

**DETERMINANTS OF FERTILITY AMONG YOUNG COUPLES IN MISAU,  
BAUCHI STATE, NIGERIA**

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## DECLARATION

This thesis is my original work and has not been presented for a degree in any other university or any other award.

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## **DEDICATION**

This work is dedicated to Almighty Allah for his mercies, provisions of guidance and protection over me during the course of my study and to my father Alh. Malami Baba Misau.

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**ABBREVIATION AND ACRONYMS**

<b>CPR</b>	Contraceptive Prevalence Rate
<b>DHS</b>	Demographic Health Survey
<b>FMOH</b>	Federal Ministry of Health
<b>GDP</b>	Gross Domestic Products
<b>NDHS</b>	National Demographic Health Survey
<b>NGOs</b>	Non-Governmental Organisations
<b>NIPOST</b>	Nigerian Postal Service
<b>NPC</b>	National Population Commission
<b>PRB</b>	Population Reference Bureau
<b>TFR</b>	Total Fertility Rate
<b>UN</b>	United Nations
<b>UNFPA</b>	United Nations Fund for Population Activities
<b>USAID</b>	United States Agency for International Development
<b>WHO</b>	World Health Organisation

## **OPERATIONAL DEFINITION OF SIGNIFICANT TERMS**

**Contraception:** Contraception refers to the use of drugs, withdrawal method or surgical operations, to avoid pregnancy.

**Couple delay:** Couples delay refers to the condition by which couples experience a delay during giving birth. For instance, some couples when they experience such delay once they started having children they will quickly bear more child in order to cover the gap.

**Culture:** It is the convectional conducts and ideologies of a community; the system comprising the accepted norms and values of a society.

**Demography:** Refers to the study of population, migration, mortality and fertility.

**Demographic Factors:** These are the Statistical features and determinants that influence population growth or decline. Here, several parameters are important namely Fecundity (Birth Rates), Mortality (Death Rates), Age, Education, Economic Wealth Flow (income), Race, Sex Ratio to mention a few.

**Determinants:** The term determinants refers to any factor which strongly influences and affect fertility or an element that identifies or determines the nature of something or that fixes or conditions an outcome. For example education level, economic, demography, social and cultural among others.

**Economic Status:** The term economic status refers to the entire measure of the social position and work experience of a person as compared to those of other person with regard to occupation, education, and income levels.

- Education:** It is the receiving of knowledge especially giving instruction by the school setting. Young couples who are educated are more likely to apply family planning and contraceptive methods.
- Ethnicity:** A particular ethnicity is a population of persons identifying with one another based on their shared ancestry, nation, culture, society, language or history. Often, the members of a given ethnic group have a common cultural heritage, physical appearance, cuisine, language and dialect, and homeland.
- Family planning:** Family planning is the capacity of given persons to attain the number of offspring that they desire to attain and spacing the births of the offspring as they wish.
- Fertility:** Refers to the capability of young couples to reproduce or bear children.
- Fertility Rate:** The term fertility rate regarding a given population or individual is his population's or the individual's actual childbearing level.
- Family Size:** The size of a family is the number of persons in that family, especially in relation to a nuclear family.
- Patriarchy:** It is the situation where by men dominated women in a particular society. Therefore, all the family decision making are coming from the head of the family (husband). In another word, patriarchy is a system of society in which male dominated women in family setting. So in this study patriarchy deals with male can decide on child bearing.
- Proximate Determinant:** In this study, proximate determinant of fertility refers to the factors that affect fertility such as economic, social and biological variables that influence fertility.

- Young Couple:** In this study, young couples involve both male and female who are married or having a sexual relationship between the ages of 18 to 35 years within a community or society. The period of time for young couples to be considered as a respondent for this study is 5 years and above.
- Religion:** In this study, religion deals with spiritual beliefs and practices of the peoples or couples that have a direct influence on fertility within a society. Different religious affiliations affect fertility because of their diverse beliefs and practices.
- Sex:** Deals with genetic differences between males and females. In this study, young couples are those who are between the ages of 18 to 35 years.
- Strategy:** Strategy refers to the techniques or ways of reducing fertility from the higher to lower level.
- Socio-cultural:** Social-cultural refers to the combination of social and cultural factors affecting fertility. In other words, socio-cultural factors comprised of a set of beliefs, customs, practices and behaviours that exist within a population. In this case, Socio-cultural factors include ethnicity, which is one of the important factors influencing fertility. Other determinants are religious influence which affects the level of fertility because of the belief that children are blessing from God; Psychological disposition and culture influence fertility as a result of polygamous marriages. Furthermore, Strategic measures of controlling fertility (contraceptive use and family planning to have few children) influence the level of fertility.
- Tradition:** It refers to the transmission of customs or beliefs from generation to generation. In this study young couples bear more children according to their tradition and customs.

## ABSTRACT

In Sub-Saharan Africa the level of fertility rate is very high compared to other regions across the globe. Culture, economic, social, health, environmental factors and birth control methods are key determinants that directly affect fertility. These factors which have manifested themselves in different socio-economic and cultural situations, localities, demographics among others, ultimately determine the fertility of the population in space and time. High fertility if not controlled leads to high population that eventually put pressure on government to provide adequate socio-economic developments. Population in Nigeria and Misau has been sharply growing in the recent past. Since, population and fertility are directly linked, this study investigated the determinants of fertility among young couples in Misau, Bauchi state Nigeria. The research objectives were: To investigate the demographic factors that influence young couple's fertility, to examine the socio-cultural factors that influence young couples' fertility and, to assess the strategic measures of controlling fertility among young couples in Misau, Bauchi State, Nigeria. The study was guided by the theory of Intergenerational Wealth Flows postulated by John Caldwell. The study adopted mixed methods that involved interpreting, analysing, collecting, and corroborating with qualitative and quantitative information. Out of a target population of 2800, 338 respondents were sampled using Krejcie and Morgan's formula and 137 respondents were sampled using Mugenda and Mugenda sample size formula. Both purposive and simple random sampling techniques was used in choosing respondents. Quantitative field data was cleaned and inputted into SPSS where frequency distribution, percentages and Multiple Linear Regression was analysed while Qualitative data was analysed by using thematic content analysis. Analysed quantitative results was presented in tables while qualitative results were captured in key voices or verbatim reporting. Research findings revealed that education was found to have a great influence on the family size. It also established that use of birth control methods affects fertility. The culture of all tribes explored allows husband make decision on anything concerning family affairs thus, affecting family size. It was established that only a few couples use modern family control methods implying that fertility rate in Misau is high because most religions do not restrict child bearing. The regression analysis results show that demographic factors, socio-cultural factors and measures of controlling fertility influenced positively young couples fertility by 71.5% ( $R^2 = 0.715$ ). The regression analysis showed that demographic factors influenced young couples fertility rate by 19.1% ( $R^2 = 0.715$ ), socio-cultural factors influenced fertility rate among young couples by 78.3% ( $R^2 = 0.783$ ) while strategic measures for controlling fertility influenced fertility rate among young couples by 53.4% ( $R^2 = 0.534$ ). The study concludes there is high fertility rate in Misau and that it is caused by factors such as competition among wives, preference of male child, child mortality, and the age of the couples. The study further concludes that religion contributes to high fertility because it encourages couples to bear many children because it allows polygamy and it does not advocate for family planning. The study concludes that many couples in Misau are not applying contraceptive measures because they are patriarchal. The main recommendation of this study was that the government should enlighten the young couples particularly in the rural areas to adopt modern methods of fertility control to regulate the level of high fertility. It should also implement a policy that will reduce high fertility rate.

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background to the Study

Fertility is naturally capable of producing a viable offspring. The viability of the offspring to reproduce brings the notion of the growth in human population. However, fertility rate varies from one individual to another and this explains the varying population in various region across the globe. In the recent past, there are rising concerns over tremendous growth in world population in certain regions while rapid fall in population in others.

According to the UN, the global population would reach 9.8 billion by 2050, up from 1 billion in 1800, 2.5 billion in 1950, and 6.5 billion in 2017 (UN, 2017). Every year the world population continues to grow at a rapid rate of about 75 million people. Developing countries such as Africa, Asia, and Latin America seeing the most rapid population growth rates while the developed worlds are expected to observed little change (Norville, 2016). Population Reference Bureau (PRB) explains that Asia has the fastest population growth having her population grown from about 1.3 billion in 1950 to the current 3.7 billion and in the next 50 years, there will be a population of 6 billion people (PRB, 2005).

The women lifetimes in Sweden and France estimated to have 1.92 and 1.88 children respectively. However, for this population to regenerate its self it is widely agreed that in order for a population to replace itself without inward migration, fertility rates must reach about 2.1. The lowest fertility rates were found in Italy, Spain, and Portugal where they ranged between 1.34 and 1.36 (Eurostat's report, 2018). Countries of Eastern Europe have positive pro-natalist initiatives were used to provide various incentive for people to have children. According to Ewa et al.

(2003), in 1970s Poland began a three –fold increase in the monthly allowance for having a child. Many countries, including several Eastern Europe Countries, have used Coercive policies to increase national fertility. Hungary, for example, prohibited abortion and contraceptives coverage in 1953 to raise national fertility (David, 2016).

In Africa and some Arabic countries, fertility rates are very high which is followed by countries of Central and South America. On the other hand, industrialised countries such as the Norway, Canada and Japan have lower rates of population growth (UN, 2000). Developing regions of Africa and Middle East fertility rates are very high where a woman gives birth to five or more children. In the industrialized regions of like Canada, Australia, Japan and European countries in Asia and some South American Countries fertility rate are below replacement levels, while in Asia fertility rates are below the replacement levels, an average of 2 to 2.9 children is sustained (UN, 2000).

The UN (2015) indicates that India will have a bigger population than China from 2022. India will thus, be the country with the highest population from 2022. The Philippines is also among the countries with the highest fertility rates globally, where each woman has an average of 3.1 (UNFP, 2015). From the 1950s to the 1990s, the birth rate in Latin America rose from 7.5 million births per year to about 11.5 million births per year. The reducing fertility rates in the region have seen the number of the births dip since the 1990s (Paulo, 2009).

Nabanita and Faujdar (2013) carried out a comparative research to explore changes in fertility rates across defined periods in several Asian countries: India, Nepal, Vietnam, Bangladesh, Indonesia, and Philippines. They established that the usage of contraceptives decimated the rates over time regardless of whether given

populations are poor or opulent. Disparities in education levels have been found to influence the fertility rates. In a study conducted by Khayat (2014) in Jordanian it was found that women with low levels or lack of formal education had high fertility rates of 6.9 compared to 4.1 children of those with formal secondary education.

Costello and Casterline (2002) discovered that higher income households in the Philippines had a lower demand for children. The number of children in this study varies from 2.2 for the wealthiest to 4.0 for the lowest. In the Philippines, socioeconomic differences in fertility are expected to continue, and it is unlikely that the nation will reach replacement level in the immediate future. According to Dharmalingam and Morgan (2004), a 1993 Indian family survey revealed that Muslims in India are more likely than Hindus from similar socioeconomic backgrounds to want a second child.

Despite their significant disparities, religious faith is not a big factor affecting fertility decisions in Muslim and non-Muslim culture in West African (NIPOST, 2009). He indicates that when Muslims are the minority in a community, their fertility rates are higher than non-Muslims, but when they are the majority, their fertility rates are lower. McQuillan (2004) asserts that religion affects fertility rates directly in areas where the dominant religions are characterised by well-established fertility norms. Islam seems to lack those strong norms (NIPOST, 2009).

Kenya suffers high poverty levels. Currently, it is estimated that 46% of all Kenyans are poor though the poverty levels in different localities within the country differ significantly (UN, 2013). Women in poor households register higher fertility rates than those in rich households and in addition, women in deprived rural areas have a higher birth rate than women in wealthy urban areas (UN, 2013).

Bbaale and Mpuga (2011), through a research carried out in Uganda, established that education is particularly a significant determinant of fertility rates among women. Even though the education of a woman's spouse affects the woman's fertility rate, its effect on the rate is lower than that of the woman's education. Bbaale and Mpuga (2011) determined that the more the education that a woman and her spouse or partner has, the more the likelihood that the woman will use contraceptives.

A Demographic Health Survey of 2013 in Nigeria found that average total fertility rate reduced from 6.5 children in 1990 to 5.7 children 25 years later. Given that Nigeria has a large population, a reduction in its average total fertility rate to only 3.7 children will not stop the population from increasing to about 440 million persons by 2050. In 2016 and 2017, the fertility rate in the country was close to 6 children for each woman on average. Most Nigerian women have a live baby by the time they are celebrating their 19<sup>th</sup> birthday. Even though the Nigerian government has invested heavily in accelerating economic growth, the country's rapidly growing population has affected the Nigerians' quality of life and socioeconomic wellbeing (Demographic Health Survey, 2013).

The country's National Population Policy for Sustainable Development aims to reduce the country's overall fertility rate by no fewer than 0.6 children per five years (National Population Commission, 2004). In Nasarawa state, educational attainments are a major determinant of the size of the family that one wishes to have (Okolo, 2013). In Lagos, the types of occupations that young people have, is a major determinant of the size of the family that they wish to have (Dibaba & Mitike, 2016). In North West region the highest fertility rate at 6.3 children while the smallest is 3.6 children in the South-south region. The state with the highest fertility

rate at 8 children is Zamfara while the one with the lowest at 2.8 children is Borno (National Population Commission, 2009). In Misau, Bauchi state of Nigeria, with 5.2 births per women, has a high average fertility rate (DHS, 2013).

The present review shows that there have been multiple studies on the factors that affect fertility rates in different countries. The countries include Canada, Philippines, Uganda, Italy, India, and Kenya. Several related studies have been conducted in Nigeria with their principal focal areas being South West, North Central, and North West Nigeria, especially in areas such as the Kano, Nasarawa, Zamfara, and Lagos states. Even then, there has been no previous research done particularly on the factors that affect fertility rates particularly in Misau Metropolis of Bauchi state a region in North East Nigeria, one of the Muslims dominated states with high birth rates and consequent high population (NIPOST, 2009). Consequently, the current study tried to bridge the knowledge gap on the factors that determine fertility rates in Misau Metropolis of Bauchi state, Nigeria.

## **1.2 Statement of the Problem**

The total fertility rate (TFR) in Misau Bauchi state in Nigeria still remains high with 5.2 births per women (Demographic Health Survey, 2013). Young couples, in general strive to have many children as possible, particularly in the conventional setting. Despite the Bauchi State Government efforts to implement various programs aimed at slowing population growth, fertility rates, especially among young couples in Misau remain relatively high. High population growth rates are associated with varied socioeconomic challenges, including unemployment, increased crime rate and land degradation (National Population Commission, 2009).

Several studies have been conducted on high fertility across the globe (Bbaale & Mpuga 2011; Okolo, 2013; Dibaba & Mitike, 2016). However, none of

the above researchers looked into the factors that affect fertility in young couples in Misau. Consequently, the research sought to explore the demographic, socio-cultural factors affecting fertility, as well as measures to control fertility among young couples residing within the research area.

### **1.3 Purpose of the Study**

The aim of the research is to find out the determinants of fertility among young couples in Misau, Bauchi state Nigeria. This owes to the current concern over the upsurge in population and challenges related to it in equal measure. The study sought to explore the demographic and socio-cultural factors and fertility control strategies that may have profound effect on fertility of young couples in the study area.

### **1.4 Research Objectives**

The general objective of this research is to establish determinant of fertility among young couples in Misau Bauchi state, Nigeria. The specific objectives are to:

- i. To investigate the demographic factors that influence young couple's fertility in Misau Bauchi state, Nigeria
- ii. To examine the socio-cultural factors that influence young couple's fertility in Misau Bauchi state, Nigeria.
- iii. To assess the strategic measures of controlling fertility among young couples in Misau Bauchi State, Nigeria.

### **1.5 Research Questions**

The study was guided by the following research questions;

- i. What are the demographic factors that influence young couple's fertility in Misau Bauchi state, Nigeria?

- ii. What are the socio-cultural factors that influence young couple's fertility in Misau Bauchi state, Nigeria?
- iii. What are strategic measures of controlling fertility of young couple fertility in Misau Bauchi state, Nigeria?

### **1.6 Justification and Significance of the Study**

From the background, fertility and the factors that influence it have not received adequate scholarly attention with particular reference to Misau Metropolis. There are a number of reasons why this study is important. First, having a good understanding of these determinants aided in the development of programs and policies that encourage fertility reduction in Misau metropolis of Bauchi state, Nigeria. Secondly, this study added more fact and knowledge in the academic field. Also, this study fills a knowledge gap in the academic field since no researcher has ever dealt with the topic herein to highlight the determinants of fertility among young couples in Misau Metropolis of Bauchi state, Nigeria.

It was important to carry out the study since high rates of fertility poses a problem in the study area. The high rate of population growth is problematic to the Bauchi government as population is surpasses the capacity of the state government's financial budget. This has been evident in the increased poverty levels, insecurity in the region, school dropouts, and the inability to have visible developments in the community.

The findings are believed to be significant to the National Population Commission in setting objectives for substantial demographic pointers.

### **1.7 Scope and Limitations of the Study**

The research was based on the determinants of fertility among young couples in Misau; hence, it was conducted in Misau metropolis, Bauchi state, Nigeria. The

study was limited to this particular locality of the Bauchi state. This study focused on young couples between the ages of 18 to 35 years old. National population commission office branch was selected for this study to collect the registered number of young couples in Misau metropolis of Bauchi state, Nigeria. This study investigated the demographic and socio-cultural factors that influence young couple fertility and strategic measures of controlling fertility among young couples in Misau Bauchi state, Nigeria.

Misau local government resident are predominantly Muslim who are conservative in as far as family matters are concerned. Therefore some participants were unwilling to share information considering it as taboo. This was delimited through holding awareness sessions to enlighten them on the purpose of the study that it solely for academic purposes.

## CHAPTER TWO

### LITERATURE REVIEW AND THEORETICAL FRAMEWORK

#### 2.1 Introduction

In this chapter relevant and related literatures are reviewed based on demographic and socio-cultural determinants of fertility as well as strategic measures to control. Literature was reviewed thematically based on the study objectives. It also discusses theoretical framework that guided the study.

#### 2.2 Demographic Factors that Influence Young Couples Fertility

It is agreed that that many demographic features concerning fertility, couples, and social backgrounds have been change over time. The study was significant to this study as it informed it on the current manifestations of fertility. His work was used from a comparative perspective of fertility (Lesthaeghe, 2010).

Marriage style, age, parity, education, income, are all variables under demographic factors. Women age has a curved that influence contraceptive use (Njogu, 2016). In developing world Africa in particular married women's are more likely to bear more children while single active women's are always apply contraceptive method (Adebayo et al. 2012; Caldwell, Orubukoye & Pat, 2000). Most of the African countries considered their children as larger part of income. Therefore, the couples have desire of having more children (Caldwell & Caldwell 2000).

##### 2.2.1 Women's Level of Education

There are many views regarding the effect of education on women's fertility, with most arguments suggesting that the more women education is high the lower level of her fertility. Kim (2016) indicates that educational level of women's

influence women wellbeing, ability to bear children and ability to monitor their child bearing as well as knowledge concerning birth control.

A woman's level of instruction affects her fertility level. Higher educational achievement appears to be related to prolonged pre-natal care. Infants born to young mothers have low survival chances on the off chance that they are conceived soon after a past birth, or if their mothers have numerous kids. Altogether, higher female education or training is generally connected with lower and deferred fertility richness (Drew, 2013). This study differs from Drew's work as this study examines other factors alongside education in ascertaining fertility determinants among young Misau couples.

According to Khayat (2014) established that women's in Jordan who are not educated had more than 5.9 youngsters each and those with high school had 4.2 children. In Lebanon, women who have higher education levels, employed women's their birth rate is 2.2 while in other countries like Kuwait, UAE and Saudi their fertility rate are 5.9 children, 7.1 children and 5.9 children respectively (Omran & Roudi, 2010). Regions are not homogeneous; therefore these studies can only be applicable to this study from a comparative point of view.

In Asian countries where child marriage is prevalent and not much consideration is given to educating women, the fertility rates are relatively low. The fertility rates in India and Pakistan are 2.5 children and 3.3 children respectively. The rates have been registered for quite some time. They are still adequate to ensure that the countries' population keeps on growing at least into the foreseeable future (Drew, 2013).

The importance of education on fertility varies greatly among countries with differs in terms of instruction (Jejeebhoy, 2015; Ian Diamond et. al., 1999).

Nevertheless, usually, the correlation among women's level of education and fertility has negative aspect and several studies found that the level of women's education affect fertility. His work was critically analysed to determine the applicability to Misau's young couples.

Many literature revealed that women's with high level of education could have lower fertility rate (Bankole & Bamikale, 2002). Higher education had a significant negative relationship with fertility. This is because the educated women have knowledge concerning contraceptive method and additional women's empowered to agitate for equal right when it comes to making decisions on child bearing. However, community education influence the level of couple fertility and society with low level of women's education could have high level of fertility (Njoroge, 2016).

### **2.2.2 Men's Level of Education**

According to Muresan (2014), studies on Men's level of education and fertility are rare, but some of the few studies have given at least some guide in that direction. After studying several countries across Europe and generating data, she inferred that there are obvious negative effects of education on male fertility making it more influential than marital status. Secondly, in some countries that witness more similar gender equality across institutions, the ultimate fertility of men depends less on their educational attainment, but more on their union patterns (commitment effect). Thirdly, in both situations, more or less traditional societies and more egalitarian societies, the mechanism of the impact of male fertility on education was driven through educational attainment of women's partners and it is shaped by the existing family policies encouraging parenthood.

Bankole, and Audam (2013) indicates that educational level of women's does not support their fertility decision of bearing more children. In patriarchal society's men education level influence fertility decision over their wife's than in matrilineal groups. However, all the responsibility concerning child bearing vested on their father (De Rose, 2007).

### **2.2.3 Postponement of First Childbirth**

Most of the European countries the initially delay childbirth among youthful couples for over a decades. For instance, the average ages of giving birth in ascending from 25/26 years as of 1970s to 29/30 years as of 2010s (Human Fertility Database, 2015). According to Debaere, Verbiest and Tyden (2020), in most public discourses and in media talk, one gathers that birth delay among youthful couples is regularly rather garrulously connected with the actuality that more women than ever are getting tertiary education, getting into employment and desiring to get few children.

Specialists have likewise found a solid relationship between women's occupations and their fertility rates as shown by Blacker (2002) and Wasao (2002). Employed women have a high chance of using contraception hence are likely to register lower fertility rates than unemployed women. Employed women have a high chance of using delaying childbirth hence are likely to register lower fertility rates than unemployed women (United Nations, 2015). Education changes the economic fortunes of women and thus has an indirect impact on their fertility rates (Rashood, 2016).

### **2.3 Socio-Cultural Factors that Influences Young Couples Fertility**

Social-cultural factors refer to the combination of social and cultural factors affecting fertility. In other words, socio-cultural factors comprised of a set of beliefs

(Religion), customs, practices and behaviours that exist within a population. Socio-cultural factors also include ethnicity, religion, patriarchy and culture are the determinants that influence childbirth.

According to Noveli, Cazzola, Angeli, and Pasquini (2020), who conducted a study in Europe, believed that public child care and availability of individual support considered as important factors that influence economic insecurity on fertility.

Muhammed, Abdulbaqi, Raji, Sulaiman and Joseph (2016) documented that it is established that customs and the understanding of religion contribute significantly to the incidence of male child preference thereby influencing fertility among couples with such preferences.

According to Sabiti (2012), social aspects such education levels among women exhibit varying fertility levels and education restrains a woman's fertility compared to men. He also asserts that fertility variations are more marked based on the rural and urban residence in that those who reside in rural areas tend to portray higher fertility levels compare to their urban based counterparts. This study is relevant as it is comparatively used to ascertain its applicability to Misau in Bauchi state, Nigeria.

Machira and Palamuleni's (2016) study on fertility differentials in Malawi established the level of education, woman's age, and wealth status determined women's fertility and that the number of living children of couples determined their fertility.

### **2.3.1 Religion**

Religion is a major socio-cultural element which exerts tremendous influence on human fertility in most societies. In Misau community of Bauchi State, Nigeria, almost all the people are adherents to especially Islamic Religion and its impact on

their fertility in particular and their population as a whole cannot be over emphasized.

Hayford and Morgan, (2008) confirmed that in 2002, ladies in US who perceived religion as imperative for their daily existence influence high level of fertility than those who do not attend churches regularly. Religion and ethnicity have been found to influence fertility as discussed above. Bélanger and Ouellet (2001) indicates that Italy experience decline in fertility as a result of lowest women's labour force and marital instability which led to high level of divorce rate. With this impact the fertility rate decline and in 2000 Italy had a fertility rate of 1.2.

Egenti et al., (2016) opines that fertility behaviour and religious orientations influence family size preference among the population of Orlu South East Nigeria. Religious played a vital role in influencing the level of fertility. This shows that religious significantly increase the level of child bearing. For instance, Catholic young couples in 1963 had intention of having more childbearing than Jewish and Protestant couples. Moreover, members of Catholics have the intention of having high fertility according to their religion while Protestants have the intention of having few number children (Bélanger & Ouellet, 2001).

A portion of the present literature body contends that most of the Catholic Church's position oppose utilization of family planning that influences individuals' states of mind and thus their utilization of family planning strategies. Roman Catholicism has it that that the key reason for a sexual connection inside marriage is multiplication (Schenker, 2000; LoPresti, 2005; Poston, 2005).

Higher salary is additionally connected with marginally expanded fertility rates among Catholic couples, though, it is related with somewhat diminished fertility rates among Protestant couples (Drew, 2000). His study was on catholic

denomination in relation to fertility. This study is however on a predominantly Muslim community.

The religiosity of parents is decidedly connected with their youngsters' fertility rates. Along these lines, more religious parents will tend to enhance their fertility rates. For example, the Protestant church's agreed that marriage could come to an end while Catholics churches don't believed it. In this manner, while Catholic churches have high number of children than Protestants because there is no divorce according to their religion (Li Zhang, 2010). US participate actively concerning their religious than Canadian citizens. This is so since around 34% of American women of reproductive age attend religious events weekly but Canadian women of reproductive age attend religious events after every two weeks on average.

More significant, religious acknowledgment tends to oblige higher marriage rates and lower separation rates. Along these lines, most of the religious young couples keep bearing more children (Bélanger & Ouellet, 2001). Moreover, marginally those who are not practice their religious had 82% compare to those who practice their religion had 40%. No religious condemns the use of contraceptives and family planning. Notwithstanding Islam communities allowed their people to have more children. In Albania Muslims have more fertility than Europe with 1.5%. In Malay Islam is one of the three most popular religion population with high fertility than India and Chinses (Khayat, 2014).

Audu (2008) found that Muslim ladies in Nigeria were tolerating of their spouses utilizing present day contraceptives, however favoured not to utilize it themselves. This may have been because of dread of reactions including barrenness and menstrual inconsistencies. In contrast to Muslims, Christians were all the more tolerating of current contraceptive utilization. Nonetheless, in Northern part of the

country Christian registered lower fertility rate than Muslims (Isiugo-Abanihe, 2015). Islamic association and more established age emphatically correspond to perfect family estimate (Gyimah, Takyi & Tenkorang, 2008). Christian ladies partake in the formulation of family planning decisions more than Muslim women plus traditional women according to Gyimah, Takyi and Addai (2006). In Kogi state, Muslim have the highest fertility rate than Protestant and Catholic religions (Dibaba & Mitike, 2016)

Socio-cultural considerations impact heavily on the reproductive decisions made by couples (Onwuzurike & Uzochukwu, 2001). Peer and Morojele (2016), indicates that in Ethiopia and Zanzibar majority of male does not apply contraceptive and other family planning method. Moreover, ladies normally held low societal position in the society and acquired small level of power which not gave them opportunity to use family planning method (Beekle & McCabe, 2006). Religion plus the related social practices are exceedingly connected with fertility rates across Ghana (Agyei-Mensah, 2006).

Children particularly boys are highly valued in traditional family setting. According to Caldwell, children are viewed as a source of wealth in traditional family setting where parents view children as a source of wealth because the structure dictates the net upwards wealth flow, he further contends that male children are preferred in a family as a symbol of security.

### **2.3.2 Ethnicity**

Ethnicity is one of the basic social measurements that have for long been considered as having vital effects on states of mind towards, and the take-up of, contraception techniques. Individuals' states of mind towards family planning are imperative as they could advance agreement on contraceptive use, particularly

within communities with larger family size and they have lower contraceptive take-up. The individuals who see family planning to be of advantage to their prosperity will probably utilize contraceptives (Odimegwu, 2015).

Africa is a patriarchal societies where by male have a final decision at their homes. In Bauchi, Adamawa, Taraba, Kaduna and Plateau are described as high fertility where women bear many children toward meeting economic standard, and fear of death as well as child labour (Blacker et al., 2005). Still, since men are the dominant figure and makers, the ideology concerning bearing many children as well as using family planning method. Moreover, the achievement of family planning relying on the success of men approval. Thus, the success of family planning will be contingent upon men's approval (Babalola et al, 2008). The study ascertained the applicability of Babalola study.

Many studies have shown how demographic, and socio-cultural factors influence high level of fertility in United States, India, Ghana, Ethiopia, Rwanda, Kenya and Nigeria. However, there is barely any scholarly works done on Misau local government pertaining fertility and its determinants. This study hopes to contribute to the literature on the study of socio-cultural factors that influence young couple fertility in Miasu, Bauchi, State, Nigeria.

#### **2.4. Socio-economic factors influencing young couples' fertility**

Numerous socio-economic factors influence young couples' fertility especially in Africa and the global North countries. It was emphasized by Odior and Alenogheno (2018) that development plan is very important in human population which brought political prosperity and socio-economic development of the country. Therefore, without the above plan will result to economic decline and rapid population growth within the community. According to Giwa (2017), indicates that

in some African societies and the global at large the effect of socio-economic fertility needs to be understood in terms of social structure. Either male or female fertility is invariably influenced by a myriad of socioeconomic determinants that affect nutrition toward education and health.

Imo, Okoronkwo & Ukoji (2014) opine that certain factors could be expected to help in a gradual long-term decline in the fertility rates. These include improvement in educational attainment, occupation status, urbanization and its related changes in the economic nature of the household and decreasing of child mortality which reduces replacement motive of child bearing.

A few research studies in Asia have found that the employment of women has little impact on the leverage they enjoy over their fertility rates especially if they are employed owing to adverse economic realities (Bankole & Audam, 2011). There is a common argument that women's control of earnings determines their desire for a particular number of children more than their employment does (Achana et al., 2015). Socioeconomic realities impact on the usage of contraceptives by couples. For instance, women living in urban regions and from rich households have high chances of utilizing contraception as a result of better incomes, access to healthcare facilities, and learning about contraception (Bbaale & Mpuga (2011).

According to the Kenya National Bureau of Statistics (2010) opines that in Africa, Kenyans are typified by high levels of neediness. About 46% are deemed to be poor. Poor household women's have higher fertility rates than those in rich households (Nabanita & Faujdar, 2013). Given that greater part of the populace are poor and live in rural environs, the fertility rate is high in agrarian settings compare to urban settings. This demonstrates that women from poor households in Kenya do

not have the same socioeconomic and reproductive experiences as those well-off households (Goujon, Lutz & KC, 2015). Ojo and Adesina (2014) found out that in the in Lafia Nasarawa state of Nigeria employment and high income levels persuade women to have small families. Ojo and Adesina (2014) opines that there is significance correlation among women's employment are more likely to bear fewer families size with high income level (Okolo, 2013).

A study carried out by Dibaba and Mitike in Nasarawa and Niger states (2016) revealed that events that occur as a result of someone's economic situation are likely to alter more children. For instance, job retrenchment may lead to child spacing in order to allow the families to recover from their economic hardship before having another children. While a study by Olatoregun et al. (2014) focusing on the Lagos, Ogun, Ondo and Ekiti states of Nigeria, has revealed that fertility preference of young couples that have lower income is based on agricultural level.

In addition, Bankole and Audam (2013) opines that women's who are working in an organisation can easily influence their level of fertility via their personal resources. However, Dibaba and Mitike's (2016) study among men in Gombe, Borno, Yobe and Adamawa states of Nigeria indicate that those who have important position in the society are intended to have low level of family size which differs from the lowest and middle position in the societies.

Dibaba and Mitike (2016) assert that in the Plateau, Taraba, as well as Benue states of Nigeria, there is a high chance that increasing age at first marriage and educational attainments persuade women to have small families. Educational attainment and family planning training affect the preferred sizes of families in these states. As noted earlier, Ojo and Adesina (2014) found out that in the in Lafia Nasarawa state of Nigeria employment and high income levels persuade women to

have small families. As noted earlier as well, income levels affect fertility rates significantly according to Okolo (2013). In the Kano, Kaduna, and Jigawa states, educational attainments affect the preferred sizes of families (De Rose et al., 2002).

The body of literature has shown education as a determinant of fertility among young couples around the world such as European countries, Indian, Jordan, Lebanon, Saudi Arabia, Kuwait, Kenya, Sri Lanka, Uganda and Tanzania, little has been done on the educational demographic determinant of fertility among young couples in Nigeria, especially in Kano, Jigawa, Kaduna and Lafia Nasarawa state, Nigeria. Similarly, most of these studies have neglected the demographic determinants that influence young couple fertility within Misau, Bauchi state, Nigeria. This research therefore, is intended to fill the knowledge gap.

## **2.5 The Strategic Measures of Controlling Fertility among Young Couples**

This section presents the different sub-heading which includes contraceptive and family planning.

### **2.5.1 Contraceptive Use**

Across the globe, fertility rates have fallen to a great extent due to the far reaching and expanding utilization of present day strategies for contraception. Notwithstanding, in some emerging economies, the take-up of contraception remains low because of various social, financial plus political obstructions (Avidimeet et al., 2015). Africa nations is one of the locale and most reduced contraceptive utilization and increased child bearing (Umoh et al, 2012). Alkema et al. (2013) opine that around the world, contraceptive pervasiveness expanded as of 55% in the 1990s to 63% in the 2010s. Thus, the neglected requirement for contraceptive method diminished ranging from 15% to 12%. The most predominant continent in the world like Asia and Latin America World Health Organization announced that the most

astounding contraception use while Africa nations apply the least family planning pervasiveness (WHO, 2013). The mean Contraceptive Prevalence Rate (CPR) in the region is 21% (World Bank 2010).

According to Emina, Chirwa and Kandala (2014), East Africa nations have had a more noteworthy increment in current family planning use than nations in Africa. For instance, present day contraceptive utilization expanded in Malawi from 26% to 42% over eight years up to 2012 (Chintsanya, 2013). In Rwanda the utilization increased from 10% to 45% over five years starting 2005. In Ghana, the utilization increased from 13% to just 17% over 10 years starting 1998 (ICF International, 2012). The utilization increased from 8% to just 29% over 11 years starting 2000 In Ethiopia (UNFPA 2012).

Ethiopia, Malawi and Rwanda have accomplished a significantly more quick increment in the contraceptive pervasiveness rate than some other nations in the area over the most recent 10 years, as indicated by an investigation into the present day contraceptive pervasiveness in Demographic and Health Surveys (DHS 2011). Present day Contraceptive Method schemes in Ethiopia are spearheaded by the Family Guidance Association (FMOH, 2011).

Prevalence of contraceptive practices varies countrywide. In Osun, Ogun and Lagos, Enugu, Anambra, Ebonyi and Imo states 15% of presently married women use contraceptives, an increase of just 2% points (National Population Commission, 2014). Rajiet at al., (2013) indicates that the level of awareness concerning family planning in Northern Nigeria is reducing from 3% to 6.2%.

### **2.5.2 Family Planning**

Family Planning is a crucial determinant of fertility among young couples across the world. In Africa, couples have to be encouraged to adopt family planning strategies such as the use of contraceptives. For instance, according to studies in Kenya, it is observed that women's involved in family planning programs it is likely to bring good result in returns. Establishing good environment in order to solve the problems of discrimination, stigmatization in gender toward demanding of contraceptive and family planning for young couples (Casey, Gallagher, Kakesa, Kalyanpur, Muselemu, Vololona, Rafanoharana, Spilotros, 2020).

In Iran, in spite 1979 policies on family planning endorsed by Ayatollah Khomeini the progressive family planning program was discontinued after the political instability. Albeit, after the political instability no any population policy was implemented, the new administration was supported a pro-natalist policy in Iran. According to Ayatollah Khomeini policy the minimum age for young women and men to marry has been raised from 9, 12 and above years of age respectively. After the Iraq war which brought new climate change in terms of pro-natalist policy; couples were urged to have more offspring and were incentivised financially. In spite of the post-revolution pro-natalist belief system, the high fertility era was fleeting, fertility rates began waning in mid-1980s in Iran (Jalal, 2000).

Morocco, Egypt and Tunisia put in place national family planning programs into effect to check on overpopulation and the related pressures (Onn, 2000). While Syria and Jordan are not as pressured by overpopulation as Morocco, Egypt and Tunisia authorities assumed more child bearing as disadvantage to the socioeconomic well-being of their countries. The authorities are yet to put in place

national family planning programs and are keen on checking on overpopulation by engaging women's education and jobs. With the appropriation of a definite population control approach in 1993 (Transitional Government of Ethiopia, 1993), various local, as well as universal, family planning groups have joined forces with authorities to extend family planning projects. In order to regulate health care service the Ethiopian Ministry of Health implement family planning guidelines. Ethiopian Ministry of Health published the Guidelines for Family Planning Services to control healthcare service suppliers and guarantee contraceptive interventions within the nation (FMOH, 2011). Government and various NGOs have extended the interventions significantly in 2002.

Since 1965, Kenya has appreciated the potential unfriendly impacts of overpopulation on socioeconomic development, including the inability to offer educational, health, and shelter provisions to the population (KNBS, 2010). It is therefore that the Kenyan government has over the years put in place numerous programs to control overpopulation. In 1968, Kenya is one of the East Africa nation which adopted National Population Policy. The policy, notwithstanding, remained generally torpid until when the World Fertility Survey of 1977 demonstrated that Kenya was bedevilled by very high fertility rates of 8 children per woman (CBS, 2007).

Nigerian authorities put in place the National Population Commission in 1988 and adopted a structured population policy to limit child bearing in the nation for only four child's per female by 2000 (Olalekan & Olufunmilayo, 2012). In 2005, the authorities established the policy concerning Population in order to sustain the development of the country. In 2015 Nigerian government limit the child bearing to only two children per female nationwide (Umoh et al., 2012; Olalekan &

Olufunmilayo (2015). The policies have been largely unable to check on the country's population growth in the face of its declining GDP (Umoh, Abah & Ekanem, 2012). In several occasion many Communities in the Northern Nigeria denied to accept contraceptive measure which affected their health condition both mother and child. In Nigeria, particularly in Kaduna and Kano states scholars recorded 6.7 pregnancies women (National Population Commission, 2014; Augustine et al., 2011). Most of the Nigerian women's bear children by the age of 19 years and more than 45% bear 10 or more children at the age of forty years (Adiri et. al, 2010). There is no study on this important magnitude of strategies that control fertility in Misau Bauchi state, Nigeria.

## **2.6 Identify Gap in Literature**

From the above literature presented, no any scholar has conducted a research concerning determinants of fertility among young couples in Misau, Bauchi State Nigeria. Consequently, this study fills a knowledge gap in the academic field by addressing the problem of the high rate of fertility in the area under study.

## **2.7 Theoretical Framework**

In restatement of demographic transition theory, Caldwell proposes that transitions from large members of family size and death rate to lower the fertility and non-fertility levels one due to social and economic changes and accompanying modernization. The research made use by John Caldwell's intergeneration wealth flows theory which proposes that there is an immediate connection between fertility and family institution (Caldwell, 1976b). As indicated by the theory there are just two noteworthy types of family structure, contrasting chiefly on wealth flows to succeeding youngsters. In `agrarian society they consider their children as source of income and individual preferences are enslaved to corporate preferences. In

developed economies, family structure is associated with downward wealth flow where parents are required to guarantee their youngsters' financial prosperity.

The theory suggests that fertility choices in all social orders are rational and financially reasonable reactions to familial wealth streams. In social orders with net upward wealth streams, the financially judicious choice is to have whatever number of offspring as could reasonably be expected (inside the requirements forced by science), in light of the fact that each extra youngster adds emphatically to a parent's riches, security in seniority, social and political prosperity. In social orders with net descending wealth streams, the financially judicious choice is to have no youngsters or the base number permitted by a capacity of child rearing.

As societies move from traditional agrarian economies to modern, urban economies where they value of children decrease as wealth net flow from older to younger generation, children no longer provide labour, status or security, rather they become the cost to the parent in terms of providing education, health other basic needs to them. This adjustment in family structure was because of the spread of secularization that put a quality on people fulfilment and accomplishment (Caldwell, 1982).

The progress from 'traditional' to 'modern' family structure happens when a minimum amount of people embrace the new qualities, and react with low fertility rates. The achievement of mass training in a nation should in this way accelerate and foresee the fertility progress. The theory varies from the others by extending the meaning of intergenerational exchanges over the existence course and by specifically connecting changing wealth or value frameworks with respect to intergenerational exchanges of riches to fertility progress. It characterizes riches as

all the cash, products, administrations that one individual gives to another (Caldwell, 1982).

As indicated by the theory, children are seen as old age security; parents expect finance advantage from their posterity amid seniority. Those advantages spur high fertility in conventional social orders where grown-up offspring are required to care for their parents. In present day society, the ethic of independence and open backings for the parents is inspiring.

Instruction or education assumes a noticeable part in numerous speculations of fertility change. In the theory, instruction influences fertility through three courses, all influencing the net expenses of raising youngsters. To start with, instruction subverts conventional commonly arranged esteem frameworks and trains kids to seek after individual objectives to the detriment of supporting their folks. While there is a lot of exact proof with respect to the connection amongst instruction and fertility, less is thought about the relative commitments of these option causal courses, and especially about training's effect on fertility through changing qualities in regards to familial wealth streams. The observational proof with respect to the effect of training on values is blended.

The theory an explanation for high fertility among Misau community members since it proposes that children produce more than they consume and therefore provide net wealth to parents. This justifies the rational decisions by young couples in Misau for having more children as they associate children with high income.

## **2.8 Conceptual Framework**

The below diagram represents relationships between independent and dependent variables and relates it with intervening variables.

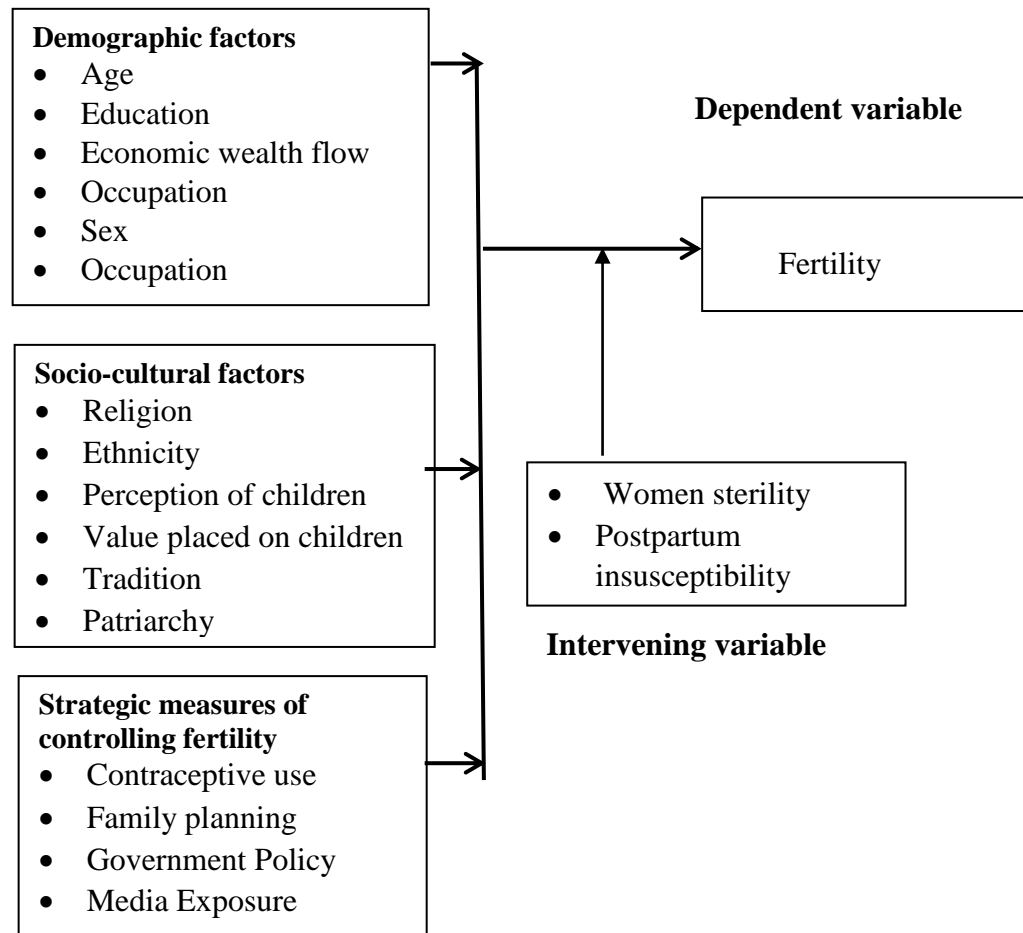
**Independent variables:** Demographic factors include: mass education influence the level of fertility for controlling childbearing. Age influence fertility as a result of most parents likes to bear more children especially when they became old. Economic wealth flows are likely influence childbearing and postponement of fertility.

Socio-cultural factors (ethnicity and religious influence the fertility because children are blessing from God, psychological disposition and culture influence fertility as a result of polygamous). And strategic measures of controlling fertility (contraceptive use, government policy, media exposure and family planning influence the level of fertility control to have few children).

**Dependent variables:** the actual fertility and desired fertility in young couples is often affected by the independent variables.

**Intervening variables:** Women sterility and postpartum insusceptibility can influence fertility level.

### Independent variable



**Figure 2.1: Conceptual framework**

Source: Author (2020).

The conceptual framework above shows that independent variables consist of demographic factors include age, sex, economic wealth flow, occupation, and education then socio-cultural factors include ethnicity, patriarchy, tradition and religion, the intervening variables constitute policies. Fertility is the dependent variable. For instance, age influences fertility in the sense that many young couples

are at the prime age of bearing children owing to their active reproductive organs and hormones. Income influences fertility in that many couples believe that many children are a source of labour that in turn makes them wealthy. Education influence fertility as people come aware of the pros and cons of having many children and decide family size. Religion shows a vital role in fertility as couples it instils beliefs among believers that children are God given and hence, many couples tend to have many children. Contraceptives influence fertility because they inhibit hormones and hence control conception and child birth. Media influences fertility as it makes the public aware of the available methods of fertility control measures and hence couples can decide on how to have children. Finally, women sterility and postpartum insusceptibility influence fertility owing to the availability of information and resources as far as family matters are concerned. For instance, women sterility and postpartum insusceptibility can restrict the number of children per couple to control national population.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The chapter explained the research methodology which divided in to the following: validity and piloting, data analysis, ethical consideration, procedure of data collection, research design, and management, location of the study target population, sampling method and research instrument.

#### **3.2 Research Design**

The research adopted a descriptive research design. Both quantitative and qualitative techniques was employed. According to Creswell, (2018) opines that this method of study uses a questionnaire in order to gather information from the participants within the target population. Descriptive design analyses describes the state of affairs as they exist, with the narration of facts and characteristics concerning individual, group or situation (Trop & Kombo, 2006). Mixed methods involve scientific hypothesis that monitor the ways of collection and analysis of data through mixed method into a single research (Creswell & Creswell, 2018). The central premise of using both quantitative and qualitative research design is to provide a better understanding of research problems by collecting both quantitative and qualitative data (Cameron & Sankaran, 2013).

Quantitative research deals with collection and analysis of statistical data to quantify the correlation between the small numbers of individuals across numerous cases (Creswell, 2013). Qualitative approach collected oral interviews which supplemented quantitative data while questionnaires solicited quantitative data that generated information on determinates of fertility of young couples in the study area. The researcher properly followed the research design accordingly.

### 3.3 Study Area

The study was carry out in Misau Local Government of Bauchi State. Misau situated at latitude, 11030I North; longitude, 10<sup>o</sup> 40I East 100 45I East). It is in the Bauchi State and experiences a semi tropical climate. It borders with Katagum, Danbam and Darazo local Government Area of the State.

The division of socio-economic features are comprised of eight location namely: Mangari, Gallimari, Kukadi, Fawari, Sabon Gari, Malori, Jadadi and Sabon Layi Locations. Most of Misau are Muslim inhabitants, dominated by Fulani and Hausa are the local indigene while other societies comprise the following: Kare-Kare, Bare Bari and Kanuri among others. The most popular religion is Islam within the local Government Area.

Misau is one of the local government in Bauchi State. Socio-economic activities within local Government Area consists of: mango, maize, carrots, tomatoes, white beans, millet, sorghum, peanuts, groundnuts, sheep, cotton, cowpeas, rams, goats, cows and. Misau has a population of more than 270,456 while the area coverage is 1, 320Km<sup>2</sup> and the total population of young couples is 2800 young couples within Misau metropolis of Bauchi state, Nigeria (National Population Commission, 2017).

The total fertility rate (TFR) in Misau Bauchi state in Nigeria still remains high with 5.2 births per women (Demographic Health Survey, 2013). Within the conventional set up, Young Couples prefer to bear more children tend to have as many children. According to the National Population Commission (2009), despite the efforts by the Bauchi state government to roll out different programs are intended to reduce the number of people. Fertility rates especially among young couples residing in Misau, still remain relatively high.

The Bauchi state government provide different programs to reduce the rate of population growth but the fertility rates especially among young couples residing in Misau remain quite high. High population growth rates are associated with varied socioeconomic challenges, including unemployment and land degradation that's the only reason for selecting or choosing Misau metropolis.

### **3.4 Study Population**

The study target population was consists of young couples between the ages of 18-35 years that have registered in the national population commission Misau branch of Bauchi state, Nigeria. The target of this study consist of 2, 800 young couples. The reason for choosing this population was based on definition of young couple who are married or having a sexual relationship between the ages of 18 to 35 years within a community or society.

### **3.5 Sampling and Sample Size Determination**

In this research random sampling technique was employed based on quantitative method of research. In simple random sampling, all possible subjects have the same likelihood of being selected at any given stage when a sampling process is underway. In selecting study respondents, young couples were randomly sampled for responses to the questionnaires as a result of the vas nature and geographical location of the estates, because of this, it is too hard for a researcher to cover the entire estates.

In quantitative research design this study used sample-size computation formula developed by Krejcie and Morgan (1970) and arrived at 338 as selected from the target population of two thousands eight hundred (2,800). The following formula was used to arrive at the sample size.

Solution

$$S = \frac{(1.96)^2 \times 2800 \times 0.5(1 - 0.5)}{(0.05)^2 (2800 - 1) + (1.96)^2 \times 0.5(1 - 0.5)}$$

$$S = \frac{3.8416 \times 2800 \times 0.5}{0.00025 \times 2799 + 3.8416 \times 0.25}$$

$$= \frac{2689.12}{7.9579}$$

$$S = 338$$

The stratified sampling technique was employed in the research, as it ensures the representation of each stratum in the sample, thus given the external validity of the study (Creswell, 2013). Table 3.1 presents the proportionate sample size of each stratum i.e. Mangari, Gallimari, Kukadi, Fawari, Sabon Gari, Jajadi, Malori and Sabon Layi within Misau metropolis of Bauchi state.

**Table 3.1: Research population per region and sample size**

Misau metropolis	Population	Sample size
Mangari	220	27
Gallimari	450	54
Kukadi	415	50
Fawari	500	61
Sabon Gari	435	52
Malori	300	36
Jajadi	210	25
Sabon Layi	270	33
<b>Total</b>	<b>2800</b>	<b>338</b>

**Source:** National Population Commission (2017)

This study adopted Purposive sampling technique in order to choose (137) respondents from the target population as a result of the nature of qualitative method of research. It happens when a researcher chooses sample participants based on a set of criteria. It enables the researchers to use cases that provide the necessary knowledge in relation to the study.

5-30% within the available population is suitable for a study in qualitative research design. A sample size of 5% from each targeted population was selected to represent the study respondents. The sample of one hundred and thirty seven (137) couples from the target population was selected individually for oral interview (Mugenda & Mugenda, 200).

**Table 3.2: Sample Size per location**

Misau metropolis	Target Population	Sample size 5%
Mangari	220	11
Gallimari	450	22
Kukadi	415	20
Fawari	500	25
Sabon Gari	435	21
Malori	300	15
Jajadi	210	10
Sabon Layi	270	13
<b>Total</b>	<b>2800</b>	<b>137</b>

**Source:** National Population Commission on Nigeria, Bauchi State (2017).

### **3.6 Research Instruments and Validity**

#### **3.6.1 Research Instruments**

The research instruments in this study included a standardized questionnaire and interview guide. There were both closed and open-ended questions on the survey. A collection of appropriate answers was given for close-ended questions. In this study structured questionnaire and interview guide was included in the research instruments. The questionnaire had both closed and open ended questions. Close ended questions were accompanied by a list of suitable answers. This type of questions were used because they were easily administered based on Likert scale. Likert scale refers to the construct and administered questions for the respondents in order to make it simple and understand while filling the questionnaires. The below

are the five Likert scales: Disagree, Strongly Disagree, Undecided, Agree, Strongly Agree (Malhotra, 1994). Furthermore, the questionnaire covered the demographic information of the respondents. Although open ended questions did not provide restricted responses, they did encourage respondent to include additional input in response to the study questions. The qualitative data was compiled using interview schedules. In order to triangulate the results, a face to face interview with 137 young couples held, with verbatim speech by the respondents and audio recording.

### **3.6.2 Validity and Reliability**

A pilot study was conducted to test for validity before the actual data collection. The degree of results can be accurately interpreted and measures or the extent to which a tool can be measures (Oso & Onen, 2009). Reliability on the other hand is the consistency measures of the available information gathered (Oso & Onen, 2009). The politic study aided in attaining reliability as this helped the researcher to explain the similarities and differences in findings. To achieve validity in this study, the research questions were aligned in line with the research objectives.

The questionnaire robustness was tested in a study piloting (Babbie, 2010). Ten (10) persons from the study location were selected for piloting from Sabon Gari estate. However, they were not part of the sample selected for collecting qualitative data.

### **3.7 Method of Data Collection**

In January 2019, data was collected, a total of 338 questionnaire was administered to the selected young couples in the study area. Out of 338 questionnaires administered 304 were returned and were found valid for analysis after data cleaning.

With the help of the research assistant, the researcher interacted with various stakeholders and informed them the purpose of the study. They scheduled interview dates for various respondents.

On the interview days, the researcher personally distributed the questionnaire to the participants. The questionnaires were randomly distributed to the young couples in Misau, at various locations. Similarly, the researcher employed an open ended interview and one hundred and thirty seven (137) couples are selected for the interview in Misau. The interview was flexible and focused on demographic and socio-cultural information of the participants as well as their method of measuring fertility within the intended area of study. Secondary source of data were document analysis from the National population commission office.

### **3.8 Management and Analysis of Data**

The information gathered was subjected to both quantitative and qualitative analysis techniques. Using questionnaires, data was gathered, cleaned, coded and inputted into the Statistical Package for Social Sciences (SPSS) version 20 computer software for analysis. Descriptive statistics like mean scores and frequency were analysed and findings presented in tables and charts.

Both multiple regression and descriptive analysis was used in defining the correlation between variables. Multiple Linear Regression prediction model was predicted the effect of independent variables on fertility among young couples within the intended area of study. The model is set according to the following:

$$y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + e \text{ Where}$$

$y$  = Dependent variable (Fertility of young couples)

$\beta_0$  = fertility of young couples

$\beta_i$  = coefficients to be estimated

$x_i$  =independent variables

Where  $x_1$  - Demographic factors

$x_2$  - Socio-cultural factors

$x_3$  - Strategic measures

in Qualitative data from the main informant interviews was manually summarized, arranged, and interpreted in accordance with the research objectives using thematic content analysis.

### **3.9 Ethical Considerations**

In line with the ethical consideration the researcher exercise all the policy guided by the research ethics in collecting data. After receiving the approvals clearance from the Graduate School and Ethical Review Committee at Kenyatta University the researcher communicated with National Population Commission in Misau Metropolis to issue consent to collect data in Misau (see the appendix VI). The researcher got a research permit from Graduate School to conduct research.

Before collecting data, researcher clarified the purpose of the study and the respondent's rights. With informed consent, data was collected from voluntary participants. The respondents' privacy was assured and secure by the researcher.

## CHAPTER FOUR

### RESULTS AND DISCUSSION

#### 4.1 Introduction

The discussion of the study results was explained in this chapter. Part one presents: demographic information of the participants which consist of gender, age, education level, religion, occupation, desired number of children, preference to a baby boy, preference to a baby girl, demographic factors that influence young couples, socio-cultural factors and measures in controlling fertility among young couples in Misau.

#### 4.2 Response Rate

**Table 4.1: Percentage Rate of the Male and Female Respondents**

	Questionnaires Issued	Questionnaires Returned	% Response rate
<b>Male</b>	160	146	91.3
<b>Female</b>	178	158	88.8
<b>Total</b>	<b>338</b>	<b>304</b>	

**Source:** Researcher (2020)

The above findings in Table 4.1 shows that males (91.3%) had a higher response rate compared to 88.8% for females. Moreover, the questionnaires was administered for both males and females and the response rate was very high. For a research, a response rate of more than 50% is acceptable, 60 percent is good, and more than 65 percent is considered very well (Mugenda & Mugenda, 2003). This argument shows that above 85.0% for the response rate is valid for analysis.

### 4.3 Demographic Characteristics of Respondents

Demographic information of the participants was provided which include the following: desire of children, boys and girls, number of children, tribe, occupation, age, gender, and age as well as level of education.

#### 4.3.1 Gender and Location of Respondents

Table 4.2 presents gender and location of respondents.

**Table 4.2: Distribution of the Locations and Gender of the Respondents**

Location	Male		Female		Total	
	F	%	F	%	F	%
Mangari	12	3.9	13	4.3	25	8.2
Gallimari	23	7.6	26	8.6	49	16.1
Kukadi	21	6.9	23	7.6	44	14.5
Fawari	28	9.2	27	8.9	55	18.1
Sabon Gari	23	7.6	25	8.2	48	15.8
Malori	15	4.9	17	5.6	32	10.5
Jajadi	11	3.6	11	3.6	22	7.2
Sabon Layi	13	4.3	16	5.3	29	9.5
<b>Total</b>	<b>146</b>	<b>48.0</b>	<b>158</b>	<b>52.0</b>	<b>304</b>	<b>100.00</b>

The above study findings in Table 4.1 revealed that majority 158 (52.0%) of the respondents was female compared to 146 (48.0%) males. Fawari region registered the highest number of respondents 55 (18.1%) followed by Gallimari 49 (16.1%) while Jajadi 22 (7.2%) had the least. These findings imply that there is gender imbalance within the research area.

#### 4.3.2 Age of Respondent

This research further inquired about age of respondent in order to classify the cohorts of the young couples under study.

**Table 4.3: Distribution of Male and Female Respondents by Age**

Age	Male		Female		Total	
	F	%	F	%	F	%
18 – 22	15	4.9	51	16.8	66	21.7
23 – 26	24	7.1	43	14.1	67	22.0
27 – 31	52	17.1	37	12.2	89	29.3
32 – 35	55	18.1	27	8.9	82	27.0
<b>Total</b>	<b>146</b>	<b>48.0</b>	<b>15</b>	<b>52.0</b>	<b>304</b>	<b>100</b>

Table 4.2 reveals that 15(4.9%) males and 51(16.8%) females were between the age of 18-22 years, 24(7.1%) males and 43(14.1%) females were between the ages of 23– 26 years. About 52(17.1%) males and 37(12.2%) females were between 27 – 31 years of age while 55(18.1%) males and 27(8.9%) females were between the ages of 32 – 35 years. A slight majority 171 (56.3%) of the respondents was more than 25 years of age while the remainder was between 18- 22 years by age. The ages of 18-22 years had the majority of females 51 (16.8%) as compared to males 15 (4.9%). This result implies that more women enter into marriage at lower age compared to men. The above result corroborate with the study findings by Odimegwu and Somefun (2017) in Nigeria noted that women get married at younger age as compared to men. This revelation confirms why a bigger proportion of the young couples in the age of 18-22 were women. These are young persons who might have little knowledge on their reproduction.

### 4.3.3 Distribution of Respondent by Religion

This research explained the religion aspect. This was important in order to classify respondents' religion. The study finding shows in Table 4.4.

**Table 4.4: Distribution of respondent by religion**

Religion	Male		Female		Total	
	F	%	F	%	F	%
Islam	158	52.0	146	48.0	304	100
Christianity	-		-		-	
Traditional	-		-		-	
<b>Total</b>	<b>158</b>	<b>52.0</b>	<b>146</b>	<b>48.0</b>	<b>304</b>	<b>100</b>

The above study finding in Table 4.3 indicates that all the participants were Muslims. Therefore the population of the respondents was homogenous. The homogeneity of the population by religion. Islam allowed Muslims to bear more children without restriction that is the reason why fertility is very high in Misau due to the fact that Islam dominate the entire region.

#### 4.3.4 Distribution of Respondent by Occupation

The study also inquired on the respondent occupation in order to have a clear understanding on the occupation of the respondents. This was important since study have shown that different economic occupations affect how many children couples have. Table 4.5 presents disaggregated cross tabulation of gender and occupation findings.

**Table 4.5: Distribution of respondent by Occupation**

Occupation	Male		Female		Total	
	F	%	F	%	F	%
Farmer	86	28.9	15	4.9	101	33.2
House wife	-		125	41.1	125	41.1
Civil Servant	29	9.5	4	1.3	33	10.9
Business	18	5.9	8	2.6	26	8.6
Others	13	4.3	6	2.0	19	6.3
<b>Total</b>	<b>146</b>	<b>48.0</b>	<b>158</b>	<b>52.0</b>	<b>304</b>	<b>100</b>

From table 4.5 86(28.9%) male and only 15(4.9%) female were farmers, 125(41.1%) female were housewives, 29(9.5%) male and 4(1.3%) female were civil servants. On the other hand 18(5.9%) males and 8(2.6%) females are involved in business enterprises whereas 13(4.3%) males and 6(2.0%) females were involved in

other occupations. Overall most of the males 86 (28.9%) were farmers as compared to 15(4.9%) females. As expected no males were doing household chores. Majority of the people who reside in Misau are agrarians by occupation for this reason the young couples decided to have many children as possible in order to help their parent in agriculture.

The above finding corroborate with the work of Caldwell (1976) pointed out that in an agrarian society children produce more than they consume and produce net wealth to parents.

#### 4.3.5 Distribution of Respondent by Level of Education

Studies have shown that education influences the number of children one may wish to have. It is this in mind this study found it important to establish the respondent levels of education.

**Table 4.6: Distribution of respondent by Education Level**

Education Level	Male		Female		Total	
	F	%	F	%	f	%
Junior primary school	9	3.0	11	3.6	20	6.6
Senior primary school	17	5.6	42	13.8	59	19.4
Junior secondary school	11	3.6	55	18.1	66	21.7
Senior secondary school	67	22.0	29	9.5	96	31.6
Tertiary/ University	35	11.5	3	1.0	38	12.5
No school education	7	2.3	18	5.9	25	8.2
<b>Total</b>	<b>146</b>	<b>48.0</b>	<b>158</b>	<b>52.0</b>	<b>304</b>	<b>100</b>

As analysed in Table 4.6, 91.8% of the respondents have at least primary school education with majority 162(53.3%) having attained secondary school education. This indicates that most of the respondents attained a certain level of academic qualification and few of them did not go to any level of education. Females 18(5.9%) comprised the larger proportion of respondents with no school education as compared to men. The study also established that only 38(12.5%) of the respondents attained tertiary/university education of which men were more in

number. The above findings indicates that majority of the participants had lower level of educational that it is the reason why the level of fertility is very high in Misau.

#### 4.3.6 Distribution of Respondents by Tribe

The research sought to examines the participant's ethnic tribe since their cultures are known to influence the number and sex of the babies they wish to have. The finding are discussed in Table 4.7.

**Table 4.7: Distribution of respondent by tribe**

Tribe	Male		Female		Total	
	F	%	F	%	F	%
Hausa	15	4.9	21	6.9	36	11.8
Fulani	78	25.7	80	26.3	158	52.0
Kanuri	45	14.8	51	16.8	96	31.6
Kare- Kare	8	2.6	6	2.0	14	4.6
<b>Total</b>	<b>146</b>	<b>48.0</b>	<b>158</b>	<b>52.0</b>	<b>304</b>	<b>100</b>

The above Table 4.7 revealed that, majority 158(52.0%) of the participants was from Fulani tribe followed by 96(31.6%) Kanuri ethnic group while Kare-Kare tribe was the least at 4.6 %. These findings imply that Kanuri and Fulani ethnic groups determine high fertility among young couples in the study area.

#### 4.3.7 Distribution of Respondent according to the Desired Number of Children

The research found out that the number of children the respondents desired to have. The result are depicted in bellow table.

**Table 4.8: Distribution of respondent by the Number of Children they desire to have**

No. of Children one desire to have	Male		Female		Total	
	F	%	F	%	f	%
0-1	-		-		-	
2-3	19	6.3	37	12.2	56	18.4
4-5	24	7.9	23	7.6	47	15.5
6-7	34	11.2	22	7.2	56	18.4
8-9	21	6.9	31	10.2	52	17.1
10 and above	48	15.8	45	14.8	93	30.6
<b>Total</b>	<b>146</b>	<b>48.0</b>	<b>548</b>	<b>52.0</b>	<b>304</b>	<b>100</b>

The finding in Table 4.8 revealed that 93(30.6%) of the participants (15.8% males and 14.8% females) would like to have 10 children and above. The results also established that none of the respondents desire to have between 0-1 children. These findings imply that the respondents regardless of tribe, education and religion have preference of having many children. These findings are in agreement with the report by Nigeria National Demographic Health survey (NDHS) of 2018 which noted over 64% of women and men in Bauchi would like to have many children.

#### 4.3.9 Respondent Preference for a Boy

The study sought to know the respondents child sex preference. This was necessary since studies have shown that couples keep on giving birth until their preferred child is born.

**Table 4.9: Preference for a baby Boy**

Preference for a Boy	Male		Female		Total	
	F	%	F	%	F	%
Yes	119	39.1	123	40.5	242	79.6
No	27	8.9	35	11.5	62	20.4
<b>Total</b>	<b>146</b>	<b>48.0</b>	<b>158</b>	<b>52.0</b>	<b>304</b>	<b>100</b>

**Table 4.10: Preference for a baby Girl**

Preference for a Boy	Male		Female		Total	
	F	%	F	%	f	%
Yes	129	42.4	120	39.5	249	81.9
No	17	5.6	38	12.5	55	18.1
<b>Total</b>	<b>146</b>	<b>48.0</b>	<b>158</b>	<b>100</b>	<b>304</b>	<b>100</b>

Tables 4.9 and indicates that majority 242(79.6%) of the participants will desire boys. Out of these number women forms the highest 123(40.5%) as compared to men. The boy child is preferred since most communities especially the African and Asians beliefs that a son has an ancestral role of ensuring continuity of the family lineage (Claire, 2018). Countries like Iran, East and South Asia countries of India, China, and South Korea among others have a high preference of giving birth to a baby boy. India has a high preference for boy child which has led to selective abortion for girls which has been aggravated by advances in science which can accurately tell the sex of the foetus (Claire, 2018).

On the other hand, in Table 4. 10 indicate that the respondents have preference for girls if they don't have one or the number they desire. This is so since majority 249(81.9%) of the respondents would like to have a girl child. Some communities especially the Africans who are traditionalist would prefer to have girls to marry them off to get wealth through dowry. In countries like India and China the preference for boys still persists, however in South Korea it has slackened.

#### **4.4 The Demographic Factors that Influence Young Couple's Fertility in Misau State**

In the first objective sought to investigate demographic factors that influence young couple's fertility in Misau Bauchi state, Nigeria. The demographic variable investigated that may influence fertility included; need to bear large family size in

order to support their old age, income, high fertility is good, educational level, social status, age, delayed giving birth, child deaths, gender, child labour and associated poverty with fertility.

Likert data collection instrument was employed to collect information regarding certification benefits. This study settled on percentages to analyse collected data.

**Table 4.11: Demographic Factors that Influence Young Couple's Fertility**

	Factor	SD		DA		UD		AG		SA	
		F	%	F	%	F	%	f	%	F	%
a)	Income	24	7.9	40	13.2	40	13.2	104	34.2	96	31.6
b)	High fertility is good in your community	32	10.5	40	13.2	16	5.3	144	47.4	72	23.7
c)	Age Influence fertility	24	7.9	40	13.2	80	26.3	104	34.2	56	18.4
d)	Couple delay in giving birth	32	10.5	56	18.4	48	15.8)	120	39.5	48	15.8
e)	Child death experienced by parents	40	13.2	56	18.4	64	21.1	64	21.1	80	26.3
f)	Educational level	48	15.8	16	5.3	63	20.7	80	26.3	96	31.6

Table 4.11 presents the findings on the demographic determinants that affect young couples' fertility in the research area of Bauchi State. The findings are interpreted and discussed based on the responses on the statement posed.

#### 4.4. 1 Income

On income, Table 4.11 revealed that over 31.6% strongly agreed that the level of their income supported their family size, 34.2% agreed, 13.2% undecided, and 13.2% disagreed while 7.9% strongly disagreed. Furthermore, those who felt that high fertility is good in the community realized high income. The findings are corroborated by the observation by one of the interviewed coupled who unanimously confided the following;

*We believe that my husband income support our family size. For that reason my husband and I want to have many children (Wife, KII, 2019).*

A 34 year old man, head of the family stated that,

*“As head the head of the family, I make decisions on any financial matter, since I am the one who provides for the family, while my wife takes care of house chores, however, in most cases I seek for her advice” ( KII, 2019).*

A 29 years old female shop attendant respondent asserted:

*“My husband decides for us, we spend according to what we have at hand. He budgets everything based on his pocket”. He also decides for us but in most cases I advise him on what to do (KII, 2019).*

The above findings and sentiments are in agreement with observation by Dibaba and Mitike (2016) who state that someone’s economic situation are likely to alter childbirth. Job retrenchment may lead to the postponement of bearing more children in order to allow family members to restore their economic stability before adding another child. Olatoregun *et al.* (2014) focusing on Lagos, Ogun, Ondo and Ekiti states of Nigeria revealed that fertility preference on young couple that have lower income is based on agrarian level influence fertility rate.

However, study among men in Gombe, Borno, Yobe and Adamawa states of Nigeria revealed that young couples with a high occupation are more likely to have a low preference for child bearing than those with a middle or lower occupation, implying that there is good relationship between fertility preference and occupation among young couples. It has been argued that improvements in income lead to higher fertility Dibaba and Mitike’s (2016).

#### **4.4.2 Education**

On education it was established that 31.6% strongly agreed that it has influenced their family size, 26.3 % agreed. Furthermore, 20.7% were undecided,

5.3% disagreed while 15.8% strongly disagreed. This observation was supported by one man, a college tutor who noted that,

*“...In my case, education has influenced the size of my family, my wife and I are educated well enough and we made a decision on the number of children we want. We understand that we have to give our children the best in life and so, we decided to have two children (KII, 2019)*

The above confession is aligned with Caldwell’s theory that society is changing its structure from upwards net wealth flow to downward net wealth flow. Educated couples bear the responsibility to provide for their children’s economic growth and not vice versa. Echoing the preceding respondent, a female respondent, a pre-primary school teacher interjected:

*“My husband is our breadwinner, and he thus, is mindful of the size of the family. He always reminds me that the smaller the family, the lighter the burden of providing for it and I agree with him since I understand that the cost of living is very high as a result of our level of education toward our family size.” (Wife, KII, 2019).*

Another house wife civil servant 25 years of age added that;

*“Me and my husband sat together in order to have a minimum number of children considering the fact that we are educated (Wife, 2019).”*

The above findings are supported by Janowitz (1976) who asserts that education has direct and indirect effect on family size and that the wife’s level of education who obtained a tertiary institution would have small number of children than those who doesn’t have any qualification. The finding of this research indicate that most of the couples once they acquire western education, they can easily decide on the number of children they need. It can be established that education strongly influences parents decision on the number of children, hence, the family size and that educated families are more inclined to planning about their desired family size and hence, have control over their fertility.

#### **4.4.3 Child death/ mortality**

The death of a child was found to influence the fertility of young couple. This was revealed by 26.3% of respondent who strongly agreed that child death

experience by parent influenced high fertility, 21.1% agreed on the same, while 21.1% were undecided. On the other hand, 18.4% disagreed and 13.2% strongly disagreed. A man, 28 years old said:

*It is always my joy to see all my children alive, however, if it happens that one of them dies, I will bear another one (Husband, KII, 2019).*

Concurring with the preceding sentiments, another a 33 year old housewife stated as follows:

*“Talking from experience, it is very painful to lose a child. I lost my first born child and I immediately had to get another baby because I could not bear the pain of being childless” (Wife, KII, 2019).*

The above assertions coincide with the study by Cantrelle and Leridon (2010) which established that upon losing a child to death, many couples will automatically desire to have another one. This was also noted by Sembajwe (2018) in a study in Yoruba in Nigeria in which he found out the death of a child in a family increases subsequent child births among couples.

The previous discussion implies that having a large family is highly valued by couples in Misau community.

#### **4.4.4 Notion of high fertility among Misau community**

On the notion that Misau community have a high fertility it was established that 23.7% strongly agreed, 47.4% agreed, 5.3% undecided, 13.2% disagreed and 16.5% strongly disagreed. One of the male respondents who answered orally stated that,

*“The issue of having many children depends on God. He may bless you with more or less children as He so wishes. But for me, I prefer having many children and “Of course I want to have many children in my life”. (Husband, KII, 2019).*

A husband, 35 years of age with primary education had this to say:

*“We live in an unpredictable world and our lives are so guaranteed, therefore, having many children is better because there are higher chances of their growth into maturity. I have seen couples especially those who reside in towns who have one child and they are always lonely when they finally retire and come back to their retirement homes. I prefer many children because out of the many, I am certain one or two can give me company and can become our breadwinner (KII, 2019).”*

Women respondents cited their concerns over the wealth inheritance by their children particularly those in polygamous marriages. For instance, a primary school dropout woman aged 23 noted as follows:

*“Since I am in a polygamous marriage, I must strive to have many male children in order to secure my children future. It is like a competition; whoever has many male children will be allocated more wealth as inheritance” (KII, 2019)*

Yet a woman who was a respondent added that,

*“Yes, I could recall when I was a child, anytime I heard people sympathizing over the death of someone who left behind 30 to 40 children, I always pray that God make me among those who will be remembered as having left many blessed children that will benefit the humanity (Husband, KII, 2019).”*

This woman, 30 years old stated that,

*“Yes, I would like to have between 30 - 35 children in my life” (Wife, KII, 2019).*

The fertility rates in India and Pakistan are 2.5 children and 3.3 children respectively. The rates have been registered for quite some time. They are still adequate to ensure that the countries' population keep on growing at least into the foreseeable future according to Drew (2013).

The above revelations coincide with the intergenerational wealth flow theory by Caldwell who asserts that traditional or rather primitive societies make rational sound decisions to have many children as the family structure is based on net upward wealth flow. Africa and some Arabic countries continue to have high

fertility rates than Central and South American countries. Europe and other developed countries like Japan and Canada are concentrated with lower fertility rate (Bélangier and Ouellet, 2016). Quite a lot of reasons were given by the interviewed couples, as the rationale behind the need for many children in Misau. Some of these reasons include assistance with farm work, religious belief, economic activities, and competition among wives because of inheritance.

The findings demonstrate that family size is determined by various factors among men and women of Misau and that children are viewed as a source of wealth bAy many couples, therefore, the larger the family size, the higher chances of getting wealthier. It can be established that culture and religion are coined in the high fertility levels of people of Misau.

#### **4.4.5 Age as a determinant of fertility**

On Age as a factor of influencing fertility, the result in Table 4.12, showed that 18.4% strongly agreed that age influence fertility in Misau, 34.2% agreed, 26.3% undecided, 13.25% disagreed and 7.9 strongly disagreed. According to one respondent a husband, 32 years of age with secondary education added that,

*“Yes, that is the main reason why we need them, especially when you are old and weak they are the one to help you” (Husband, KII, 2019).*

The woman who was 27 years of age with primary education and a mother of 6 children revealed that,

*“I bear children to help me with the house chores especially during my old age (Wife, KII, 2019).*

Additionally, a married man, 35 years old with primary education added that,

*“I bear children not only to help me but also to assist my wives and society in general (Husband, KII, 2019).*

The above sentiments confirm the applicability of Caldwell's intergenerational theory to this study. Children born in upward wealth flow generation assumes the responsibility of taking care of the older generation's economic wellbeing. Most parents would like to bear more children especially the male so that when they are old the children can take care of them. A son is vital to continue the lineage and to act as a means of protection for the parents at their old age (Kariuki, 2019).

Contraceptive method is curvilinear with women's age during younger and older ages (Njogu, 2016). The above views revealed that couples in Misau really bear children to help them in their farm, house chores and assist them during their old age. Only one wife did not encourage sending children to the farm, or the idea of sending them to hawk as it has some negative Consequences according her.

#### **4.4.6 Couple delay in Giving Birth**

Concerning couple delay in giving birth influence on fertility, it was noted that 15.8% strongly agreed that couple delay in giving birth, 39.5% agreed, 15.8% undecided, 18.4 disagreed and 10.5% strongly disagreed. This man was 51 years of age, a father of 20 children revealed that,

*“Yes there are some of our friends who didn't get married on time are always thinking of how they can get as many as children as those of their friends who got married earlier than them and in the event, they bear children as fast as they can to catch up with their peers” (Husband, KII, 2019).*

According to one of the respondents, a 25 year old married woman noted that:

*“I got married at 35 and I stayed for two more years before I got my first child. I was devastated trying to conceive. I therefore, I think that people should have children as early as possible to avoid such problems” (Wife, KII, 2019).*

Her sentiments were further backed by another female respondent who confided that:

*“I know of a couple that got married in their late 40 and the do not have children as we speak” (Wife, KII, 2019).*

The sentiments by respondents above corroborate the Human Fertility Database (2015) in most public discourses and in media talk, one gathers that birth delay among youthful couples is regularly rather garrulously connected with the actuality that more women than ever are getting tertiary education, getting into employment and desiring to get a few children. A 43 year old married woman with primary level education stated,

*“.....Yes, those who got married very late rarely give enough space between their children they do not give adequate spacing between one child and the next as they are afraid of old age catching up with them without many children (Wife, KII, 2019).*

Couples may then tend to postpone having a child and delaying childbearing because of the decline of fecundity that effects both men and women when they get older, bearing children often than desired (Bélanger & Ouellet, 2016). There are people who don't control the way they bear children; because they marry very late as such spacing between each birth is like delaying their chances of having many children. For the wives, they are afraid of menopause, while for the husbands they are becoming older and weak which is also another factor militating fertility.

The sources above imply that delay in child bearing leads to reduced family size due to bearing less number of children as such couples often experience numerous hurdles with conception and are often afraid to experience the same problems when attempting to bear more children.

#### **4.4.6 Regression Analysis of demographic factors influence on fertility rate among young couples**

The research sought to examine the demographic factors on fertility rate among couples. The findings indicated below table 4.12.

**Table 4.12: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.437 <sup>a</sup>	.191	.177	.72676	.191	14.035	5	298	.000

a. Predictors: (Constant), High fertility notion, couples' delay in giving birth, Income level, Age, child death

The findings indicate that demographic factors accounts for .191% increase in fertility rate among young couples in Misau Bauchi State, Nigeria. Furthermore, the relationship between demographic factors and fertility rate among young couples in Misau Bauchi State, Nigeria is significantly positive since the co-efficient of correlation of 0.437 is further from 1.

**Table 4.13: ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	37.066	5	7.413	14.035	.000 <sup>b</sup>
	Residual	157.396	298	.528		
	Total	194.462	303			

a. Dependent Variable: Fertility rate

b. Predictors: (Constant), High fertility notion, Couples' delay in giving birth, Income level, Age, child death

The result revealed that a p value of 0.000 which indicates that the total model for demographic predictors is statistically significant since  $P < 0.05$ . This implies that High fertility notion, Couples' delay in giving birth, Income level, Age and child death are good predictors for fertility rate among young couples in Misau Bauchi State, Nigeria.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	1.985	.247		8.024	.000	1.498	2.472
Age	.035	.038	.050	.901	.036	.041	.110
Income Level	.268	.034	.422	7.861	.000	.201	.335
1 child death	.093	.035	.161	2.668	.008	.025	.162
Couples' delay in giving birth	.030	.038	.047	.805	.042	.105	.044
High fertility notion	.027	.034	.043	.807	.042	.094	.039

a. Dependent Variable: Fertility Rate

$Y = 1.985X + 0.035 \text{ Age} + 0.268 \text{ income level} + 0.93 \text{ child death} + 0.030 \text{ couples' delay in giving birth} + 0.027 \text{ high fertility notion}$

Fertility Rate among young couples =  $1.985X + 0.035 \text{ Age} + 0.268 \text{ income level} + 0.93 \text{ child death} + 0.030 \text{ couples' delay in giving birth} + 0.027 \text{ high fertility notion}$ . Age result increase to 0.035 units in fertility rate, a unit increase in income level will lead to 0.268 units increase in fertility rate, a unit increase in child death will lead to 0.93 units increase in fertility rate, a unit increase in couples' delay in giving birth will lead to 0.030 units increase in fertility rate and increase in fertility notion which yield to 0.027 units increase in fertility rate among young couples. These findings indicate that fertility rate among young couples is influenced by High fertility notion, Couples' delay in giving birth, Income level, Age and child death. The above result corroborated with the work of Kariuki (2019), opines that on effects of demographic determinants on fertility rate in Mang'u district, Thika town in Kenya. He found out that demographic factors like age and child mortality had a positive

influence on fertility rate among married couples in Kenya since he found a  $P = 0.0258 < 0.05$ .

#### 4.5 The Socio-Cultural Factors that Influences Young Couple's Fertility

Objective two sought to examine the socio-cultural factors that influence young couple's fertility in Misau Bauchi state, Nigeria. Frequencies and percentages were used to analyse the responses.

**Table 4.15: Socio-Cultural Factors that Influences Young Couple's Fertility rate**

	Factor	SD		DA		UD		AG		SA	
		F	%	F	%	F	%	F	%	F	%
a)	Couples determine fertility	24	7.6	-		16	5.3	88	28.9	176	57.9
b)	Religious belief	48	15.8	16	5.3	8	2.6	120	39.5	112	31.6
c)	Preference of male child	48	15.8	72	23.7	112	36.8	48	15.8	24	7.9
d)	Child labour	80	28.3	40	13.2	112	36.8	56	18.4	16	5.3
e)	Fertility Lead to Poverty	88	28.9	80	26.3	64	21.1	40	13.2	32	10.5
f)	Patriarchy influences fertility	32	10.5	40	13.2	80	26.3	88	28.9	64	21.1
g)	Traditional practice influences fertility	40	13.2	48	15.8	80	26.3	88	28.9	48	15.8
i)	Ethnicity influences fertility	32	10.5	56	18.4	48	15.8	96	31.6	72	23.7

#### 4.5.1 Couples determine fertility

Couple determination of family size (fertility), results in Table 4.13 above show that 57.9% strongly agreed, 28.9% agreed, 5.3% undecided, 7.6% strongly disagreed while 0.0% as disagreed.

One of the female respondents, 29 year old married woman stated:

*“I practice it with his permission, I used contraceptive pills in order to determining our fertility as a couples” (Wife, KII, 2019).*

As stated by a housewife aged 23 years,

*“I do it but I have to seek for his permission first, I used Pills” (Wife, KII, 2019).*

Young couples in Japan prefer to have small number of children, while couples in agrarian societies tend to have more children than those in urban areas (Matsumoto & Yamabe, 2013). Aside from that, as emphasized by various research, the number of child bearing is considered a very critical and significant problem is estimating the total number of child bearing that a couple will like to have (Habbema et al., 2015; Günther & Harttgen, 2016). From the opinion of these interviewees it was evident that couples played a bigger role in determining desired number of children they will like to have.

#### 4.5.2 Religious Belief

Table 4.15 show that 31.6% strongly agreed that religious belief influence fertility, 39.55 agreed, 2.6% undecided, 5.3% disagreed while 15.8% strongly disagreed.

A 35 year housewife asserted as follows,

*Religiously and culturally, every child is endowed with his or her wealth and that the Muslim religion advocates for many children. This is a belief that is deep rooted in us (Wife, KII, 2019).*

Agreeing with the above articulations this man, 32 years with secondary school level education added that,

*“As a Muslim, I want to have more children, because our holy prophet has told us to have many children so that we can be proud of them. However, today many parents are afraid of bearing children due to the socially disapproved vices that may interfere with their proper upbringing” (Husband, KII, 2019).*

This woman was 34 years and she had a formal education revealed that;

*“.....Really, our religion in Misau encourages us to have many children.....” (Wife, KII, 2019).*

Another respondent asserted that religion permits them the freedom to have as many children as possible owing to the fact that Misau is predominantly Muslim and the religion allows men to marry up to four wives.

Resonating with the above female respondent, a male respondent, 29 years stated that:

*”As permitted by my religion, Islam, I married four wives and each of them has 5 children” (Husband, KII, 201).*

The above findings are supported by Bélanger and Ouellet (2016) who noted that Jewish couples are intended to have less children than Catholic and Protestant young couples. The same was observed by Egenti (2016) in a study in Orlu South East Nigeria where he established that religion played vital role in effecting the fertility. He observed that Muslims tend to have many children as compared to Christians. Also, the respondents echo what Krishnaji (2005) established in his study on religion and fertility that the latter is higher among Muslims compared to other religions. The respondents revealed Misau is dominated by Muslims who do not advocate for use of controlled contraceptives and births and this explains their large family sizes.

The research findings confirmed that the highest the number of wives one has, the greater number of children will bear in the future (Skirbekk, 2008).

In line with this, United States discovered that ladies who took religion very vital or "imperative" would have high number of children than those who are not religious (Hayford & Morgan, 2008). From the opinion of these interviewees, religion in Misau influence the number of children the couple will get. Most of the Misau communities members are predominantly Muslims and the Islamic religion allow them to get as many children as possible.

A man, 27 years of age reported that,

*“.....My religion is my culture, and my religion as you know does not restrict our child bearing to a certain number. Therefore you can have as many as you want. In our religion you don't restrict your child bearing.....” (Husband, KII, 2019).*

There is no religious prohibition against family planning even in the Islamic point of view. Although, Muslims people across the globe have the intension to bear more children. For instance, Albania has the highest number of children than in Europe and other part of the world. Muslims in Malays, bear many children than those Muslims in India and Chinese (Khayat, 2014). One of the female respondents who answered orally added that,

*“.....My religion influences the way I bear my children, because I want to raise them in accordance with the guiding principles of our religion.....” (Wife, KII, 2019).*

In this study majority of the respondents are Muslims and this explains the great influence of religion on their fertility.

However, a female respondent, 30 years old revealed that,

*“.....My religion really encourages me to have more children.....” (Wife, KII, 2019).*

Similarly, another female respondent with primary education reported that,

*“..... My religion influences the way I bear my children as a Muslim. Children are God given” (Wife, KII, 2019).*

*I have 3 co-wives and I am newly married and I decide to have many children. I Always prayed to almighty God to blessed me with many children (Wife, KII, 2019)*

From the opinion of these interviewees indicate that religious influence majority of the young couples in Misau. They consider children as blessing from God and that they desire to have many children. This helps to explain the current up surging population in Misau as majority of the couples believe in having many children.

#### **4.5.3 Ethnicity**

On the influence of ethnicity on couples' fertility, it was established that 23.7% strongly agreed, 31.6% agreed, 15.8% undecided, 18.4% disagreed while 10.5% strongly disagreed. One man, the head of the family revealed that,

*“.....Yes, in my ethnic community, Hausa, the couple can easily have more than 20 children unlike other ethnic groups.....” (Husband, KII, 2019).*

Due to the individual attachment to his or her ethnic group, ethnicity played a vital role in Nigeria (Akpa and Ikpotokin, 2012; Feyisetan & Casterline, 2000; Caldwell, 1987; Weinreb, 2000).

27 years of age a tailor female respondent confirmed that;

*“It is part of our ethnicity Hausa/Fulani communities to have many children as possible within the constraints imposed by the biology going by this it will help us to maintain our ethnicity (Wife KII, 2019)”.*

In Hausa/Fulani ethnic group fertility has been consistently reported to be higher than those resided within Igbo and Yoruba communities (NPC, 2013). From

the opinion of these interviewees in Misau the Hausa ethnic group can have more than 20 to 30 children unlike other ethnic groups.

#### **4.5.4 Patriarchy and Tradition influences fertility**

The findings in Table 4.12 indicated that 21.1% strongly agreed, 28.9% agreed, 26.3% undecided, 13.2% disagreed while 10.5% strongly disagreed that patriarchy influences fertility in Misau state.

A village women group leader revealed as follows,

*“.....Our culture really influences the way we give birth, because a typical Hausa person believes that it is our creator who ordained us to bear the children. Your child bearing determines your level of belief. The more children you have the more assistance you will receive from them.....” (Wife, KII, 2019).*

A village elder, 35 years of age added that,

*”.....Our culture wants us to have many children, because as I told you society is a mixture of different families, that either assist one another through cooperative work, trade, education and so on. Every society needs more children, because if you have that the society will be very strong, in such a way that one child will engage in business another one in blacksmithing, another one in tailoring, driving, weaving, fishing and so on. Therefore, our society needs more children.....” (Husband, KII, 2019).*

A man, 33 years of age added that,

*“In my culture, men prefer to marry a woman who give birth many children (Husband, KII, 2019).*

With similar views one male respondent, a water vender stated:

*I would like to have many children because when I grow old and they take care of us since my wife and I will be old weary and unable to provide and take care of ourselves. (Husband, KII, 2019).*

A 35 year family man with 10 children asserted:

*“Children are an assured security during our old age; I believe that the many children we have will share responsibilities in taking care of us when we grow old and weary”.*

The revelations above corroborate Caldwell theory stating that in traditional societies, parents view children as a source of income hence, an upward net wealth

flow. This implies that in Misau, the family structure is not yet fully transitioned from traditional-based values to downward. Hence couples bear many children believing they are a source of security, political and economic wellbeing. The respondents' assertions are backed by Wang (2016) who established that in developing countries children became a means of economy to their elderly parents. The findings establish that many couples in Misau consider having many children as they consider many children because they consider them a prerequisite for marriage.

Another result shows that from the traditional experience 15.8% strongly agreed that traditional practice also influence fertility, 28.9% agreed, 26.3% undecided, 15.8% disagreed and 13.2% strongly disagreed.

Culture influences the age at first marriage which is between 14 and 17 in the north (Ushie et. al, 2011). This implies that the women have a longer period to give birth before they reach menopause and therefore their fertility rate seems to be high. Culture also influences the number of wives a man can have. The people of Misau are culturally polygamous and this explains their high fertility. This is supported by one female respondent, a housewife who remarked:

*“.....Mostly in our tradition, especially in our community, the husband makes decision on anything concerning money.....” (Wife, KII, 2019)*

A culturally influenced husband has a final decision on how many wives to marry and ultimately number of children to have. This finding is supported by Adhikari (2010); Azmoude (2019) who found that socio-cultural belief influence couples fertility. On the same note a farmer, 23 years old confided:

*“.....traditionally men decide, as the leader of the house, I decide on what to do with what I earned.....” (Husband, KII, 2019).*

Moreover, one of the female respondents revealed that,

*“.....Here in Misau, husband makes the final decision, because he is the one who provides for the family. Whatever he decides is final.....” (Wife, KII, 2019).*

One of the female respondents supported the findings and indicated that;

*Mostly in our culture, especially in our community, the husband makes decision on anything concerning family affairs (wife, KII, 2019).*

A 34 year community leader responded as follows:

*In our custom in Misau men decide, as the leader of the house, I decide on what to do concerning our family issues. I decide on how to make my family and determine the size of my family (KII, 2019).*

Similarly, one man, 32 years, the head of the family reported that,

*“.....It depends on the culture of the society, but here in Misau, husband makes the final decision, because he is the one who provide for the family. Whatever he decides is final.....” (Husband, KII, 2019).*

Another woman a housewife asserted that her husband decides when to have another baby.

Echoing, same sentiments as the preceding respondent, another female a housewife interviewee stated:

*“My husband determines when to have another child because he provides for our every need as a family”. (Wife, KII, 2019).*

Another middle aged woman interjected:

*“For me, I was married off to my husband when I was 16 years. My father wanted me to get married so that my bride price can be given to him.*

From the findings, it can be established that patriarchy in Misau promotes fertility.

In line with this is the assertion by (Mathia, 2013) that a patriarchal kinship organisation promotes early marriages and high fertility.

It thus can be established from the discussion that patriarchy is a cultural factor that plays a key role in influencing fertility among young couples in Misau. This has been exhibited by the processes of making decisions as far as family matters are concerned and that patriarchal gender system of Misau is inclined towards

increasing fertility demand. This implies that majority children are born in Misau due to the husbands demands to have one or more.

From the opinion of these interviewees in Misau husbands decide what to do within their family affairs. The husband controls everything as the head of the family, so he can decide the number of children he need

From the above findings and sentiments shared by key informants, it's clear that cultural factors such as patriarchy have a great influence on the couple's fertility.

#### **4.5.6 High Fertility leads to poverty**

On assertions that high fertility lead to poverty, findings in Table 4.15 show that 10.5% strongly agreed that fertility lead to poverty, 13.2% agreed, 21.1% undecided, 26.3 disagreed and 28.9% strongly disagreed. This man was 31 years and he had university education revealed that,

*“.....Of course in my community people who have many children cannot afford to provide basic needs such as schools fees, shelter, food, clothes and health. Therefore, according to my understanding, high fertility can lead to poverty.....” (Husband, KII, 2019).*

However, a female teacher with 29 years added that;

*“.....In my village, many young people accused of crime have been found to come from poor families and more often than not, they come from families with large family sizes where parents struggle to make their ends meet. (Wife, KII, 2019).*

Concurring with her neighbour, a farmer, and 35 years old with 10 children interjected by saying:

*I have many children and I always struggle to feed, clothe and educate them because my husband and I are peasant farmers. We get very little from it to cater for every need of our family (Wife, KII, 2019).*

The intergenerational theory by Caldwell suits the above revelations in as far as change in family structure has assumed in the wake of secularization. Couples that have many children struggle to provide for their economic wellbeing. This implies that the dictates of the modern family structure on individual satisfaction influences fertility. The couples interviewed above have adopted the downward wealth flow, thus bearing the burden of ensuring their children's economic wellbeing. Revelations by respondents coincide with the findings of a report by HYBRID (2017) which observes that poverty and high fertility rates are closely connected because majority of the poorest communities across the globe females are having too many children which they then cannot financially support.

The findings above establish that high fertility is associated with poverty in Misau. Most of the participants accept many children are contributors to their poor living conditions.

#### **4.5.7 Male Child preference**

The study revealed that 36.9% strongly agreed that preference of male child than girls, 15.8% agreed, 7.9% undecided, 23.7% disagreed and 15.8% strongly disagreed preference of male child influences couples fertility. In strong agreement a woman 32 years old reported that

*“A male child is very important in the family, had I not given birth to my five sons I would attempt to conceive again and again until I get one or more” (Wife, KII, 2019).*

A shopkeeper, 35 years old revealed;

*My wife and I are still considering having another child as we are attempting to get a baby boy who will give me pride as a husband and as a father (Husband, KII, 2019).*

One more respondent added that a female child is an outsider who will soon after adolescent stage get married and leave her home.

Of a contrary opinion was one man, aged 40 years old truck driver expressed:

*“I believe that female children are more sympathetic towards their parents. Nevertheless, a male child is like the father of the house, because he takes charge of all responsibilities in your absence. Therefore, one should not reject it if God decides to bless him with either sex of the child, since both of them are equally important...” (Husband, KII, 2019)*

From these findings it's clear that preference of a given sex of child influences couples fertility. The observations are similar to the findings by Adhikari (2010) who established that preference for a given child sex lead to couples giving birth to an extra one. In the same vein, these findings further confirm the assertions by Elele (2002) that a male child is considered a family pride and honour in Nigeria, leading to giving birth to additional children .

Similarly, Muhammed, et al,(2016) established that customs and the understanding of religion contribute significantly to the incidence of male child preference thereby increasing couples fertility. Invariably, couples in Misau prefer having male children in a greater number, as they are considered a source pride and makes a family complete. Thus, male child is most preferred by many couples as evidenced by the above revelations by interviewees. One particular interviewee views a female child as a burden who stays with you for a short period of time before going to her permanent husband house. A businessman with 4 children stated that,

*“Some couples did not have any preference between the two; they are contented with whatever they get male or female” (Wife, KII, 2019).*

#### 4.5.8 Child labour

Results in Table 4.15 show that 5.3% strongly agreed, 18.4% agreed, 36.8 undecided, 13.2 disagreed and 28.3 strongly disagreed that that child labour influence fertility in Misau. Child labour definitely influences child bearing in Misau, which is why some resort to marrying more than one wife in order to have so many offspring.

One man who was the head of the family revealed that,

*“Honestly, I want to have many children, because it will help us in our farms and business activities in return they will serve us as our sources of income (Husband, KII, 2019)”.*

A mason 35 years old with 9 children stated as follows:

*“.....Yes, there may be people with such perception, but that was prevalent during the olden days. In this our modern day society that perception is beginning to wane” and He added that In my opinion, whatever God has destined for you there is very little you can do to change that. Even if your wife put to bed every year because you lost some children, you cannot have more than the number of the children God has destined for you.....” (Husband, KII, 2019).*

According to Moshe and Binyamin (2010) there is correlation among fertility and child labour, however from above findings it has very little influence on child bearing as the community have changed their economic activities that are child labour dependent.

#### 4.5.9 Regression Analysis of Socio-cultural influence on fertility rate among couples

The research sought to examine the impact of socio-cultural on fertility rate among couples. The findings indicated in bellow Table.

**Table 4.16: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.885 <sup>a</sup>	.783	.778	.37786	.783	152.284	7	295	.000

a. Predictors: (Constant), Ethnicity, child labour, preference of male child, traditional, Educational level, Religious, Patriarchal setting

The findings indicate that socio-cultural factors for 78.3% increase in fertility rate among young couples in Misau Bauchi State, Nigeria. Furthermore, the result revealed that there is a positive correlation between fertility rates and socio-cultural among young couples in Misau Bauchi State, Nigeria since the co-efficient of correlation of 0.885 is closer to 1.

**Table 4.17: ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	152.203	7	21.743	152.284	.000 <sup>b</sup>
	Residual	42.120	295	.143		
	Total	194.323	302			

a. Dependent Variable: Fertility Rate

b. Predictors: (Constant), Ethnicity, child labour, preference of male, traditional practice, Educational level, Religious belief, Patriarchal setting

The result revealed that a p value of 0.000 which indicates that the overall model for socio-cultural predictors is statistically significant since  $P < 0.05$ . This implies that Ethnicity, child labour, preference of male, traditional practice, Educational level, Religious belief and Patriarchal setting are good predictors for fertility rate among young couples in Misau Bauchi State, Nigeria.

**Table 4.18: Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
	B	Std. Error				Beta	Lower Bound
(Constant)	.888	.080		11.100	.000	.730	1.045
Religious belief	.086	.023	.150	3.783	.000	.041	.130
Educational level	.113	.022	.197	5.149	.000	.070	.157
preference of male child	.046	.026	.065	1.771	.078	.005	.096
child labor	.017	.025	.025	.686	.493	.031	.065
Patriarchal setting	.185	.028	.288	6.503	.000	.129	.241
traditional practice	.155	.025	.242	6.219	.000	.106	.204
Ethnicity	.089	.029	.146	3.044	.003	.032	.147

a. Dependent Variable: Fertility Rate

$Y=0.888X+0.080$  religious belief $+0.113$  education $+0.046$  preference of male child $+0.185$  Patriarchal setting $+0.155$  traditional practice $+ 0.89$  ethnicity

Fertility rate among young couples  $=0.888X+0.086$  religious belief $+0.113$  education $+0.046$  preference of male child $+0.185$  Patriarchal setting $+0.155$  traditional practice $+ 0.89$  ethnicity.

The results show that a unit increase in religious belief will result in 0.086 units increase in fertility rate, education result increase to 0.113 units in fertility rate, a unit increase in preference of male child will result in 0.046 units increase in fertility rate, a unit increase in Patriarchal setting will result in 0.185 units increase in fertility rate, a unit increase in traditional practice will result in 0.155 units increase in fertility rate and a unit increase in ethnicity will result in 0.89 units increase in fertility rate among young couples.

These findings indicate that fertility rate among young couples is influenced by Ethnicity, child labour, preference of male, traditional practice, Educational level, Religious belief and Patriarchal setting. Child labour does not seem to affect fertility rate among couples since its p value is  $0.493 > 0.05$ . The above result corroborated with the work of Kariuki (2019), on the influence of socio-cultural factors on fertility rate in Mang'u district, Thika town in Kenya. He found out that socio-cultural factors like Religious affiliation, sex preference have an influence on fertility rate among married couples in Kenya.

#### **4.6 Strategic Measures of Controlling Fertility among Young Couples in Misau Bauchi State, Nigeria**

The third objective sought to assess strategic measures of controlling fertility among young couples in Misau Bauchi State, Nigeria. Frequencies and percentages disaggregated by gender were used to analyse likert scale responses. A composite score for likert scale responses was generated to allow interpretation. Strongly disagree and disagree scores were added together to form one score. On the other hand strongly agree and agree scores were added together to form one score agree while undecided constituted a neutral score. The three scores were used to discuss the study findings. The analysis used Table 4.19 presents results of the strategic measures of controlling fertility among young couples in Misau Bauchi State, Nigeria.

**Table 4.19: Strategic Measures of Controlling Fertility among Young Couples in Misau Bauchi State, Nigeria**

Strategic measures	Gender	SD		DA		UD		AG		SA		Total
		F	%	F	%	F	%	F	%	F	%	
Family planning	Male	9	3.0	11	3.6	11	3.6	43	14.1	72	23.7	146
	Female	7	2.3	21	6.9	5	1.6	69	22.7	56	18.4	158
Government policy on family planning	Male	18	5.9	23	7.6	43	14.1	46	27.0	16	5.3	146
	Female	22	7.2	41	13.5	13	4.3	66	21.7	16	5.3	158
Media exposure	Male	20	21.7	28	9.2	21	6.9	66	6.6	11	3.6	146
	Female	28	23.0	28	9.2	19	6.3	70	9.2	13	4.3	158

#### 4.6.1 Family planning

The process of regulating the total number of children in a family and the intervals between their births, especially by contraceptives method or voluntary sterilization, is refer to as Family planning. Results in table 4.19 revealed that 78% of both genders agreed that family planning is a measure to control fertility. These comprised of 37.8% of male and 31.1% of females. Family planning is the most important strategy measures of controlling fertility among young couples in Misau. However, 15.8% of the respondents (6.6% male and 9.2% female) disagreed with this statement.

A 29 year old business woman admitted:

*“Yes, I do practice family planning, because all my children were delivered by Caesarean Section. Accordingly, I was medically advised about family planning because of my health (KII, 2019).”*

Majority of female respondents attested that they use various available fertility control measures. For instance, one noted that she uses morning after pills in order to conceive. This was followed by another respondent who asserted that she has a 5 year implant.

Another female respondent asserted that they consider family planning as fertility control measure to have few children (Wife, KII, 2019).

In agreement, another male high school teacher with 5 children stated:

*We always plan on when to have another baby. We have agreed that my wife uses an implant for 5 years before we can get another baby (KII, 2019).*

A married undergraduate female student interjected by asserting:

*I have a coil, which I use as a family planning method and helps us raise our children with less difficulty because when know when we are ready to get one and how to raise them and give the baby the best we have (KII, 2019).*

A 28 year old cleaner responded by stating as follows:

*Since I do not like using a condom, I use withdrawal method any time we do not want to have a baby (KII, 2019).*

On the other hand, a 34 year old man, a father of 5 children said:

*I always use a condom because have once failed to withdraw and my wife fell pregnant when we were not ready for a baby (Husband, 2019).*

Of the contrary sentiments was a 35 year old man, a farmer with 7 children:

*“.....Honestly, we have never practiced any family planning in our lives. I have a friend who is a medical practitioner; he advised my wife that before practicing any family planning, she should make sure that she has many children. Because there are couples whose sperms are less fertile and the moment they started family planning, they have compounded their problem. Therefore, my wife and I decided to take heed of his advice since he is a medical doctor. We rely on natural family planning as she bears children after every three years” (Husband, KII, 2019).*

Another female respondent, a 20 year old primary school dropout with three children added that,

*“No, I don't believe in family planning that is why I don't even practice it, because I want to have many children in my life”(Wife, KII, 2019).*

With a similar opinion was another respondent who reported that, she does not practice any family planning and that as a couple, they do not have power over that, and that God decides for them” (Wife, KII, 2019)

One of the female respondents added that,

*“Yes, through the natural ways, most women practice family planning because of their health, and also they want to give space to allow room for good training of the children” (Wife, KII, 2019).*

Another woman, a housewife, 21 years of age revealed that:

*“If your husband doesn’t support then there is very little you can do since he is the one who pays for the bills. Therefore, he decides on whether to practice family planning or not. That is why I don’t do it because my husband doesn’t like it. I’ve never known of any family planning method (Wife, KII, 2019).*

A female tailor, 35 years of age asserted:

*I believe that family planning can interfere with my reproductive system to the point of making me infertile. Who will I blame when I fail to get children? I would rather not dare any of them (Wife, KII, 2019).*

A barber, 26 years of age added that:

*We have never considered using any family planning method because it is against God. When my wife conceives, we count it as a blessing because there are people out there who are childless therefore, having one or more is considered a blessing to us (Husband, KII, 2019).*

According to United Nations (2020), many contraceptives programs in sub Saharan Africa promoted birth spacing programmes in the interest of maternal and child health which may provide an additional clue about the high levels of fertility in these countries relative to their levels of contraceptive use. Some studies in Nigeria have shown that majority of the community are denial of family planning particularly in Northern part of the country (Umoh, Abah & Ekanem, 2012).

From the findings, family planning is practiced in Misau, by the few educated ones among them, who used contraceptive pills, withdrawal method, and menstrual cycle

period. Additionally, some women practice it for medical reasons because they always deliver their children by Caesarean Section (CS). Majority of the interviewees don't practice any family planning techniques, in fact very few of them are even aware of some family planning methods or programmes. To some it is against their religion, while some wives are discouraged by their husbands.

Condoms is one of the form of contraception that is cheap and affordable as well as widely available with very little side effect. Male condoms are thought to be natural and reliable method of controlling childbirth. Condoms got almost 98 percent effective preventing pregnancy were used correctly according to the parenthood planned. If used incorrectly, the effectiveness rate drops to about 85 percent. By contrast, female condoms are 95 percent effective when used correctly (Condom effectiveness, 2017). The opinion of the respondent revealed that use of condom can easily prevent couple from having another child.

Nigerian authorities put in place the National Population Commission in 1988 and adopted a structured population policy to limit the number of children in the nation to only four youngsters per female by 2000 (Olalekan & Olufunmilayo, 2012). In 2005, the authorities introduced NPC for Sustainable Development as reported by Umoh, Abah and Ekanem (2012) to limit the child bearing within the communities to only two kids per female by 2015 as reported by Olalekan & Olufunmilayo (2012). Another respondent reported that

The above confessions correlate with the findings by Speizer et al (2019) that established that family planning in northern part of Nigeria has been noticeable. However much needs to be done since family planning sustainability is likely to hit a snag with the ending of funds. This implies that there is a significant number of Misua residents who use family planning methods to control their fertility.

10 years in marriage, a housewife confessed,

*“I have been using the family planning the services became available. I also informed my friends about the available birth control methods and they also started using them” (Wife, KII, 2019).*

A newly married woman, 29 years old revealed,

*“I always find many women in the clinic waiting to be attended to in terms of birth control and even getting introduced to the family planning methods” (Wife, KII, 2019).*

This implies that that with the availability of the facilities, a substantial number of couples in Misau use family planning methods to control their fertility. This is in accordance with USAID (2012) that contraceptive promotion affects fertility preference.

#### **4.6.2 Government Policy on Family Planning**

It was established that 147.4% of the respondents (20.4% male and 27% female) agreed that government policy on family planning is a strategy of controlling child bearing between young couples. However, 34.2% of the respondents (13.5% male and 20.7% female) disagreed that government policy on family planning is a fertility control strategy. In fact, an accountant, 34 years old stated,

*“..... Well I will not say I used it directly, but because I and my wife are educated, we adopt the menstrual cycle method and the period during which she breastfeeds to have sex in order to avoid having unwanted conception. However, we are doing this in order to comply the national population policy in Nigeria” (Husband, KII, 2019).*

Birth control, also known as contraception method of family planning in order to protect young couples from conceiving (Hanson and Burke, Anne; 2010). Over a decades birth control was affective and affordable as well as safe. Family planning preparation entails deciding how to control the child bearing (WHO, 2016). Majority

of the respondent revealed that they used birth control devices to manage the number of children the need. According Mahmud 23 years old,

*“Yes I have done it almost twice, because my wife requested for it that she needs some rest. Sometimes I use the withdrawal techniques since our government sensitize us on how to control our births. Therefore, we are abide by the government population policy concerning our fertility (Husband, KII, 2019).*

Another male respondent, 23 years old added that,

*Yes we apply withdrawal method because it is more natural in order to avoid the negative impact of the artificial family planning methods at the same time to adopt our national population policy concerning our fertility (Husband, KII, 2019).*

A father of three, who does small scale farming said:

*“Family planning is not common here in Misau, unlike the western world where they restrict their number of children. For example in England the maximum number of children a couple can have are 4, or 6 children in Brazil (Husband, KII, 2019).*

A housewife, mother of 6 children added that,

*Here in Misau we don't have such laws restricting the number of couple's children, since one can marry up to four wives, and each can give birth to 10 children and nobody will ask why. There isn't any policy to that is effective here” (Wife, KII, 2019).*

A mechanic, father of 9 children interjected by stating:

*“I have no idea of any policy that restricts me to have many children. In any case, it is my right to bear whatever number of children I desire because I am the one who takes care of them and they are God given (Husband, KII, 2019)”.*

The sperm ejaculated into the vagina canal must be reduced to amount that consistently preclude fertilization in a male (Anderson and Baird, 2002). Withdrawal is a conventional male method contraceptive procedure in which intercourse leads to extravaginally ejaculation (Rogow and Horowitz (1995). Majority of the respondent revealed that use of withdrawal method is the best solution than using artificial once.

Another key informant asserted that culture and religion in Misau precedes any policy particularly when it comes to matters of family making. There is still a high fertility rate in Bauchi state and Bauchi in particular despite the local government recommendations in 2017 to provide political support to family planning, improving collaboration between government and non-government to deliver family planning programs and increasing information on family planning (Health Policy.com, 2017).

The view and attitudes of the respondents demonstrated above imply that family planning policies in Misau have less influence and that the population have barely been influenced.

With the appropriation of a definite population control approach in 1993 (Transitional Government of Ethiopia, 1993), various local, as well as universal, family planning groups have joined forces with authorities to extend family planning projects. Ministry of Health published the family planning guidelines to control healthcare service suppliers and guarantee contraceptive interventions within the country (FMOH, 2011).

Among Muslim countries, Morocco, Egypt and Tunisia put in place national family planning programs into impact to check on overpopulation and the related pressures (Onn, 2000). On the other hand, Syria and Jordan are not as pressured by overpopulation as Morocco, Egypt and Tunisia authorities considered to have more children as threats to their countries socioeconomic wellbeing. Majority of the respondents revealed that government policy on family planning do not play a vital role in Misau. Majority of the couples in Misau are predominantly Muslims.

#### 4.6.4 Media Exposure

Table 4.13 result shows that 7.9% strongly agreed that media exposure play a vital role in controlling fertility among young couples in Misau, 15.8% agreed, 13.2% undecided, 18.4% disagreed while 44.7% strongly disagreed. Mariam, a 22 year old housewife asserted.

*We also listened to some family planning programs on radio. I have learnt a lot concerning its advantages and disadvantages” (Wife, KII, 2019).*

A male respondent stated:

*As much as we have been hearing adverts about family planning on radio, we have not adopted any of the methods, our religions does not advocate for artificial fertility, we believe children are God (Husband, KII, 2019).*

A village youth leader, a 30 year old father of three revealed that:

*“No, media has no influence over my fertility despite the fact that I’ve been hearing about family planning on Radio. Child bearing, is the prerogative of God, He decides whether to bless you with a child or not. He also decides on the right time to bless you with the child, therefore, neither the wife nor the husband can control that through family planning method” (Husband, KII, 2019).*

While media has had an effect on fertility preference, since those exposed to media often see advertisements and majority hear them on radio and their importance. From the results, media exposure has influenced a number of couples in Misau to use contraceptives. Although a smallest percentage of the respondents strongly agreed that media has influenced their fertility desire and that that they always get information via radio to get to make decisions on child bearing.

For instance, a couple asserted that radio helped them get to adopt artificial family planning methods that were advertised on radio and that they have

children that they have always desired to have as a couple (Husband, KII, 2019).

An influential woman asserted:

*We always watch family programs and get to know more about various fertility control measures and for sure, they have saved us from having unplanned children (Wife, KII, 2019).*

The revelations by respondents corroborate the study by Asogwa (2018), in which the author asserts that awareness concerning contraceptive methods among young is acquired through radio. However, couples in Misau are hardly influenced by radio programs on fertility control methods.

From the above findings, fertility of young couples in Misau is not influenced by media. Misau is a rural area and thus, majority of couples are not exposed to the contemporary media channels hence they lack adequate information or rather enlightenment in matters of fertility control measures. Radio, which is the area's main media, barely influences them.

The interview result for strategic measures of controlling fertility reveals that, majority of the couple interviewed don't practice any family planning techniques, in fact very few of them are even aware of some family planning methods or programmes. To some it is against their religion, while some wives are discouraged by their husband's decision. The finding of this study is not surprising as most of the interviewed couples in the agrarian area doesn't have any access and awareness about family planning programmes, coupled with their cultural and religious beliefs. This could be some of the reasons why some of them don't use family planning. Nevertheless, family planning is practiced in Misau, by the few educated ones among them, who used contraceptive pills, withdrawal method, and menstrual cycle

period. Additionally, some women practice it for medical reasons because they always deliver their children by Caesarean Section (CS).

#### 4.6.5 Regression Analysis of strategic measures of controlling fertility and fertility rate among young couples

**Table 4.20: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.731 <sup>a</sup>	.534	.528	.55067	.534	85.572	4	299	.000

a. Predictors: (Constant), Media exposure, The level of birth control devices, Government policy on family, Family planning

The findings indicate that strategic measures of controlling fertility accounts for 53.4% increase in fertility rate among young couples in Misau Bauchi State, Nigeria.

Furthermore, there is a strong positive significant relationship between strategic measures of controlling fertility and fertility rate among young couples in Misau Bauchi State, Nigeria since the co-efficient of correlation of 0.731 is closer to 1.

**Table 4.21: ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	103.794	4	25.949	85.572	.000 <sup>b</sup>
	Residual	90.668	299	.303		
	Total	194.462	303			

a. Dependent Variable: Fertility Rate

b. Predictors: (Constant), Media exposure, The level of birth control devices, Government policy on family, Family planning

The findings show a p value of 0.000 which indicates that the overall model for strategic measures of controlling fertility predictors is statistically significant since  $P < 0.05$ . This implies that Media exposure, the level of birth control devices,

Government policy and Family planning are good predictors for fertility rate among young couples in Misau Bauchi State, Nigeria.

**Table 4.22: Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	1.381	.144		9.607	.000	1.098	1.664
Family planning	.070	.034	.103	2.083	.038	.136	.004
1 birth control device level	.510	.035	.742	14.610	.000	.441	.579
Government policy	.123	.029	.190	4.196	.000	.181	.065
Media exposure	.227	.028	.350	8.062	.000	.172	.282

a. Dependent Variable: Fertility Rate

$Y = 1.381X + 0.70 \text{ family planning} + 0.510 \text{ level of birth control} + 0.123 \text{ government policy} + 0.227 \text{ media exposure.}$

Fertility rate among young couples =  $1.381X + 0.70 \text{ family planning} + 0.510 \text{ level of birth control} + 0.123 \text{ government policy} + 0.227 \text{ media exposure.}$

The results show that a unit increase in family planning will result in 0.70 units increase in fertility rate, a unit increase in level of birth control will result in 0.510 units increase in fertility rate, a unit increase in government policy will result in 0.123 units increase in fertility rate and a unit increase in media exposure will result in 0.227 units increase in fertility rate among young couples. These findings indicate that fertility rate among young couples is influenced by Media exposure, The level of birth control devices, Government policy and Family planning. This notion is supported by a National Fertility Dynamics Survey conducted in Korea in

2007 which found out that strategic measures of controlling fertility like government policy had an effect on fertility rate among married Koreans since results showed a P value of  $0.001 < 0.05$  (Lee, S. S. 2009).

#### 4.7 Regression Analysis of the determinants of fertility among young couples

A regression analysis was generated to determine the degree of changes in the dependent variable (Couples fertility) can be discussed by the independent variables (Demographic factors, socio-cultural factors and strategic measures for controlling fertility). Regression model (adjusted R squared) and regression coefficients results was predicted the influence of independent variables on the dependent variable. Table 4.23 indicates the fitness of regression model results.

**Table 4.23: Model fitness**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.850 <sup>a</sup>	.723	.715	2.70726	.723	105.967	3	122	.000	2.320
a. Predictors: (Constant), Demographic factors, socio-cultural factors and strategic measures for controlling fertility										
b. Dependent Variable: Couples fertility										

The results in table 4. 23 covered the regression model used in explaining the study phenomena. The model explains the extent of variation of dependent variable (Couples fertility) simple influence the independent variables (Demographic factors, socio-cultural factors and strategic measures for controlling fertility). This model explains the 72.3% of fertility rate change among young couples is caused by demographic factors, socio-cultural factors and strategic measures for controlling fertility. These findings imply that demographic factors, socio-cultural factors and strategic measures for controlling fertility play a critical role in influencing young couple fertility (dependent variable). However, other factors that were not examined

in this study accounted for 27.3% change of variation on the fertility of young couples in Misau metropolis in Bauchi State in Nigeria.

### **Regression Coefficients of the determinants of fertility rate among young couples**

The regression coefficients analysis was conducted to analyse the degree of contribution of each independent variable (Demographic factors, socio-cultural factors and strategic measures for controlling fertility) explored on the fertility of couples in Bauchi State.

**Table 4.24: Regression Coefficients**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std.	Beta	T	Sig
1	(Constant)	6.429	.972		2.522	.01
	Demographic factors	.435	.111	.362	6.304	.00
	Socio-cultural factors	.680	.208	.615	7.882	.00
	Strategic measures for controlling fertility	.300	.136	.308	8.347	.01
	a. Predictors: Demographic factors, socio-cultural factors and strategic measures for controlling fertility b. Dependent Variable: Couple fertility					

The regression coefficients results presented in table 4.24 shows that socio-cultural factors effects (Beta=0.615) contributed the most on the influencing couples fertility. It was followed by demographic factors effects (Beta=0.362) while strategic measures for controlling fertility effects (Beta=0.308) contributed the least. Regression equation;  $Y=6.43 + 0.435$  (Demographic factors)  $+ 0.680$  (Socio-cultural factors)  $+ 0.300$  (Strategic measures for controlling fertility). The regression model shows that the three independent variables have a positive coefficient, which means that they were directly proportional to fertility change.

The above results imply that a unit increase on demographic factors effect will increase fertility change by 0.435 units while socio-cultural effect will influence change by 0.680 units. Finally, a change in strategic measures for controlling fertility variables will increase couples fertility by 0.300 units.

In conclusion, the inferential statistics showed that fertility amongst young couples in Bauchi State was explained by independent variables; demographic factors, socio-cultural factors and strategic measures for controlling fertility effects. The above findings show that socio-cultural factors have a higher influence (0.615 units) on young couple fertility in the study area.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter presents the summary of the major findings of this study based on the stated objectives. It also offers some recommendations according to research findings and finally draws conclusion.

#### **5.2 Summary**

In summary, this study explored the determinants of young couple's fertility in Misau, Bauchi State, Nigeria. This established the demographic factors, socio-cultural determinants the effects young couple fertility and the strategic measures of controlling fertility in Misau.

#### **5.3 Conclusions**

This study presents the following conclusions.

##### **5.3.1 Demographic Factors Influencing Fertility Rate among Young Couples in Misau**

The study findings revealed that over 31.6% strongly agreed that the level of their income supported their family size, 34.2% agreed, 13.2% undecided, and 13.2% disagreed while 7.9% strongly disagreed. Furthermore, those who felt that high fertility is good in the community realized high income. The study also found that income support couple family size. The above findings and sentiments are in agreement with observation by Dibaba and Mitike (2016) who state that someone's economic situation are likely to alter childbearing.

The study showed that 18.4% strongly agreed that age influence fertility in Misau, 34.2% agreed, 26.3% undecided, 13.25% disagreed and 7.9 strongly disagreed. The study found that the main reason why young couples need

childbearing specially when they are old and weak they are the one to help the parent. A son is vital to continue the lineage and to act as a means of protection to the parents at old age (Kariuki, 2019).

Concerning couple delay in giving birth influence on fertility, it was noted that 15.8% strongly agreed that couple delay in giving birth, 39.5% agreed, 15.8% undecided, 18.4 disagreed and 10.5% strongly disagreed. Another finding found that there are some of our friends who didn't get married on time are always thinking of how they can get as many as children as those of their friends who got married earlier than them and in the event, they bear children as fast as they can to catch up with their peers.

The sentiments by respondents above corroborate with the Human Fertility Database (2015) in most public discourses and in media talk, one gathers that birth delay among youthful couples is regularly rather garrulously connected with the actuality that more women than ever are getting tertiary education, getting into employment and desiring to get a few children.

### **5.3.2 Socio-Cultural Factors that Influence Young Couples Fertility**

The study found that 57.9% strongly agreed that couple determination of family size (fertility) 28.9% agreed, 5.3% undecided, 7.6% strongly disagreed while 0.0% as disagreed. Another study findings revealed that young couple determining the number of children based on their capacity as parent as concern.

The study showed that 31.6% strongly agreed that religious belief influence fertility, 39.55 agreed, 2.6% undecided, 5.3% disagreed while 15.8% strongly disagreed. Another finding found that religiously and culturally, every child is endowed with his or her wealth and that the Muslim religion advocates for many

children. . The same was observed by Egenti (2016) in a study in Orlu South East Nigeria where he established that religion plays a determinant role in influencing the fertility. He observed that Muslims tend to have many children as compared to Christians (Habbema et al., (2015; Günther & Harttgen, 2016).

On the influence of ethnicity on couples' fertility, it was established that 23.7% strongly agreed, 31.6% agreed, 15.8% undecided, 18.4% disagreed while 10.5% strongly disagreed. The study finding also revealed that couple can easily have more than 20 children unlike other ethnic groups. Ethnicity is one of the determinants that influence people attachment (Akpa & Ikpotokin, 2012).

The findings indicate that 21.1% strongly agreed, 28.9% agreed, 26.3% undecided, 13.2% disagreed while 10.5% strongly disagreed that patriarchy influences fertility in Misau state. Young couples culture really influences the way they give birth, because a typical Hausa person believes that it is our creator who ordained us to bear the children. Your child bearing determines your level of belief. The more children you have the more assistance you will receive from them.

### **5.3.3 Strategic Measures of Controlling Fertility among Young Couples**

The study findings revealed that 78% of both genders agreed that family planning is a measure to control fertility. These comprised of 37.8% of male and 31.1% of females. Family planning is the most important strategy measures of controlling fertility among young couples in Misau. However, 15.8% of the respondents (6.6% male and 9.2% female) disagreed with this statement. Another study findings found that young couples practice family planning, because their children were delivered by Caesarean Section. Accordingly, couples medically advised about family planning because of their health condition.

The above study corroborate with the above findings that condoms is very affordable and cheap and it has very little side effects. Male condoms are 98 percent effective and protection while female condoms are almost 95% are effective and safe (Condom effectiveness, 2017). Majority of the interviewees don't practice any family planning techniques, in fact very few of them are even aware of some family planning methods or programmes.

Sometimes young couples use withdrawal techniques since government sensitize us on how to control our childbearing. Therefore, couples are abide by the government population policy concerning our fertility.

#### **5.4 Recommendations**

The study presents the followings recommendation:

##### **5.4.1 Demographic Factors Influencing Fertility Rate among Young Couples in Misau**

Government should create awareness among young couples through educational programs on the need for family planning. This awareness should start early from lower level of education among those who did not go to school. There should special education program provided in the community.

The village leaders and any other stakeholders should address the issue of disadvantage of encouraging young couples to continue having children until the boy child is born (the tendency of preferring male child has an implication on the number of increase per child.

##### **5.4.2 Socio-Cultural Factors that Influence Young Couples Fertility**

Government should emphasize and enlighten young couples to suspend their cultural belief on bearing high fertility. Moreover, government and communities leaders

should continue sensitize their community members to reduce the level of ethnicity and religion in terms of bearing many children.

#### **5.4.3 Strategic Measures of Controlling Fertility among Young Couples**

The government should introduce several programmes that encourage pregnant women to attend anti natal clinics in order to learn more about family planning and implication of high fertility rate. This should be done to that family who are more economically disadvantage in rural and urban areas.

Government should also work with community leaders to educate the young couple on contraceptive or withdrawal methods as a measure to reduce the high level of fertility among young couples.

#### **5.5 Suggestions for Further Studies**

Most of the community were not aware about family planning program; therefore, more study need to be carry out particularly on women contraceptive methods. It is will help to reduce the level of fertility rate within the case study.

Another research should focus on the determinants of fertility across Bauchi State, Nigeria not only in Misau Local Government Area. Lastly, mixed method should be carried out particularly in Northern Nigeria in order to explore in depth explanation.

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## APPENDICES

### Appendix I: Consent Letter

Department of Sociology,  
School of Humanities and Social Sciences,  
Kenya University,  
P.O BOX 43844,  
Nairobi.

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

#### LETTER OF INTRODUCTION AND CONSENT TO CONDUCT RESEARCH

I am Bala Baba a student of the Kenya University undertaking a Master's in the Department of Sociology in Kenya University. I am conducting research on the topic; **Determinants of Fertility among Young Couples in Misau, Bauchi State Nigeria.**

The information to be collected will only be used for academic purposes and anonymity is ensured. Kindly support me in this endeavour by providing the required information. You will be assisted to fill the where necessary to enable you respond as accurately as possible.

Thank you for your time and response.

Yours sincerely,

Bala Baba.

## Appendix II: Questionnaire

### SECTION A:

#### 1 Age

- i. 18 – 19
- ii. 20 – 24
- iii. 25 – 29
- iv. 30 – 35

#### 2 Gender

- i. Male
- ii. Female

#### 3 Religion

- i. Islam
- ii. Christianity
- iii. Traditional

#### 4 Occupation

- i. Farmer
- ii. House wife
- iii. Civil Servant
- iv. Business
- v. Other specify

#### 5 Education Level

- i. Junior primary school
- ii. Senior primary school
- iii. Junior secondary school
- iv. Senior secondary school
- v. Tertiary/ University
- vi. never been to school

#### 6 Tribe

- i. Hausa
- ii. Fulani
- iii. Kanuri
- iv. Kare- Kare

#### 7 Number of Children

- i. 0-1
- ii. 2-5
- iii. 6-10
- iv. 11 and above

#### 8 How Many are Boys

- i. 0-1
- ii. 2-5
- iii. 6-10
- iv. 11 and above

#### 9 How Many are Girls

- i. 0-1
- ii. 2-5
- iii. 6-10
- iv. 11 and above

#### 10 How Many Children do you want to Have

- i. 0-1
- ii. 2-3
- iii. 4-5
- iv. 6-7
- v. 8-9
- vi. 10 and above

#### 11 If you Have only Girls, Will you Look for Boys

- i. Yes
- ii. No

#### 12 If you Have only Boys, Will you Look for Girls

- i. Yes
- ii. No

## DEMOGRAPHIC INFORMATION

### SECTION B:

- 1 Below are the demographic factors that influence young couple's fertility in Misau Bauchi state, Nigeria. From your experience, please kindly tick the appropriate option below: Strongly Disagree (SD), Disagree (DA), Undecided (UD), Agree (AG), Strongly Agree (S.A)

S/No	demographic factors	SD	DA	UD	AG	SA
1	Income influence family size					
2	Age Influence your desired fertility					
3	Level of your Income Support Your Family Size					
4	child death experienced by parents influence high fertility					
5	delay in giving birth by couples influence high fertility					
6	High fertility is good in your community					

- 2 Below are the socio-cultural factors that influence young couples fertility in Misau Bauchi state, Nigeria, from your opinions, please kindly tick your level of agreement on the following strategies on enhancing ethical leadership in an organization

S/N	socio-cultural factors	SD	DA	UD	AG	SA
0		1	2	3	4	5
1	Religious belief influences fertility					
2	Ethnicity influences fertility					
3	Culture influence your desire fertility					
4	Understanding between couples will determine family size					
5	Education influence on fertility preference					
6	Social status influences your fertility					
7	Preference of male child influence fertility					
8	child labour influence fertility					
9	More Fertility Lead to Poverty					

4. Below are the strategic measures of controlling fertility among young couples in Misau Bauchi State, Nigeria. From your opinions, please kindly tick your level of agreement on the following strategies on enhancing ethical leadership in an

S/No	Strategic measures	SD	DA	UD	AG	SA
1	The level of birth control devices use influence your fertility					
2	Family planning influence your desired fertility					
3	Government policy on family planning influence your desired fertility					
4	Media exposure influence your desired fertility					
5	Use condom to control my birth rate					
6	Withdrawal method influence your desired fertility					

5. Below are the fertility rate among young couples in Misau Bauchi State, Nigeria. From your opinions, please kindly tick your level of agreement on the following statements:

S/NO	Strategic measures	SD	DA	UD	AG	SA
1	High fertility rate is considered good in my community					
2	My fertility rate is affected by my strong religious belief					
3	My fertility rate has been affected by watching Tv programs on Family Matters					
4	My fertility rate has been affected by my status in the community					
5	My fertility rate has been affected by my cultural practices					

### Appendix III: Verbal Interview Questions

- 1 How many children you do have?
- 2 How many are boys?
- 3 How many are girls?
- 4 Do you want to have more children? If Yes why .....? If No why.....?
- 5 If you have only girls will you look for boys?
- 6 If you have only boys will you look for girls?
- 7 In what way does your culture influence the number of your children?
- 8 Why do people want to have more children?
- 9 Who makes the major decision in your family? E.g. how many children to you want to have? Who make final decision on family spending?
- 10 Do you use any birth control method? If Yes why.....? If No why.....?
- 11 Do you know any method of family planning?
- 12 Do you know any government policy on family planning that influences the number of children you have?
- 13 Do you need more children to help you in your farm?
- 14 Do you need more children to help you for child labour/child trafficking?
- 15 Do you need more children to help in your old age?
- 16 Do you agree that child death experience by parent will influence fertility?
- 17 Do you agree that delay in giving birth by couple's influences fertility? `
- 18 Do you agree that use of withdrawal method can influence fertility?
- 19 Do you agree that use of condom can control the fertility? Please give details
- 20 Do you agree that ethnicity influences fertility? Please give details
- 21 Do you agree that patriarchal influence fertility in Misau? Please give detail
- 22 Do you agree that traditional practice can influence desire fertility? Please explain in detail
- 23 Do you agree that social status influence fertility? Please give details.

**Appendix IV: Research Authorization Letter****KENYATTA UNIVERSITY  
GRADUATE SCHOOL**E-mail: [dean-graduate@ku.ac.ke](mailto:dean-graduate@ku.ac.ke)Website: [www.ku.ac.ke](http://www.ku.ac.ke)

P.O. Box 43844, 00100

NAIROBI, KENYA

Tel. 020-8704150

**Our Ref: C50F/31796/2015****DATE: 12<sup>th</sup> November, 2018**

Director General,  
National Commission for Science, Technology  
and Innovation  
P.O. Box 30623-00100  
**NAIROBI**

Dear Sir/Madam,

**RE: RESEARCH AUTHORIZATION FOR MR. BALA BABA – REG. NO.  
C50F/31796/15**

I write to introduce Mr. Bala Baba who is a Postgraduate Student of this University. He is registered for M.A. degree programme in the **Department of Sociology, Gender & Development Studies**

Mr. Baba intends to conduct research for a M.A. thesis Proposal entitled, **“Determinants of Fertility among Young Couples in Misau, Bauchi State Nigeria.”**

Any assistance given will be highly appreciated.

Yours faithfully,

  
**PROF. ELISHIBA KIMANI**  
**DEAN, GRADUATE SCHOOL**

## Appendix V: Approval of Research



### KENYATTA UNIVERSITY GRADUATE SCHOOL

E-mail: [dean-graduate@ku.ac.ke](mailto:dean-graduate@ku.ac.ke)

Website: [www.ku.ac.ke](http://www.ku.ac.ke)

P.O. Box 43844, 00100  
NAIROBI, KENYA  
Tel. 020-8704150

#### Internal Memo

**FROM:** Dean, Graduate School **DATE:** 12<sup>th</sup> November, 2018  
**TO:** Mr. Bala Baba **REF:** C50F/31796/2015  
C/o Department of Sociology

**SUBJECT: APPROVAL OF RESEARCH PROPOSAL**

=====

This is to inform you that Graduate School Board, at its meeting on 7<sup>th</sup> November, 2018, approved your Research Proposal for the M.A. Degree entitled, "Determinants of Fertility among Young Couples in Misau, Bauchi State Nigeria."

You may now proceed with your Data collection, subject to clearance with the Director General, National Commission for Science, Technology & Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking Forms per semester. The form has been developed to replace the Progress Report Forms. The Supervision Tracking Forms are available at the University's Website under Graduate School webpage downloads.

Thank you.


**JULIA GITU**  
**FOR: DEAN, GRADUATE SCHOOL**

CC. Chairman, Sociology, Gender and Development Studies Department

**Supervisors:**

1. Dr. Parvin Molloo  
C/o Department of Sociology, Gender & Development Studies  
**Kenyatta University**
2. Dr. Daniel M. Muia  
C/o Department of Sociology, Gender & Development Studies  
**Kenyatta University**

**Appendix VI: Letter of Research Authorization by Misau Local Government  
Area Bauchi State**

  
*Office of the Executive Chairman*  
**MISAU LOCAL GOVERNMENT**  
**BAUCHI STATE**

Telegram Logmin P.M.B. 0023  
Tel: 071-40150 MIS/LG/TR/S/V.I 28/01/2019

Our Ref..... Your Ref..... Date.....

Bala Baba  
Department of Sociology  
Bauchi State University,  
Gadau,


Sir,

**RE-REQUEST FOR PERMISSION TO CONDUCT A RESEACH IN MISAU LOCAL  
GOVERNMENT AREA**

Reference to the above subject matter, via letter dated 31/12/2018, I am directed to write and convey the local Government approval to go ahead with the research.

2. It's the belief of the Local Government that the research work will play a significant role towards the success of your studies and the LGA at large however, its hoped that the research will not negatively affect the moral behavior of the populace.

Once again accept our continuous support and co-operation towards that direction, please.

  
**Usman Yerima Imam**  
For: Chairman CTC

**Appendix VII: Map of Nigeria Indicating Bauchi State**



**Map of Bauchi State**



Sources NAGIS