

**TREND OF THE DETERMINANTS OF FERTILITY
INTENTION AMONG WOMEN IN NIGERIA.**

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**A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF
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CERTIFICATION


This is to certify that Olusegun James Braimoh of the Department of Demography and Social Statistics, Faculty of Humanities and Social Sciences, carried out a Research on the Topic **“Trend of The Determinants of Fertility Intention Among Women in Nigeria.”** in partial fulfillment of the award of Bachelor of Science (B.Sc.) in Federal University Oye-Ekiti, Nigeria under my Supervision

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DEDICATION

This project is dedicated to the God Almighty, my maker, keeper, source and substance and strength. His grace and mercy has enabled me to successfully complete this stage of my life.

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With the highest heights of gratitude and the lowest depths of humility, I acknowledge God the All-knowing, All-Powerful and All-Being, whose autocracy cannot be questioned for HIS unconditional love, ever-sufficient provisions, never-failing strength, ever-present grace and ever-abounding mercies that saw me through my stay in Federal University, Oye-Ekiti, Ekiti state, Nigeria. I also give high thanks to the Holy Spirit, my personal friend and close companion in times of thick and thin. I was able to these because you were with me at every step of the way.

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ABSTRACT

In Nigeria, the subject of deciding whether or not to have another child has been overly based on the desire of women for the choice of a preferred family size, as well as some socio-demographic, socio-cultural and socio-economic characteristics. Thus, the need for further studies on the determinants of fertility intention cannot be overemphasized. This research examines a trend in the determinants of fertility intentions among Nigerian women using the Demographic and Health Survey women recode dataset for 2003, 2008 and 2013. Three levels of analysis were used in this study. Multinomial Logistic Regression Model was employed in multivariate analysis. Findings revealed that more women wanted to have another child in 2003 than 2008 and 2013 combined. This paper also revealed that socio-demographic and socio-economic characteristics such as education, place of residence, region, wealth status, number of living children, occupation, age, religion and marital status have a significant influence on fertility intention and behaviour among women in Nigeria ($P < 0.05$). Women with 5 or more children are less likely to want more children, while women aged 25-34 having another child is 83%, and 70% of women in the ages above 35 were undecided about their fertility intention.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Fertility intentions are central to discussions of family planning and fertility rates in developed countries. Whether implicit or explicit, behind the emphasis on fertility intentions is the assumption that, at least in developed countries with readily available contraception, having a child is the result of a reasoned decision. (Abma, and Henshaw 2012).

Fertility desires are also known to reflect subsequent fertility behaviour, therefore, understanding these desires therefore could help in planning strategies to modify fertility behaviour.

Nigeria's population was estimated to be over 158 million in 2010 (PRB, 2010) with a fertility rate of 5.7 (NPC and ICF Macro, 2009), making it the eighth most populous nation in the world. Nigeria's reproductive indices are also very worrisome with a maternal mortality ratio of 545/100,000 live births, infant mortality rate of 75 /1000 live births, under-five mortality rate of 157/1000 live births (NPC and ICF Macro, 2009) and an estimated yearly prevalence of induced abortion of 760,000 (Bankole et al., 2006).

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 demographic 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). Also in spite of a high awareness of contraception, contraceptive prevalence for modern contraceptives in the country has remained low (NPC and ICF Macro, 2009, Oye-Adeniran et al., 2006; PRB, 2010).

Studies have shown that those who begin child bearing early and those who begin late have increased odds for unmet fertility desires (Bankole and Singh, 1998; Ibisomi et al., 2011). Also, women with low levels of education, from poor households, rural residents as well as those who had experienced child death were at a higher risk of unmet fertility desires (Ibisomi et al., 2011). Even infection with some diseases such as HIV does not seem to negatively modify the fertility intentions of some patients. A study among HIV positive patients also showed that majority of them intended to have more than two children (Oladapo et al., 2005; Iliyasu et al., 2009).

Studies have also shown that a woman's fertility intention fairly forecasts subsequent fertility behaviour of such a woman hence intentions must be taken seriously and come in useful in policy formulation and design of strategies for achieving fertility targets (Poo and Nai, 1994; Schoen et al., 1999; Kodzi et al., 2010). Indeed, the National Demographic and Health Survey, (NDHS) regularly includes fertility desires or intentions as part of its evaluations (NPC and ICF Macro, 2009; NPC, 2004b).

Demographers study fertility intentions for at least two reasons (Philipov 2011). First, they use intentions to help predict fertility rates in a given population. Early research suggested that these predictions tend to be quite accurate at the macro level: Realized fertility rates were found to correspond quite closely to mean family size intentions (Morgan 2005). For example, in the 1930s, the mean intended family size in a sample of about 300 U.S. couples

was 2.7; twenty years later, the actual family size was 2.6 (Westoff et al. 1957). In a later study (Bumpass and Westoff 1969), mean desired family size among couples with 2 children was 3.3, and actual completed family size was also 3.3. However, at the individual level, this research documented considerable over- and under-estimates of completed family size. For instance, Bumpass and Westoff (1969) reported a correlation of 0.56 between women's intended and actual family size. Similarly, in the first wave of a survey of white women with one child (Schoen et al. 1999), the correlation between intentions to have another child and giving birth to a child in the following five years was 0.98 at the aggregate level but only 0.46 at the individual level. The contrasting findings regarding aggregate- versus individual-level correlations are explained by the fact that the number of unwanted children tends to be balanced by the number of unrealized intentions. Thus, in the Bumpass and Westoff survey, 30% of the women had more children than intended, while an equal percentage had fewer children than intended.

More recent research in developed countries has revealed a consistent "fertility gap." Although the desired family size varies greatly across European countries, the ideal number of children in the completed family usually exceeds the actual number (Coleman 1996; Goldstein, Lutz, and Testa 2003). In 2006, for example, the mean desired number of children in Ireland was about 3, while the actual fertility rate in that country was slightly less than 2 children per woman. Similarly, in Austria the ideal number of children was only about 2, yet the actual fertility rate was even lower at about 1.3 (OECD 2010a).

These kinds of findings have led many demographers to pursue a second aim in their research on fertility intentions; namely to further our understanding of the factors that are responsible for the realization or frustration of these intentions. The focus of this stream of research has been on demographic, economic, and societal variables, both micro- and macro- level, believed to influence fertility rates. The research results are mixed and appear to be contingent on the contextual factors included in the model. To illustrate, the OECD's

explanation of changes in fertility rates emphasizes the effects of both demographic and societal changes – increases in education and labor force participation, changes in patterns of union formation and child rearing, changing societal norms and individual values about the role of women – and the interactions among these variables, and concludes that female labor force participation has a positive impact on fertility (D'Addio and d'Ercole 2005). On the other hand, studies that observe similar variables but control for country-level effects find that total fertility rate decreases with increases in female employment. When Del Boca, Pasqua, and Pronzato (2009) controlled for income and level of education of the individuals in their multi-level study, they found differences in the effects of national policies on childcare arrangements, parental leave, family allowances and labor market participation. Thus, this line of research, and its strong link to discussions of policy Thévenon (2011), affirms an underlying assumption that factors such as income, education, availability of child-support services, values, societal norms, and policies can help account for the extent to which fertility intentions are realized.

The study of fertility intentions has become central in the discussion of fertility rates in developed countries, under the realistic assumption that, in an almost perfect contraceptive regime, having a child is a result of a reasoned, although imperfect, decision. Whereas fertility intentions have been a central theme in demographic research for some time, it has received renewed attention in recent years since intentions are now frequently analyzed in the framework of Theory Planned Behavior (hereafter, TPB), a general psychological theory concerning the link between attitudes and behavior (Ajzen, 1991, 2005; Ajzen & Fishbein, 1980; Fishbein & Ajzen, 2010). Billari, Philipov, and Testa (2009), as well as Ajzen and Klobas (2013), specifically discuss the possible application of TPB in the fertility domain. Fertility outcomes, according to TPB, are seen as depending directly on fertility intentions, which in turn depend directly on attitudes (related to the perceived benefits and/or costs of

reproduction), subjective norms (related to the social approval of behavior from relevant others), and perceived behavioural control. Possible constraints can further intervene from the time the fertility intention was formed and the subsequent behavior (such as a disruption of the couple's relationship or changes in individuals' health conditions or job status). This multi-factor paradigm is expected to depend on several background factors as well (such as socioeconomic and demographic factors). Whether TPB is a valid framework for analyzing human fertility is, however, a hotly debated issue (Ajzen, 2011; Barber, 2011; Klobas, 2011; Liefbroer, 2011; Miller, 2011; Morgan & Bachrach, 2011; Philipov, 2011) and, apart from the theoretical debate, there are only few attempts to test the TPB.

1.2 Statement of the Problem

The Total Fertility Rate (TFR) is 5.5 children per woman in Nigeria (NDHS, 2013). This is considered high and is attributed in part to low use of contraceptives in Nigeria (United Nations, 2009). In the last three decades, most of the family planning interventions have focused on unmet needs of women. As such, a response to such assumption is the great investment by stakeholders on developing various modern contraceptive methods for females (Westoff and Bankole, 1995). In recent times, there is an increasing body of literature about the role of men in contraceptive use (Bankole et al, 2009; Oye-Adeniran et al, 2005, Odu OO et al, 2006). These studies came about as a result of the inconsistency observed with women's inability to match their reproductive intention with reproductive goals despite all the focus on them (Doodoo, 1998). These studies acknowledged that men in developing regions such as in the Sub-Saharan Africa make most of the decisions that shape family formations and as such, the assumption that the use of contraceptives and pregnancy prevention are domains for women alone is only painting the picture from one perspective. The evident mismatch in the fertility intention and fertility outcome of women is because of the great influence that men have on family decision. Since the males are influential when

it comes to decision making in households, there is a need to focus studies on males especially with regards to their contraceptive use. The reason for this is because ambivalence in women's fertility intention is evident and fertility levels continue to be high. Therefore, if male reproductive intention often dominates females, the understanding of how men's fertility intention influences their contraceptive use is vital to fertility outcome in households.

1.3 Research Questions

1. What are the trend of fertility intention among women in Nigeria?
2. Is there any association between fertility intention of Nigerian women and their fertility behaviour?

1.4 Research Objectives

1.4.1 General Objective:

To examine the fertility intentions of women aged 15-49 in Nigeria.

1.4.2 Specific Objectives:

1. To examine the fertility intention and fertility pattern of women aged 15-49 in Nigeria.
2. To examine the socio-demographic and socio-cultural characteristics and fertility intentions among women between 2003 and 2013

1.5 Justification of the Study

A reason for the mismatch in women's fertility intention and contraceptive behaviour of women may be due to the influence of the fertility intention of their male partners. Studies have also shown that males are main decision makers on fertility issues and as such have great impact on the fertility intention and contraceptive use of their female partners (Agadjanian, 2006; Isiugo-Abanihe 1994, Ezeh 1996, Dodoo 1998). Furthermore, some

studies have shown that men's preferences are better predictors of women's contraceptive use than women's (Dodoo 1998; Dodoo and van Landewijk 1996; Bankole and Singh 1998). Given that fertility intention of men often dominate in their female partner's contraceptive use and fertility intention in households (Ibisomi & Odimegwu, 2011; Govinda et al, 2008; Dodoo et al, 1997), could the fertility intention of males therefore predict their contraceptive use in households? This study seeks to examine the association between fertility intention and contraceptive use among males in Nigeria. It will also contribute to the existing body of knowledge on reproductive health issues in Nigeria because if the fertility intention of males has an effect or corresponds to their modern contraceptive use, the implication is that since the males are dominant forces in decision making, programs will be needed to educate men to embrace small family sizes.

CHAPTER TWO

2.1 Fertility Intention

Researchers have attempted to look into fertility preference of different populations and in the course of doing this; several measures have been used to derive their hypotheses. The form and the interpretation of the questions being asked respondents brought about different labelling of the questions. Measures like desired family size, ideal number of children, fertility preference, desire for additional children and fertility intention have been used in surveys. Some of these questions require the respondents to answer retrospectively while others are to be answered prospectively. Some of these measures have their perceived flaws as regards fertility measurement indicators. For example, desired family size refers to the number of children that the respondent would have had irrespective of the number he/she already has. This is more of a retrospective question and this may lead to some bias due to the fact that most respondents may state desired family size that is close to their number of living children (Bongaarts, 1990).

Questions about desire for another child which is often referred to as fertility intention are generally thought to have less error since it is a prospective response. According to Bongaarts, questions on if an individual wants another child which he referred to as fertility or reproductive intention and dubbed fertility preference in the Demographic Health Survey questionnaire are relatively unbiased, though not completely free of error. The explanation for some of the expected error in response is because respondents may misinterpret the question and also chances are high that respondent who want to have child spacing for five years may behave like those respondents who want to stop child bearing (Bongaarts, 1990). However, the use of fertility intention in studies regarding contraceptive to see its influence on contraceptives use can be held as valid since contraceptive use has been noted to be more prevalent especially couples want to limit childbearing or want to space their children

(Bongaarts, 1992). Furthermore, studies have shown that there is an association between fertility intention and contraceptive use (Feyisetan & Casterline, 2000). One of such studies was done by Feyisetan and Casterline in 2000. They examined 22 Latin-American, Asian and African countries in the period between 1970 and 1990 by applying regression decomposition techniques, and using the World Fertility Survey and the Demographic and Health Survey data. They found that change in contraceptive prevalence is due to changes in fertility intention. Changes in preference accounted for more of the increase in contraceptive prevalence in Africa more than in other regions (Feyisetan & Casterline, 2000). Fertility intention is therefore, an important measure that may influence the use of modern contraceptives. In Sub-Saharan Africa, males have a higher chance to be literate and have better access to education (USAID, 2008). This translates that men are in a better position than women to inform themselves about what is best for the family reproductive health. We therefore ask whether there is evidence that the educational attainment level of males and their modern contraceptive usage are linked in any way. Understanding how education of males influences their behaviour and reproductive decisions in the household is important since education accounts for trends in various demographic dynamics. Some studies have shown a significant relationship between education and contraceptive use (Ezeh 2006). In a different study carried out by Cochrane in 2008, it was noted that education was positively associated with birth regulation, increased awareness and use of modern contraceptive methods. The study argues that educated men prefer to have small families because they are more likely to have views and lifestyles that are consistent with lower fertility and higher quality of children (Cochrane, 2008). Amin in 2010 conducted a study on men in Bangladesh and found that education increases contraceptive use and reduced fertility and the pattern of these effects is much higher among educated respondents beyond the primary level as compared with those educated only at primary level and below (Amin, 2010). Occupation is another likely

predictor of contraceptive behaviour. A Nigerian study which reveals that desired fertility is lower for women married to husbands employed outside agriculture, when compared to those in the agricultural sector and this in turn affect contraceptive use by the male (Bankole et al., 2000). The suggested interplay of variables is that the higher the educational level of men, the higher their likelihood to be in high paying jobs which in turn influence their family size and choice of contraceptive method. The link between education and occupation as important predictors of contraceptive behaviour can be extended to the living standard of a man. Men who have improved living standards are likely to be educated, literate and thus have better knowledge of modern contraceptive methods. Therefore, they are more likely to use contraceptives since that they can also afford it. A cross sectional study of men's attitude and participation in family planning were explored statistically using 150 married male respondents currently working in The Islamia University of Bahawalpur in Pakistan. One significant factor that influenced male contraceptive use was income level. The size of the study population may not be convincing to infer on conclusively, this study however has provided some perspectives on the role and responsibility of males in family planning (Abdul et al, 2010). Some studies on women have also found that rich women were more likely to use effective contraceptive methods when compared to poor women (Creanga et al, 2011) and in line with this, Kanazawa suggests that although higher status groups have a higher sexual frequency but more contraceptive use prevents this frequent coition from being translated into higher fertility (Kanazawa, 2003).

2.2 FACTORS INFLUENCING FERTILITY INTENTION

The factors influencing fertility intention of women are grouped into three (3) categories which are the *socio-demographic, socio-cultural and the socio-economic factors*.

2.2.1 Socio-Demographic Factors

2.2.1.1 Number of Living Children

Number of living children a person has can have an influence on modern contraceptive use because there is a tendency that the desire for additional children may decrease as number of living children increases. This assumption is based on the fact that economically, world economy is not improving and the cost of raising children in recent times is higher than before although, it is a general belief that men in Sub-Saharan Africa are lovers of children based on different reasons which is mostly cultural. It may be unsafe to say therefore, that because African males are supporters of high fertility that they are less likely to want to limit or stop fertility at some point especially as their parity increases. In reacting to this view, the need to attest to whatever kind of association that exist between the number of living children and contraceptive use, and on what population is imperative to studies around the subject as number of living children is a more direct influence on male contraceptive use (Ringheim, 1993). A study carried out on women in Orissa found that one –third of the women with one child used a method of contraception. That suggests that the use of contraceptives at lower parities is low and therefore concludes that there is an association between the number of living children and contraceptive use. Furthermore, the modern contraceptive uptake increases with numbers of living children (Sahoo, 2007). Although this study was done on women, it is still a pointer to the fact that there is an association between the numbers of living children and use of contraceptive. This study although was carried out on women, in a different study in Nepal on 1041 married males using the Nepal DHS 2001. Couple dataset was used and multinomial logistic regression analysis. These males were of ages 20 or more who had at least one living child and did not want another child. The main objective of the study was to examine if the sex number of living children

could influence modern contraceptive use. The result shows that the chances of using permanent or modern contraceptive methods was highest among men who had at least two living sons and lowest among the men who had daughters only. The result further showed that the likelihood of using no method was highest among those who had only daughters irrespective of the parity. Men who report a desire to have no more children are likely to choose permanent methods only after they have two living sons (Dahal et al, 2008).

2.2.1.2 Place of Residence

Place of residence is often used to explain variation in factors about demographic and population studies. A Nigerian study interviewed 1,540 respondents from the three main regions namely Northern, Western, and Eastern on their contraceptive use. The analysis shows that different factors significantly affect the choice of contraceptive use in the different regions. Result showed that there were regional variations on factors that influence contraceptive use. Contraceptive use is less practiced in the North compared to other regions. According to the authors, the reason for this disparity is low level of education and awareness in the north and secondly is the regions religious background (Odimegwu et al, 2004). The examination of the association between male contraceptive use and age is important in the studies on contraceptive use. It is expected that younger and older men are likely to have different reproductive objectives. One of the reasons for people in different age bracket to have varying reproductive objectives is that older men probably are holding on to the traditional big family size which may discourage the use of contraceptives especially in developing countries. In contrast, younger males may just be getting into reproductive stage and as such their contraceptive use may be low because they are likely to still be at lower parities (Dahal et al 2008).

2.2.1.3 Age

It is important to know that age also influences the method of contraceptive they use. Younger men often opt for the spacing methods if at all they have to use modern contraceptives while the older men go for methods like sterilization as they are more likely to have attained their desired fertility (Ringheim, 2007). A study carried out on Yoruba men on the relationship between age and contraceptive use also found that men of lower age 15 – 24 have high uninterrupted use of contraceptive compared to men in age 34 and above. A reason for this is that men of younger ages are probably still in school and cannot afford the burden of childbearing and as such stick to contraceptive use to prevent unwanted pregnancy (Adewuyi & Ogunjuyigbe, 2003).

There have been mixed findings on the association between marital status and contraceptive use. A cross sectional study among women in a community in Nigeria showed a positive association between marital status of women and contraceptive use (Oye-Adeniran et al, 2006). Marital status was also a significant predictor of contraceptive use in a study carried out by Ankomah et al in 2011 in Nigeria (Ankomah et al, 2011). Ringheim in 1993 also found that most men believe that men should share fertility regulation responsibilities with their partners, but only a small proportion do so. He explained that limited contraceptive choices for men may also explain this inconsistency (Ringheim, 1993). It is important to explore how this predictor influences the contraceptive use of Nigerian males.

2.2.1.4 Religion

A body of evidences exist which demonstrates that use of contraceptives is associated with religious and belief of individuals (Warwick, 2009). Religious affiliations affect customs and practices of individuals regarding general norms which include modern contraceptive use. The belief system that is propagated by a specific religion influences even the

contraceptive method to be used. For instance, sterilization is not an acceptable contraceptive method among Muslims and Catholics (Ringheim, 1993).

According to Warwick, most times religious values create an important barrier for family planning practices (Warwick, 2009) and a study by Jones and Dreweke found that some individuals view the use of contraceptives as unacceptable due to their religious belief. For example contraceptive use is strongly opposed to by the doctrines of the Catholic Church and some other socially conservative religious organizations including Islamic fundamentalist (Jones and Dreweke, 2011). There have been mixed reports on how religion affects contraceptive use in a population depending on the religious composition of that particular population.

2.3 Socio Cultural Factors

A study in Ghana by Tawiah in 2011, the study surprisingly found that socio cultural variables such as religion and ethnicity do not have any significant effect on current use of contraceptives. A possible explanation is that, once a person attains a higher educational status, his ethnicity and religious affiliation does not significantly influence his current contraceptive use (Tawiah 2011). Contrary to this evidence, a study done on Nigerian males from the Yoruba ethnic group found that men who are Catholics had a significant lesser odd of using modern contraceptives when compared to men that were Muslims (Adewuyi & Ogunjuyigbe, 2003).

As fertility remain high and lack of progressing the pace of fertility transition in Sub-Saharan Africa, some studies have shown that the quest for smaller family sizes is increasing in the region. Despite the increase in demand for small family sizes, effective contraceptive use is low and the level of unmet need is still high. So, due to low use of contraception

among other reasons in many of these countries, the number of children partners are having is greater than what they want to have (Sedgh G et al, 2007).

There are different types of contraceptives which can be broadly categorized as modern (effective) and non-modern (ineffective) methods. Modern methods of contraception include sterilization for male and female, pills, Intra-Uterine Devices (IUDs), male and female condoms. Others are injectables, implants (including Norplant), and vaginal barrier methods. Non-modern techniques of contraception include periodic abstinence, withdrawal method, lactation amenorrhea method (LAM) and folkloric methods. All of these contraceptives methods are used mainly as preventive measures of except male and female condoms. Condoms have a two-way function of pregnancy and sexually transmitted infections prevention (WHO, 2009).

2.4 Contraceptive Use

The use of contraceptive is inevitable for those who are in their reproductive ages whose intention is to postpone a birth or who do not want any more children, and those who are not ready for a birth at all. However, those who are faced with a contraceptive need may choose from a variety of contraceptive method and may as well decide not to use a method (Rindfuss et al, 1989). Proximate determinants of fertility include contraceptive use and these determinants of fertility are behavioural variables through which socio-economic and other biological variables work to influence fertility rate in a population (Bongaarts 1987, 1978). In countries in which fertility reduction is prominent, evidences have shown that various fertility reducing variables are thought to be responsible for this population decline (Cohen, 1998), and among these fertility reducing variables, modern contraceptive use is the main factor affecting inter country variation when these countries are compared (Kirk and Pillet, 1998). Family planning acceptance in Africa region has for long been low and the low contraceptive prevalence can be said to have influenced the resulting high fertility

rates in Sub Saharan Africa compared to other parts of the globe. World Bank in 2009, reports that the average number of births for woman in Sub-Saharan Africa was (5.1). These statistics showed that average number of births per woman in Africa is more than doubled as much in South Asia with (2.8) or Latin America and the Caribbean with (2.2). The contraceptive prevalence (22%) for Caribbean, is almost half that of South Asia with (53%) and less than one- third of what is observed in East Asia with 77% (World Bank Report, 2009); Due to these patterns, Africa's population is growing at a fast rate (2.3%) compared to other regions in the developing world, which includes both some part of Asia and Latin America (1.1% each) (UN DESA 2008). Low contraceptive prevalence in Sub-Saharan Africa has been attributed to high cultural and religious influence which promotes resistance to family planning practice (Caldwell and Caldwell 1987). Although contraceptive usage increased in some African countries, the increase that is observed is very modest. The Contraceptive Prevalence Rate (CPR) which is the proportion of women of reproductive ages who uses modern contraceptive methods differs across Sub-Saharan African countries (UNDP, 2009). Western and Central African countries reported very low rates of family planning uptake. Low contraceptive prevalence rates in the world can be observed in this sub-region with Chad with at 1.7%, Niger 5%, Nigeria 9.1% and Central African Republic with 8.6% (UNDP, 2009). It is imperative to study factors that predict modern contraceptive use in one of these countries with low contraceptive prevalence; in this case - Nigeria. Emphasis will be laid on whether the fertility intention of males especially influences their use of modern contraceptives. This literature review comprises four parts. The first part is fertility intention factor. The second part is socio-economic factors; the third part is socio demographic factors while cultural factor is in the fourth part.

2.5 THEORETICAL FRAMEWORK

A theory on fertility can usefully support the application of a theory on intentions. Based on the economic theory on fertility and the theory of planned behaviour, I would place factors describing the economic situation of the individual among the background factors and in the perceived behavioural control, provided relevant measurement is available. Demographers need a theory on fertility intentions if only for the purpose of understanding and predicting better fertility behaviour. Regrettably, we are at present disposed of just one theory: theory of planned behaviour.

2.5.1 The Theory of Planned Behaviour and Unintended Births.

This approach is based on the theory of planned behavior (TPB; Ajzen 1991, 2005, 2012) and we try to show how this theory can contribute to our understanding and modeling of the social psychological processes involved in forming the intention to have (or not to have) a child. According to the theory of planned behaviour, the intention to have or not to have a child is determined by three kinds of considerations (see Ajzen 2013). The first is termed *behavioral beliefs*; it refers to the perceived positive or negative consequences of having a child and the subjective values or evaluations of these consequences. In their aggregate, 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.

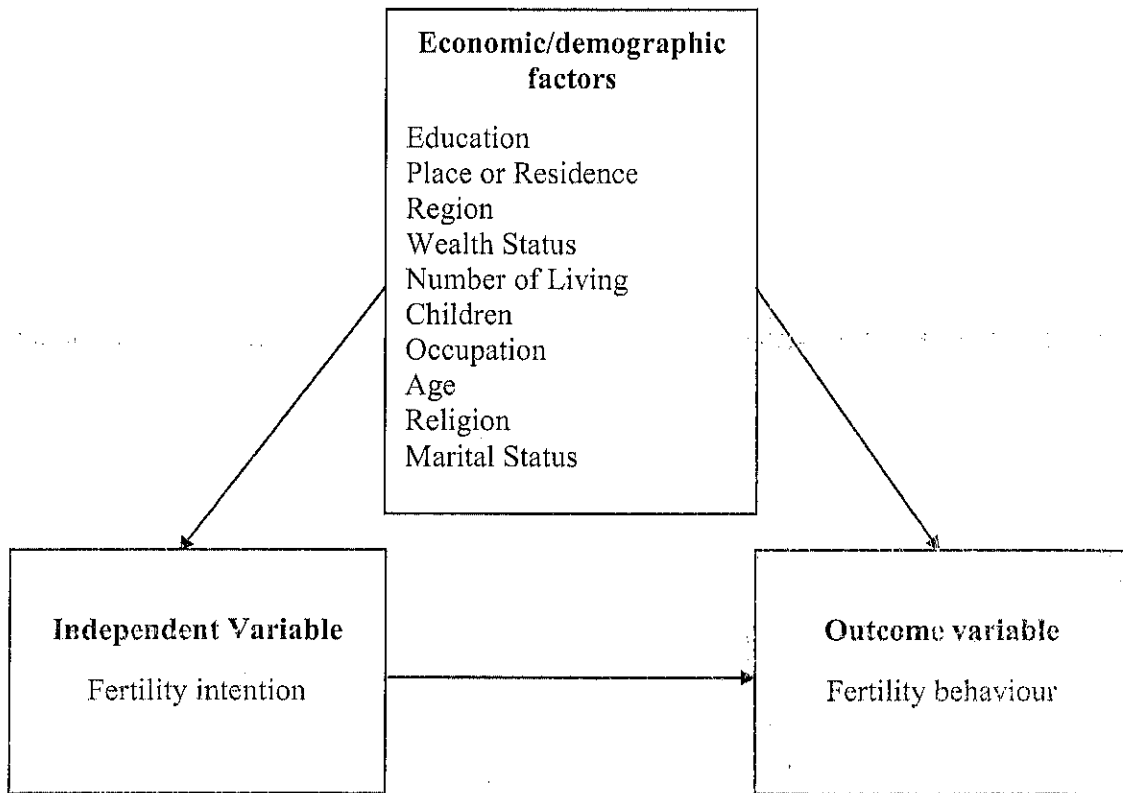
In the present article we focus on a different, though related, issue that has received much less attention in demographic research, namely the question of what determines fertility intentions in the first place. Our approach is based on the theory of planned behavior (TPB; Ajzen 1991, 2005, 2012) and we try to show how this theory can contribute to our understanding and modeling of the social-psychological processes involved in forming the intention to have (or not to have) a child. Briefly, according to the TPB, the intention to have or not to have a child is determined by three kinds of considerations (see Ajzen 2013). The first is termed *behavioral beliefs*; it refers to the perceived positive or negative consequences of having a child and the subjective values or evaluations of these consequences. In their aggregate, 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

intentions 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. However, in many applications of the TPB, it would be difficult or impossible to identify all the factors that influence actual control over performance of a given behavior. For this reason, investigators typically use perceived control as a proxy for actual control under the assumption that perceptions of control reflect actual control reasonably well.

2.6 CONCEPTUAL FRAMEWORK

This study aims to examine the association between fertility intention among women in Nigeria and their fertility behaviour. The review of several literatures revealed some of the important factors that influence fertility behaviour. This includes socio-demographic, socioeconomic and sociocultural.

Figure 2: Conceptual framework showing the model selecting factors affecting fertility behaviour.



Sources: Author's Work 2016.

2.7 Hypotheses

H₀: There is no significant relationship between fertility intention and socio-demographic characteristics of women aged 15 – 49.

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, method of data analysis and limitations of the study.

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 people considered as eligible respondents in this study are women from all the 6 geo-political regions of Nigeria.

3.3 Sources of Data

This study analyses data from the women recode data of the NDHS datasets from 2003, 2008 and 2013. The three datasets will be pooled together.

3.4 Sample Design for the 2013 NDHS

The 2013 NDHS will be nationally representative. 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. It also provided population and health indicator estimates. The sample design allowed for specific indicators to be calculated for each of the six zones, 36 states, and the Federal Capital Territory, Abuja.

All 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. In a subsample of half of the households, all men age 15-49 that

were either permanent residents of the households in the sample or visitors present in the households on the night before the survey were eligible to be interviewed. Also, a subsample of one eligible woman in each household will be randomly selected to be asked additional questions regarding domestic violence.

3.5 Sample Design for the 2008 NDHS

The sample for the 2008 NDHS also provided population and health indicators at the national, zonal, and state levels. The sample design allowed for specific indicators, such as contraceptive use, to be calculated for each of the 6 zones and 36 states plus the Federal Capital Territory, Abuja. The sampling frame also consisted of the 2006 Population and Housing Census (NPC, 2006).

The primary sampling unit (PSU), referred to as a cluster for the 2008 NDHS, is defined on the basis of EAs from the 2006 EA census frame. The 2008 NDHS sample will be selected using a stratified two-stage cluster design consisting of 888 clusters, 286 in the urban and 602 in the rural areas. A representative sample of **36,800** households will be selected for the 2008 NDHS survey, with a minimum target of 950 completed interviews per state. In each state, the number of households will be distributed proportionately among its urban and rural areas.

3.6 Sample Design for the 2003 NDHS

The sample for the 2003 NDHS will be designed to provide estimates of population and health indicators (including fertility and mortality rates) for Nigeria, including urban and rural areas, and six major subdivisions. A representative probability sample of **7,864** households will be selected for the 2003 NDHS sample. The sample will be selected in two stages. In the first stage, 365 clusters were selected from a list of enumeration areas developed from the 1991 population census. In the second stage, a complete listing of households will be carried out in each selected cluster. Households were then systematically selected for participation in the survey. All women age 15-49 who were either permanent

residents of the households in the 2003 NDHS sample or visitors present in the household on the night before the survey were eligible to be interviewed. In addition, in a subsample of one-third of all households selected for the survey, all men age 15-59 were eligible to be interviewed if they were either permanent residents or visitors present in the household on the night before the survey.

3.7 Measurement of Variables

The analysis examined the power relations and the use of contraceptives among women in Nigeria, the general binary logistic regression model used for the multivariate analysis is:

3.7.1 Dependent variable: Fertility Intention

This study used the NDHS concepts of fertility intention from the 2003 – 2013 data sets.

3.7.2 Independent variables

3.7.2.1 Socioeconomic characteristics

- 1. Age:** The age of women will be measured from the NDHS using the grouped age of respondents in a five-year age group 15-19, 20-24, 25-29, 30-34, 35-39, 40-44, and 45-49.
- 2. Place of Residence:** Urban and rural.
- 3. Level of Education:** This is a categorical variable that is divided into four categories. These are No Education, Primary, Secondary and Higher Education.
- 4. Religion:** The religion of the respondents was measured in three categories; the first groups were Christians, which will be the combination of Catholics and other Christians and will be coded as 0 = Christian, the second group will be Islam, will be coded as 1 = Islam, the last group are the traditionalists, which will be coded as 2 = Traditional.
- 5. Wealth Index:** The wealth index is a categorical variable, which will be divided into three categories; Poor, Middle, Rich.

6. Exposure to Mass Media: This is measured using variables on the NDHS data that asked questions on whether the women have heard of family planning on radio, television and newspaper in the last 12 months.

3.7.2.2 Decision Making

This study measured the extent of couple's participation in household decision making in the following areas; (a) who makes decision on health care, (b) who makes the decision on family visits. Response for the women were recoded as 1 "Wife alone", 2 " Husband alone", 3"Joint decision"

3.7.2.3 Resource Control Variables

This will be measured by the resource control among women, which includes control over large household purchases and control over household's cash earnings. The responses were recoded as 1 "Wife alone", 2 " Husband alone", 3"Joint decision"

3.7.2.4 Force Variables

Force variable for this study is measured in form of physical violence among women. This reveals the level of intimacy between women. The variable is measured under five hypothetical scenarios – this is if the husband is justified to hitting/beating his wife in the following situations, (a) if she goes out without telling him (b) if she neglects the children (c) if she argues with him (d) if she refuses to have sex with him (e) if she burns the food (NDHS, 2013). The responses are classified into three. If the respondents say No, it will be coded as '0', if yes it will be coded as '1'.

3.8 Data Processing and Analysis

The NDHS datasets from 2003, 2008 and 2013 women recode will be pooled, processed and analyzed using STATA application package (STATA 12.0). 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.

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 chi-square (χ^2) test to show the association between use of fertility intention and the various socio economic and demographic characteristics that are categorical variables in the datasets. Furthermore, binary logistic regression is used in the multivariate analysis to identify the strength of association and examine predictors of fertility intention in the study area.

CHAPTER FOUR

4.0 DATA ANALYSIS, PRESENTATION AND INTERPRETATION

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

Table 1: Socio – Demographic Characteristics of Respondents

Variable	2003 (%)	2008 (%)	2013 (%)
Age (in years)			
15 – 24	40.7	36.2	36.6
25 – 34	31.2	33.5	32.7
35+	28.1	30.2	30.2
Educational Status			
No formal Education	42.5	36.2	37.9
Primary	21.1	19.7	17.3
Secondary	30.4	34.9	35.6
Post-Secondary	6.0	9.2	9.2
Religion			
Christian	28.0	53.6	47.1
Islam	19.2	45.0	52.0
Traditionalist	52.7	1.4	0.9
Household wealth index			
Poor	37.5	37.2	37.4
Average	19.9	18.9	19.1
Rich	42.5	43.9	43.6
Contraceptives use			
No	88.4	84.4	83.9
Yes	13.6	15.6	16.1
Place of residence			
Urban	34.5	36.0	42.5
Rural	66.5	64.0	57.5
Occupational Status			
Not working	40.9	36.4	36.0
Working	59.1	63.6	64.0
Decision maker			
Wife	14.2	2.9	2.5
Husband	61.3	47.1	51.6
Joint decision	24.5	50.0	45.9

Source: NDHS Datasets 2003 – 2013

Table 1: Socio – Demographic Characteristics of Respondents (Continued)

Force			
No	75.9	88.1	90.2
Yes	24.0	11.9	9.8
Children Ever Born			
None	29.3	28.1	28.2
1 – 4	40.1	42.0	42.0
5+	30.6	29.9	29.8
Number of Living Children			
None	31.1	29.4	29.3
1 – 2	27.0	25.5	25.3
3 – 4	20.5	23.4	23.0
5+	21.4	21.7	22.4
Fertility Intention			
Have another	14.2	2.9	2.5
Undecided	61.3	47.2	51.6
No more	24.5	49.9	45.9

Source: NDHS Datasets 2003 – 2013

Majority of the women (40.7%) belonged to the age group 15-24 in the 2003 dataset, 36.3% in 2008 and 36.6% in 2013. With regards to the respondent's educational status, majority of the women in the 2003 dataset had no formal education (42.5%), 36.4% in 2008 and 37.9% in 2013 dataset. Majority of women in the 2003 are Traditionalists (52.7%), 53.6% are Christians in the 2008 dataset and 52% practice Islam. With regards to the household wealth index, majority of the respondents belonged the rich category in all the datasets, 42.5%, 43.9% and 43.6% respectively. Contraceptives use among women in Nigeria has been generally low, only 13.6% of women used any form of contraceptives in 2003, 15.6% in 2008 and 16.1% in 2013. Majority of the women lived in urban centers, 66.5%, 64.0% and 57.5% respectively. With regards to the household decision making power, the husband was the dominant decision maker in 2003 dataset (61.3%) and 2013 (51.6%). Household where the wife is justified to beating make up a total of 24% in 2003, reduced to 11.9% in 2008

and then 9.8 in 2013. Majority of the women have 1-4 children ever born across the three datasets, 40.1%, 42% and 42% respectively. Sixty-one percent of the women are undecided about their fertility intentions in 2003, 50% want no more children in 2008 and 51.5% are also undecided about their fertility intentions in the 2013 dataset

Figure 1: Chart showing the fertility intentions of women by year

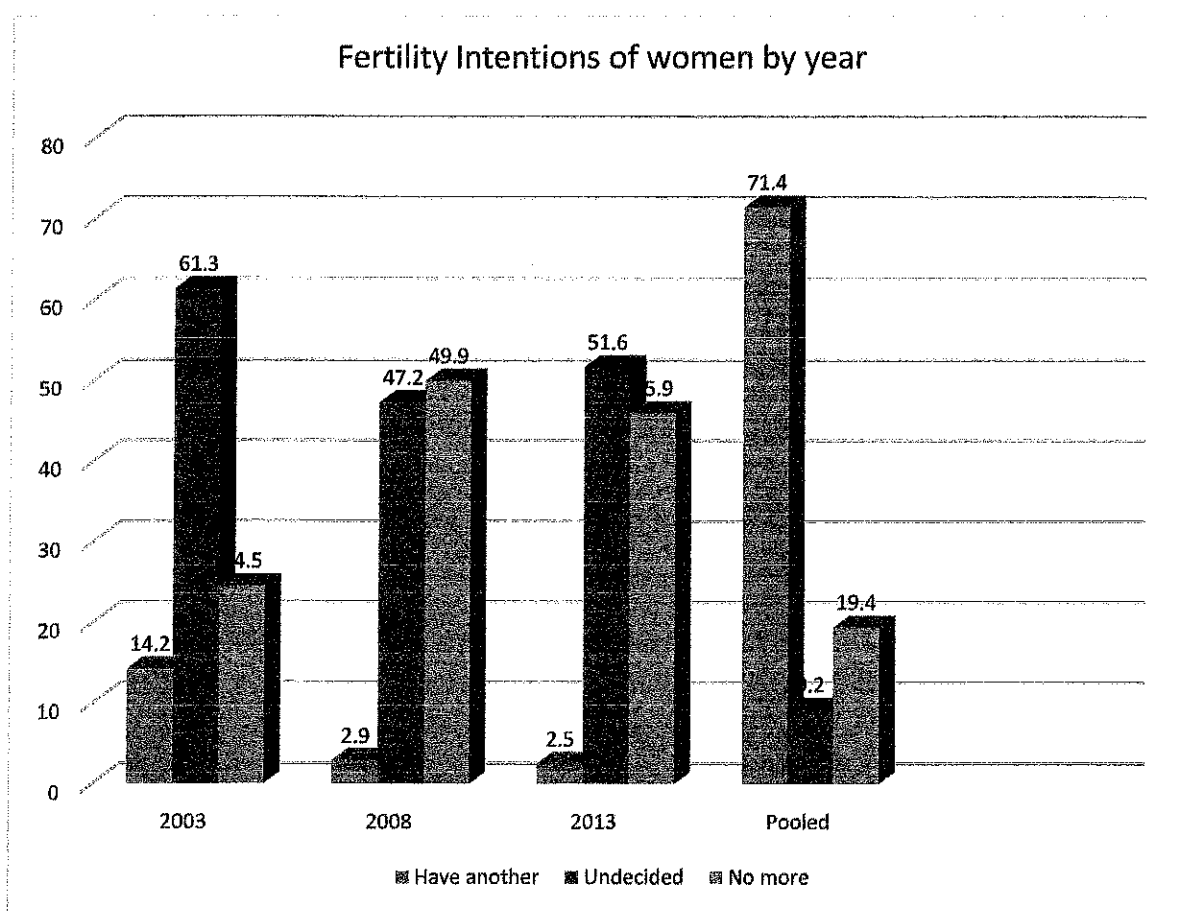


Table 2: Bivariate Analysis: Chi-square (χ^2)

Variable	2003			2008			2013			Pooled		
	Have Another	Undecided	No More	Have Another	Undecided	No More	Have Another	Undecided	No More	Have Another	Undecided	No More
Age (in years)												
15 – 24	48.8	43.2	7.6*	44.8	37.8	5.8*	46.1	29.3	3.6*	45.8	34.4	4.9*
25 – 34	35.5	26.6	13.9	38.2	29.6	17.9	37.1	40.4	15.7	37.4	29.8	15.4
35+	15.7	30.2	78.4	16.7	32.6	76.2	16.8	40.3	80.4	16.8	35.8	78.7
Educational Status												
No formal Education	38.7	28.7	48.9*	38.4	45.6	42.6*	35.2	43.8	33.5*	36.9	44.2	38.7*
Primary	20.2	22.3	26.1	18.6	15.3	26.6	15.5	17.1	28.8	17.2	16.3	27.6
Secondary	34.6	44.3	18.1	34.5	32.7	22.6	39.5	31.3	27.9	37.0	32.6	24.8
Post-Secondary	6.4	4.6	6.9	8.5	6.3	8.2	8.8	7.8	9.7	8.9	6.9	8.8
Religion												
Christian	29.6	48.8	38.4*	50.3	46.3	58.8*	48.8	43.1	61.8*	47.4	45.0	58.4*
Islam	17.9	18.1	20.4	48.0	52.2	38.8	50.4	55.7	36.7	46.1	52.3	35.9
Traditionalist	52.5	34.1	41.2	1.7	1.4	2.4	0.8	1.2	1.5	6.5	2.7	5.7
Household wealth index												
Poor	37.5	35.5	39.0	42.8	45.2	38.6*	37.5	40.8	30.6*	39.6	42.9	34.6*
Average	19.6	22.0	20.0	19.1	19.9	21.6	20.0	19.0	22.1	19.6	19.6	21.7
Rich	42.9	42.5	41.0	38.1	34.9	39.8	42.5	40.2	47.3	40.8	37.5	43.7
Contraceptives Use												
No	87.7	92.5	80.1*	87.9	91.6	79.4*	86.5	87.3	73.2*	87.2	89.8	76.4*
Yes	12.3	7.5	19.9	12.1	8.4	20.6	13.5	12.7	26.8	12.8	10.2	23.6
Place of residence												
Urban	39.5	40.4	41.8	31.6	29.3	33.1*	39.6	37.0	43.8*	36.4	33.1	39.2*
Rural	60.5	59.7	58.2	68.4	70.7	66.9	60.4	63.0	56.2	63.6	66.9	60.8
Occupational Status												
Not working	45.1	52.8	24.1*	41.4	42.2	19.3*	41.7	35.1	14.5*	41.9	39.6	17.4*
Working	54.9	47.2	75.9	58.6	57.8	80.7	58.3	64.9	85.5	58.1	60.4	82.6
Decision maker												
Wife	12.6	21.5	17.6*	1.9	2.9	5.3*	1.7	1.7	5.7*	3.0	3.3	7.0*
Husband	63.2	37.8	46.5	51.1	47.3	36.1	54.4	59.5	36.1	54.1	54.1	37.2
Joint decision	24.2	40.7	33.9	47.0	49.8	58.6	43.9	38.8	58.2	42.9	44.6	55.8
Force												
No	77.0	78.4	77.7	86.2	90.7	89.4*	89.5	91.0	91.3*	86.9	90.3	89.2*
Yes	23.0	21.6	22.3	13.8	9.3	10.6	10.5	9.0	8.7	13.1	9.7	10.8
Children Ever Born												
None	35.8	48.6	8.3*	31.9	33.4	5.6*	35.0	26.6	3.8*	33.9	31.1	5.0*
1 – 4	44.6	20.6	19.6	48.5	31.9	24.9	46.2	30.7	27.9	46.9	31.0	25.9
5+	19.6	30.8	72.1	19.6	34.7	69.5	18.8	42.7	68.3	19.2	37.9	69.1
Number of Living Children												
None	37.7	48.9	8.8*	33.6	34.4	5.8*	36.4	27.2	4.2*	35.4	31.9	5.3*
1 – 2	31.1	10.6	7.8	32.0	16.8	8.5	30.9	14.6	7.3	31.4	15.6	7.8
3 – 4	19.6	19.2	22.5	22.3	22.3	28.2	20.1	25.1	31.0	20.9	23.4	29.1
5+	11.6	21.3	60.9	12.1	26.4	57.5	12.6	33.1	57.5	12.3	29.1	57.8

• Source: NDHS, 2003, 2008 and 2013 *p-value<0.01 and **p-value<0.05; No symbol refers to no significant association

The above table shows the relationship between respondents' socio-demographic characteristics and their fertility intentions,

The table revealed that 78.4% of women age 35 and above in the 2003 dataset wants no more children, 76.2% wants no more children in the same age group in the 2008 dataset and 80.4% wants no more children in that same age group in the 2013 dataset. With respect to the respondent's educational status, 44.3% of the respondents with secondary school education are undecided about their fertility intentions, 34.5% and 39.5% of women with that same educational attainment want to have another child in the 2008 and 2013 dataset respectively. Forty-eight percent of respondents who are Christians wants to have another child in the 2003 dataset, 52% of respondents practicing Islam are undecided about their fertility intentions in the 2008 dataset and 55.7% of respondents of that same religion are undecided about their fertility intentions in the 2013 dataset. With respect to the respondent's household wealth index, 43% and 47.3% of respondents who are rich wants to have another child in the 2003 dataset, about 40% of respondents in that same wealth status wants to have no more child in 2008 and 2013 respectively. Twenty percent of respondents who use any form of contraceptives wants no more child in the 2003 dataset, 20.6% and 26.5% of respondents who uses any form of contraceptives in 2008 and 2013 also reported to want no more children. The 2003 dataset revealed that household where the husband is the major decision maker wants to have another child (63.2%), households where joint decisions are made wants to have no more child in the 2008 dataset and same applies to 2013 dataset with (58.2%). With respect to the number of children ever born by respondents, 72.1% of household with more than 5 children want to have no more children in 2003 dataset, 69.5% and 68.3% of households with more than 5 children ever born want to have no more child in 2008 and 2013 datasets.

Table 3: Multinomial Logistic Regression Model Showing the Effect On the Independent Variables On Fertility Preference Among Women, Reported in Coefficients

Variables	Pooled		2003		2008		2013	
	Have another	Undecided	Have another	Undecided	Have another	Undecided	Have another	Undecided
Age (in years)								
15 – 24	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)
25 – 34	0.83*	-0.38	0.53*	0.04	0.88*	-0.80	0.86*	0.08
35+	2.65*	0.70*	2.63*	0.97*	2.57*	0.60*	2.74*	0.87*
Educational Status								
No formal Education	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)
Primary	-0.03	-0.26*	-0.18	0.19	-0.14*	-0.34*	0.06	-0.15*
Secondary	-0.06	-0.26*	-0.37*	0.25	-0.90	-0.17*	-0.01	-0.28*
Post-Secondary	-0.10	-0.47*	-0.52*	-0.56	-0.16	-0.31*	-0.02	-0.46*
Religion								
Christian	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)
Islam	-0.64*	0.12*	-0.03	-0.20	-0.47*	0.36*	-0.81*	-0.10
Traditionalist	-0.57*	-0.80*	-1.02*	-0.71*	-0.16	0.04	-0.17	0.10
Household Wealth Index								
Poor	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)
Average	0.14*	0.01	0.01	-0.02	0.15*	-0.07	0.17*	0.12
Rich	0.30*	0.72	0.14	-0.16	0.31*	-0.07	0.33*	0.32*
Contraceptives use								
No	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)
Yes	0.82*	0.03	0.57*	0.35	0.75*	-0.13	0.91*	0.29*
Place of residence								
Urban	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)
Rural	-0.14*	0.04	-0.10	-0.36*	-0.17*	-0.03	-0.13*	0.14*
Occupational Status								
Not working	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)
Working	0.07*	-0.09*	-0.01	-0.39*	0.08	-0.12*	0.08	0.06
Decision maker								
Wife	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)
Husband	-0.95*	-0.38*	-0.93*	-0.76*	-0.92*	-0.66*	-0.82*	0.18
Joint decision	-0.65*	-0.20*	-0.57*	0.01	-0.59*	-0.34*	-0.63*	-0.05
Force								
No	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)
Yes	-0.19	-0.55*	0.13	0.33	-0.38*	-0.83*	-0.12	-0.38*

Source: NDHS, 2003, 2008 and 2013 *p-value<0.01 and p-value <0.05; No symbol refers to no significant association *No more (Baseline category)

Table 3: Multinomial Logistic Regression Model Showing the Effect On the Independent Variables On Fertility Preference Among Women, Reported in Coefficients (Continued)

Children Ever Born								
None	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)	1.0(RC)
1 – 4	0.04	-0.26	-0.03	-0.20	-0.29	-0.20	0.30	0.80
5+	10	0.46*	-1.5	0.57*	0.16	0.68*	0.38*	0.74

Source: NDHS, 2003, 2008 and 2013 *p-value<0.01 and p-value <0.05; No symbol refers to no significant association *No more (Baseline category)

The table above shows the results from the multinomial logistic regression. The results revealed that when that data is pooled, the probability of women in age group 25-34 having another child is 83%, and the probability of women in the age above 35 being undecided about their fertility intention is 70%. In the 2003 dataset, the probability of women in age group 25-34 having another child is 53%, and the probability of women in the age above 35 being undecided about their fertility intention is 97%. In the 2008 dataset, the probability of women in age group 25-34 having another child is 88%, and the probability of women in the age above 35 being undecided about their fertility intention is 60%. The 2013 dataset also revealed in the same vein that the probability of women in age group 25-34 having another child is 86%, and the probability of women in the age above 35 being undecided about their fertility intention is 87%.

With regards to the respondent's level of education, the three datasets pooled together revealed that the probability of women with post-secondary education being undecided about their fertility intention is 47%, 2003 (56%), 2008 (31%) and 2013 (46%). More so, the probability of respondent practicing Islam having another child is 64% and probability of respondents practicing traditional religion being undecided about their fertility ten is 80% when the dataset was pooled. The 2008 dataset revealed that the probability of respondent's practicing traditional religion being undecided about their fertility intention is 71%, (4%) in 2008 and 10% in 2013.

The probability of women from rich household's been undecided about their fertility intention is 72% when the dataset is pooled, 16% in 2003, 7% in 2008 and 32% in 2013.

With respect to respondent's contraceptives use, the probability that respondents who use any form of contraceptives want another child is 82% when the dataset is pooled, the probability that this same set of women are undecided about their fertility intentions is 35% in 2003, 13% in 2008 and 29% in 2013.

The probability that women who are justified to bearing are undecided about their fertility intentions is 55% when the dataset is pooled, 33% in 2003, 83% in 2008 and 38% in 2013.

Furthermore, with respect to respondent's children ever born, the probability of women with 5 children and above to be undecided about their fertility intentions is 46% when the data is pooled, 57% in 2003, 68% in 2008 and 74% in 2013.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This study examined the trend of the determinants of fertility intention among women in Nigeria. The socio-demographic and socio-economic characteristics were used as predictors of fertility intention of women in Nigeria.

5.1 Summary of Findings

The overall objective of this study is to explore the trend of women's fertility intention and fertility behaviour in Nigeria. The study analyzed data using the 2003, 2008 and 2013 Nigeria Demographic and Health Survey datasets. The study was based on the sample size of 7,237 women of reproductive ages in the 2003 datasets, 30,956 in 2008 and 37,131 in the 2013 datasets. Univariate, Bivariate and Multivariate analysis techniques were employed in the course of this study to analyze the datasets. The univariate analysis in this study was carried out using tables of frequency distributions to describe the background characteristics of the respondents from all the three datasets pooled together. The bivariate analysis was done using the chi-square (χ^2) test to show the association between fertility intention of respondents and the various socio economic and demographic background characteristics that are categorical variables. Furthermore, Multinomial logistic regression model was used in the multivariate analysis to determine the strength of association and identify predictors of fertility intentions among women in the study area

With respect to the socio-demographic characteristics, majority of the women (40.7%) belonged to the age group 15-24 in the 2003 dataset, 36.3% in 2008 and 36.6% in 2013. With regards to the respondent's educational status, majority of the women in the 2003 dataset had no formal

education (42.5%), 36.4% in 2008 and 37.9% in 2013 dataset. Majority of women in the 2003 are Traditionalists (52.7%), 53.6% are Christians in the 2008 dataset and 52% practice Islam. With regards to the household wealth index, majority of the respondents belonged the rich category in all the datasets, 42.5%, 43.9% and 43.6% respectively. Contraceptives use among women in Nigeria has been generally low, only 13.6% of women used any form of contraceptives in 2003, 15.6% in 2008 and 16.1% in 2013. Majority of the women lived in urban centers, 66.5%, 64.0% and 57.5% respectively. With regards to the household decision making power, the husband was the dominant decision maker in 2003 dataset (61.3%) and 2013 (51.6%). Household where the wife is justified to beating make up a total of 24% in 2003, reduced to 11.9% in 2008 and then 9.8 in 2013. Majority of the women have 1-4 children ever born across the three datasets, 40.1%, 42% and 42% respectively. Sixty-one percent of the women are undecided about their fertility intentions in 2003, 50% want no more children in 2008 and 51.5% are also undecided about their fertility intentions in the 2013 dataset

Furthermore, the study also revealed that 78.4% of women age 35 and above in the 2003 dataset wants no more children, 76.2% wants no more children in the same age group in the 2008 dataset and 80.4% wants no more children in that same age group in the 2013 dataset. With respect to the respondent's educational status, 44.3% of the respondents with secondary school education are undecided about their fertility intentions, 34.5% and 39.5% of women with that same educational attainment want to have another child in the 2008 and 2013 dataset respectively. Forty-eight percent of respondents who are Christians wants to have another child in the 2003 dataset, 52% of respondents practicing Islam are undecided about their fertility intentions in the 2008 dataset and 55.7% of respondents of that same religion are undecided about their fertility intentions in the 2013 dataset. With respect to the respondent's household wealth index, 43% and 47.3% of