SEX COMPOSITION OF CHILDREN AND FERTILITY PREFERENCE AMONG MARRIED WOMEN IN NIGERIA

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CERTIFICATION

This is to certify that this research work – Sex Composition of children and Fertility Preference among married Women in Nigeria – was carried out by **OLUWALEYE, AJIBOYE OLUWASEGUN** with Matriculation Number **DSS/13/1186** of the Department of Demography and Social Statistics, Faculty of Humanities and Social Sciences, Federal University OyeEkiti, Ekiti State, Nigeria.

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DEDICATION

This research work is dedicated to God Almighty and to my parents Mr & Mrs Oluwaleye.

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Abstract

In spite of the significant campaign for the equality and desirability of both sexes of children, empirical evidence and reality indicate that the practice of child-sex preference is still prevalent in Nigeria. The main objective of the study is to examine the effect of sex composition of children on the fertility preference among married women in Nigeria. The study utilized secondary data from the Nigeria demographic and health survey 2013.Data was analysed at bivariate and multivariate levels (α=0.05). Result shows that majority of mothers who wants no more children were those with more boys than girls 40.6% while 32.7% were those with less boys than girls and 26.7% were those who had equal sex of children. It was discovered that sex composition of children significantly influence women's fertility preferences. Women should stop childbearing after attaining their desired number irrespective of the sex composition of living children.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Population is an important component of the resource base of any country. It is one of the most valuable assets when it comes to the country's demographic characteristics. The total world population double itself in 38 years and triple in 72 years, this was the event of last century. The current world population is over 7.5 billion with an annual growth rate of 1.11 percent (Worldometers 2017)

Birth rates are declining on the average but with much difference between the developed and the developing countries. While population experts are concerned about the great decline in the population size of the developed countries, the population of sub-Saharan Africa is expected to experience a massive increase within the next 50 years. With 20.4percent of the total world land area, Africa has a total population of over 1.2 billion that is 16.36percent world's human population contributing steadily to the growth of the world's population (worldometers, 2017).

The population of Africa varies in density and distribution from one country to another. Available data indicate that Africa has the highest fertility rate in the world, with a crude birth rate of 41 births per 1000 as against the world's average crude birth rate of 21 per 1000 (Weeks 2004).While the developed countries of the world have experienced a well-established decline in fertility and demographic transition from large family sizes to small family sizes, fertility is only beginning to decline in the developing countries, and majority of these countries are still in the second stage of demographic transition.

Fertility is the actual reproductive performance of a couple (Raj 2001). It could be measured using children ever born and desired family size (Nwakeze, 2007). It is different from fecundity, which is the capability to produce children. The American Society for Reproductive Medicine (2013) defined it as being the capacity to produce a child.

Previous studies on fertility preference defined people's fertility preferences differently. It could be termed as desired family size, ideal number of children, desire for additional children, fertility intentions and so on. They have been used to describe and estimate the actual number of children people want to have. Fertility preferences are the indicators of general attitudes and possible future course of fertility (Lunani, 2014).

Fertility preferences are potentially important in shaping the fertility of the society as future fertility behaviour will most likely be affected by the currently observed fertility preferences (Ayehu, 1998). Although ambitions related to reproduction are done by a couple, studies and surveys on fertility shows that fertility preferences differ among husbands and wives with husband's preference being most of the times higher than that of their wives. A study conducted on 18 developing countries using Demographic and Health Survey data showed differences between the preference of spouses, with significant variations between countries and regions (Bankole and Singh, 1998).

In spite of the significant campaign for the equality and desirability of both sexes of children, empirical evidence and reality indicate that the practice of child-sex preference is still prevalent in Nigeria (Eguavoen, et al. 2007). Data available from the Nigerian National Demographic and Health Surveys are silent on the issue of sex preference; attention is paid mainly to family size and not to the preferred sex

composition of the family. The problem with this is that the preferred family size is usually mediated by the actual sex composition of the children. For example, a woman who wishes to have just about three children may have to alter this preference if the actual fertility outcome does not satisfy her hopes and aspiration with regards to sex composition and this is due to the value customarily placed on a specific sex which is higher for one sex than the other. The most common motive on gender preferences is the traditional structure of family system. In patrilineal and patrilocal family systems, men are the fixed points in the social order, so that the investment in daughters is considered as investment in another family's daughter-in-law (Pauline Rossi, Lea Rouanet, 2015).Flato and Kotsadam (2014) find that infant mortality increases more for girls than for boys during a drought.

Although there has been significant reduction in total fertility across the world, some authors find that in many countries especially in less developed countries, Nigeria inclusive, total fertility is still above the replacement levels. This however, shows that there are countries where a considerable proportion of unintended children still exist. Within the context of a specific number of total children preferred, parents may prefer at least one child of each sex, a minimum number of children of a particular sex, or in total equal numbers of sons and daughters. Thus, couples may continue to give birth beyond their predetermined preferred family size in order to achieve a favorable number of distributions of sons and daughters. A significant proportion of couples who attain their preferred sex composition of children do not want more children. Couples who have either all sons or all daughters are more likely to have additional child to fulfill their desire in respect of sex children. However, those who have children of both sexes, do not desire more children. Bairagi and Langsten (1986), in a study in Companiganj in rural Bangladesh, concluded that the

negative risk effect on fertility was swamped by the positive effect of son preference. Couples who had no sons, planned to continue childbearing longer, practiced contraception less and had somewhat higher subsequent fertility than couples with one or more sons.

1.2 Statement of the Problem

Today, the major problem that seems more threatening to the well-being of mankind and his environment is his population growth. Lauchlin Currie (1972) an official of the United States Government said that he regards the rate of growth in the population of the under-developed countries as the single most important problem of the world, even out ranking the threat of nuclear warfare in terms of ultimate dread possibilities. In most countries of the developing world, population growth consumes much of their natural resources and thereby eating into the economic growth, condemning the people of such countries to perpetual poverty, as seen in most countries in Sub Sahara Africa.

There still exists wide variations and slow pace of decline in fertility levels, in spite of the decline of fertility throughout the world over the years (Munshi and Myaux, 2006). The causes of these variations and slow pace of decline in fertility levels, however, are issues of great concern. The high preference for large family sizes that exists in most part of Sub Saharan Africa, Nigeria inclusive, doesn't allow for fertility decline as desire for large families' leads to high fertility.

As of 1 January 2017, the population of Nigeria was estimated to be over 189million (Countrymeters, 2017) with a fertility rate of 5.65 (Wordbank, 2017), making it the most populous black nation in the world the seventh most populous nation in the world. The complex relationship between fertility and development is

well established and is not lost on the Nigerian authorities who in 1988, concerned about the rate of population growth relative to economic growth, established the National Population Commission and also adopted her first population policy with the aim of achieving a total fertility rate of 4 by the year 2000, or what was generally referred to as the four children per family (woman) policy (NPC, 1988). In February 2005, Nigerian government launched a reviewed population policy tagged the National Policy on Population for Sustainable Development (NPC, 2004a). Among the targets of this new policy were to reduce population growth rate to 2% or lower by 2015 and to reduce the total fertility rate by at least 0.6 children every 5 years by encouraging child spacing through the use of family planning. Indeed, the aim of different Nigerian population policies and programs has since been to reduce fertility in the country (NPC, 1988; NPC and ICF Macro, 2009; NPC, 2004a). In spite of this, the Nigerian population has continued to grow while her GDP had continued to decline (PRB, 2010).It is important therefore to address the problem of high fertility caused by differences in fertility preference among married women in Nigeria. As in most good researches, a number of issues could be identified from these studies. One of these is the differences observed between actual and wanted fertility in Nigeria. This difference indicate in a way that there is some level of undesirable fertility in the country, which in effect means that women have not been able to translate their fertility preferences into reality. This study therefore seeks to examine the fertility preferences of married women in Nigeria as it is been affected and influenced by the sex composition of children.

1.2 Research Questions

1. What is the sex composition of children of married women in Nigeria?
2. What is the current fertility preference of married women in Nigeria?
3. What is the relationship between sex composition of children and fertility preferences among married women in Nigeria?

1.4 Research Objectives

1.4.1 Main Objectives

The main objective of the study is to examine the effect of sex composition of children on the fertility preference among married women in Nigeria.

1.4.2 Specific Objectives

The specific objectives are:

1. To describe the sex composition of children of married women in Nigeria.
2. To describe the current fertility preferences of married women in Nigeria.

1.5 Justification of the Study

Fertility preferences are important in evaluating levels of unwanted or mistimed fertility, forecasting fertility, and assessing unmet need for contraceptives. They inform and advice population policy and family planning programs and also contribute to existing literature on fertility studies. Nigeria has operated a population policy since 1988, which was recently revised in 2004.The current modification is focused on: to achieve a reduction of the national annual population growth rate to 2% or lower by the year 2015, to achieve a reduction in the total fertility rate of at least 0.6 children every five years and to increase the modern contraceptive prevalence rate by at least 2% points per year. However, despite the policies and various recent robust

national data sets in Nigeria (NDHS 2003, 3008 and 2013 and the 2006 population census), information available on population dynamics in Nigeria has been largely limited to reports of these surveys. Few known studies have also been done within a theoretical context to quantify the determinants of fertility or other fertility measures in the country at the national level. Thus, the impact of the various efforts by the government to implement or achieve the set objectives at the various international meetings on population in the promotion of demographic behavior remains a matter of guess in Nigeria demographic discourse. This study should assist the government and reproductive health programmers in designing appropriate and/or fortifying existing programmes with the main aim of improving the level at which women achieve their fertility preferences and towards the country achieving the desirable objectives.

1.6 Operational Definition of Terms

Children ever born: refers to the number of children born alive to the person up to a specified reference date. It includes children who have died since birth. It does not include stillborn, abortions or children adopted by the person

Contraception: it is the deliberate action taken by persons in union to control birth, space birth and control their family size

Demographic Growth: The number of people added to (or subtracted from) a population in a year due to natural increase and net migration expressed as a percentage of the population at the beginning of the time period.

Economic Growth: Economic growth is an increase in the capacity of an economy to produce goods and services, compared from one period of time to another.

Family size: This refers to the total fertility experience of an individual woman, even though men could have idea of what size of family they prefer. Given the role that sex preference plays in the ultimate completed family size and its eventual impact on the overall population growth rate.

Fecundity: The physiological capacity of a woman to produce a child.

Fertility: Fertility is the actual reproductive performance of a couple.

Fertility behaviour: The term fertility behaviour as used in this study relates to all manner of behaviour that directly or indirectly influences the biological reproduction of children.

Fertility Preference: Fertility preference is defined as desired family size, ideal number of children, and desire for additional children or fertility intentions. It is defined as the desire for additional children in this current study.

Population Dynamics: they are the changes that occur in the population.

Population Policy: Explicit or implicit measures instituted by a government to influence population size, growth, distribution, or composition.

Replacement–Level: The level of fertility at which a couple has only enough children to replace themselves, or about two children per couple.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents the literature review and discusses the theoretical framework which the study is hinged and makes a case for their appropriateness. This chapter also presents the conceptual and the operational frameworks to be used in the analysis of data.

2.1 Review of Literature

Fertility studies have been given much attention globally. In the developed world, popular authors like; Kohler, Billari, Ortega, Frejka, and several others have done a lot of work on fertility. Likewise, in the developing Countries of the world, Nigeria inclusive, much has been done on the subject. In Nigeria, for example, authors like; Feyisetan and Bankole (2002), Isiugo-Abanihe (1994, 1996, 1999, etc.), Ibisomi (2007, 2008), and others have given considerable attention to fertility issues.

The above studies reveal that fertility has declined below replacement level in majority of developed countries, most especially in Europe (Kohler, Billari and Ortega 2002, 2006).

A growing body of literature attempts to explain the reasons behind the low fertility of the European countries, including some of the Former Soviet Union (FSU) countries (Sobotka 2004; Perelli-Harris, 2005). Most of the literature explains it in terms of level and timing effects in TFR adjustment. Bongaarts and Feeney (1998) defined the timing effect as the change in TFR caused by the adjustment in timing of births, and the level effect as the change in TFR that would have been observed in the

absence of timing distortions. The reason for separating these two effects is that the usual period TFR measure does not adequately describe the real fertility behavior of the cohorts when timing of birth changes. Some authors view the postponement of births (timing effect) as the main explanation for exceptionally low TFR in Southern, Central and Eastern European countries (Philipov and Kohler 2001; Kohler et al. 2002; Sobotka, 2004).

On the other hand, fertility had declined to some extent in some developing countries especially in Asia. However, it has remained high in Sub-Saharan Africa. Even though there have been evidence of fertility decline in some countries in sub-Saharan Africa but studies also show some stalls in fertility (Bongaarts, 2006, Shoumaker, 2009; Sneeringer, 2009; Westoff and Cross, 2006). Countries affected include; Nigeria, and the stalling occurred between 1999-2003; Ghana, 1998-2003; Kenya, 1995-2003; Madagascar, 1987-1993; Rwanda,(Bongaarts ,2006, 2008; Garene, 2008; Shoumaker, 2009; Sneeringer, 2009; Westoff and Cross, 2006).The causes of these stalls are; early birth, low contraceptive use, low labour force participation and income.

High Fertility has persisted for a long time in Nigeria as shown by a lot of studies. The results of NDHS surveys for the past 17 years have shown a TFR of 5.9 births per women in 1991 to 5.7 births in 2008 (NPC, 2009). This high rate of fertility like in other African countries is due to high level of illiteracy, men dominance in the issues of reproductive health, polygyny, son preference, low status of women, high level of infant and child mortality, early and universal marriage, early child bearing as well as child bearing within much of the reproductive life span, low use of contraception and high social values placed on child bearing (Feyisetan and Bankole, 2002). In the face of perceived high infant and child mortality, the fear of death of a

child encouraged high procreation with the hope that some of the births would survive to carry on the lineage (Feyisetan and Bankole, 2002). The traditionally high values placed on marriage ensured not only its universality but also its occurrence early in life with the consequence that child bearing started early in life and in most cases continued until late in the reproductive span. The institution of polygyny which sometimes promotes competition for childbearing among co-wives also contributed to sustain high fertility. Use of modern contraception was traditionally unacceptable as it violated the natural process of procreation (Feyisetan and Bankole, 2002).

2.2Sex Composition

2.2.1 Sex Composition in the World

Gender preferences may have essential implications for a couple's fertility behavior. In their work on Gender Preferences for Children in Europe Hank and Kohler (2000) found out that despite significant regional heterogeneity across Europe there still remains solid tendency towards a preference for a mixed sex composition. However, they also discovered some unexpected indication for a girl preference in the Czech Republic, Lithuania, and Portugal because of the socioeconomic conditions and family policies in Europe, which are important factors in explaining different fertility levels and are not related to a specific gender of children, they suggested that socio-cultural factors should be regarded as important determinants of different gender preferences. The data used for their research was from the Fertility and Family Surveys which are used to compare 17 European countries with respect to their gender preferences for children.

Pramila et al (2014) in their study conducted in Tharu, Rural of Nepal discovered high sex ratio at last birth and shorter birth spacing following female

children. Desire for next child was strongly affected by sex composition; women having only female children female were more likely to want another birth compared to others with male children. Education and age of women, number of current living children were significantly related with current contraceptive practices. This high sex ratio at last birth for those who decided to stop child bearing or used permanent contraceptives suggests that end to childbirth attitude shown was only driven by son preference and can be said that the son preference attitude exists in Tharu community. Higher sex ratio indicating son preference attitude has also been found in analysis of data from Nepal demographic and health survey 1996, 2001, 2006, and 2011.

Stuart et al 2013 in their study in rural china on the effect of children composition on the sex of the next birth found out that son preference is still high despite the fertility policy and that the policies will not be sufficient on its own to relieve the imbalance of sex ratio at birth. The study was conducted using a primary data and it is solely based on the influence of the fertility policy, it was however discovered that reproductive behaviour at this level is more related to fertility intention than policy. This current study would use a secondary data and would determine the influence of sex composition of children on fertility preference rather than just the fertility policy.

Lisa M Calhoum et al 2013 in their study conducted in urban uttar Pradesh, India explored son preference using fertility behaviors and family sex. Their finding shows that family sex composition affects fertility behavior and also shows that preference for sons persists in urban Uttar Pradesh. women who have no living children, no sons but one or more daughters and no daughters but one or more sons are all significantly less likely to desire no more children compared to women that have both sons and daughters but more of daughters than sons. Women that have both

sons and daughters but more sons than daughters are significantly more likely to desire no more children compared to women that have both sons and daughters but more daughters than sons

2.2.2 Sex Composition in Africa

In Kenya majority of women who reported having more daughters than sons (47.2%) had more desire to have more children compared to women who had more sons or those who had an equal number of sons and daughters (Wachira, 2001).

The study in Tanzania shows that there is higher boy preference than preference for girls. Boys' preference women have about six children higher than girls' preference (four children) while those with neutral preference have about three children. Women who preferred boys to girls have higher number of children than their counterparts who preferred girls (and those who preferred neutral sex of children) due to the need of more son (Beatrice, 2009).

Unlike other parts of sub-Sahara Africa, research conducted in Malawi by Stephen and Martin (2015) on the Influence of gender preference and sex composition of surviving children on childbearing intention among high fertility married women in stable union revealed that female preference is high in the region and this could be attributed to the fact that some parts of Malawi are matrilineal which means the trace their lineage to their mother. Despite this difference in child sex preference fertility intention is still highly influenced by living children sex composition. (Stephen and Martin 2015)

Kinziunga and Schoumaker (2014) in their work on "the sex preferences and sex composition effects on fertility in DR Congo" found out that men prefer families that have more boys than girls. But women preference differs based on their kinship system in the country. They prefer an appropriate distribution by sex when they wish

to have the even number of boys and girls. If the women desire an odd size family, the women from matrilineal kinship system prefer more girls. The women from patrilineal ethnic prefer more boys.

2.2.3 Sex Composition in Nigeria

As in many parts of sub-Saharan Africa, the family structure of the Nigerian society is formed around the extended family which continues to represents the most basic unit of social organization. Family ties are strong and play an important role in shaping individual behavior, even though there are signs that the extended family system is weakening for some ethnic groups (Wusu and Isiugo-Abanihe, 2006). There is an extraordinary ethnic diversity in Nigeria, but all ethnic groups are predominantly characterized by patrilineality and patrilocality, this emphasizes the dominant role of males in these traditional patrilineal societies where descent and inheritance are transmitted through the male line. In most Nigerian societies sons are highly valued by women because of the cultural importance attached to having a male child. This consequently generates pressure for bearing male children as a way to protect them in the state of widowhood and it may also lead to competition in cases where there are other wives.

Evidence clearly suggests that the sex of children affects marriage outcomes for Nigerian women (Annamaria Milazzo, 2014). Compared to women with a first-born son, women with first-born daughters appear to be more at risk of falling into a category of women who are typically more disadvantaged. This disadvantage stems from the fact that women often have limited property rights in traditional patrilineal societies and need husbands or other male relatives to access resources.

In a survey questionnaire Agbor (2006) asked respondents questions on the sex of children preferred; such as 'suppose you were to have only one child in your

life time what sex would you prefer?, the answers given shows that 61.9 percent of the male respondents and 70.0 percent of the female respondents said they would prefer a male child while 38.1 percent of the male respondents and 30.0percent of the female respondents said they would prefer a female child. As expected women showed more preference for male children than their male counterpart. This situation is understandable especially in a patriarchal society where the security of the marriage is built on the number of surviving sons they give birth to.

2.3 Fertility Preference

2.3.1Fertility Preference around the World

Ever since attempts were made to construct quantitative measures of individual fertility preferences and intentions, the interpretation of these measures has been controversial (Ralph, 2001). Women in developing countries often have more children than they desire. This is particularly the case in Latin America, where the relative gap between actual and desired fertility levels is larger than in any other major region of the world (Hakkert, 2001). In Cuba, which is in advanced stage of its fertility transition, the ideal family size declared by women in that country is typically larger than the actual Total Fertility Rate (Cuba, 1991). The measurement of the level at which women are having births that are either unwanted or mistimed gives much of the justification for the efforts of national governments and international agencies to promote universal access to contraceptive (Hakkert, 2001). Yet, despite different policies relevance to the issue of excess fertility beyond individual desires, its objective has proven somewhat elusive. The most traditional measure to describe desired fertility is that of ideal family size, which is asked in most fertility surveys since it was first introduced in the US in the 1940s. However, the known deficiencies of this measure have stimulated the formulation of more refined indices, which rely

on additional information, such as the desire to have additional children and whether the last live birth was desired or not (Hakkert, 2001). In Bolivia, of the 112 couples who had the same declared ideal family size, 15 (13.4%) ended up with less children than desired, 49 (43.8%) hit their target, and 48 (42.9%) had more surviving children than they desired (Hakkert, 2001).

2.3.2 Fertility Preference in Africa

The sub-Saharan African fertility regime continues to defy theory and to puzzle demographers and other population experts (Bankole and Audam, 2011). While fertility has declined very substantially in other developing regions, it remains high in sub-Saharan Africa. Despite the generally high fertility and lack of significant progress in the pace of fertility transition in sub-Saharan Africa, evidence shows that demand for smaller family size is increasing and many couples are having more children than they want. (Bankole and Audam, 2011).

Bankole and Audam, 2011, in their work on Fertility preferences and contraceptive use among couples in sub-Saharan Africa discovered that both husbands and wives want a large family. In many of the 24 countries included in their study, there is a substantial discrepancy between the preferences of spouses: in about two-thirds of the countries, husbands and wives differ by one child or more in the family size they consider ideal. Their analysis also showed that husbands want a larger family size than their wives in most of the 24 countries included in this study. These findings suggest, therefore, that husbands and wives in sub-Saharan Africa do differ in their fertility goals, although the level of the differences as well as its significance for behavior varies across countries in the region. This current study however will concentrate on the fertility preferences of married women and fertility preference will be measured with desire to have another child rather than ideal number of children.

Estelle et al, 2006, while working on the Changing pattern of fertility preferences in urban and rural Senegal, compared women' ideal number of children and actual number of children, it was noted that quite important proportions of women do not realize their fertility preferences. Among urban women aged 40-49 years old and having 5 and more children for instance, only 36% had an ideal of 5 or more children, 20% had an ideal of 3 to 4 children and 2.7% had an ideal of 1 to 2 children.

2.3.3 Fertility preference in Nigeria

The differences observed between actual and wanted fertility in Nigeria shows that women have not been able to translate their fertility preferences into reality. For instance, desired fertility fell from 6.1 in 1990 to 5.5 in 2003 while actual fertility fell from 6.3 to 5.8 in the same period (Ibisomi, 2007). These discrepancy shows that to some extent unwanted fertility exist in the country.

McCarthy & Oni (1987) in their study in a South-Western city of Nigeria on the determinants of desired family size among urban women, distinguishing between women who gave numerical answers and non-numerical answers found out that non-numeric answers were common among young women, women with fewer children, women residing in low socio-economic areas, women in polygamous marriages, Muslim women and women with no education.

Bankole (1995) in his own study of couples' preferences and their subsequent fertility also in the South-Western part of the country talked about the strong influence of men on fertility decisions, which cannot be ignored or gotten through information from their wives. He discovered that desired fertility of both husbands and wives are important predictors of couples' fertility and that the desires of both marriage partners have equal effects on fertility behaviour.

Latifat Ibisomi (2011) in her work "ascertaining the level of fertility

preference implementation in Nigeria" discovered that the extent to which fertility preference is achieved in Nigeria is generally high which is attributed to the high number of wanted fertility, which is often almost at the level of actual fertility.

In a qualitative research by Latifat and Odimegwu (2011), most women interviewed felt that husbands are in charge of the decision regarding number of children to have in a household since they provide resources for the homes. Some were of the opinion that both partners should discuss and arrive at a consensus while others feel that the woman has the final say in decisions regarding the number of children to have in the household. This current study, however, will be using DHS dataset in its analysis.

In an attempt to find out respondent's family size preferences, Agbor (2006) asked respondents what size of family they preferred. In his study, a family size of 4 children and less was considered a small family size, while a family of 5 children and above was considered a large family size. From the data, 25.6 percent of the respondents desired four children and less, while majority 57.9 percent respondents desired five children or more. The implication is that the respondents were more likely to desire a large family size of five children or more. His data was gotten from research conducted in Cross River State. This current study however, will be considering Nigeria as a whole.

Farouk et al, 2010, in their study of the fertility behaviour of men and women in three communities in kaduna State, indicated that 37% wanted 5-9 children and 32% wanted 10-14 children. Fewer than 20% wanted four or fewer children. Ideal family size is one indication of women's attitude towards childbearing, even though actual reproductive behaviour often differs from stated desires. In their study, 100% of women who had at least four living children wanted to have another child.

2.4 Sex Composition and Fertility Preference

Preference for sons over daughters is common in many parts of the world including Nigeria. In some countries, couples show little or no son preference and there are even few instances in which a preference for daughters has been documented. For instance, the World Fertility Survey (WFS) found that considerably large amount of women wanted a female child for their next birth than a son in Jamaica and Venezuela (Cleland, Verrall and Vaessen 1983). The WFS in their work also found little or no male child preference of any form in South America, Caribbean, Kenya, Lesotho and Sudan. But son preference has been found to be common in all of East Asia and among groups outside that region that share a heritage of patriarchal traditions.

Preference for a male child has been well documented in a large number of countries though the level of preference varies from one country to another depending on such factors as, the level of economic development, cultural and social norms, religion, marriage and kinship systems, urbanization and the nature of social security system (Bairagi, 2001; Isiugo-Abanihe, 2003).

Islam Uddin (2011) in his work on the determinants of desired family size and children ever born in Bangladeshi observed that around one fifth of the respondents who do not want more children have one living son. On the other hand higher proportions of respondents who want another child have no living son. Among those who have two living children and do not want another child, the majority of them have one living son and one living daughter. The respondents have been reluctant to have another child if they have two living sons. The analysis indicated that the respondents want another child, in most cases, if they have minimum number of living son.

A study on the sociological implications of sex preference for fertility and

marital stability in cross river revealed that majority of the respondents (65.3%) agree that couples should continue child bearing if they do not have a son, irrespective of the number of children they already have. This shows that preference for a particular sex has a strong influence on people's fertility behaviour. That is to say that the stronger the preference for a particular sex, the stronger the willingness to continue child bearing (Agbor, 2006). The study used qualitative data in its analysis; this current data however, will be using a quantitative data.

Stephen and Martin (2015) study on the Influence of gender preference and sex composition of surviving children on childbearing intention among high fertility married women in stable union in Malawi discovered that Gender preference and same sex composition were the major reasons responsible for women's intention to bear more children after having five living children. Similarly, findings in urban Uttar Pradesh, India, confirm that family sex composition affects fertility behavior (Lisa M Calhoun et al, 2013).

2.5Social-economic Factors

2.5.1 Education

Highly educated women have a very high tendency of replacing child numbers with child quality (Lunani, 2014). Education is correlated with the health of mothers and their children. The level of education of women is an important factor which plays a significant role in reducing fertility. Educated women tend to postpone their first marriage, have small family size preference and are also aware of the contraception and have greater negotiation skills on reproductive matters (Hinde, 2001). In many countries, women's education has been demonstrated to have a significant effect on fertility (Beatrice John, 2009). A rise in the level of women's education leads to a rise in age at first marriage and age at first birth and eventually leads to a decline in

fertility. Studies done in Latin America have shown that education is probably the most important socio-economic variable associated with greater occupational differentiation and social mobility both of which can the reproductive behavior of women in various ways (Beatrice John, 2009). Another report indicated that men and women with low levels of education were likely to have high mean numbers of children (NSF 2006). Adhikari (2010) showed that educated women in Nepal have only half the numbers of children ever born (CEB) than the uneducated women in the same region (1.9 vs. 3.7 for all; 3.6 vs. 5.2 for women aged 40-49). Bongaarts (2010) in his study among 30 sub-Saharan countries to analyze the causes of educational differences in fertility discovered that on average women with secondary or higher education have lower fertility than women with no education (3.4 vs. 6.3 births per woman), which is also the case in desired family size (3.7 vs. 5.6 births per woman).

2.5.2 Occupation

The demographic transition theory serves as the major framework for most investigations that has to do with fertility changes (Beatrice John, 2009). The interpretation of the European fertility transition suggests that non-agricultural labor-force participation intervenes between economic development and fertility (Beatrice John, 2009). Economic development will lead to an increase in education and occupational opportunities for women. Similarly, Sennott and Yeatman (2012) in their study carried out in Malawi discovered that events that change one's economic situation might alter plans for future childbearing. For instance, job loss could lead to postponement of pregnancy to allow time for a household to regain financial balance before adding another member. Contrary to this, a woman beginning a new job could hasten her childbearing plans. Frequent changes in fertility preferences may also reflect the economic uncertainty that is common in developing societies (Johnson-

Hanks 2005, 2007; Agadjanian, 2005) such as Nigeria, where employment may be scarce. A significant relationship between occupation and desired fertility and fertility-related behavior is evident in several studies. A study done on the Yoruba of Nigeria reveals that desired fertility is lower for women married to husbands employed outside agriculture, compared with those in the agricultural sector (Bankole et al., 1995).

2.5.3 Place of Residence

Place of residence is a useful measure or indicator of the level of change from traditional or rural behavior to a modern or urban behavior (Beatrice John, 2009). Significant rural-urban differences in age at marriage and fertility behavior are due to the effect of modernization among other factors. Urban marriage, cohabitation and first birth distribution appears to be more dispersed than the rural distributions. Generally, fertility is higher for women residing in rural areas compared with those residing in urban areas. Higher levels of education, occupation, a more modern environment, and aspirations for higher levels of living are among the factors which can cause fertility among rural women (Lunani, 2014). Also, it is assumed that urban women have a better knowledge of / and access to modern contraception than women in rural areas (Cohen, 2000). Regional variation exists in regard to fertility intention because of different socio-cultural pattern and practices. An analysis of survey data from 17 Arab states suggested that the fertility transition in most countries is being led by urban and literate women (Farid, 1996). A study in China showed that the preference for a small family was associated with younger age, urban residence, and higher level of education (Ding and Hesketh, 2006). In his study, Oyeka (2002) found that total marital fertility was higher in the rural areas. The results are similar in

pattern to the earlier findings by Ekanem for the former Eastern Nigerian region (Ekanem, 2005).

2.5.4 Wealth

Since childbearing and child caring are time-intensive, an increase in wage rates induces a negative substitution effect on the demand for children (Becker 1965). A woman's income is, therefore, negatively associated with childbearing, as having a higher income level implies there is higher opportunity costs associated with having children (Lunani, 2014). A negative relation was observed Bangladesh between wealth index and the fertility level and desired family size; the higher the wealth index, the lower the fertility level and the desired family size (Islam Uddin et al, 2011). Stephen and Martin, 2015, discovered that being in the poorest wealth quintile encourages women intention to bear more children; these women are more likely have intention to have more children than those in the richest wealth quintile.

2.6 Socio-cultural Factors

Socio- cultural factors are indirect determinants factors, which affect fertility through direct (proximate) variables (Beatrice John, 2009). John Caldwell and Pat Caldwell (1987) identified the main factors precluding fertility decline in the sub Saharan Africa to be rooted in the cultural background, which is centered on the traditional religious belief system that upholds to lineage continuation and the succession of generations (Lunani, 2014). Socio-cultural factors play vital role in the relatively high rate of fertility prevailing in sub Saharan Africa.

2.6.1 Religion and Ethnicity

Cultural factors, defined as language, religion, customs and values have been shown to have an impact on fertility behaviors. The fertility patterns are similar in culturally homogenous groups suggesting the importance of diffusion across such groups

(Cleland and Wilson 1987).The National Health Statistics Reports in the United States revealed that the fertility intention of men and women differed across races and religions. With regard to religion, Catholic women tended to have fewer children than Protestant women; however, fertility intention was high among Mormons and Hispanics, regardless of their religion, and was lowest among Jewish women and those with no religion.

Munshi and Myaux (2006) found that local changes in reproductive behaviour occur within religious groups; and assumed that social interactions among the women cannot be substituted with other interventions. Entwisle et al, (1996) and Rogers and Kincaid (1981) showed homogeneity of choices in villages in the contraceptive preferences. It must be as a result of the diffusion of contraceptive information through interpersonal networks (Rogers et al, 1999). Since individuals locate within the social networks, their child bearing attitudes, preferences, decisions, and behavior may arise from the social learning and influence with the interactions of kin, relatives, peers (Bernardi et al, 2007). A case study of Kenya indicated that Muslims had the highest level of desire for more children (56.6%) whereas Catholics and Protestants were 42% and 43.4% respectively (Wachira, 2001) In terms of ethnicity Luos, Luhyas, Kisii had the highest desire for more children followed by the Kalenjin community and last but not least the Kamba, Kikuyu, Embu and Meru with the following percentages respectively (46%), (44.4%), and (38.1%).

2.7 Theoretical Framework

2.7.1Theory of Planned Behaviour (TPB)

Theory of planned behavior (TPB) developed by Ajzen (1991) has been used in many behavioral studies and settings and predominantly in most of the recent studies (Taslima Khatun,2011).According to TPB, the occurrence of a specific behavior can

be predicted by individuals' intentions to behave in that way and their ability to do so, given their skills and resources (Taslima Khatun,2011).On the other hand, individual's intentions are shaped by perceived behavioral control, attitude toward the behavior, and subjective norms or social pressure. In this research, it is assumed that sex composition of children influence individual's fertility preferences, even when she actually does not have desires to have any more children; individual feels pressure to adjust through the influence of other determinants.

This theory contributes to our understanding and modeling of the social-psychological processes involved in forming the intention to have (or not to have) a child (Ajzen and Koblas, 2013). According to the TPB, the intention to have or not to have a child is determined by three kinds of considerations (Ajzen 2013). The first kind is termed behavioral beliefs; it refers to the observed consequences of having a child and the subjective values or evaluations of these consequences. Behavioral beliefs lead to the formation of a positive or negative attitude toward having a child. A second kind of consideration has to do with the perceived expectations and behaviors of important referent individuals or groups, combined with the person's motivation to comply with the referents in question. These considerations are termed normative beliefs and they combine to produce a perceived social pressure or subjective norm with respect to having a child. Thirdly, control beliefs are concerned with the perceived presence of factors that can influence a person's ability to have a child. Together with the perceived power of these factors to facilitate or interfere with having a child, control beliefs produce a certain level of perceived control or self-efficacy, (Bandura 1997) in relation to having a child. More detailed descriptions of the nature of the three predictors of intentions are provided below. As a general rule, the more favorable the attitude and subjective norm with respect to having a child, and

the greater the perceived control, the more likely it is that a person will form an intention to have a child. Finally, fertility preference are expected to result in having or not having a child to the extent that people are in fact capable of attaining their goals, i.e., to the extent that they have actual control over having a child. Actual behavioral control is thus expected to moderate the effect of intention on behavior.

2.7.2 Value of Children Theory

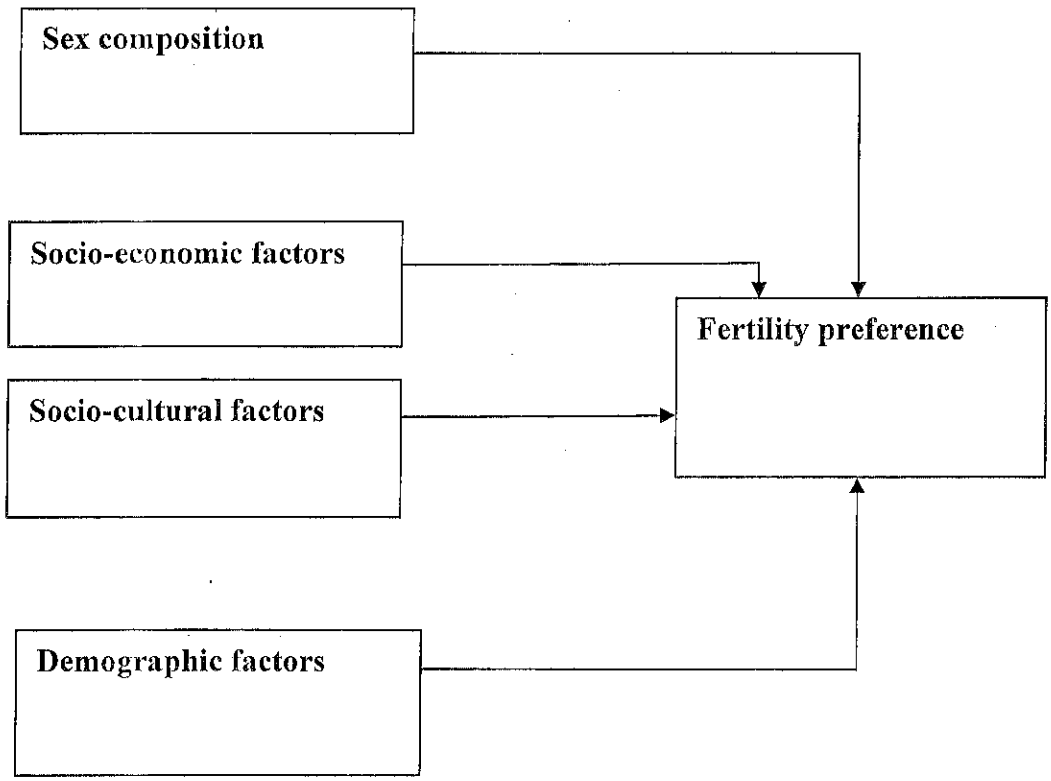
The value of children in demographic research is typically considered to facilitate understanding of fertility motivators (Lunani, 2014). Hoffman and Hoffman (1973) reviewed four reasons for the study of the value of children: to motivate fertility regulation, to anticipate compensations which might be important in achieving small family sizes, to predict fertility motivations and population trends, and to consider the value of children in the parent-child relationship. Children are said to be of value to parents in nine areas. As originally proposed by Hoffman and Hoffman (1973), these were not formulated to represent the value of children per se, rather they are intended as the value of being parents. The nine categories of the value scheme are: (1) adult status and identity; (2) Expansion of the self, 'immortality'; (3) Morality; (4) Group ties; (5) Stimulation; (6) Creativity and accomplishment; (7) Power; (8) Social comparison and competition; and, (9) Economic utility. In less developed countries of the world, children are given high economic value, both as present utility and as old age security. In developed countries, however, children are seen as an economic liability. Hoffman and Hoffman conceptualize the value of children in terms of psychological satisfaction such that children also provide primary group ties, stimulation, fun, and a feeling of creativity. For some parents, having children, provide a feeling of power and also serve as a means of making social comparison and competition. The themes evident in the value of children scheme are also found in a

comprehensive research agenda focusing specifically on sex preferences (Williamson, 1976).

2.8 Conceptual Framework and Operational Framework

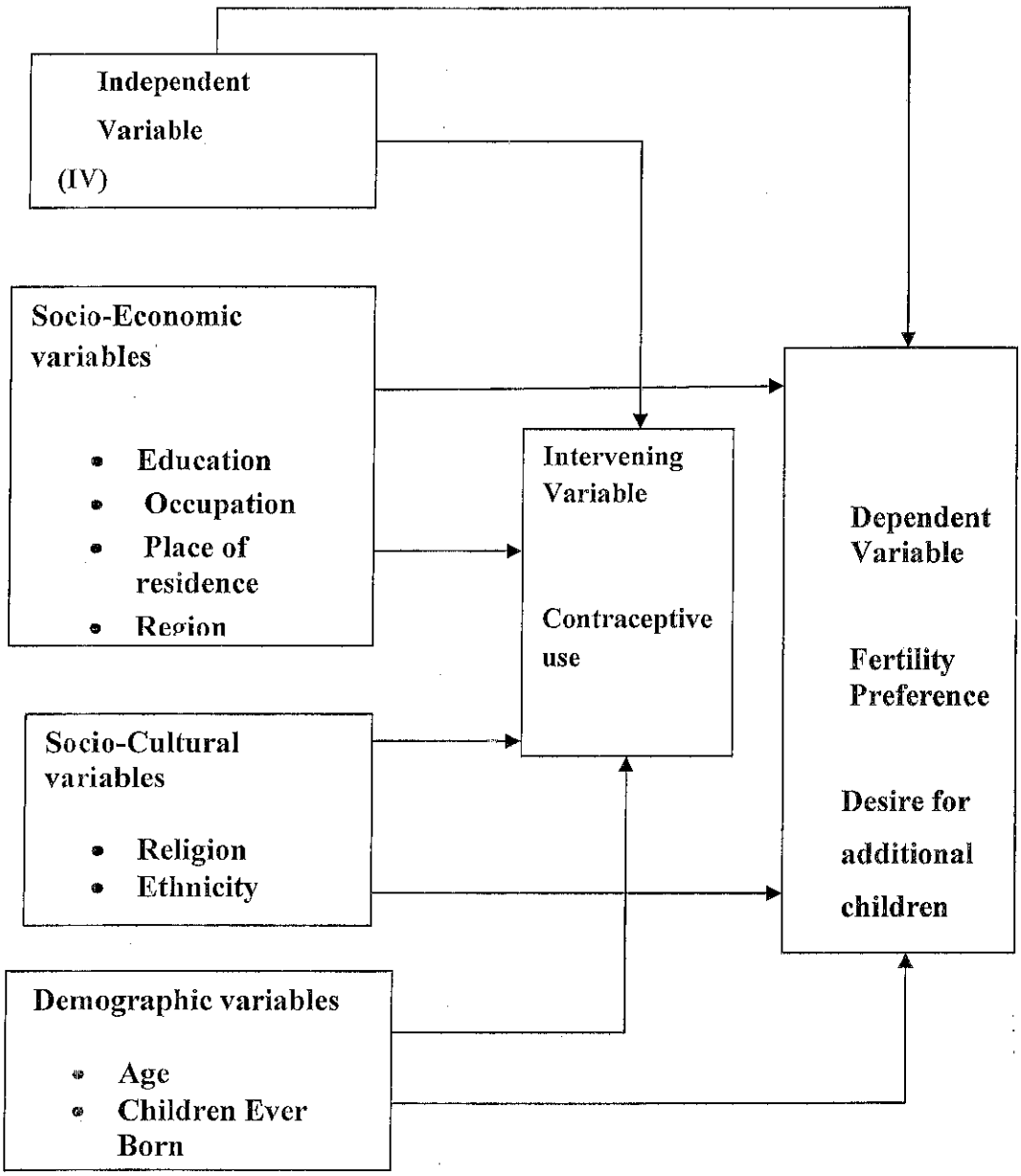
Based on the literature reviewed, sex composition of children, which is the main independent variable as well as socio-economic, social cultural and demographic factors, may be conceptualized as factors that shape fertility preferences of married women in Nigeria. It is anticipated that socio-economic and demographic factors like educational level, place of residence, women's occupation and age have influence on human attitudes and behavior; cultural factors like religion and sex composition also can predict the fertility preference and influence the attitude towards family size. Similarly mass media exposure can predict the variation of attitudes in regard to fertility preference. Below are a conceptual framework and an operational framework adapted for this study.

Figure 2.1: Conceptual framework



Source: Lunani (2014).

Figure 2.2: Operational Framework



Source: Adapted from Lunani (2014).

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter discusses the source of data and methods of data analysis. Variables used in the analysis are also presented together with their respective definitions.

3.2 Study area

Nigeria

Nigeria lies on the west coast of Africa between latitudes 4°16' and 13°53' north and longitudes2°40' and 14°41' east. It occupies approximately 923,768 square kilometres of land stretching from the Gulf of Guinea on the Atlantic coast in the south to the fringes of the Sahara Desert in the north. The territorial boundaries are defined by the republics of Niger and Chad in the north, the Republic of Cameroon on the east, and the Republic of Benin on the west. Nigeria is the most populous country in Africa and the 14th largest in land mass. The country's 2006 Population and Housing Census placed the country's population at 140,431,790.Nigeria has great geographical diversity, with its topography characterised by two main landforms: lowlands and highlands. The uplands stretch from 600 to 1,300 metres in the North Central and the east highlands, with lowlands of less than 20 metres in the coastal areas. The lowlands extend from the Sokoto plains to the Borno plains in the North, the coastal lowlands of western Nigeria, and the Cross River basin in the east. The highland areas include the Jos Plateau and the Adamawa Highlands in the north, extending to the Obudu Plateau and the Oban Hills in the southeast. Other topographic features include the Niger-Benue Trough and the Chad Basin. Nigeria has a tropical climate with wet and

dry seasons associated with the movement of the inter-tropical convergence zone north and south of the equator. Its climate is influenced by the rain-bearing south westerly winds and the cold, dry, and dusty north easterly winds, commonly referred to as the Harmattan. The dry season occurs from October to March with a spell of cool, dry, and dusty Harmattan wind felt mostly in the north in December and January. The wet season occurs from April to September. The temperature in Nigeria oscillates between 25°C and 40°C, and rainfall ranges from 2,650 millimetres in the southeast to less than 600 millimetres in some parts of the north, mainly on the fringes of the Sahara Desert. The vegetation that results from these climatic differences consists of mangrove swamp forest in the Niger Delta and Sahel grassland in the north. With its variety of climatic, vegetation, and soil conditions, Nigeria possesses the potential for growing a wide range of agricultural produce.

The 2006 Population and Housing Census reported Nigeria's population to be 140,431,790, with a national growth rate estimated at 3.2 percent per annum. With this population, Nigeria is the most populous nation in Africa, as noted, and the seventh most populous in the world (Population Reference Bureau, 2013).Nigeria's population is unevenly distributed across the country. Large areas in the Chad Basin, the middle Niger Valley, and the grassland plains, among others, are sparsely populated. The average population density for the country in 2006 was estimated at 150people per square kilometre. The most densely populated states are Lagos (2,607 people per square kilometre), Anambra (868 people per squarekilometre), and Imo (758 people per square kilometre).Most of the densely populated states are found in the southern part of the country. Kano, with an average density of 442 people per square kilometre, is the most densely populated state in the north (National PopulationCommission [NPC], 2010).

3.3 Data source

3.3.1 The Nigeria Demographic and Health Survey (NDHS 2013)

The study used secondary data from the 2013 Nigeria Demographic and Health Survey (NDHS).Nigeria Demographic and Health Survey (NDHS) 2013 is the fifth survey of its kind to be implemented by the National Population Commission (NPC). As the agency charged with the responsibility of collecting, collating, and analysing demographic data, the Commission has been unrelenting in its efforts to provide reliable, accurate, and up-to-date data for the country.

The information contained the report assist policymakers and programme managers in monitoring and designing programmes and strategies for improving health and family planning services in Nigeria. The 2013 NDHS is a national sample survey that provides up-to-date information on background characteristics of the respondents. Specifically, information is collected on fertility levels, marriage, fertility preferences, awareness and the use of family planning methods, child feeding practices, nutritional status of women and children, adult and childhood mortality, awareness and attitudes regarding HIV/AIDS, female genital mutilation, and domestic violence. The target groups were women and men age 15-49 in randomly selected households across Nigeria. Information was also collected on the height and weight of women and children age 0-5. In addition to presenting national estimates, the report provides estimates of key indicators for both the rural and urban areas in Nigeria, the six geo-political zones, the 36 states, and the Federal Capital Territory (FCT).This report summarises the findings of the 2013 Nigeria Demographic and Health Survey (NDHS), implemented by the National Population Commission (NPC). ICF International provided financial and technical assistance for the survey through the USAID-funded MEASURE DHS program, which is designed to assist developing

countries to collect data on fertility, family planning, and maternal and child health. Financial support for the survey was provided by USAID, the United Kingdom Department for International Development (DFID) through PATHS2, and the United Nations Population Fund (UNFPA).

This study will use data from the woman questionnaire.

3.3.2 Organization

The 2013 Nigeria Demographic and Health Survey (NDHS) was implemented by the national Population Commission. It is the fifth in the series of Demographic and Health Surveys conducted so far in Nigeria; previous surveys were conducted in 1990, 1999, 2003, and 2008.

The resources for the conduct of the survey were provided by the United States Agency for International Development (USAID), the United Nations Population Fund (UNFPA), the United Kingdom Department for International Development (DFID) (through the Partnership for Transforming Health Systems Phase II [PATHS2]), and the government of Nigeria (through the NPC). ICF International provided technical support throughout the duration of the survey. A steering committee composed of major stakeholders from the government and international organisations was formed. The steering committee was responsible for coordination, oversight, advice, and decision making on all major aspects of the survey. The steering committee's membership included representatives from organisations such as the NPC, the Federal Ministry of Health, the National Planning Commission, and the National Bureau of Statistics, as well as USAID, UNFPA, the United Nations Children's Fund (UNICEF), the World Health Organization, and the World Bank. The technical/quality assurance team was responsible for the entire technical management of the survey. The team was headed by a project director with the assistance of a

project coordinator. Other members of the team included 18 state coordinators who were in charge of all of the different components of the survey (i.e., recruiting and training the field staff, monitoring the fieldwork, and assisting in any other project-related activities).

3.4 Data method

3.4.1 Sample size

In this study responses from a total of 27340 married women of reproductive age (15-49) will be analyzed to establish the factors influencing their fertility preference.

3.4.2 The dependent and independent variable

This study would use desire for additional child as the dependent variable to measure fertility preference. Most studies have concentrated on ideal family size as a measure for fertility preference as much as it has its flaws. Collecting information on ideal family size as a measure of fertility preference can be relatively complex. Often it is difficult to get objective responses as questions on ideal family size are hypothetical in nature. Respondents, especially those illiterate or with little education may find it difficult to understand these questions. This study uses desire for additional child as it is direct, and focuses on the topic of interest.

The independent variable of the study is sex composition of children and the modifying variables are Socio economic factors, socio cultural factors, demographic factors and contraceptive use.

3.4.3 Dependent variable

Fertility preference will be measured by Desire for additional children. A dichotomous variable will be created and coded as wants more =0 Wants no more=1

3.4.4 Independent variable

Sex composition of children

The Sex Composition of children was categorized as equal sex, boys less than girls and boys greater than girls.

3.4.3 Modifying variables

Education

This variable is a measure of the highest level of school that the respondent has attended. The variable will be categorized into four groups namely: No education, Primary, Secondary and Higher Education.

Type of place of residence:

This is a dichotomous variable categorized as rural and urban.

Religion

This variable identifies the respondent's religious affiliation. It is grouped into Christian, Islam and Traditional

Age

This variable measures respondent's age in complete years and it will be recorded into 3 categories. The variable seeks to measure the effect age has on the desire for additional child.

Contraceptive use

The variable will measure if the respondent is currently using or not using a method of contraceptive. This is to find out how contraceptive use affects preferred waiting time for next birth.

3.5Method of Analysis

Frequency distributions and percentages were used to describe the characteristics of the target population. Cross tabulations with chi square test was carried out to test for

association between the dependent and independent variables. Binary logistic regression was further used to analyse the data to assess the effect of the independent variables on fertility preference.

Table 3.1: Definition of key analysis variables

Variable	**Definition**
Dependent Variable	
Fertility preferences Desire for additional children	Want more =0, Want no more =1
Independent Variable	
Sex Composition	Equal Sex=0 Boys less-than Girls=1 greater-than Girls=2
Control Variables	
Education	No Education=0 Primary=1 Secondary=2 Higher=3
Type of place of residence	Urban=0 Rural=1
Religion	Christian=0 Islam=1 Traditional=2

Age groups	15-24=0 25-34=135+=2
Contraceptive	Wife not Using=0 Wife Using=1
Marriage Type	Monogamy=0 Polygamy=1
Children Ever Born	1-2=0 3+=1
Wealth	Poor =0 Moderate=1 Rich=2
Occupation	Not Working=0 Working=1

CHAPTER FOUR

PRESENTATION AND DATA ANALYSIS OF RESULT

4.0. Introduction

This section presents the data and analysis of results on the study of sex composition of children and fertility preference among married women in Nigeria.

It includes descriptive statistics of some selected variables of sampled respondents. Also, Chi-Square test and Logistics Regression were used to validate the relationship between sex composition of children and fertility preference.

4.1. Descriptive Statistics of Sampled Respondents

Table 4.1: Fertility Desire and Sex Composition among Women in Nigeria

VARIABLES/CATEGORIES	FREQUENCY	PERCENTAGE
Age		
15-24	5420	19.82
25-34	10751	39.32
35+	11169	40.85
Sex Composition		
Equal Sex	6768	24.65
Boys less-than Girls	9709	35.37
Boys greater-than Girls	10974	39.98
Region		
North-Central	3789	13.86
North-East	4358	15.94
North-West	9374	33.92
South-East	2530	9.25
South-South	3026	11.07
South-West	4364	15.96
Place of Residence		
Urban	10295	37.66
Rural	17045	62.34
Ethnicity		
Yoruba	3711	13.57
Hausa	10517	38.47
Igbo	3239	11.85
Others	9874	36.12

Religion		
Christian	11327	41.65
Islam	15574	57.27
Traditional	292	1.07
Education		
No Education	12617	46.15
Primary	5552	20.31
Secondary	7226	26.43
Higher	1945	7.11
Occupation		
Not Working	7183	26.37
Working	20052	73.63
Wealth		
Poor	11657	42.64
Moderate	5190	18.98
Rich	10493	38.38
Children Ever Born		
1-2	8463	30.96
3+	18877	69.04
Marriage Type		
Monogamy	16651	66.32
Polygamy	8458	33.68
Fertility Desire		
Wants no More	9009	32.95
Wants More	18331	67.05
Contraceptive		
Wife not Using	20233	74.01
Wife Using	7106	25.99

The percentage distribution of sex composition of children among sampled mothers revealed that majority of women had more boys than girls (39.98%) while 35.37% had more girls than boys and those with equal sex took approximately 20% of the sampled women. Furthermore, the fertility preference revealed that majority of the sampled respondents wants more children.

The socio-demographic profile of sampled women in Nigeria disclosed that women of age 35years and above took the highest sampled size with 40.85%, followed by age group 25-34 years (39.32%) and 15-24years (19.82%) respectively. The bulk of respondents belong to the northern region specifically from the north-west by 33.92%,

North-East (15.94%) and North Central (13.86%), the aggregate percent from the southern region was 36.28%, which was distributed by 15.96%, 11.07% and 9.25% among the south-west, south-south and south-east respectively. Furthermore, most of the respondent are from the rural area (62.34%) compared to urban area (37.66%). The dominant ethnic group was Hausa with 38.47% follow by the Yoruba's 13.57% and Igbo's by 11.85% these were the major ethnic group while other ethnic groups was(36.12%). The respondent were predominantly Muslim (57.27%) with a substantial proportion of Christian (41.65%) and traditional by 1.07%. Majority of sampled respondents had no education (46.15%) followed by secondary education (26.43%), those that claimed to have acquired primary and higher education were 20.31% and 7.11% respectively. Most of the respondents were working by 73.63% and those that are not working were 26.37%. Majority of the sampled respondents were more classify among the poor (42.64%) while rich (38.38%) and those with moderate rich were 18.98% respectively. Also it was showed from the table that women who ever had three and more children were more (69.04%) and those who ever had one or two children were just (30.96%). Most sampled women were monogamous (66.32%) while those in a polygamous family were 33.68%, likewise women who are not using contraceptive are higher by 74.01% than those who are using contraceptive by 25.99%.

4.2. Bivariate Analysis of Fertility Preference and Background Characteristics

The bivariate analysis sex composition and fertility preference was found to be statistically significant at 5% level of confidence with Chi-Square (X^2) =48.27, p-value=0.000 as majority of mothers who wants no more children were those with more boys than girls 40.6% while 32.7% were those with less boys than girls and 26.7% were those who had equal sex of children. Details are in table 2 below. This implies that the sex composition was found to be one of such factors that influence fertility preference in Nigeria. This has been the attitude and believes in the African setting where women without male child have no say in the house. This has made several gullible mothers to keep given birth despite high number of children ever born.

Table 4.2: Cross Tabulation between fertility preference and background characteristics

Background Characteristics	**FERTILITY PREFERENCES**		**Statistics**
	wants More	**Wants no More**	
Sex			
Equal Sex	23.8	26.7	$X^2(2)$ =48.27
Boys < Girls	36.7	32.7	Pr=0.0000
Boys >Girls	39.6	40.6	
Age			
15-24	27.8	3.5	$X^2(2)$ =6676.66
25-34	48.1	21.5	Pr=0.0000
35+	24.1	75.0	
Region			
North-Central	12.4	16.8	
North-East	17.2	13.4	$X^2(5)$ =1122.40
North-West	39.6	22.4	Pr=0.0000
South-East	8.1	11.6	
South-South	9.6	14.2	
South-West	13.2	21.7	
Place of Resident			
Urban	35.2	42.7	$X^2(1)$ =147.06
Rural	64.8	57.3	Pr=0.0000
Ethnicity			
Yoruba	10.9	19.0	

Hausa Igbo Others	44.6 10.3 34.1	25.9 14.9 40.2	$X^2(3) = 1003.67$ Pr=0.0000
Religion Christian Islam Traditional	 35.7 63.4 0.9	 53.8 44.8 1.4	 $X^2(2) = 843.53$ Pr=0.0000
Education No Education Primary Secondary Higher	 49.2 17.3 26.7 6.7	 39.9 26.4 25.9 7.9	 $X^2(3) = 368.26$ Pr=0.0000
Occupation Not Working Working	 31.3 68.7	 16.4 83.6	 $X^2(1) = 677.59$ Pr=0.0000
Wealth Poor Moderate Rich	 46.6 18.4 35.0	 34.6 20.3 45.2	 $X^2(2) = 375.86$ Pr=0.0000
Children Ever Born 1-2 3+	 42.3 57.7	 7.9 92.1	 $X^2(1) = 3332.65$ Pr=0.0000
Marriage Type Monogamy Polygamy	 66.6 33.4	 65.6 34.4	 $X^2(1) = 2.45$ Pr=0.2602
Contraceptive Wife not Using Wife Using	 79.1 20.9	 63.7 36.3	 $X^2(1) = 738.11$ Pr =0.0000

The age, religion, ethnicity group, educational attainment, contraceptive usage, region, wealth status and children ever born were found to be significant predictor of fertility preference among sampled respondents in Nigeria while family types was not significant. The Pearson Chi-square ($X^2(2) = 6676.66$, Pr =0.0000) for age of women and their Fertility preference in Nigeria, it was showed that there is association between the age of women and fertility preference as majority of those who desire more children were women within age 25-34years(48.1%) and the least was within age 35years(24.1%). Also, Pearson Chi-square ($X^2(2) = 1122.40$, Pr =0.0000) for ethnicity of women and their Fertility preferences in Nigeria, it was showed that there

is association between the ethnic group of women as majority of those who desire more children were women within Hausa Ethnic group (44.6%) and the least desire for fertility was within Igbo(10.3%). Also, Pearson Chi-square ($X^2(2)$ =147.06, Pr =0.0000) for place of residence of women and their Fertility preference in Nigeria, it was showed that there is association between the place of residence and fertility preference as majority of those who desire more children were women within rural community (64.8%) while urban took 35.2%.Furthermore, Pearson Chi-square ($X^2(2)$ =368.26, Pr =0.0000) for educational status of women and their Fertility preferences in Nigeria, it was showed that there is association between the education of women and fertility preference as majority of those who desire more children were women within not educated (49.2%) and the least desire for children was within higher education(6.7%). Socio-demographic characteristics that are significant were, religion, wealth index, occupation, children ever born and contraceptive use with respective Pearson Chi-square: (X^2=843.53, p=0.000), (X^2=375.65, p=0.000), (X^2=677.59, p=0.000) (X^2=3332.11, p=0.000) (X^2=738.11, p=0.000)

4.3 Multivariate Analysis

The logistic regression was employed to test the level of likelihood of fertility preference by sex composition among sampled women as well as other socio-demographic characteristics

Table 4.3: Logistic Regression coefficients, significance and odds on the factors influencing the Fertility Preferences and sex composition in Nigeria.

Fertility Preference	Model 1 (ODD. RATIO)	Model 2 (ODD.RATIO)	CONF.INTERV LOWER LIMIT	CONF.INTERV UPPER LIMIT
Sex				
Equal Sex (RC)	1.00	1.00		

Boys < Girls	1.26***(1.18-1.34)	1.34***	1.23	1.46
Boys >Girls	1.08*(1.01-1.15)	1.18***	1.08	1.28
Age				
15-24 (RC)		1.00		
25-34		0.67***	0.58	0.78
35+		0.12***	0.1	0.13
Region		1.00		
North-Central (RC)		1.69***	1.50	1.91
North-East		2.60***	2.26	3.0
North-West		1.73***	1.37	2.19
South-East		1.21**	1.06	1.38
South-South		1.06	0.92	1.24
South-West				
Place of Resident				
Urban (RC)		1.00		
Rural		1.06	0.98	1.16
Ethnicity				
Yoruba (RC)		1.00		
Hausa		1.43***	1.2	1.71
Igbo		1.1	0.87	1.37
Others		1.39***	1.19	1.61
Religion				
Christian (RC)		1.00		
Islam		1.53***	1.38	1.71
Traditional		1.13	0.84	1.52
Education				
No Education (RC)		1.00		
Primary		1.09	0.98	1.21
Secondary		1.23**	1.1	1.38
Higher		1.22*	1.04	1.44
Occupation				
Not Working (RC)		1.00		
Working		0.96	0.89	1.05
Wealth				
Poor (RC)		1.00		
Moderate		0.97	0.88	1.07
Rich		0.84**	0.75	0.94
Children Ever Born				
1-2 (RC)		1.00		
3+		0.16***	0.14	0.17
Marriage Type				
Monogamy (RC)		1.00		
Polygamy		1.06	0.98	1.14

*P<0.05 **p<0.01 ***p<0.001

The multivariate analysis disclosed that there are significant likelihood between sex composition, other predictive factors and fertility preference of women in Nigeria. In Model 1, it was revealed that women who had more girls or fewer males are 1.26 times more likely to want more children than women with equal sex composition (RC). Also, it was shown that women who had more boys than girls were 8% more likely to desire more children than women having equal sex composition (RC), although not significantly differs from same sex. In Model 2, taking other socio-demographic factors into consideration by controlling for sex composition, it was revealed that women who had more girls or fewer males are 1.34 times more likely to want more children than women with equal sex composition (RC). Also, it was shown that women who had more boys than girls were 1.18 times more likely to desire more children than women having equal sex composition (RC) which were significant at 5% level of significance. Furthermore, women in age 25-34 years are 0.67 times less likely to desire more children compare to women in age 15-24 years (OR=0.67, p-value=0.000). Also, women age 35 years and above are 0.12 times less likely to desire more children compare to age 15-24 years (OR=0.12, p-value=0.000). The result further reveals that women from the North-East are 69% more likely to have preference for more children than women from the North-Central (RC). Also women from the North-West are 60% more likely to desire more children than women from the North-Central (RC). The result also revealed that women from the South-East are 73% more likely to desire more children that women from the North-Central (RC). Lastly, women from the South-South are 21% more likely to desire more children than women from the North-Central (RC) which were significant at 5% level of significant. The Hausa women are 1.43 times more likely to have preference for more children than the Yoruba's (OR=1.43, p-value=0.000). Also, other ethnic group are

1.39 times more likely to desire more children than the Yoruba's (OR=1.39, p-value=0.000). Muslim women are 53% more likely to desire more children as a result of their religion doctrine than the Christian (OR=1.53, p-value=0.000). The rich women are 0.84 times less likely to desire more children than the poor (OR=0.84, p-value=0.000). Women with three or more children are 16% less like to have preference for more children compare to those with one or two children which were significant at 5% level of significant.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The main objective of the study was to examine the effect of sex composition of children on the fertility preference among married women in Nigeria. This project attempted to examine the effects of some selected socio economic, cultural and demographic variables on fertility preference among married women in Nigeria. This section will be presented in three parts namely summary, conclusion and recommendations.

5.1. Summary of Findings

This study explored the effects of sex composition children on fertility preference among married women in Nigeria. High fertility constitutes threat to maternal and child health. It also has tremendous implication on women's development and empowerment. In some families, women may have decided shortly after marriage the number of children they would like to bear in their life time and this is achievable in the modern society with the existence of different choices of fertility control measures. But, women's intention on the number of children they desire might change if all their live born children are of the same sex. The bivariate analysis of sex composition and fertility preference was found to be statistically significant at 5% level of confidence with Chi-Square (X^2) =48.27, p-value=0.000 as majority of mothers who wants no more children were those with more boys than girls 40.6% while 32.7% were those with less boys than girls and 26.7% were those who had equal sex of children. This implies that the sex composition was found to be one of such factors that influence fertility preferences in Nigeria.

In most settings in Africa, families have preference for males; it is worth noting that in the current investigation, agree to this. The finding follows previous studies conducted in sub-Saharan Africa and other countries where male preference have been widely reported. In a patriarchal setting, son preference is generally viewed as a socially unwavering prejudice. Here, couples prefer to have and raise a child who has characteristics that are culturally accepted which are linked with male sex. This preference often influences behavior and may result in gender discrimination that negatively affect girls' and women's welfare, health and survival. This study clearly revealed that sex composition of the living children is an important factor to reckon with when studying women's fertility behaviour. The result of multivariate is evidenced that strong influence of sex composition of the living children is found when other socio-demographic, economic and cultural factors were used as control.

This study further shows that educated women were less likely to have desire for more children than those women who were not educated. Highly educated women are often more likely to have control over some household decisions including intention to stop childbearing having achieved their preferred fertility.

Ethnicity was another factor influencing desire for additional children. , it was showed that there is association between the ethnic group of women as majority of those who desire more children were women within Hausa Ethnic group (44.6%) and the least desire for fertility was within Igbo(10.3%).

Age group was another significant predictor of desire for additional children. Majority of those who desire more children were women within age 25-34years (48.1%) and the least was within age 35years (24.1%).

Other identified predictors of fertility preference in this study were; religion, region and wealth. For example, it was showed that there is association between the place of residence and fertility preference as majority of those who desire more children were women within rural community (64.8%) while urban took 35.2%.

5.2. Conclusion

This study has conclusively found that desire for more children can be influenced by sex composition of children ever born in the African society like Nigeria where a male child is being celebrated than their female counterpart this was due to other factors such as religion, region, education, contraceptive use and the likes. Thus this study has done justice to the objectives of the research and clearly concludes that sex composition indeed has greater influence on fertility preference in Nigeria.

5.3 Recommendations

The preference for a particular sex of child and its attendant effect on fertility behaviour of women cannot be overemphasized. The task here therefore is to recommend possible ways by which these effects could be curbed. The expectation is that if the recommendations are implemented, it will help government in its attainment of the policy objective of the National Population Policy. From the results of this analysis, it can be suggested that there is need to re-orientate mothers on sex preference so as not to risk their life in the quest of desiring male child. The problems associated with excessive population growth are recognized all over the world particularly as they affect developing countries of Africa, an organized world effort is therefore needed to change the attitude of people towards sex and fertility preferences, family size and other fertility related issues. Other recommendations are as follows:

- Family planning program should be more intensified among mother in Nigeria, especially in the Northern part.
- Importance of education should be made clear to mothers so as to help them for self-independent and gender autonomy.
- It is also important to design and promote behavioural change communication programmes to increase reproduction, sexual health knowledge, awareness and behavioural change among Nigerians.
- Population education should be encouraged and promoted. Government should draw up and include in the curriculum of primary and post primary education issues of population. It is believed that if young people become acquainted with population issues early enough, it will help in no small measure to reduce the fertility rate.
- Improvement in the status of women is very crucial in the task of reducing population growth rate. In empowering the women, they could assume and perform most of the roles performed by men in the society, which includes title inheritance, and carrying on the lineage.

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