic characteristics like age at marriage, education of the respondent, place of residence, religion working, and economic status of the respondents were taken as explanatory variables in the study.

DATA ANALYSIS

The data collected was analyzed using the following analytical tools.

Descriptive statistics and frequency analysis

Table 1: Descriptions of variables

Variable	Categories
Age at marriage	1 for 20-24 ages 2 for 25-29 3 for 30-34 4 for 35-39
Education	0 for primary education 1 for higher education.
Place of residence	0 for rural 1 for urban
Religion	0 for Islamic 1 for non-Islamic Non- Islamic category consists of Buddhist and Catholic women.
Working Status	0 for unemployed 1 for employed women
Economic Status	0 for poor (The respondents who are under the national poverty line considered as poor) 1 for non-poor women

Source: Developed by the researchers

RESULTS AND DISCUSSION

Results derived from various analytical tools, such as descriptive statistics and frequency, independent samples t-test, Pearson's chi-square test, and multiple regression model were described in the following section.

Descriptive statistics were used to summarize basic features of the variables and frequency was used to describe the socio-economic features of the respondents in the study.

Independent samples t-Test

Independent samples t-test was used to find out how the mean age at first birth differs across the different independent groups related to socio-economic characteristics of the respondents in the study.

Pearson's chi-square test

Pearson's chi-square test is used to determine whether there is a statistically significant association between the distribution of age at first childbearing and the socio-economic characters of the respondents in the study.

Multiple linear regression model

A multiple regression model was employed to analyze the impact of selected socio-economic characteristics of married women on their age at first childbearing, as below.

$$\hat{Y}_{AFB} = \beta_0 + \beta_1 AM + \beta_2 RE + \beta_3 PR + \beta_4 R + \beta_5 RW + \beta_6 ES + \epsilon_t$$

Where,

- AFB = Age at first childbearing
- AM = Age at marriage
- RE = Education of the respondents
- PR = Place of residence
- R = Religion
- RW = Working status of the respondents
- ES = Economic status of the respondents
- ϵ_t = Error term
- β_0 = Constant value

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5,$ and β_6 are the coefficients of each independent variable, respectively.

The description of variables is indicated in Table 1.

Results of descriptive statistics

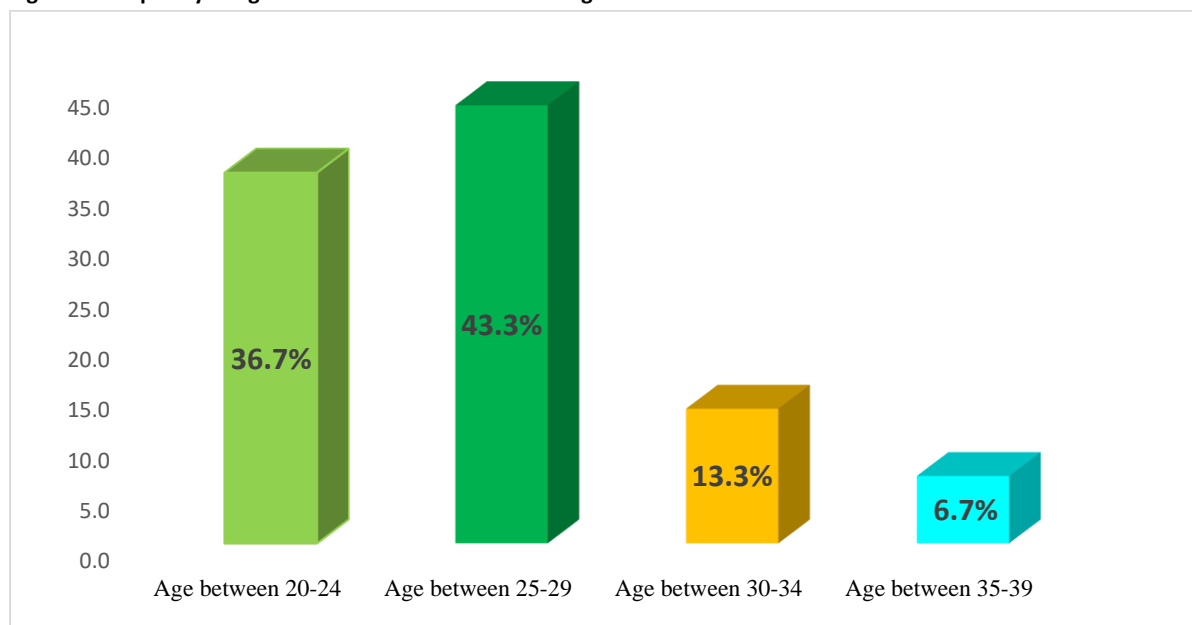
In the beginning, the descriptive statistics for selected variables such as age at first birth and age at marriage of women were depicted in the table as given below.

Table 2: Results of descriptive statistics

Variable	Mean	Minimum	Maximum	Standard deviation
Age at first birth	26.53	21	39	4.333
Age at marriage	24.77	20	37	4.022

Source: Developed by the researchers using SPSS

The above table shows that the minimum age at first birth is 21 and the maximum age at first birth is 39 years. The average age at first childbearing is 26.53.

Figure 1: Frequency of age distribution at first childbearing

Source: Developed by the researcher using SPSS

The above figure represents that, among the 120 married women, 36.7 percent of them had their first child at the age between 20-24 years, 43.3 percent of them had the first child between 25-29 years, 13.3 percent of them gave birth to a first child between the age 30-34 years and 6.7 percent

of the women had the first child between ages 35-39 years. It means that the majority of women had their first child-birth within their mid-twenties and late twenties in the sample.

Table 3: Frequency of the variables

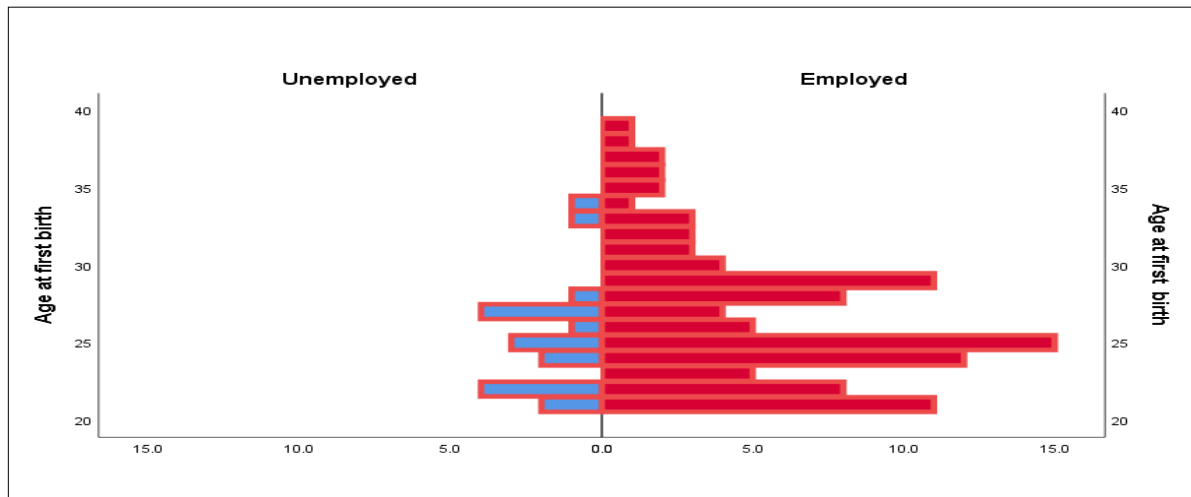
Variables	Frequency	Percentage
Age at marriage		
Between 20-24	65	54.2
Between 25-29	38	31.7
Between 30-34	13	10.8
Between 35-39	4	3.3
Education Level		
Primary education	31	25.8
Higher education	89	74.2
Place of Residence		
Rural	51	42.5
Urban	69	57.5
Religion		
Islam	40	33.3
Non - Islam	80	66.7
Working Status		
Unemployed	19	15.8
Employed	101	84.2
Economic Status		
Poor	31	25.8
Non - poor	89	74.2

Source: Developed by the researchers using SPSS

Table 3 reveals that out of 120 respondents, 65 women entered the marriage between 20-24 years, 38 of them got married between ages 25-29 years, 13 of them married at an age between 30-34 years while 4 women got married at the age between 35-39 years. Out of the 120 respondents, 31 women have primary education, and 89 women attained their education at a higher level. Among the sample, 51 women live in rural areas and 69 women live in urban

areas. Out of the 120 respondents, 40 of the women belong to Islam religion and the rest of the 80 women consist of Buddhists and Catholics. 120 respondents consist of 19 unemployed and 101 employed women while 31 of them are poor and 89 of them are with middle and higher levels of income in the sample.

Figure 2: Distribution of age at first birth across working status



Source: Developed by the researchers using SPSS

Figure 2 shows that among the unemployed women in the sample, 8 women had their first child between ages 20-24 years, 9 women had the first child between ages 25-29 years, and 2 women had the first child between the ages of 30-34 years. Among the employed women in the sample,

43 women had the first child between the ages of 20-24 years, 14 women had the first child between ages 25-29 years, and 8 women gave birth to their first child between ages 30-34 years.

Table 4: Results of Custom Tables

Working Status	Education level	Mean Age at First Birth
Unemployed	Primary Education	22
	Higher Education	27
Employed	Primary Education	23
	Higher Education	28

Source: Developed by the researchers using SPSS

Results of the above table depict that, mean age at first birth of unemployed women with primary education (22 years) is lower than the unemployed women with higher education level (27 years).

Employed women with primary education have a lower mean age at first birth (23 years) than the employed women with higher education. Finally, according to these results, it can be concluded that unemployed women with primary ed-

ucation have the lowest mean age at first birth and employed women with higher education have the highest age at first birth within and between the groups.

Independent Samples t-test

The independent samples t-test for selected variables was used to find out whether the mean age at first birth significantly differs among different socio-economic characteristics of married women in Polonnaruwa district.

Table 5: Results of independent samples t-test

Variable	Category	Mean
Education Level ***	Primary Education	22.45
	Higher Education	27.94

Place of Residence ***	Rural	23.04
	Urban	29.10
Religion ***	Islam	23.53
	Non-Islam	28.03
Working Status	Unemployed	25.37
	Employed	26.74
Economic Status **	Poor	25.37
	Non- Poor	26.74

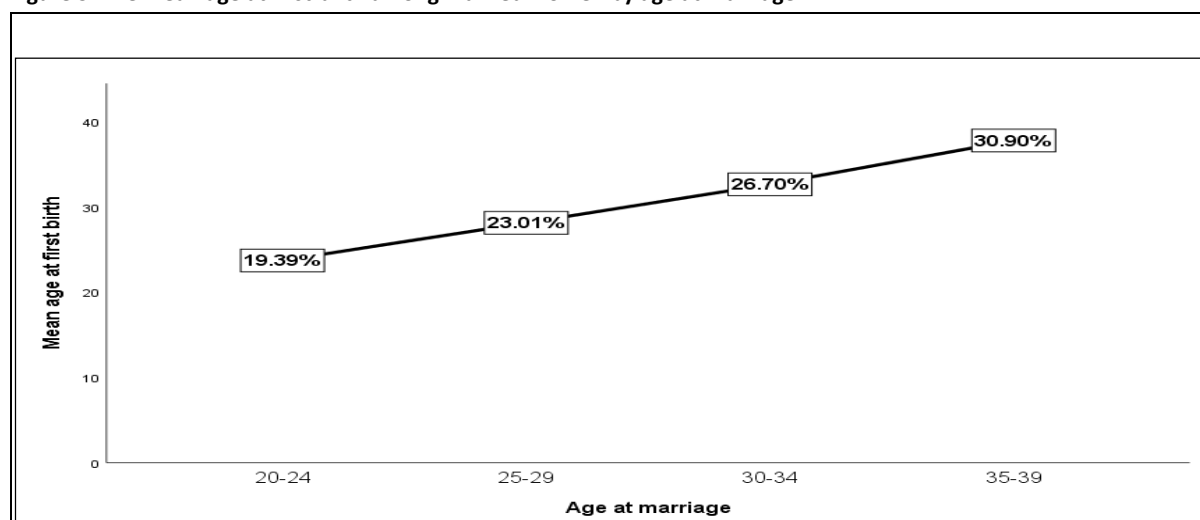
Source: Developed by the researchers using SPSS

Note: ***,** and * indicate the 1 %, 5% and 10% significant levels respectively.

According to the above results, age at first birth has significantly differed across education levels of married women at 1 percent level. This indicates that the mean age at first birth is higher for women who attained higher education levels than the women who only had primary education. Age at first birth has significantly differed across rural and urban married women at 1 percent level, which indicates that mean age at first birth for women residing in rural areas is lower than the women who reside in urban areas. Age at

first birth has significantly differed across Islam and Non-Islam married women at 1 percent level, which indicates that mean age at first birth for Islam women is lower than the Buddhist and Catholic women. Age at first birth has significantly differed across poor and non-poor married women at 5 percent level indicates that mean age at first birth for poor women is lower than the non-poor women. While age at first birth has not significantly differed across unemployed and employed married women at any significant level in the study.

Figure 3: The mean age at first birth among married women by age at marriage



Source: Developed by the researchers using SPSS

The above figure shows the mean age at first birth among subgroups of the study population by their age at marriage. Women in the marriage age group of 20-24 years had the lowest mean age at first birth and the women who have the highest marriage age group of 35-39 years had the highest mean age at first birth. Further, this graph indicates that, as age at marriage increases, age at first birth also increases in the study.

Chi-Square Test

The Chi-square test was used by the researchers to identify the association between age at first birth and socio-economic variables, such as age at marriage, education level, place of residence, religion, working status, and economic status of the study. According to the above results in Table 6, which showed that age at marriage, education level, place

of residence, religion, and economic status are less than 5 percent level (0.05) asserted that those variables are highly associated with the age at first birth. Table 5 represents that among married women with only the primary education, nearly 90 percent of women had the first child between the ages of 20-24 years while the other 10 percent of women had the first child between the ages of 25-29 years. This shows that majority of the women with only primary education had their first child in their early twenties. Among the married women with higher education, 18 percent of women had their first childbirth at an age between 20-24 years, 55 percent of women between the ages 25-29 years, 18 percent of women between the ages 30-34 years, and 9 percent of women between the age 35-39 years had their first childbirth.

Table 6: Results of cross tabs and chi-square test

Items	Age at first birth				χ^2
	20 - 24	25 - 29	30 - 34	35 - 39	
Age at marriage					137.07***
20-24	63.1%	35.4%	1.5%	0%	
25 - 29	5.3%	73.7%	21.0%	0%	
30 - 34	7.7%	7.7%	53.8%	30.8%	
35 - 39	0%	0%	0%	100%	
Education Level					52.10***
Primary Education	90.3%	9.7%	0%	0%	
Higher Education	18.0%	55.1%	18.0%	9.0%	
Place of Residence					69.62**
Rural	78.4%	21.6%	0%	0%	
Urban	5.8%	59.4%	23.2%	11.6%	
Religion					32.643*
Islam	70.0%	30.0%	0%	0%	
Non - islam	20.0%	50.0%	20.0%	10.0%	
Working Status					1.905
Unemployed	42.1%	47.4%	10.5%	0%	
Employed	35.6%	42.6%	13.9%	7.9%	
Economic Status					18.970**
Poor	67.7%	29.1%	3.2%	0%	
Non - poor	25.8%	48.3%	16.9%	9%	

Source: Developed by the researchers using SPSS

Note: ***, ** and * indicate the 1%, 5% and 10% significant levels respectively.

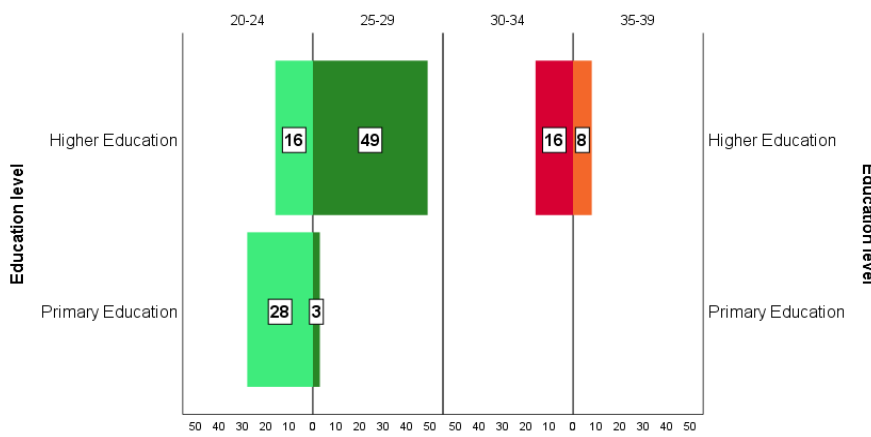
Among the urban married women, nearly 6 percent of women had the first child within the age 20-24 years, nearly 59 percent of women between the ages 25-29 years, nearly 23 percent women between the ages 30-34 years and nearly 12 percent of women between the ages 35-39 years had their first child. Among married Islam women, 70 percent of women had the first child between ages 20-24 years while the other 30 percent had the first child within the age of 25-29 years. Among the Non-Islam, 20 percent of women had the first child between the ages 20-24 years, 50 percent of women between the 25-29 years, 20 percent of women between the ages 30-34 years and 10 percent of such women gave birth to the first child within age 35-39 years. Among the married unemployed women, nearly 42 percent of women had the first child first between ages 20-24 years, nearly 47 percent of women had the first child between 25-29 years and nearly 11 percent of women had the first child between ages 30-34 years. Among the married employed women, 35.6 percent of women had the first child within age 20-24 years, 42.6 percent of women had the first child within age 25-29 years, 13.9 percent of women had the first child

within age 30-34 years and 7.9 percent of women had the first child within age 35-39 years.

Among the married poor women, nearly 68 percent of women had the first child between the ages 20-24 years, nearly 29 percent of women had the first child between the ages 25-29 years, nearly 3 percent of women had the first child between the age 30-34 years. Among married non-poor women, nearly 26 percent of women had the first child between the ages 20-24 years, nearly 48 percent of women had the first child between the ages 25-29 years, nearly 17 percent of women had between the ages 30-34 years and 9 percent of women had the first child between ages 35-39 years.

The following figure shows that 16 women who have higher education got their first childbearing at the ages of 20-24 while 49 women with high educated got their first child at ages 25-29. Women who got their first child, belonging to different education levels across different ages can be illustrated as in Figure 4.

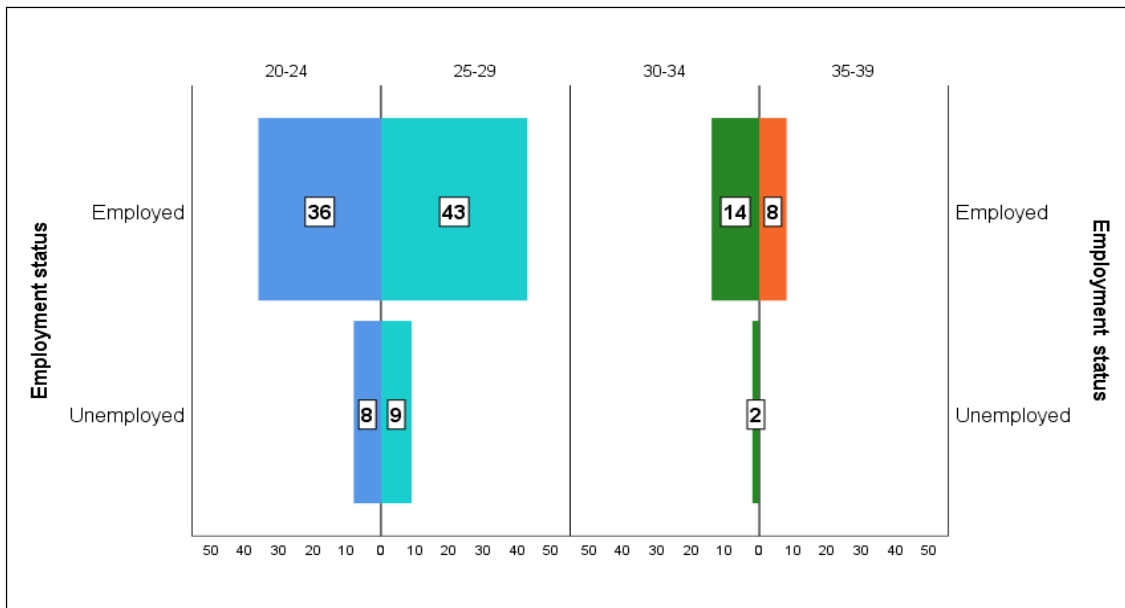
Figure 4: Number of married women of different age groups at first childbirth across education levels



Source: Developed by the researchers using SPSS

Similarly, the number of married women who had their first child at different ages across the employment status can be illustrated as in Figure 5.

Figure 5: Number of married women of different age groups at first birth across working status



Source: Developed by the researchers using SPSS

The above figure shows that 36 employed women got the first child at their 20- 24 years old while 43 of the employed women had the first child at their age between 25- 29. 8 employed women got their first child at 35- 39 age ranges and only 2 unemployed women got the first childbearing between 30-34 ages in the study.

Results of multiple regression model

A multiple regression model was used to find out the impact of socio-economic factors on women's age at their first childbearing in Polonnaruwa and its results were described in the following ways.

Table 7: Goodness of Model

R	R ²	Adjusted R ²	Standard Error	F- value	Significant
0.936	0.876	0.869	1.568	132.628	0.000

Source: Developed by the researchers using SPSS

According to the above table, adjusted R² is 0.869, which describes that nearly 87 percent of the variance in the age at

first birth is explained by the selected socio-economic factors, and the rest of the 17 percent is explained by other factors in the study. Further, the model fitness was tested by

the F value, which is significant at 1 percent level, indicates that the estimated model to examine the impact of socio-economic characteristics on women's age at first childbearing is well fitted. The estimated results derived from the multiple regression model were shown in Table 8 and the results reveal that all selected variables related to socio-economic characters were significant at 1 percent and 5 percent

significant levels except the economic status of the married women. The coefficient of age at marriage has a positive sign reveals that as the age at marriage increases by one more year, it will cause to increase age at first birth by 0.7 years assuming that other characters were constant in the model.

Table 8: Estimated results of multiple regression model

Variables	Coefficient	t - value	Significant
Age at marriage	0.700	14.623	0.000
Education level	0.966	2.373	0.019
Place of residence	1.718	4.317	0.000
Religion	1.390	3.899	0.000
Working status	1.405	3.567	0.001
Economic status	0.491	1.362	0.176
Constant	5.008	4.978	0.000

Source: Developed by the researchers using SPSS

The estimated coefficient of married women 's education has a positive sign implies that those who have a higher educational qualification, will get their first child at a later age than less educated women who are aligned with the findings of Rindfuss & St. John, (1983) and Sibanda et al., (2005). On average, age at first birth among higher educated married women is higher by 0.96 years than primary educated women in the samples. Educated mothers always search for fewer children and have a consciousness about the advantage of late childbearing and women who have less education level are more likely to start their childbearing at early ages. Another variable is the place of residence which reveals that the married women who are living in urban areas have more possibility to get their first baby in later years than rural married women and this finding is consistent with Rabbi & Kabir, (2013); Bulatao, (1984) and Ngalinda, (1998). This indicates that age at first birth among urban married women is higher by 1.7 years than rural married women in the study area. Another significant variable is the religion of the respondents, which shows that age at first birth among Buddhist and catholic married women is higher than Islamic married women. This represents that Islamic woman married at an early age and thus were able to get the first childbirth at an earlier age compared to other religious women in the study. The previous studies conducted by Bloom & Reddy, (1986); Chandrasekhar (2010), and Ngalinda (1998) also found a significant relationship between religion and age at first childbearing. Further, childbearing is determined by another significant variable, which is the status of employment of married women. The coefficient of the variable is positive indicates that age at first childbirth among working married women will be higher than those who are not working, which is consistent with the findings of Rabbi & Kabir, (2013) and Kumar & Danabalan, (2006). Due to the responsibilities in their working place, they may marry late and the possibility to become as a mother also will be delayed. However, the economic status of the married women was not significant in the study.

CONCLUSION

Results of the independent-samples - T-test showed mean age at first birth significantly differs among all the independent variables except working status. Women who only had primary education have a lower mean age at birth than women with higher education. Rural women have a lower age at first birth than urban married women. Islam women

have a lower mean age at first birth than Buddhist and Catholic women. Unemployed women have a lower mean age at first birth than employed women. But it is not significantly different. Poor women have a lower mean age at first birth than non-Poor women. According to the results of the Chi-Square test, all the socio-economic factors used in the study have a significant association with the age at first birth except working status. Results of multiple regression analysis suggested that all the socio-economic factors used in the study have a significant impact on age at first childbirth, except economic status.

REFERENCES

- Anthony G, Mitchell D, Richard P.A, & Deborah C. (2000). Introduction to sociology: WW Norton New York.
- Bloom, D. E., & Reddy, P. H. (1986). Age patterns of women at marriage, cohabitation, and first birth in India. *Demography*, 509–523.
- Bongaarts, J. (1982). The fertility-inhibiting effects of the intermediate fertility variables. *Studies in Family Planning*, 179–189.
- Bulatao, R. A. (1984). Reducing Fertility in Developing Countries: A Review of Determinants and Policy Levers. *World Bank Staff Working Papers No. 680 and Population and Development Series, No. 5*. ERIC.
- Bumpass, L. L., Rindfuss, R. R., & Jamosik, R. B. (1978). Age and marital status at first birth and the pace of subsequent fertility. *Demography*, 15(1), 75–86.
- Chandrasekhar, S. (2010). Factors affecting age at marriage and age at first birth in India. *Journal of Quantitative Economics*, 81–97.
- Cohen, B. (1993). Fertility levels, differentials, and trends. *Demographic Change in Sub-Saharan Africa*, 8–67.
- Coombs, L. C., & Freedman, R. (1970). Pre-marital pregnancy, child spacing, and later economic achievement. *Population Studies*, 24(3), 389–412.
- Davis, K., & Blake, J. (1956). Social structure and fertility: An analytic framework. *Economic Development and Cultural Change*, 4(3), 211–235.
- Harrison, K.A. and Rossiter, C.E. (1985). Maternal mortality, *Br. J. Obstet. Gynaecol.*, 92 (5), 100-15.
- Kumar, G., & Danabalan, M. (2006). Determinants of delayed first birth. *Indian Journal of Community Medicine*, 31(4), 272–273.
- Menken, J. (1972). The health and social consequences of teenage childbearing. *Family Planning Perspectives*, 4(3), 45–53.
- Mkhize, Z. M. (1995). Social needs of teenage mothers in the rural communities of Ongoye and Enseleni districts.
- Namkee, A., & SHARIFF, A. (1992). A COMPARATIVE STUDY OF FERTILITY DETERMINANTS IN TOGO AND UGANDA: A HAZARD MODEL ANALYSIS. YALE UNIVERSITY.
- National Vital Statistics Reports. (2002) Mean Age of Mother Retrieved 05/01/2020, 2020, from https://www.cdc.gov/nchs/data/nvsr/nvsr51/nvsr51_01.pdf

- NCHS Data Brief. (2016). Mean Age of Mothers is on the Rise: United States, 2000–2014 Retrieved 05/01/2020, 2020, from <https://www.cdc.gov/nchs/data/databriefs/db232.pdf>
- Ngalinda, I. (1998). Age at first birth, fertility, and contraception in Tanzania.
- Presser, H. B. (1971). The timing of the first birth, female roles, and black fertility. *The Milbank Memorial Fund Quarterly*, 49(3), 329–361.
- Rabbi, A. M. F., & Kabir, M. (2013). Factors influencing age at first birth of Bangladeshi women-A multivariate approach. *American Journal of Public Health Research*, 1(7), 191–195.
- Rindfuss, R. R., & St. John, C. (1983). Social determinants of age at first birth. *Journal of Marriage and the Family*, 553–565.
- Sarkar, P. (2010). Determinants of age at first birth in Bangladesh. *J Mod Math Stat*, 4, 1–6.
- Sibanda, A., Zuberi, T., & Udjo, E. O. (2005). *The Demography of South Africa*. ME Sharpe.
- Statistics Bureau of Japan. (2021). *Statistical Handbook of Japan* Retrieved 05/01/2020, 2020, from <https://www.stat.go.jp/english/data/handbook/c0117.html>
- Stolnitz, G. J. (1983). Urbanization and rural-to-urban migration in relation to fertility. Part A. Urbanization. Paper Prepared for the Fertility Determinants Group, Indiana University, Bloomington, Indiana.
- The World Factbook. (2016). Mother;s mean age at first birth Retrieved 05/01/2020, 2020, from <https://www.cia.gov/the-world-factbook/field/mothers-mean-age-at-first-birth/>
- Westoff, C. F., & Macro, O. (2003). Trends in marriage and early childbearing in developing countries.
- World Health Organisation. (2004). *The world health report 2004-changing history* Retrieved 05/01/2020, 2020, from <http://www.who.int/whr/2004/en/>
- World Health Organisation. (2008). *Adolescent pregnancy* Retrieved 05/01/2020, 2020, from http://www.who.int/maternal_child_adolescent/topics/maternal/adolescent_pregnancy/en/ Products - Data Briefs - Number 232 - January 2016 (cdc.gov)
- Zajonc, R. B. (1976). Family configuration and intelligence. *Science*, 192(4236), 227–236.