

**THE EFFECT OF LABOUR PARTICIPATION ON FERTILITY
BEHAVIOUR AMONG MARRIED WOMEN IN NIGERIA**

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CERTIFICATION

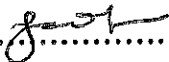
This is to certify that SMITH DAVID AYOBAMI of the Department of Demography and Social Statistics, Faculty of Social Sciences, Federal University, Oye-Ekiti carried out a research on the Topic **THE EFFECT OF LABOUR FORCE PARTICIPATION AMONG MARRIED WOMEN IN NIGERIA** in partial fulfilment of the requirement for the award of Bachelor of Science (B.Sc.) in Demography and Social Statistics under my Supervision



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DEDICATION

The project is dedicated to the Almighty God (Alpha and Omega), who has been with me from the beginning of my Academic pursuit in FUYOYE till the completion of it and has crowned all my efforts with success. In the same vein, this project work is as well dedicated to my parents, Mr. & Mrs. Adewuni Omolola and also to my friends and family who has supported me financially and emotionally.

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ABSTRACT

The prevalence of fertility has dramatically decreased worldwide, both in developed and developing countries. The study examined the effect of labour force participation on fertility behaviour among married women in Nigeria, using 2013 Nigeria Demographic and Health Survey women recode dataset. Characteristics of respondents were examined at univariate level with the use of frequency distribution table, bivariate level with the use of chi square and multinomial logistic regression was employed in the multivariate analysis. Bivariate analysis showed significantly association between the following: age of married women and fertility behaviour ($\chi^2 = 8700.35$, $P = 0.0000$), places of residence and fertility behaviour ($\chi^2 = 356.07$, $P = 0.0000$), level of education and fertility behaviour ($\chi^2 = 728.95$, $P = 0.0000$), ethnicity and fertility behaviour ($\chi^2 = 1487.98$, $P = 0.0000$), religion and fertility behaviour ($\chi^2 = 1383.80$, $P = 0.0000$), wealth index and fertility behaviour ($\chi^2 = 593.78$, $P = 0.0000$), region and fertility behaviour ($\chi^2 = 1689.59$, $P = 0.0000$), occupation and fertility behaviour ($\chi^2 = 841.98$, $P = 0.0000$). The multivariate analysis model showed no significant relationship between labour force participation and fertility behaviour in the study. The study further revealed that there is significant relationship among the following variables: age of married women (OR= 0.37, $P < 0.05$, CI=0.27-0.52) (OR= 0.21, $P < 0.05$, CI=0.15-0.3) (OR=0.13, $P < 0.05$, CI=0.1-0.19) (OR=0.09, $P < 0.05$, CI=0.07-0.13), level of education (OR=1.27, $P < 0.05$, CI=1.05-1.55) (OR=1.56, $P < 0.05$, CI=1.25-1.94) (OR=3.06, $P < 0.05$, CI=2.04-4.6), ethnicity (OR=0.49, $P < 0.05$, CI=0.13-1.14) (OR=0.49, $P < 0.05$, CI=0.66-1.45), region (OR=1.42, $P < 0.05$, CI=1.08-1.86) (OR=1.33, $P < 0.05$, CI=1.01-1.76) and religion (OR=0.43, $P < 0.05$, CI=0.32-0.58) (OR=0.39, $P < 0.05$, CI=0.2-0.76) had significant influence on fertility behaviour. Thus this study conclude that base on the facts from the result that labour force participation does not influenced fertility behaviour where p-value greater than five percent level of significant. Hence, other socio-demographic variables (Age of women, level of education, ethnicity, region and religion) influencing fertility behaviour where p-value less than five percent level of significant.

CHAPTER ONE

INTRODUCTION

1.0 BACKGROUND TO THE STUDY

The prevalence of fertility has dramatically decreased worldwide, both in developed and developing countries. Developed countries experienced a demographic transition from high to low fertility in the last quarter of the nineteenth century, while in the most developing countries fertility declined more rapidly in the last quarter of the twentieth century. For some developing countries, this demographic transition is in the middle of their development (Schultz, 2005; Del Boca and Wetzels, 2003). The world population has witnessed significant fertility declines over the past three decades. Total fertility fell in all but three of the 185 countries or areas for which data are available for all three periods. The distributions of total fertility shifted downward resulting in a decline of the median total fertility from 5.6 children per woman in 1970-1979 and to 2.4 children per woman in 2000-2007. The decline in total fertility was fastest among developing countries, whereby the median total fertility among countries with the required data dropped from 5.7 children per woman in the earliest period to 2.5 by 2000-2007. The developed countries were already far advanced in the transition to low fertility in 1970-1979, but still more than three quarters of them exhibited total fertility levels at or over 2.1 children per woman. In 2000-2007, all developed countries had total fertility at or below 2.1 children per woman (United Nation, 2011).

Developing countries face serious problem as a result of rapid and uncontrollable increase in their population. This is attributed to bearing of many children by women especially

in the rural areas because of lack of education and awareness, poverty, marriage at early ages that result to increase family sizes and population grows rapidly (Wilson and Victor, 2016).

Furthermore, lowering population growth rates has been the goal of many countries particularly, in sub-Saharan Africa (Alkema et al, 2013). Although there has been some decline in fertility in the region (Tabutin and Schoumaker, 2004), many countries like Nigeria still has a high fertility situation. Nigeria is the most populous country in Africa. Presently, she has a population of more than 167 million people with annual growth rate of 3.2 per cent. The Country's total fertility rate (TFR) is 5.5. Also, the country has relatively high levels of infant mortality by 69 infant deaths per 1,000 live births and maternal mortality by 576 maternal deaths per 100,000 live births (National Population Commission, 2009). National Demographic and Health Survey (NDHS) reported an average of 5.2 children per woman at the end of her reproductive years. This reveals a little reduction from 5.5 children per woman reported for the years 2003 and 2008 (NPopC and ICF International, 2014). This scenario has significantly contributed to the present world population growth rate of 2.63% (World Bank, 2015). It is widely believed that by delaying marriage, several hundreds of thousands of young girls will acquire improved education which will make them to understand and demand for basic human rights and participation in the workforce (Okokondem, 2018).

One of important dimension is to check the effect of labour force participation on the women fertility behaviour. Women's labour force participation refers to the percentage of women ages 16 and older either working or actively looking for work. It was stated that over the past half century, women have made substantial progress in the labour market. One place this is most visible is in the growth of women's labour force participation, between 1962 and 2000 this rate increased dramatically, from 37 percent to 61 percent. This increase in women's labour force

participation was enough to offset the declining labour force participation rate of men, which had been steadily falling for more than 60 years, so that overall labour force participation (Sandra, Whitmore and Breitwieser, 2017). More so, at the beginning of 2000, the positive trends slowed and even reversed, women's participation fell from 60.7 percent in 2000 to 57.2 percent in 2016. While some aspects of the decline can be easily explained as younger women's (ages 16 to 24) increasing educational attainment means that they are less attached to the labour market (Sandra, Whitmore and Breitwieser, 2017).

According to Bureau of Labour Statistics (2012), it was revealed that increases in the participation rate reflect individuals joining the workforce, either by looking for a job or taking one, while decreases in the participation rate can reflect an increase in retirements, people taking time out of the labour force for a variety of reasons (e.g., to go to school, care for a young child, etc.), or unemployed individuals who become discouraged and stop looking for a job. Decreased labour force participation may or may not be desirable, depending on the reason. Achieving a labour force participation rate of 100 percent is not the goal, since many people who leave the labour force are engaged in important nonmarket activities, such as schooling, raising children, or retirement (Bureau of Labour Statistics, 2012).

Starting from the pre-colonial traditional Nigeria society to its modern state, women have often been discriminated upon in affairs that led to deplete their contribution to economic growth (Makuochukwu, 2013). Nevertheless, this paper seeks to empirically investigate female labour force contribution to Nigeria's growth. Therefore it is necessary to examine the effect of labour force participation on fertility behaviour among married women in Nigeria.

1.1 STATEMENT OF PROBLEM

There are various problem associated with fertility behaviour among women. One of the most serious problems facing many developing countries is the rapid and uncontrollable increase in their population. It should be noted that population growth, social and economic development are irrevocably interconnected and are critical to the achievement of sustainable development in any society. Since the population of the country (Nigeria) is tied to her fertility level, the sustained high levels of fertility as observed for the country and the resultant rapid population growth constitute a serious threat to the socio-economic wellbeing and living standard of the citizens (Wilson and Victor, 2016). Some of the social and economic consequences include among many others poor income and investment, poverty, hunger, malnutrition, high rates of infant and maternal morbidity and mortality, unemployment, poor health and quality of education and poor living conditions (Obasi, 2011).

A child's basic needs like food, clothes and equipment for leisure activities, and the parents will either have to forego some income, because one of them typically the mother must withdraw from the labour force to care for the child at the first years (Joshi, 2002) or they must pay others to do the child care. One or both parents may be able to put in extra hours of gainful work to ease the situation, but the family may still end up with a relatively weak economy (Aassve et al. 2006). Withdrawal from the labour market may be a loss not only economically, but also socially and other pleasures one may enjoy at the work place perhaps not fully matched by the pleasures of spending more time with the child, and because a smaller economic contribution may weaken the woman's influence vis-à-vis her partner more generally (England and Folbre 2005).

Furthermore, childbearing probably also has other types of effects expected or unexpected by the parents. For example, parents may be less inclined to take risks than the childless (Wang et al. 2009), they may be subject to stronger social control at home (Kendig et al. 2007), and they may be better socially integrated into the community (Bühler, 2008). Many of these consequences of childbearing may in turn influence the parent's health and mortality (Grundy and Kravdal, 2008). Most importantly in developed countries, pregnancies may affect the mother's chance of developing cancer through hormonal changes or other physiological mechanisms. There may also be biological effects on the chances of getting other diseases (Salehi et al, 2008; Skilton et al, 2009). This study aims at examining the effect of labour force participation on fertility behaviour among married women in Nigeria.

1.2 RESEARCH QUESTIONS

1. What is the level of fertility behaviour among married women in Nigeria?
2. What proportion of married women participate in the labour force in Nigeria?
3. Is there any significant effect of labour force participation on fertility behaviour among married women in Nigeria?

1.3 OBJECTIVES OF THE STUDY

1.3.1 GENERAL OBJECTIVE

1. To examine the effect of labour force participation on fertility behaviour among married women in Nigeria.

1.3.2 SPECIFIC OBJECTIVES

1. To investigate the level of fertility behaviour among married women in Nigeria.
2. To examine the relationship between labour force participation and fertility behaviour of women in Nigeria.
3. To investigate the effect of labour force participation on fertility behaviour among married women in Nigeria.

1.4 JUSTIFICATION OF THE STUDY

Fertility behaviour is important in evaluating wanted, unwanted and undecided number of children among women of reproductive age. This study will contribute to 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 ((NPopC and ICF International, 2014)).

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 behaviour 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 behaviour and towards the country achieving the desirable objectives.

Increase in labour force participation will enable women to decide and limit the number of children they are going to have and it will contribute immensely to the various sectors in terms of education, economic opportunity and health care, including family planning is pivotal to world progress, with far-reaching benefits for families, communities and the planet..The study will create awareness for the importance of labour force participation in order to control fertility behaviour and also increase knowledge in addressing the multidimensional problems being faced by women in the study area. This research would have its contribution to examine the effect of labour force participation on fertility behaviour among married women in Nigeria.

1.5 OPERATIONAL DEFINITION OF TERMS

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.

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. More so it was defined and measured in this study as wanting more children, want no more children and undecided.

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 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.

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

Women Labour Force Participation: This refers to the percentage of women ages 16 and older either working or actively looking for work.

CHAPTER TWO

LITERATURE REVIEW

2.0 INTRODUCTION

This chapter presents the literature reviewed and related materials on fertility, fertility behaviour and labour force participation among married women. This chapter also presents the conceptual framework to be used in the analysis of data.

2.1.1 GLOBAL OVERVIEW OF FERTILITY BEHAVIOUR

Global demographic trends have shown to be going through unprecedented shifts, with the rapid growth observed in the global population over the past decades slowing dramatically. The global population grew by 174 percent between 1950 and 2015, from 2.5 billion to 6.9 billion, and is almost 7.3 billion today (United Nation, 2015). Fertility has dramatically decreased in most parts of the world, both in developed and developing countries. Developed countries experienced a demographic transition from high to low fertility in the last quarter of the nineteenth century, while in the most developing countries fertility declined more rapidly in the last quarter of the twentieth century. For some developing countries, this demographic transition is in the middle of their development (Schultz, 2005).

Population growth was the fastest from the mid-1950s through the mid-1970s, causing development policy discussions to be marked by concerns about unfettered population growth and a perceived need to control the so-called "population bomb"(World Bank 1984). Then, in the 1990s, population growth started to fall, by 2022 the average annual growth rate is expected to fall below 1 percent, down from more than 2 percent in the late 1960s (United Nation, 2015). The global average fertility rate is just below 2.5 children per woman today. The world's average

TFR declined steadily during this period, falling from 5 children per woman in 1960 to 2.4 in 2015. This decline in fertility is not skewed by the experience of a few countries. In 1960, more than half of the countries in the world experienced fertility rates greater than 6. By 2015, the median TFR was 2.2 children per woman. Interestingly, the rapid decline in fertility has taken place in countries at wide levels of development (World Bank, 2015). This shift in the pace of population growth has also shifted the policy discussion on the links between development and demography. In parallel with the slowdown in population growth, the global age structure is shifting. After rising steadily since the 1960s, the working-age population reached a peak of 65.8 percent of the total population in 2012 and is expected to decline to 62.7 percent by 2050. At the same time, children under age 15 represent a shrinking share of the global population, and the share of those 65 and over has been rising steadily (World Bank, 2015).

Furthermore, the share of children in the global population is expected to have fallen to 21 percent by 2050, versus a peak of 38 percent in the late 1960s, while the aged share of the population will have expanded from 5.0 percent in 1960 to 16.0 percent in 2050. As a result of these shifts in the dependent population shares, the global total dependency ratio declined from its peak of 75.4 percent in 1965 to a low of 52.2 percent in 2010. With the aged share of the global population now expanding much faster than it has in the past. The world has also seen major changes in other demographic dimensions, including a halving of total fertility rates and rapid improvement in life expectancy (Global Monitoring Report, 2016). In the 1950s total fertility rates were about five births per woman, reaching a peak in the post-World War II period (Klein, 2004). Since then, fertility rates have steadily declined, falling to 2.5 births per woman as of 2015, and are projected to fall further but remain above global replacement rates through 2050 (Espenshade, Guzman and Westoff, 2003). In parallel with the average life expectancy at birth

has risen by more than 25 years over the past 65 years, from 46.8 years in 1950 to 71.7 years in 2015, while infant mortality has declined. Improvements in life expectancy are expected to continue, although at a much lower rate than in the past. The global total dependency ratio is expected to rise in the coming decades, to 59.6 percent in 2050 (United Nation, 2015).

2.1.2 FERTILITY BEHAVIOUR IN AFRICA

Fertility Behaviour in sub Saharan Africa has been pinpointed to exhibit a very unique demographic scenario in the world that sets it apart from other regions in the world. Over the past half century substantial changes in reproductive behaviour have occurred throughout the developing world, with the total fertility rate declining by 56 percent from 6.0 to 2.7 births per woman between 1960 and 2010 (United Nations, 2015). Demographers are particularly keen on comprehending the dynamics surrounding the demographic transition of the sub-continent especially with respect to its movement from high fertility rates to low fertility rates. The decline in fertility embodies the second phase of the demographic transition process (Malmberg, 2008:7).

The current fertility rates in the sub-continent stand at the same level as that of Asia and South America towards the end of the 1970s. According to arguments postulated by the demographic transition theory, all regions are expected to undergo a demographic transition that is characterized by the movement from high fertility rates and mortality rates to low fertility and mortality rates. Most countries in Sub Saharan Africa are still experiencing relatively higher fertility rates and it is the sole region in the world that has not so far experienced any significant decline in its fertility rates (Malmberg, 2008). Furthermore, declines have been especially rapid in Asia and Latin America over this period, but in Sub-Saharan Africa the fertility transition occurred later and is proceeding at a slower pace. As a result of high African fertility and

declining mortality, the population of this region is now growing at a faster rate by 2.5 percent per year than other regions of the developing world. The United Nation projects the Sub-Saharan population to grow from 0.8 billion in 2010 to 3.9 billion in 2100. This unprecedented expansion of human numbers will create a range of social, economic, and environmental challenges and make it more difficult for the continent to raise living standards (Bongaarts, 2016).

The Policy makers in Sub Saharan Africa have acknowledged that the solution to the high population growth stemming from high fertility rates, resides in the promotion of family planning programmes which they reckon would forge the practice of contraceptives use as a medium of checking reproduction and childbearing. A comparison of the total fertility rates of the region with Latin America and Asia illustrated that fertility rates in Asia fell from 4.2 to 2.4, and that of Latin America, from 3.5 to 2.4 between 1985 and 2005 respectively (United State census bureau, 1998). Research shows that there are some models that have been postulated to account for fertility decline trends in the region which are reproductive behaviour model, and the socio-economic model. The reproductive model put forth the contention that changes in reproductive behaviour accounts for changes in fertility rates. Behavioural changes or preference that form the tenet of this model include changes of age at marriage and decline in early motherhood, increase in childbirth out of wedlock, and contraceptive use The socio economic model's dominant theme used in explaining fertility rates and differentials within and across countries in the region, main argument is that fertility patterns differ between different socio-economic and socio-cultural groups (Ezeh, 2009, Westoff and Cross, 2006)

The study of human fertility is of paramount importance in population studies. Human fertility is responsible for the biological replacement and maintenance of the human species, since every society replenishes itself and grows through the process of fertility. Therefore, in

context of population dynamics it is important to note that fertility is one of the major counteractive forces that aids in overcoming mortality. Contrary to this, an increased level of fertility more than desired might result in population explosion (Bhende and Kanitkar, 2008).

2.1.3 FERTILITY BEHAVIOUR IN NIGERIA

Nigeria is the tenth most populous country in the world and the largest in sub-Saharan Africa, with an estimated population of 140 million from the 2006 census. Nigeria's population growth rate has been driven by high fertility, which has fallen in the last few decades but not as rapidly as the fall of the crude death rate (Kolawole, 2006).

The total fertility rate (TFR) declined modestly from 6.3 children per woman in 1981-1982 to 5.7 children per woman in 2008. The Nigeria Demographic and Health Survey, 2013 result indicated that the Total Fertility Rate of Nigeria is 5.5 births per woman. This means that, on average, Nigeria women will give birth to 5.5 children by the end of their childbearing years. The current TFR of 5.5 is 0.2 children per women less than that reported in the 2003 and 2008 NDHS survey by 5.7 respectively (NPopC and ICF International, 2014). Understanding fertility desires and behaviour requires a careful examination of women's and men's attitudes and behaviours about reproduction within their economic, social and cultural context (Smith, 2004). High population growth is related to the socio-economic development of any nation. Effects of rapid population growth include reduced per capita income, high rural to urban migration, heavy pressure on social services such as healthcare and education, high unemployment rates, poverty, land fragmentation and degradation, and communal clashes over arable land (Daniel, 2009). Within families, elevated risks of maternal and child mortality and a higher risk of being trapped in poverty are areas of concern as family size increases (Olukoya and Ferguson, 2002). High fertility is one of the primary determinants of rapid population growth, which can hinder

socioeconomic development. Thus, efforts to reduce poverty and promote sustainable development have included an emphasis on strengthening family planning programs. To date, the majority of family planning programs have focused on methods to address women's family planning needs, as opposed to addressing both women and men as full partners in fertility decisions and responsibilities. At the International Conference on Population and Development (ICPD) in 1994, and the 1995 United Nations World Conference on Women, delegates raised the problems of gender imbalance, reproductive rights and responsibilities, abuse of reproductive rights, and sexual violence (Keeton, 2007).

2.1.4 LABOUR FORCE PARTICIPATION AMONG MARRIED WOMEN

The labour force participation rate is a measure of the proportion of a country's working-age population that engages actively in the labour market, either by working or looking for work; it provides an indication of the size of the supply of labour available to engage in the production of goods and services, relative to the population at working age. The breakdown of the labour force formerly known as economically active population by sex and age group gives a profile of the distribution of the labour force within a country (Bourmpoula, Kapsos, and Pasteels, 2015). One of the most striking phenomena of recent times has been the extent to which women have increased their share in the labour force, in both developed and developing countries, the increasing participation of women in paid work has been driving employment trends and the gender gaps in labour force participation rates have been shrinking. Especially in the 1980s and early 1990s, labour force growth was substantially higher for women than for men for every region of the world except Africa. In the developed industrialized countries, increasing female labour force participation has been linked to the completion of the fertility transition. In many developing countries, however, fertility decline has been slow or stalled (Lim, 2002).

Gender differentiation and productivity are critical issues that are central the socio-economic life of any country. Women contribute half or more of the country's population but they contribute much less than men towards the value of recorded production both quantitatively in labour force participation and qualitatively in educational achievement and skilled man power (Olukemi, 2008). The developed countries have practically graduated from problems of gender differentiation, their less developed counterparts are still often been looked down upon in terms of their ability to contribute to the economic well-being of their families which invariably has some correlation to a nation's economic growth (Okokondem, 2018). Research shows that right from the pre-colonial traditional Nigeria society to its modern state, women have often being discriminated upon in affairs that led to deplete their contribution to economic growth (Makuochukwu, 2013). Nevertheless, over the past half century, women have made substantial progress in the labour market. One place this is most visible is in the growth of women's labour force participation between 1962 and 2000, women's labour force participation defined as the percentage of women ages 16 and older either working or actively looking for work increased dramatically, from 37 percent to 61 percent. This increase in women's labour force participation was enough to offset the declining labour force participation rate of men, which had been steadily falling for more than 60 years, so that overall labour force participation was actually increasing until 2000(Sandra, Whitmore and Breitwieser, 2017).The economy has benefited greatly from this increase in labour force participation among women. Estimates suggest that the economy is 13.5 percent, larger than it would have been had women's participation and hours worked remained at their 1970 levels. Women's income also accounts for the majority of the increases in family income since 1970 (Council of Economic Advisers [CEA], 2015).

More so, at the beginning in 2000, the positive trends slowed and even reversed and women's participation fell from 60.7 percent in 2000 to 57.2 percent in 2016. While some aspects of the decline can be easily explained, younger women's ages 16 to 24 increasing educational attainment means that they are less attached to the labour market and others are more puzzling. For instance, it is not clear why prime-age women ages 25 to 54 are working less. Research focusing on the 2000 to 2007 period has highlighted the importance of differential trends in employment and wages based on marital status and the presence of children (Moffitt, 2012).

The Nigerian situation shows that between 1971 and 2004, the percentage of women rose from 12% to 70% of the work force due to women's participation in further and higher education (Women and Work Commission, 2005). However distinct differences exist in the types of occupation entered by women and men. Women got more jobs in administrative, clerical, personal services and sales occupation, Apart from moving into law, medicine and accountancy, there was no similar movement into science, engineering, ICT and the skilled trades. Women were not found in managerial occupations: overall, women make up only 32% of managers and senior officials (Women and Work Commission, 2005). Equally, Okoro (1991) notes that apart from traditional humanist professions like nursing, teaching, catering and law, the percentage of women who venture into professions like engineering, architecture are low compared to men. According to Umar & Karofi, 2007 observed that female employment in the Nigerian civil service was historically tended to be lower than male.

2.1.5 LABOUR FORCE PARTICIPATION AND FERTILITY BEHAVIOUR

Increased participation of women in the workforce is associated with decreased fertility. A multi-country panel study found this effect to be strongest among women aged 20 years to 39 years, with a less strong but persistent effect among older women as well (Bloom et al, 2009). International United Nations data suggests that women who work because of economic necessity have higher fertility than those who work because they want to do so (Lim, 2009).

However, for countries in the Organization Economic Cooperative Development area, increased female labour participation has been associated with increased fertility (Namkee and Mira, 2002). Causality analyses indicate that fertility rate influences female labour participation, not the other way around. Women who work in nurturing professions such as teaching and health generally have children at an earlier age. It is theorized that women often self-select themselves into jobs with a favourable work life balance in order to pursue both motherhood and employment (Nicoletta , 2013). With higher female empowerment it is more likely to observe a lower fertility rate. The mechanism could be that more empowered women will want a fewer number of children, because having fewer children will allow them greater freedom to pursue other life opportunities. Greater resources and agency may also help women control their own environment and in turn achieve their preferred number of children. For instance, the probability for empowered women to use contraceptive is larger than the probability for less empowered women to use it (Woldemicael, 2009). Increased income and human development are generally associated with decreased fertility rates (Rai, 2016). Economic theories about declining fertility postulate that people earning more have a higher opportunity cost if they focus on childbirth and parenting rather than continuing their careers, that women who can economically sustain themselves have less incentive to become married, and that higher income parents value quality

over quantity and so spend their resources on fewer children (Nicoletta , 2013). Likewise fertility rates drop at first, but then begin to rise again as the level of social and economic development increases, while still remaining below the replacement rate (Myrskylä, Kohler, Francesco and Billari, 2009).

2.1.6 SOCIAL-ECONOMIC FACTORS

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 (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 (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). Furthermore, research 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). 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 by 3.4 vs. 6.3 births per woman), which is also the case in desired family size by 3.7 vs. 5.6 births per woman (Adhikari, 2010; Bongaarts, 2010).

OCCUPATION

The demographic transition theory serves as the major framework for most investigations that has to do with fertility changes (John, 2009). The interpretation of the European fertility transition suggests that non-agricultural labor-force participation intervenes between economic development and fertility (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 (Sennott and Yeatman, 2012). 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, Samson, Schrank, Eckart, 1995).

PLACE OF RESIDENCE

Place of residence is a useful measure or indicator of the level of change from traditional or rural behaviour to a modern or urban behaviour (John, 2009). Significant rural-urban differences in age at marriage and fertility behaviour 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).

WEALTH STATUS

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.

2.1.7 SOCIO-CULTURAL FACTORS

Socio-cultural factors are indirect determinants factors, which affect fertility through direct proximate variables (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.

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.

According to Munshi and Myaux (2006), it was found that local changes in reproductive behavior occur within religious groups; and assumed that social interactions among the women

cannot be substituted with other interventions (Munshi and Myaux, 2006). Also, 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%).

2.2 THEORETICAL FRAMEWORK

This study was guided by human capital theory

2.2.1 HUMAN CAPITAL THEORY

Human capital theory suggests several reasons why women might decide to acquire smaller amounts of formal education than men. Many scholars have emphasized the traditional roles of women within the family of which childbearing is one of the most important. Women know that bearing children might force them to leave the labour market for a while. Again, the present value gives us the insight of the potential behaviour of women. If a woman is planning to interrupt her participation in the labour market, her investment in additional education might no longer be profitable since her time out of the labour market results in a reduction in benefits since time would be smaller (Rincon, 2007).

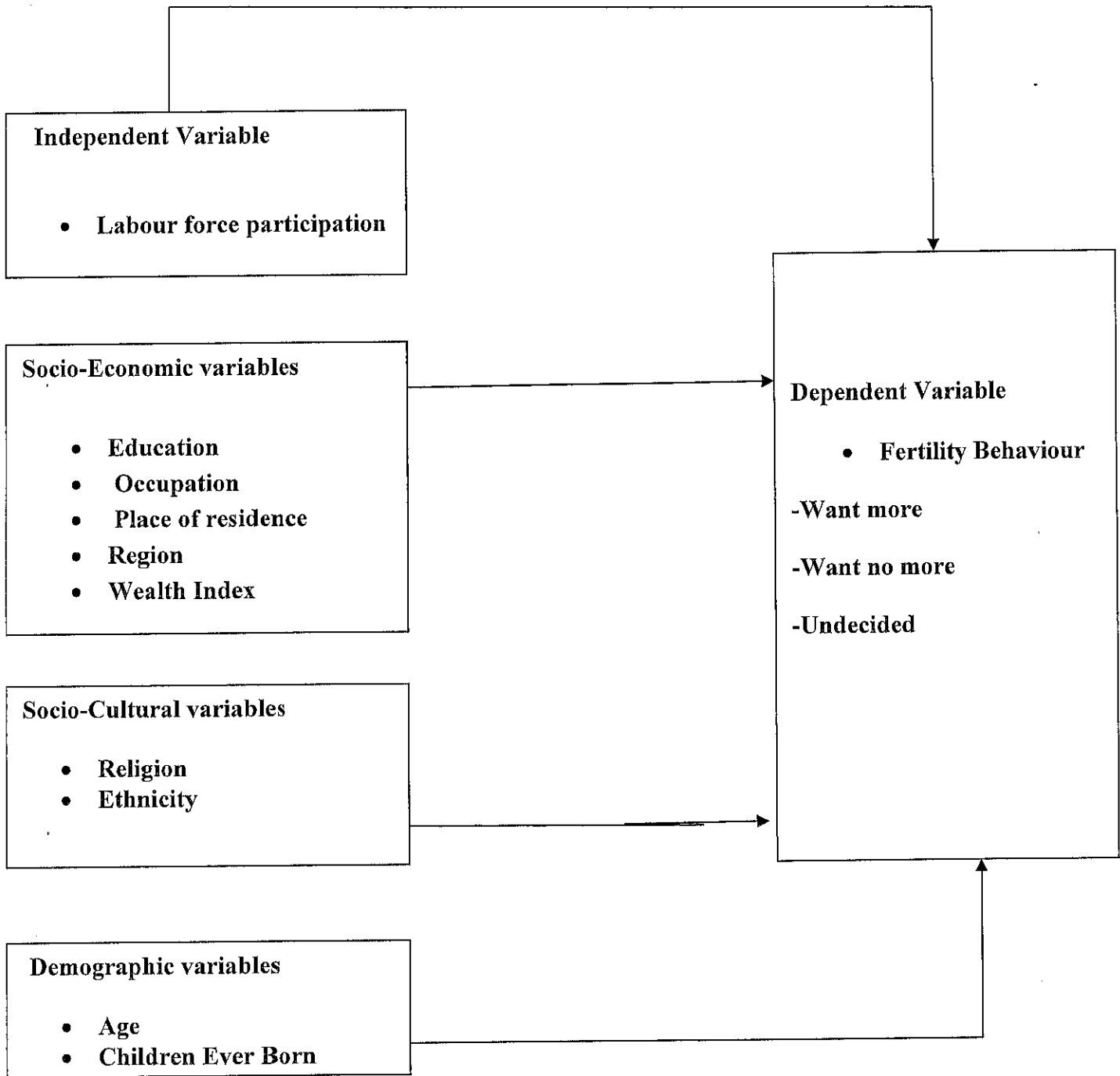
Moreover, a woman may decide against investment in the types of human capital that require sustained, high-level commitment to the labour force because the investment depreciates rapidly during periods of work interruptions. The time out of the labour force has cost her a reduction of earnings over the remainder of her working life. In this example, the benefits of the investment in college education, the sum of the two shaded areas, may not be large enough to make it worthwhile. Thus, a woman with an adherence to the traditional roles in the family is less likely to pursue college and graduate study. Anticipating time out of the labour force, she is likely to reduce her amount of educational investment. Other kinds of human capital investments are those made after one has started to work, in training received at the workplace. All forms of training, whether formal training programs, informal training under the supervision of a more experienced worker, or general training, are costly. If the training is specific to one firm or employer, workers and the firm share the cost. The role of education in determining women's participation becomes stronger when we consider women in urban areas only. Compared to illiterate women, those with higher levels of schooling have progressively higher participation rates that peak for those with higher education. Among rural women, illiterates and primary school graduates are not any more likely to participate than illiterate women (Dayioglu and Kirdar, 2010). The authors noted that those with secondary and general high school education have a lower likelihood of entering the labour market as compared to illiterate women, which may stem from demand side factors: the unavailability of "socially appropriate" jobs for them and the changing economic structure of rural households with the proportion engaged in agriculture declining.

However, vocational high school graduates and those with university degrees have a higher likelihood of entering the labour market. The effect is especially strong for university

graduates. Dayıoglu and Kırdar (2010) were of the opinion that the age participation profiles are hump-shaped in both urban and rural areas, though age is a stronger correlate of participation in urban areas. The authors assert that being married is negatively associated with participation in both urban and rural areas, with a particularly large effect in urban areas. Separated and divorced women are also less likely to participate in rural areas but not in urban areas. In both places, it seems less likely for widowed women to enter the labour market. The number of children in the household are also negatively associated with the participation probability of women in urban but not in rural areas (Dayıoglu and Kırdar, 2010).

2.3 CONCEPTUAL FRAMEWORK

Based on the literature reviewed, Labour force participation, which is the main independent variable as well as socio-economic, social cultural and demographic factors, may be conceptualized as factors that shape fertility behaviour 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 behaviour and influence the attitude towards family size. Below are a conceptual framework and an operational framework adapted for this study.



▼ Source: Adapted from Lunani (2014)

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 INTRODUCTION

This chapter seeks to explain the plan and approach for executing the research work. It covers the description of the study area, target population, source of data, sampling design and sample size, method of data collection, measurement of variables and method of data analysis

3.1 DESCRIPTION OF THE STUDY AREA

Nigeria is a West African country located between latitudes 4°16' and 13°53' north and longitudes 2°40' and 14°41' east. It extends from Gulf of Guinea in the south to the fringes of the Sahara Desert in the north. The country is bordered by Niger Republic and Chad in the north, Cameroon on the east, and the Republic of Benin on the west. With a population of 140,431,790 (NPC, 2006), Nigeria is the most populous country in Africa and the 14th largest in land mass (World Bank, 2012). Nigeria has great geographical diversity, with its topography characterized by two main land forms: lowlands and highlands. The uplands stretch from 600 to 1,300 meters in the North Central and the east highlands, with lowlands of less than 20 meters 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. Its climate is influenced by the rain-bearing southwesterly winds and the cold, dry, and dusty northeasterly 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. Nigeria marked its centenary in 2014, having begun its existence as a nation-state in 1914 through the amalgamation of the northern and southern protectorates. Before this time, there were various cultural, ethnic, and linguistic groups, such as the Oyo, Benin, Nupe, Jukun, Kanem-Bornu, and Hausa-Fulani empires. These groups lived in kingdoms and emirates with sophisticated systems of government. There were also other strong ethnic groups such as the Igbos, Ibibios, Ijaws, and Tivs. The establishment and expansion of British influence in both northern and southern Nigeria and the imposition of British rule resulted in the amalgamation of the protectorates of southern and northern Nigeria in 1914.

3.2 TARGET POPULATION

The category of eligible respondents in this study focus currently on married women aged 15-49 years, which was collected by the National Demographic Health Survey (NDHS) 2013.

3.3 QUANTITATIVE DATA SOURCE

This study analyses data from women recode of National Demographic and Health Survey (NDHS) 2013 dataset.

3.4 SAMPLE DESIGN FOR THE 2013 NDHS

The sample for the 2013 NDHS was nationally representative and covered the entire population residing in non-institutional dwelling units in the country. The survey used as a sampling frame the list of enumeration areas (EAs) prepared for the 2006 Population Census of the Federal Republic of Nigeria, provided by the National Population Commission. The sample was designed to provide population and health indicator estimates at the national, zonal, and state levels. The sample design allowed for specific indicators to be calculated for each of the six zones, 36 states, and the Federal Capital Territory, Abuja. The 2013 NDHS sample was selected

using a stratified three-stage cluster design consisting of 904 clusters, 372 in urban areas and 532 in rural areas. A representative sample of 30,327 households was selected for the survey, with a minimum target of 943 completed interviews per state. A fixed sample take of 45 households were selected per cluster.

All married women who was either permanent residents of the households in the 2013 NDHS sample or visitors present in the households on the night before the survey were eligible to be interviewed (NPopC and ICF International, 2014).

3.5 SAMPLE SIZE

All married women age 15-49 who were either permanent residents of the households in the 2013 NDHS sample or visitors present in the households on the night before the survey were eligible to be interviewed. The sample size of women age 15-49 years that will be used are 26,403.

3.6 VARIABLE DESCRIPTION

DEPENDENT VARIABLE: FERTILITY BEHAVIOUR

This study uses the NDHS concepts of desire to have more children denote the prevalence of fertility behaviour. The occurrence of fertility behaviour is based on three criteria and coded has, those who did not decided on the number of children to have by those who want no more children=, undecided=0 and those who want more children=2.

INDEPENDENT VARIABLES: LABOUR FORCE PARTICIPATION

The independent variable considered were the direct proxies for labour force participation. This is a categorical variable that will be divided into six categories. These would

be coded has, not working=0, white collar job=1, manual job=2, services=3, housewife=4, others=5.

NAME OF VARIABLE	VARIABLE MEASUREMENT AND CODES	DATA RECORDED AND MANIPULATION
<p>Dependent Variable:</p> <ul style="list-style-type: none"> Fertility Behaviour 	<p>V605 (Categorical)</p>	<p>0:Want no more children 1:Undecided 2:Wants more children</p>
<p>INDEPENDENT VARIABLE:</p> <ul style="list-style-type: none"> Occupation 	<p>v717 (categorical)</p> <p>not working, sales, professional/technical/managerial, agricultural, household and domestic service, manual, clerical</p>	<p>0:Not working 1:White collar job 2:Manual job 3:Service 4:House wife 5:Others</p>
<p>Socio economic factors:</p> <ul style="list-style-type: none"> Age 	<p>V013 (categorical)</p> <p>15-19, 20-24, 25-29, 30-34, 35-39, 40-44, and 45-49.</p>	<p>The same categories</p>
<ul style="list-style-type: none"> Wealth index 	<p>v190 (categorical)</p> <p>Poorest, Poorer, Middle, richer, richest.</p>	<p>0:Poor 1:Middle</p>

		2:Rich
<ul style="list-style-type: none"> Place of residence 	v025 (Categorical) Urban Rural	The same categories
<ul style="list-style-type: none"> Level of education 	v106 (Categorical) No education, primary, secondary, Higher.	The same categories
Demographic factors: <ul style="list-style-type: none"> Religion 	v130 (Categorical) Catholic, Other Christian, Islam, Tradition, Others	Three main ethnic group: Yoruba, Hausa, Igbo and other Minority ethnic groups
<ul style="list-style-type: none"> Ethnicity 	v131 (categorical) Fulani, Hausa, Ibibio, Igala, Igbo, Ijaw/izon, Kanuri/beriberi, tiv, Yoruba, Others.	Three main ethnic group: Yoruba, Hausa, Igbo and other Minority ethnic groups

3.7 DATA PROCESSING AND ANALYSIS

The NDHS datasets from 2013 women recode will be processed and analyzed using Stata application package (STATA 13.0). The data processing will be necessary before the proper analysis in order to measure the variables in this study accurately as well as to make the analysis well presentable and easily interpretable. The tools for data manipulation were employed on the STATA application package to achieve this task. To ensure reliable data, sample weights and STATA survey command (SVY) were applied to adjust for stratified sample design and the effect of over-sampling or under-sampling of some regions or areas.

Univariate analysis will be carried out using tables of frequency distribution to describe the background characteristics of the respondents and the bivariate analysis will be done using the Pearson Chi-square (χ^2) test to show the association between fertility behaviour and labour force participation with other socio economic characteristics that are categorical variables in the datasets. Furthermore, multinomial logistic regression is used in the multivariate analysis to identify the strength of association and examine the influence of labour force participation with other socioeconomic characteristics on fertility behaviour in the study area.

3.8 MEASUREMENT OF VARIABLE

The general binary logistic regression model used for the multivariate analysis is:

$$\log\left(\frac{p}{1-p}\right) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n$$

Where p = probability of exposure

X_1 - X_n = predictor variables

$\beta_0, \beta_1 - \beta_n$ = regression coefficients

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.0 INTRODUCTION

This chapter deals with presentation, analysis and interpretation of the data collected from secondary sources National Demographic and Health Survey (NDHS, 2013) to show the labour force participation with socio-demographic characteristics effect on fertility behaviour among women in Nigeria. For the purpose of analysis, this study makes use of descriptive analysis and inferential analysis. However, in supportive of descriptive statistics, inferential analysis, Pearson Chi-square test was used to ascertain relationship while multinomial logistic regression analysis was used in testing the study hypothesis.

4.1. Distribution of Respondents by Socio-Demographic Characteristics by Weighted Percentage.

Results in Table 4.1 showed the age of women 25-29 years by 21.1%, age 30-34 years by 17.5%, age 35-39 years and 20-24 years by 15.6% and 15.3% respectively, age 40-44 years by 11.7% and the least were age 45-49 years and age 15-19 years by 10.5% and 8.5% respectively. Women reported more from rural area by 64% and urban area by 36%. Those reported with no formal education were 49.6%, secondary education by 24%, primary and higher education were 19% and 7.3% respectively. Hausa women reported more by 42.4%, Yoruba women by 12.6% and Igbo women by 10.8%. Women reported more from northern region by 68.6% and those reported from southern region reported by 31.4%. Women reported more to practice Islam by 62.2%, Christian by 36.8% and traditional by 1%. Poor women reported more by 45.6%, rich women reported more by 36.6% and middle wealth status by 17.8%. Women reported to be

unemployed by 28.8%, manual jobs by 21.5%, white collar jobs by 5%, service and house wife by 4.2% and 0.1% respectively.

Table 4.1: Distribution of Respondents by Socio-Demographic Characteristics by Weighted Percentage.

Background Characteristics	Frequency	Percent (%)
Age		
15-19	2,193	8.5
20-24	4,124	15.3
25-29	5,681	21.1
30-34	4,702	17.5
35-39	4,192	15.6
40-44	3,153	11.7
45-49	2,850	10.6
Place of residence		
Urban	9,675	36.0
Rural	17,222	64.0
Educational level		
No education	13,346	49.6
Primary	5,114	19.0
Secondary	6,462	24.0
Highest	1,975	7.3
Ethnicity		
Yoruba	3,399	12.6
Hausa	11,408	42.4
Igbo	2,900	10.8
Others	9,189	34.2
Region		
North Central	3,840	14.3
North East	4,642	17.3
North West	9,954	37.0
South East	2,219	8.3
South South	2,269	8.3
South West	3,972	14.8
Religion		
Christian	9,846	36.8
Islam	16,626	62.2
Traditional	279	1.0
Wealth Index		

Poor	12,265	45.6
Middle	4,799	17.8
Rich	9,832	36.6
Occupation		
Not working	7,769	28.9
White collar job	1,348	5.0
Manual job	5,770	21.5
Service	1,133	4.2
House wife	23	0.1
Others	10,853	40.4

Source: Authors work, data extracted from NDHS

4.2.: Distribution of Respondents by Labour Force Participation and Fertility Behaviour.

Result from table 4.2 below revealed that there is significant association between labour force participation, socio-demographic characteristics and fertility behaviour among women ($P < 0.05$). There is significant association between age and fertility behaviour ($\chi^2 = 8700.35$, $P = 0.0000$) whereby women age 25-29 years wants more children by 26.7%, age 20-24 years by 20.5%, ages 30-34 years by 19%, age 15-19 years by 13.8%, age 35-39 years by 13.2%, age 40-44 years and 45-49 years by 6.5% and 3.1% respectively compare to women that reported undecided on number of wanted children and those that want no more children. There is significant association between places of residence and fertility behaviour ($\chi^2 = 356.07$, $P = 0.0000$) whereby women from rural areas wants more children by 66.4% and those reported from urban area by 33.6% compare to women that reported undecided on number of wanted children and those that want no more children.

Also, there is strong significant association between level of education and fertility behaviour ($\chi^2 = 728.95$, $P = 0.0000$) women with secondary education want more children by 23.9%, primary education by 16.6%, highest education by 7.2% and those reported by no formal education by 5.3% compare to women that reported undecided on number of wanted children

and those that want no more children. There is strong significant association between ethnicity and fertility behaviour ($\chi^2 = 1487.98$, $P = 0.0000$) whereby Hausa women tends to wants more children by 48%, Yoruba women by 10% and those that are Igbo by 9.6% compare to women that reported undecided on number of wanted children and those that want no more children. There is strong significant association between religion and fertility behavior ($\chi^2 = 1383.80$, $P = 0.0000$) whereby Muslim women tends to wants more children by 67.6%, Christian women by 31.5% and traditional women by 0.9% compare to women that reported undecided on number of wanted children and those that want no more children.

Furthermore, there is strong significant association between wealth index and fertility behaviour ($\chi^2 = 593.78$, $P = 0.0000$) whereby women that are poor wants more children by 49.2%, rich by 33.4% and women in the middle wealth status by 17.4% compare to women that reported undecided on number of wanted children and those that want no more children. There is strong significant association between region and fertility behaviour ($\chi^2 = 1689.59$, $P = 0.0000$) whereby women from northern region wants more children by 73.7% and women from southern region reported by 26.3% compare to women that reported undecided on number of wanted children and those that want no more children. There is strong significant association between occupation and fertility behaviour ($\chi^2 = 841.98$, $P = 0.0000$) whereby women that reported unemployed by 33.6%, manual job by 20.1%, house wife by 8.3%, white collar jobs and service by 4.4% and 4.3% compare to women that reported undecided on number of wanted children and those that want no more children.

Table 4.2.: Distribution of Respondents by Labour Force Participation and Fertility Behaviour.

Background characteristics	Fertility behavior			Statistics
	Wants more	Undecided	Wants no more	
Age				$\chi^2=8700.35$ Pr=0.0000
15-19	11.0	4.2	0.4	
20-24	20.5	8.1	1.1	
25-29	26.7	16.8	4.7	
30-34	19.0	18.4	12.4	
35-39	13.2	22.5	20.8	
40-44	6.5	17.9	26.5	
45-49	3.1	12.2	34.0	
Place of residence				$\chi^2=356.07$ Pr=0.0000
Urban	33.6	28.5	46.2	
Rural	66.4	71.5	53.8	
Educational level				$\chi^2=728.95$ Pr=0.0000
No education	5.3	62.3	36.0	
Primary	16.6	17.0	27.3	
Secondary	23.9	16.8	27.0	
Highest	7.2	3.9	9.7	
Ethnicity				$\chi^2=1487.98$ Pr=0.0000
Yoruba	10.0	9.3	22.2	
Hausa	48.0	44.9	23.7	
Igbo	9.6	4.6	16.7	
Others	32.4	41.2	37.4	
Religion				$\chi^2=1383.80$ Pr=0.0000
Christian	31.5	27.0	57.4	
Islam	67.6	71.4	41.3	
Traditional	0.9	1.6	1.3	
Wealth Index				$\chi^2=593.78$ Pr=0.0000
Poor	49.2	51.1	32.2	
Middle	17.4	18.2	19.2	
Rich	33.4	30.7	48.6	
Region				$\chi^2=1689.59$ Pr=0.0000
North Central	13.1	21.0	15.7	
North East	18.4	21.8	12.1	
North West	42.2	35.0	21.1	
South East	7.3	2.9	12.8	
South South	7.0	7.6	13.5	

South West	12.0	11.7	24.8	$\chi^2= 841.98$ Pr=0.0000
Occupation				
Not working	33.6	26.3	14.8	
White collar job	4.4	3.7	7.5	
Manual job	20.1	20.7	25.3	
Service	4.3	3.1	4.1	
House wife	8.3	6.9	0.1	
Others	37.3	46.3	48.2	

Source: Authors work, data extracted from NDHS

4.3: Odds Ratio Based on Logistic Regression Analysis of Labour Force Participation and Fertility Behaviour.

Table 4.3 below showed the result of multinomial logistic regression of the effect of labour force participation, socio-demographic characteristics on fertility behaviour among women. Result Model 1, revealed that reveals that women age 30-34 years were 37% less likely to wants more children to women in age 15-19 years (RC). Women age 35-39 years were 21% less likely to wants more children to women in age 15-19 years (RC). Women age 40-44 years were 13% less likely to wants more children to women in age 15-19 years (RC). Women age 45-49 years were 9% less likely to wants more children to women in age 15-19 years (RC).

Also, women that attained primary school education were 1.27 times to wants more children than women with no formal education (RC). Women that attained secondary school education were 1.56 times to wants more children than women with no formal education (RC). Women that attained higher school education were 2.12 times to want more children than women with no formal education (RC). Women from north-east were 1.61 times more likely to wants more children than women from the North-Central (RC). Women from North-West were 2.63 times more likely to wants more children than women from North-Central (RC). Women from

South-East were 3.24 times more likely to want more children than women from North-Central (RC). Women from South-South were 1.42 times more likely to want more children than women from North-Central (RC). Women from South-West were 1.33 times more likely to want more children than women from North-Central (RC).

Result from Model 2 showed that women age 30-34 years were 3.64 times more likely to want no more children than women in age 15-19 years (RC). Women age 35-39 years were 5.24 times more likely to want more children than women in age 15-19 years (RC). Women age 40-44 years were 9.26 times more likely to want more children than women in age 15-19 years (RC). Women age 45-49 years were 22.19 times more likely to want more children than women in age 15-19 years (RC). Women that attained primary school education were 1.65 times more likely to want more children than women with no formal education (RC). Women that attained secondary school education were 1.63 times more likely to want more children than women with no formal education (RC). Women that attained higher school education were 2.03 times more likely to want more children than women with no formal education (RC). Hausa women were 49% less likely to want no more children than Yoruba women (RC). Women from other ethnicity were 49% less likely to want no more children than Yoruba women (RC). Muslim women were 43% less likely to want no more children than Christian women (RC). Women that practice traditional religion were 39% less likely to want no more children than Christian women (RC). According to Solanke (2015), the same result showed that there is no significant relationship between women labour force participation and fertility behaviour (Solanke, 2015).

Table 4.3: Odds Ratio Based on Logistic Regression Analysis of Labour Force Participation and Fertility Behaviour.

Background Characteristics	Wants more		Wants no more	
	RRR	Upper-Lower confidence interval	RRR	Upper-Lower confidence interval
Base Outcome	Undecided		Undecided	
Occupation				
Not working (RC)	1.00		1.00	
White collar job	0.74	(0.49 - 1.11)	0.77	(0.5 - 1.18)
Manual job	1.02	(0.84 - 1.24)	1.11	(0.89 - 1.39)
Service	1.04	(0.73 - 1.5)	0.87	(0.58 - 1.31)
House wife	1.04	(0.34 - 3.15)	1.75	(0.43 - 7.12)
Others	0.84	(0.73 - 0.97)	0.92	(0.78 - 1.1)
Age				
15-19 (RC)	1.00		1.00	
20-24	0.96	(0.66 - 1.38)	0.87	(0.47 - 1.6)
25-29	0.59	(0.43 - 0.81)	1.62	(0.93 - 2.83)
30-34	0.37***	(0.27 - 0.52)	3.64***	(2.08 - 6.35)
35-39	0.21***	(0.15 - 0.3)	5.24***	(2.1 - 9.14)
40-44	0.13***	(0.1 - 0.19)	9.26***	(5.37 - 15.97)
45-49	0.09***	(0.07 - 0.13)	22.19***	(12.46 - 39.51)
Place of residence				
Urban (RC)	1.00		1.00	
Rural	0.86	(0.67 - 1.1)	0.83	(0.64 - 1.08)
Educational level				
No education (RC)	1.00		1.00	
Primary	1.27*	(1.05 - 1.55)	1.65***	(1.32 - 2.06)
Secondary	1.56***	(1.25 - 1.94)	1.63***	(1.28 - 2.08)
Highest	3.06***	(2.04 - 4.6)	2.03**	(1.32 - 3.12)
Ethnicity				
Yoruba (RC)	1.00		1.00	
Hausa	0.79	(0.56 - 1.12)	0.49**	(0.13 - 1.14)
Igbo	0.87	(0.54 - 1.41)	0.71	(0.35 - 0.69)
Others	0.72*	(0.53 - 0.97)	0.49***	(0.66 - 1.45)
Region				
North Central (RC)	1.00		1.00	
North East	1.61**	(1.17 - 2.24)	0.98	(0.66 - 1.45)
North West	2.63***	(1.86 - 3.72)	0.99	(0.64 - 1.54)
South East	3.24***	(1.98 - 5.3)	1.81	(1.08 - 3.03)
South South	1.42*	(1.08 - 1.86)	1.14	(0.83 - 1.55)

South West	1.33*	(1.01 - 1.76)	1.21	(0.87 - 1.7)
Religion				
Christian (RC)	1.00		1.00	
Islam	0.83	(0.64 - 1.07)	0.43***	(0.32 - 0.58)
Traditional	0.69	(0.32 - 1.49)	0.39*	(0.2 - 0.76)
Wealth Index				
Poor (RC)	1.00		1.00	
Middle	0.98	(0.8 - 1.19)	1.02	(0.82 - 1.29)
Rich	0.84	(0.67 - 1.05)	0.9	(0.69 - 1.19)

RC means the reference categories *P<0.05 **p<0.01 ***p<0.001

Source: Authors work, data extracted from NDHS

HYPOTHESIS TESTING

H₀: There is no significant relationship between labour force participation and fertility behaviour.

H₁: There is significant relationship between labour force participation and fertility behaviour.

DECISION

From the multinomial logistic regression, the relationship between labour force participation and fertility behaviour is statistically significant in ($P < 0.05$), from this, we can conclude that there is a significant relationship between socio-demographic characteristics among women (Age of women, educational level, ethnicity, region and religion) and fertility behaviour. There is no significant relationship between labour force participation and fertility behaviour. Therefore we accept the null hypothesis.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECCOMENDATIONS

5.0 INTRODUCTION

This chapter is devoted to the presentation of the summary of findings, conclusion and recommendations drawn from the analysis of the research study. The overall objective of this study is to explore the effect of labour force participation on fertility behaviour among women in Nigeria. The study was based on the sample size of 26, 897 women of reproductive ages in the study area.

5.1 SUMMARY AND DISCUSION OF THE FINDINGS

With respect to socio-demographic characteristics of women who wants more children, undecided and wants no more. Women socio-economic and demographic characteristics, It was reported that women 25-29 years by 21.1%, age 30-34 years by 17.5%, age 35-39 years and 20-24 years by 15.6% and 15.3% respectively, age 40-44 years by 11.7% and the least were age 45-49 years and age 15-19 years by 10.5% and 8.5% respectively. Women reported more from rural area by 64% and urban area by 36%. Those reported with no formal education were 49.6%, secondary education by 24%, primary and higher education were 19% and 7.3% respectively. Hausa women reported more by 42.4%, Yoruba women by 12.6% and Igbo women by 10.8%. Women reported more from northern region by 68.6% and those reported from southern region reported by 31.4%. Women reported more to practice Islam by 62.2%, Christian by 36.8% and traditional by 1%. Poor women reported more by 45.6%, rich women reported more by 36.6% and middle wealth status by 17.8%. Women reported to be unemployed by 28.8%, manual jobs by 21.5%, white collar jobs by 5%, service and house wife by 4.2% and 0.1% respectively.

Furthermore, there is a significant association between the following labour force participation, socio-demographic characteristics (age of women, place of resident, level of education, ethnicity, region, religion, wealth index and occupation) and fertility behaviour when p-value less-than 0.05. There is a significant association between women labour force participation and fertility behaviour when p-value less-than 0.05.

In the multivariate analysis result showed the effect of women autonomy, socio-demographic characteristics and fertility behaviour. Model 1, revealed that reveals that women age 30-34 years were 37% less likely to wants more children to women in age 15-19 years (RC). Women age 35-39 years were 21% less likely to wants more children to women in age 15-19 years (RC). Women age 40-44 years were 13% less likely to wants more children to women in age 15-19 years (RC). Women age 45-49 years were 9% less likely to wants more children to women in age 15-19 years (RC).

Also, women that attained primary school education were 1.27 times to wants more children than women with no formal education (RC). Women that attained secondary school education were 1.56 times to wants more children than women with no formal education (RC). Women that attained higher school education were 2.12 times to want more children than women with no formal education (RC). Women from North-East were 1.61 times more likely to wants more children than women from the North-Central (RC). Women from North-West were 2.63 times more likely to wants more children than women from North-Central (RC). Women from South-East were 3.24 times more likely to wants more children than women from North-Central (RC). Women from South-South were 1.42 times more likely to wants more children than women from North-Central (RC). Women from South-West were 1.33 times more likely to wants more children than women from North-Central (RC).

Furthermore, Result from Model 2 showed that women age 30-34 years were 3.64 times more likely to wants no more children to women in age 15-19 years (RC). Women age 35-39 years were 5.24 times more likely to wants more children to women in age 15-19 years (RC). Women age 40-44 years were 9.26 times more likely to wants more children to women in age 15-19 years (RC). Women age 45-49 years were 22.19 times more likely to wants more children to women in age 15-19 years (RC). Women that attained primary school education were 1.65 times to wants more children than women with no formal education (RC). Women that attained secondary school education were 1.63 times to wants more children than women with no formal education (RC). Women that attained higher school education were 2.03 times to want more children than women with no formal education (RC). Hausa women were 49% less likely to want no more children to Yoruba women (RC). Women from other ethnicity were 49% less likely to wants no more children to Yoruba women (RC). Muslim women were 43% less likely to wants no more children to Christian women (RC). Women that practice traditional religion were 39% less likely to wants no more children to Christian women (RC).

5.2 CONCLUSION

Without any doubt that there is no significant between women labour force participation and fertility behaviour. Thus this study conclude that base on the facts from the result that labour force participation does not influenced fertility behaviour where p-value greater than five percent level of significant. Other socio-demographic variables (Age of women, level of education, ethnicity, region and religion) influencing fertility behaviour where p-value less than five percent level of significant.

5.3 RECOMMENDATION

The findings suggest that there should more attention on fertility behaviour of women age 15-49 years considering these socio-demographic factors associated with fertility behaviour such as Age of women, level of education, ethnicity, Region and Religion. More so, has this research disclosed the level of effect and likelihood ratio of the influence of socio-demographic characteristics on fertility behaviour in Nigeria? This will enable women to decide their fertility behaviour in terms of timing and spacing births and this will improve the mother's health and child's health.

Based on the findings from the study, I would recommend that

1. Different partners in partnership with the Government should pay more attention on fertility behaviour among women and also to address formal education and unemployment issues among women, so as to improve their economic status, hence for fertility behaviour to change.
2. Government should provide information, health services like family planning, seminars to educate women and to help them have knowledge on how to change their fertility behaviour.

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