

**WOMEN EMPOWERMENT AND FERTILITY BEHAVIOUR IN
NORTHERN NIGERIA**

REMILEKUN DESMOND OLANIYAN

DSS/14/1841

**A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF
DEMOGRAPHY AND SOCIAL STATISTICS, FACULTY OF SOCIAL
SCIENCES, FEDERAL UNIVERSITY, OYE-EKITI, NIGERIA.**

**IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE
AWARD OF BACHELOR OF SCIENCE (B. Sc) HONS. IN DEMOGRAPHY
AND SOCIAL STATISTICS.**

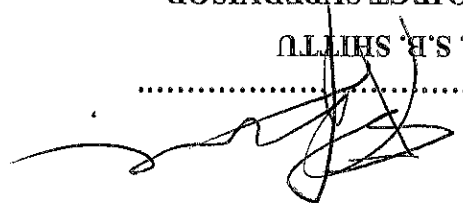
DECEMBER,2018

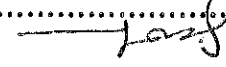
CERTIFICATION

This is to certify that OLANIYAN REMILEKUN DESMOND, of the Department of Demography and Social Statistics, Faculty of Social Sciences, carried out a Research on the Topic "Women Empowerment And Fertility Behaviour In Northern Nigeria" in partial fulfillment of the award of Bachelor of Science (B.Sc) in Federal University Oye-Ekiti, Nigeria under my Supervision

PROJECT SUPERVISOR

DR. S.B. SHITTU



.....


DR. NTOMO LORETTA FAVOUR C.

HEAD OF DEPARTMENT

DATE

.....
19/3/19

DATE

.....
14/3/19

EXTERNAL EXAMINER

DATE

.....

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. Aladejare, all women in Northern Nigeria and also to all Nigerians.

ACKNOWLEDGEMENT

All glory and honor be to God who has kept me all through my course of study in Federal University Oye-Ekiti. I am a sum total of who God has helped.

I want to specially express my sincere appreciation to my parents, Mr. and Mrs. Aladejare who saw the potential in me and decided to invest in my life, without you, I will never be where I am today, thank you mum and dad. I also express my gratitude to my sister (Princess Adeifeoluwa Aladejare, aka Doctor Aderinsola) and my brother (Prince Adefolajinmi Aladejare, aka Foody.com). I will not forget the impact my one and only grandma (Mrs. Sodeke) for her constant prayers and supports. Also, my gratitude goes to the Sodeke's family (Prophet David Olufade Sodeke, Pastor Seyi Sodeke, Mr. Samuel Sodeke (aka Samie-Sho), Mr. Ayo Sodeke (aka Mr.-Sho), Mr. David Olubusoye Sodeke (I usually call him David Sugar), Mr. Akin Sodeke (aka 5ifty Production), Mr. Abayomi Sodeke (aka Yomi-Sho), Oreoluwa sodeke and all grandsons and daughters.

Also, I express my gratitude to the Aladejare's family (Mr. Aladejare (aka Grandpa), Mrs. Aladejare (aka grandma), Mrs. Osinuga (aka Bobby), Mr. Aladejare jnr. (aka Aladejare Aramoko), My Daddy(Mr. Peter Aladejare (aka Bakassy), Mrs. Yetunde Aladejare (aka Mummy Yeti), Mr. Ademola Aladejare.

I appreciation also goes to Mr. and Mrs. Atane, Mrs. Awe Norah, Mrs. Ronke (aka Ronniebonny), Mrs. Dupe, Alpha (aka Infinity Art), Mr. Gbenga. My sincere appreciation goes to my supervisors, Dr. E.K. Odushina and Dr. S.B. Shittu who were ever ready to help me during the course of this research work, guiding me to achieve the level of competence and quality of this study, with their welcoming mode of correction and direction. It has been a pleasure being under your supervision.

I am highly grateful to Mr. Abatan, whose help for the completion of my project is much appreciated, being my school father who taught me statistical analysis from my 100 level days, even up till this moment for guidance, tutorials and support, also Miss Christiana (my school mother) that has been my guide from 100 level, your impacts will never be forgotten. I am grateful.

To my wonderful friends: Daramola Abiodun (aka pastor), Ojeleke Toyin (aka Papa Oje), Miss Iyanuoluwa (aka Adele) and also my colleagues Olowolafe Kikelomo (aka Govi), Adegoke Adetola (aka presi.) Kudus (aka faculty. Presi.), Godwin, Okunuga Damilola, Micheal, Shittu Ridwan (aka Shit.), Aderayo and all DSS 2018 set; I want to say you guys are the best.

I also appreciate Pastor Segun Awolumate (C.A.C Rejoice Arena) for your support, prayers, spiritual drillings and prompt response anytime I text or call you, I will forever be grateful. Also, to the members of my church (C.A.C Rejoice Arena), C.A.C.F (Fuoye Chapter),(Methodist Campus Fellowship) for their concern and follow-up on my progress report.

Also, to Mr. Olutade Faith (aka Coach Faith), Mr. Emeka Livinus (Fuoye Students Drug Free Club coordinator), and to all members of Fuoye Students Drug Free Club for giving me the privilege to serve you as the pioneer president of the club, thank you all. Also to Dr. Ige (Fuoye Medical center), the vita banner guys(Mr. Osss and Mr. Samuel) and all MIND-PROGRAMMING Team, and to the Olaniyans. Thank you all.

Table of content

Certification	ii
Dedication	iii
Acknowledgement	iv
Table of content	v
List of Tables	vi
List of Figures	vii
Abstract	viii

CHAPTER ONE: INTRODUCTION

1.0	Background to the Study	1
1.1	Statement of the Problem	4
1.2	Research Questions	5
1.3	Research Objectives	5
1.3.1	General objectives	5
1.3.2	Specific Objectives	5
1.3.3	Hypotheses testing	5
1.4	Justification of the Study	6
1.5	Definition of Terms	7

CHAPTER TWO: LITERATURE REVIEW

2.0	Introduction	8
2.1	Literature Review	8
2.1.1	Decision making autonomy and fertility behaviour among currently married women in Nigeria	10
2.1.2	Marriage age, fertility behaviour and women empowerment in Nigeria	12
2.2	Theoretical Orientation	16
2.3	Conceptual framework	18

CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY

3.0	Introduction	20
3.1	Study Location	20
3.2	Study Population	20
3.3	Sample Size	20
3.4	Sampling Procedure	20
3.5	Data Collection Methods	21
3.6	Variables Description and Measurement	21
3.7	Methods of Data Analysis	23

CHAPTER FOUR: DATA PRESENTATION, ANALYSIS, INTERPRETATION

4.0	Introduction	24
4.1	Univariate Analysis	24
4.2	Bivariate Analysis	31
4.3	Multiivariate Analysis	40
4.4	Discussion of Findings	42

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATION

5.0	Introduction	46
5.1	Summary of Findings	46
5.2	Conclusion	50
5.3	Recommendations	51

REFERENCES

APPENDIX

LIST OF TABLES

	PAGE
TABLE 1	24
TABLE 2	29
TABLE 3	30
TABLE 4	31
TABLE 5	37
TABLE 6	40

LIST OF FIGURE

PAGE

FIGURE 1

19

ABSTRACT

Nigeria is the most populous country in Africa, and the seventh largest country in the world. The sub-division of Nigeria into geo-political zones placed the country into six geo-political zones. Northern Nigerian is a region which is quite different from Southern part of the country. The Northern region of Nigeria is divided into three different parts, which are the North Central, North East, and North-West. North Central region consists of Niger, Kogi, Benue, Plateau, Nasarawa, Kwara, Abuja, North East states include Adamawa, Bauchi, Borno, Gombe, Yobe, Taraba, North West include Jigawa, Kano, Kastina, Kebbi, kaduna, Sokoto and Zamfara). Past researches on women empowerment and fertility behavior in Nigeria have shown that socio-economic characteristics of women and their empowerment have been responsible for their fertility behaviour. women empowerment is defined as an encompassing women sense of self-worth, access to opportunities and resources, choices and the ability to exercise them, control over their own lives, and influence over the direction of social change(NPC, ICF International, 2013). While Fertility behavior can be said to be the state or ability of being fertile, the ability to produce offspring.

This study examined the relationship between women empowerment and fertility behaviour in northern Nigeria. This study adopts liberal feminist theory. Liberal feminist theory aims at improving all round gender equality and empowerment by encouraging women's access to public institutions and bringing women's issues to the fore of national discourse (Walter, 1998). The weighted sample size of 22,999 women of reproductive age (15-49 years). For the purpose of this study, secondary data was used. The secondary data Source was obtained from NDHS 2013 (Nigeria Demographic and Health Survey) which constitute the data for this study.

The univariate analysis revealed that very few women have autonomy in northern Nigeria with 5.75%, while those women who have no autonomy had the highest percentage of 94.25%. The result also revealed that 59% of women in northern Nigeria were employed, while 41% were un-employed. Furthermore, the table revealed that 24% of women had no children ever born, while 35% of women had 5 and above children ever born and 41% of women had 1-4 children ever born. The bi-variate result revealed that there is a significant relationship between women autonomy and children ever born with ($X^2= 270.3671$, $pr =0.000$), while women that had low autonomy had the highest percentage of no children, while, women that had high autonomy had 44%. The result also revealed that women who are un-employed had the percentage of 39%, they had no children, while those women who were employed had the highest percentage of 42%, they had 1-4 children ever born. Employed women who have 5 and above children had 43%. There is a significant relationship between occupational status of women and children ever born ($X^2= 2000$, $pr =0.000$). The multivariate analysis revealed there is a significant influence of women autonomy on fertility behavior in northern Nigeria with ($P>|z| = 0.000$, 95% Conf. Interval of 2.5 and 2.8), while there is a significant influence of women employment on fertility behavior in Northern Nigeria with ($P>|z| = 0.000$, 95% Conf. Interval of 2.5 and 2.8). There is a significant influence of Islam religion, rural place of residence, secondary and higher educational level, age of respondents, north east region and north west region on fertility behavior in northern Nigeria, while there is no significant influence of primary education, traditional and other religion on fertility behavior.

Key words: Women work status, women empowerment, fertility behavior, northern Nigeria.

CHAPTER ONE

INTRODUCTION

1.0 BACKGROUND TO THE STUDY

According to National Population Reports (NPC, 2004), Nigeria is the most populous country in Africa, and the seventh largest country in the world. The sub-division of Nigeria into geo-political zones placed the country into six geo-political zones. Northern Nigerian is a region which is quite different from Southern part of the country in terms of regional profile and fertility behaviour. The Northern region of Nigeria is divided into three different parts, which are the North Central, North East, and North-West. It has 20 states in total. North-Central region consists of Niger, Kogi, Benue, Plateau, Nasarawa, Kwara, Abuja, North-East states include Adamawa, Bauchi, Borno, Gombe, Yobe, Taraba, North-West include Jigawa, Kano, Kastina, Kebbi, kaduna, Sokoto and Zamfara in the region.

In Northern region, there are also variations in Total Fertility Rates (TFR). For instance, the Northern Nigeria fertility rate is 5.3 for North-Central, 6.3 for North-East, 6.7 for North-West respectively while their children ever born include 5.8 for North-Central, 7.1 for North-East, 7.6 for, North-West, respectively (NPC, ICF International, 2013).

Past researches on women empowerment and fertility behavior in Nigeria have shown that socio-economic characteristics of women and their empowerment have been responsible for their fertility behaviour. According to (Kabbar, 2001), women empowerment is defined as the expansion of women's ability to make strategic life choice in a contest where the ability was previously denied to them (Kabbar, 2001). Also, Women empowerment can be said to be the

freedom given to women to make decisions on their own without necessary getting approval from men. The autonomy, freewill given back to women to exercise what was denied of them.

NPC, ICF International, 2014 report posits that women empowerment is defined as an encompassing women sense of self-worth, access to opportunities and resources, choices and the ability to exercise them, control over their own lives, and influence over the direction of social change. Over the last two decades, women empowerment has become focal point of development effort worldwide (Upadhyay, Usman. (2014). Before the year 2000, 189 countries signed the eight millennium goals which include a commitment to promote gender equality and women empowerment (Usman *et al*, 2015). The 1994 ICPD (International Conference on Population and Development) declared that advancing gender equality and equity, the empowerment of women and the elimination of all kinds of violence against women, and ensuring women ability to control their own fertility are cornerstones to population and development and related progress (NPC, ICF International, 2014).

The empowerment and autonomy of women and the improvement of their political, social, economic and health status is highly important end in itself. Hence, it is essential for the achievement of sustainable development. Though, some indices may be considered as factors that determines women empowerment in other researches. For instance, employment status, ownership of assets, participation in household decision, attitudes towards wife beating are considered indices for women empowerment (NPC, ICF International, 2014). More than 70% of married women aged 15-49 years were employed compared with almost all married men (NPC, ICF International, 2014). Seven in ten women who are employed and earning cash made independent decisions on how to spend their earning (NPC, ICF International, 2014). Considering ownership of assets, eight in ten women do not own a house or land only, 18% of women own a house either alone or jointly

and only 15% own land. In comparison to men, 60% of Nigeria men do not own a house and two-third do not own land (NPC, ICF International, 2014). In women participation in household decision, not all Nigerian women have power to make decision. Nearly half of women have joint decision about visiting family or relatives while only 38% participate in decision varies by region, only 12% women made decision in North West Zone participate in all three decisions (NPC, ICF International, 2014).

Fertility behavior can be said to be the state or ability of being fertile, the ability to produce offspring. It is one of the principal important components of population change that determines the size, structure and composition of the population in any countries (WHO, 2015, NPC, ICF International, 2014). Fertility remains the most inexplicable among the varieties of demographic variables despite the sustained attention and major effort that has been directed at it (Alonge,2013). We cannot but talk about the current fertility of Nigeria especially that of the Northern Nigeria. The Current fertility has a direct relevance to population policies and programs (NPC, ICF International, 2014). The goal of National Policy of population for sustainable development is to achieve a reduction in the total fertility rate for at least 0.6 children every five years (NPC, 2004). Nigeria TFR is 5.5 births per women in 2013; this means that on the average, Nigeria women will give birth to 5-6 children by the end of their child bearing years. While GFR is 190 birth for every 1000 women, while TFR for urban is 4.7 and for rural is 6.2 respectively (NPC, ICF International, 2014).

1.1. Statement of Problem

Nigeria population began to increase due to so many factors which fertility, mortality and migration are the major population dynamics. Although, high fertility and low mortality is the major cause of the increase in Nigeria population. Nigeria population will continue to grow if its fertility rate is not addressed through family planning or other means of controlling birth. It was noticed that northern region of the country is the specific part of the country that continues to increase the population of the country (NPC, 2004). According to (NPC, ICF International, 2014), the northern region had 5.3, 6.3, 6.7 total fertility rate for north-central, north-east and north-west respectively. The increase in the fertility rate of the country has implication on the country's development which causes economic challenges, children dropping out of school, reduction in quality of lives, and also made achievement of social economic development goals difficult and also hinders demographic dividend in the country (Chioma, 2018).

In Nigeria, especially in the Northern region (North -Central, North-East, North-West), women empowerment is not really encouraging compared to that of the southern region (South-South, South-East, South-West) in all aspects and all indices of women empowerment. For instance, the (NPC, ICF International, 2014) revealed that 71% of currently married women were employed in Nigeria and almost 99% currently married men were employed. Women are been marginalized in northern region of Nigeria, their voices are not been heard, they are not duly represented in governing of the affairs of the society and Nigeria as a whole. (NPC, ICF International, 2014). Therefore, this study will examine the effect of deprived empowerment of Northern women and its various implication, effects, relationships, association on their fertility behavior.

1.2 Research Question

At the end of this survey, answers will be provided to these questions.

- (i) What is the level of women empowerment in Northern Nigeria?
- (ii) Is there relationship between women empowerment and fertility behavior in Northern Nigeria?
- (iii) Do other socio-economic characteristics mediate the relationship between Women empowerment and fertility behavior in Northern Nigeria?

1.3 Research objectives

1.3.1 General Objective:

The main objective of this study is to examine the relationship between women empowerment and fertility behaviour in Northern Nigeria.

1.3.2 Specific Objectives

- (i) To examine if women empowerment influence fertility behavior in Northern Nigeria.
- (ii) To examine the influence of educational attainment, occupation, religion, and other socio-demographic characteristics on their fertility behavior.

1.3.3 Hypotheses Testing

H₀: There is no significant relationship between Women empowerment and fertility behavior of women in Northern Nigeria

H₁: There is a significant relationship between women empowerment and fertility behavior of women in northern Nigeria.

1.4 Justification of the Study

This study will unveil some discoveries about women empowerment and fertility behaviour and its implication on individual women, society, and the nation at large. Having established the fact that the fertility behavior of Northern women is high and alarming when compared to other regions of the country. Northern women of Nigeria still have low empowerment at 36 percent for North-central, 15 percent for North East, and 12 percent for North-west as posits by (NPC, ICF International, 2014). It was observed that the increase in the country's population is attributed to fertility increase in the northern region due to the low level of women empowerment.

This study will provide insight on what constitute the women empowerment in Northern Nigeria, show the level of fertility behavior of women in the Northern Nigeria, show the relationship that exist between women empowerment and fertility behavior amongst Northern Nigeria. This will give the government, policy makers, and others the insight into how policy implementation can improve the women empowerment for effective planning. This will contribute at large extent to national development and also regional development of the Northern region. Also, it will eliminate regional variation in fertility behavior in order for implementing family planning programs and set up policy to control fertility in the region. Despite several programs on women empowerment in Sub-Saharan African countries, Women from Northern Nigeria still have low empowerment at 36 percent for North-central, 15 percent for North East, and 12 percent for North-west as posits by (NPC, ICF International, 2014). Also, the alarming TFR compared to the southern part of Nigeria. More so, education is perceived to be one of the major means of empowering women globally, but despite the educational attainment in the Northern Nigeria, their level of women empowerment is still low compared to the other region. Furthermore, the autonomy of women to make decision independently also forms important indices in measuring

the level of women empowerment. Although, Women's autonomy is a component of women's status that relates to their ability to harness information received in making decisions about their private concerns and the concerns of people who are close to them (Banjo,2016). The survey will therefore offer insight into the causes of low empowerment and the relationship between empowerment and fertility behaviour in the region.

1.5 Definition of some Terms

(1) **Total Fertility Rate (TFR):** refers to the average number of live births a woman would have if she were subject to the current age-specific fertility rates throughout her reproductive years 15-49 years (NPC, ICF International, 2014).

(2) **Women Empowerment:** is define as the ability of women to make decisions by themselves at all aspects of life without necessarily waiting for her husband to make sole, only and final decision at home. Furthermore, employment status and women participation in decision making were used as index to measure women empowerment.

(3) **Fertility Behavior:** is the attitudinal behavior of women towards their fertility. Furthermore, Children ever born and number of living children are the indices that will be used to measure fertility behavior in this study.

(4) **Children ever born (CEB):** In this study, children ever born (CEB) is the mean number of children born alive or dead to women. The number of children ever born to a particular woman is a measure of her lifetime fertility experience up to the moment at which the data are collected.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

Overtime, many scholars have attempted to measure the relationship between women empowerment and their fertility behavior. Though, many reviewed literatures focused their attentions to other key indices used to measure women empowerment in NPC, ICF International, 2014. Studies have reviewed that the more empowered a woman is, the lesser the children ever born (CEB), fertility behavior. Malhotra (2002) summarized the most promising methods to measure and analyze women's empowerment and provided a review of empirical studies from the fields of Economics, Sociology, Anthropology, and Demography.

Kishor and Subaiya (2008) provided data on the distribution and correlates of women's empowerment in 23 countries documenting the wide variation in levels of decision-making power and gender- equitable attitudes. Recently, the World Bank devoted the World Development Report (2012) to the theme of Gender Equality and Development. The report argues that the success of global development efforts hinges on gender equality and recommends public policies that promote gender equity as a means of ensuring economic growth. Although, these efforts aimed to improve the status of women globally, support for family planning are integral component in transforming women's lives (Cleland et al 2006; Crossette, 2005). Although, according to U.N report, women now make up of 41% of paid workers outside the agricultural sector which is an increase from 35% in past decades (United Nations Millennium Development Goal Report). Although, many researches had been conducted on the topic to access women empowerment in

Nigerian, but very few had been noticed in northern region. Furthermore, to access the gender equality and women empowerment across the world, women have gained ground in the parliamentary representation in nearly 90% of the 174 countries with data over past 20 years, but reversal is the case in Northern Nigeria especially when we focus our attention on women. The average proportions of women in parliament have nearly doubled during the same period. Yet only one in five members is woman (United Nations, 2015), but very low representation of women in Parliament from the Northern part of Nigeria. As at 2015, about 50 percent of all working age women (aged 15 and above) are in labor force compared to 77% of men. Despite their educational attainment progress, women are still short-changed and faced more difficult transition to paid workers and also receive lower earnings than men (U.N. 2015), not only throughout Nigeria, but also especially Northern Nigeria.

In addition, employment results have shown that 70% of currently married women who earned cash decide themselves how their cash earning are used, while 19% reported that they decide jointly with their husband, and 10% reported that their husband alone decide how their earning are used at the national level (NPC, ICF International, 2014). There are slightly improvement of empowerment at regional level where 48%, 74%, 88% mainly wife of North-central, North-East, North-West respectively decides how wife cash earning will be used as compared to Southern Region and 26%, 19%, 7% husband jointly make decision on how wife earning will be used at North-Central, North-East, North-West respectively.

2.1 DECISION MAKING AUTONOMY AND FERTILITY BEHAVIOUR AMONG CURRENTLY MARRIED WOMEN IN NIGERIA.

According to Banjo (2016), Women's decision making autonomy is a component of women's status that relates to their ability to harness information received in making decisions about their private concerns and the concerns of people who are close to them (Banjo,2016). Resulting from the patriarchal nature of many African societies where men dominate all household decisions, women often have very little or no say about issues that concern them including their fertility. Furthermore, he stressed that Nigerian women are often under the collective decision making of their spouses on household issues and other issues relating to fertility. Thus, he gave the factors influencing women's decision making autonomy in Nigeria as Cultural factors, socio-economic factors, societal and environmental factors among others (Banjo,2016). The inferior role assigned to women compared to the role of superiority given to men as dictators and sole household decision maker/ taker is a major cultural factor that have negatively affected the involvement of women in decision making in most African countries(Banjo, 2016). Education, employment and income, are some of the socio-economic factors that have been found to raise women autonomy when it comes to the issue of household decision-making and fertility/contraceptive decisions (Banjo,2016). Likewise, the environment or society a woman finds herself could affect her decision-making power positively or negatively (Banjo, 2016). In the later work of Banjo (2016), the results showing women's involvement in decision making showed a high level of women's involvement in household decision making 85% of married women make decisions on their Contraceptive uses, 70% of married women make decisions on their Health, 70% of married

women make decision on Large Household purchase and 79% of married women make decisions on Visits to family/Relatives.

The result, of the chi square analysis on the relationship between women's background characteristics and decision making autonomy showed that, autonomy increased with age, age at first marriage and level of education attained. Most women in the Christian religious group were of high decision making autonomy. High decision making autonomy was also observed among working women, women living in the urban areas and women in the rich wealth index group. The result of the poisson regression analysis showed that, decision making autonomy was not a significant predictor of CEB among currently married women (Banjo, 2016). Furthermore, it showed that, age, age at marriage, level of education and wealth status remained significantly associated with CEB, while the relationship between women's decision making autonomy was found to be weak (Banjo, 2016). Finally, the study concludes that a strong association exists between women's demographic and socio-economic characteristics and fertility behaviour in Nigeria. Poisson regression showing the relationship between women's background characteristics, women's decision making autonomy and fertility behaviour in Nigeria(Banjo 2016).

This literature did not really check the autonomy of women in the aspect of attitude of men justifying beating women. Although this literature has endeavor to examine the relationship between women autonomy and their fertility behaviour but has neglected the aspect of wife beating. My research will make attempt to examine the aspect of wife beating in determining their empowerment and autonomy and also check if it has relationship with their fertility behaviour.

2.1.2 Marriage Age, Fertility Behavior, and Women's Empowerment in Nigeria.

According to Solanke (2015), marriage age is also referring to age at first marriage. Marriage age is an important proximate determinant of fertility and indeed has not only been linked with demographic change in many parts of Europe and North America where fertility has stabilized at low levels, but has also been identified as one of the causes of high fertility level in developing countries of Africa and Asia where the practice of early marriage remains widespread. The recognition of this fact has often been the basis for devising initiatives to encourage rise in age at first marriage as one of the means of redressing high fertility in many developing countries.

He further argued that evidences abound that populations with higher age at first marriage have on the average low fertility level. This is made possible by higher ability to exercise more control over reproductive decisions including decisions about childbearing, improved educational attainment, and enhanced economic capacities of populations that delay first marriage.

Following the rise to prominence of gender equality and women's empowerment in global population and health discourses after the 1994 Cairo International Conference on Population and Development, initiatives to raise age at first marriage has been linked with agitations for improvement in women's empowerment (Solanke,2015). Women's empowerment refers to the process of providing women with greater access to vital resources such as education, employment, and health care for the purpose of increasing their ability to control their own affairs and to reduce women's domination by men (Solanke,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 thus likely to cause change in their fertility desire and ultimately their fertility behavior. There is

therefore a nexus among age at first marriage, fertility behavior, and women's empowerment (Solanke, 2015). However, in spite of several studies focusing on women's empowerment and fertility related issues, insufficient attempts have been made to simultaneously explore the relationship between age at first marriage and fertility behavior on the one hand and women's empowerment on the other hand (Solanke, 2015).

From the result, Women in the north-west zone of the country were dominant in the sample. The three zones in the northern region constitute more than two thirds of the sample compared with less than one third in the three southern zones of the country.

Slightly more than a quarter of the women married at age 14 years or less with highest proportion of early marriages occurring in the north-western zone of the country. However, the dominant age interval at first marriage across the country is 15 to 19 years. The proportions of first marriages occurring at 25 years or above were higher in the southern region and lowest in the northern region. The mean number of children ever born was highest in the north-western zone compared with other zones in the country, contraceptive use among married women is poor in Nigeria. Only 15.7% of the respondents were currently using at least one method of modern contraception; however, use of modern contraceptives were much better in the three southern zones compared with its prevalence in northern zone. Pregnancy termination experiences were more prevalent in southern region particularly in the south-eastern and south-western zones, which incidentally are the two zones with higher contraceptive prevalence. Desire for more children were higher in north-eastern and north-western zones compared with other zones in the country. Result of levels of empowerment provide evidence of low level of women's empowerment particularly in northern parts of the country (Solanke,2015). The highest level of empowerment was found in south-western zone compared with the lowest level of empowerment in the north-western zone.

This study also explored the relationship between age at first marriage and fertility behavior on the one hand and between age at first marriage and women's empowerment on the other hand. Four major findings emerged from the analyses.

Firstly, early marriage is dominant in Northern Nigeria. This is consistent with the finding by Kyari and Ayodele (2014). Early marriage violates the rights of young girls to education and economic opportunities, but undermines their ability to advance socially and politically (USAID, 2012). The practice of early marriage thrives in the region for two basic reasons such as an accepted cultural practice in the region and parents and guardians of young girls derive economic gains from marrying young girls by receiving dowry payment or relief from paying school fees on the girl child (UNICEF, 2005). Both concerns must be fully addressed by social programs to change attitudes in the region. Governments in the region can develop programs that not only enforce universal basic education, but also provide economic incentives to parents and guardians who enrolled their female children in either primary or secondary school.

Secondly, there were differentials in fertility behavior among southern and northern women. On the one hand, women in north-eastern and north-western zones of the country had higher fertility compared with their southern counterparts. This results tends to support previous higher fertility reported in northern Nigeria compared with the southern parts of the country (NPC and ICF Macro, 2009; NPC and ICF International, 2014). On the other hand, women in southern Nigeria had higher prevalence of modern contraceptive use than women in northern zone. It is however worthy to note that in spite of higher prevalence of contraceptive use in southern Nigeria, higher proportions of women in the region have experienced pregnancy termination compared with their northern counterparts. This is worrisome because despite sustained advocacy for reform of

the abortion law in Nigeria, pregnancy termination remained highly restricted under the Nigerian legal system (Solanke,2015).

Thirdly, significant relationship exists between age at first marriage and fertility behavior. Younger age at first marriage connotes early exposure to regular sexual intercourse which will ultimately translate into early childbearing in the absence of effective contraceptive (Solanke, 2015). In consonance with findings in Sathar and Kiani (1998), Dommaraju (2008), Raj et al. (2009), Acharya (2010), and Haloi (2014) women who start childbearing early have on the long run more number of children which may even extend beyond their desired level if they fail to use contraceptives or use it consistently(Solanke,2015).

In addition, Solanke (2015) said there is a significant relationship that exists between age at first marriage and women's empowerment with younger age at first marriage being associated with low level of empowerment. He said, It is plausible to assume that women who delay marriage till older ages will have higher empowerment because in most cases most of the women delaying marriage were mostly attending educational institutions or actively engaged in the labor force (Solanke,2015). These findings indicate that significant change in fertility behavior as well as women's empowerment can be achieved if age at first marriage is delayed (Solanke,2015).

The prevalence of early marriage in northern Nigeria has serious socio-economic implications. Early marriage in the region denied many girls the opportunities of acquiring basic education and developing their talents. This is compounded by subsequent high fertility that further hinders their economic productivity and empowerment. It is therefore important that a nationwide program providing empirical evidence of the age at first marriage, fertility, and empowerment nexus should be designed and implemented in the country(Solanke,2015).

Solanke,2015 concluded that age at first marriage has significant relationship with women's fertility behavior and empowerment. The enactment and enforcement of legislation to eliminate early marriage will impact positively on fertility reduction and women's empowerment in the country (Solanke,2015).

This study will make attempt to explore, expanded more on the work of Solanke,2015 in explaining the relationship that exist between women empowerment and fertility behavior in Northern Nigeria(North-Central, North-East, North-West).

2.2 THEORETICAL FRAMEWORK

This study adopts liberal feminist theory. Liberal feminist theory aims at improving all round gender equality and empowerment by encouraging women's access to public institutions and bringing women's issues to the fore of national discourse (Walter, 1998).

Liberal Feminist Theory emphasizes equal individual rights and liberties for women and men and downplaying sexual differences. Liberal feminism is the most widely accepted social and political philosophy among feminists. Liberal feminists defend the equal rationality of the sexes and emphasize the importance of structuring social, familial, and sexual roles in ways that promote women's autonomous self-fulfillment.

They emphasize the similarities between men and women rather than the average differences between them, attribute most of the personality and character differences between the sexes to the social construction of gender, and tend to promote a single set of androgynous virtues for both women and men.

While liberal feminists acknowledge that some choices made by women are questionable because conditioned by sexist social practices, they also tend to avoid materialism and any second-

guessing of those choices made without coercion, or threats. Thus liberal feminists tend to resist legislative intervention that would gainsay the judgment of women. The preeminence of this perspective owes much to the fact that it encompasses a wide range of related but distinct views that fit comfortably within the framework of political liberalism.

It does not fundamentally challenge capitalism or heterosexuality; nor does it recommend separatism, as do more radical feminists. Instead, it aims to extend the full range of freedoms in a liberal democratic society to women, criticizing practices that deny women equal protection under the law as well as laws that de facto discriminate against women.

Liberal feminism has its roots in the writings of, among others, Mary Wollstonecraft (1759-1797), John Stuart Mill (1806-1873), and Harriet Taylor Mill (1807-1858). Many writers prior to Wollstonecraft, such as Jean-Jacques Rousseau (1712-1778), had explicitly argued that men and women were by nature not merely different in kind but different in "natural rank," with women being weaker physically, intellectually, and emotionally (pg358-361). Men were said to be more rational, women more emotional; their respective educations should reflect these differences. A few philosophers, such as John Locke (1632-1704), had argued that the sexes should receive the same education and that they shared equal rights and responsibilities with respect to their children. Nonetheless, these writers stopped short of defending complete sexual equality (either for social roles or legal rights), and putative sex differences have been, and in some parts of the world continue to be, the basis of laws denying women the right to retain property in marriage and the right to vote.

In *Vindication of the Rights of Women*, Wollstonecraft wrote that many of the supposed differences between the sexes were either fabricated or exaggerated and therefore could not be used as the basis for differential rights and roles.

This not only stunted the moral development of women but also denied them the self-fulfillment that comes only with the freedom to pursue one's own good. Mill thought that when provided with the same educational and civic opportunities that men had, most women would choose to remain wives and mothers, improving domestic life for the family.

Liberal feminists acknowledge that our culture enforces such norms but argue both that women are nonetheless free to reject the norms and that any legal arrangements that favor heterosexuality over other sexualities are unjust. Women who choose to enter heterosexual institutions (such as marriage) and who choose male sexual partners are not thereby participating in an injustice, unless they do so in a way that is prejudicial to other forms of sexual life (Colker, 146-47)

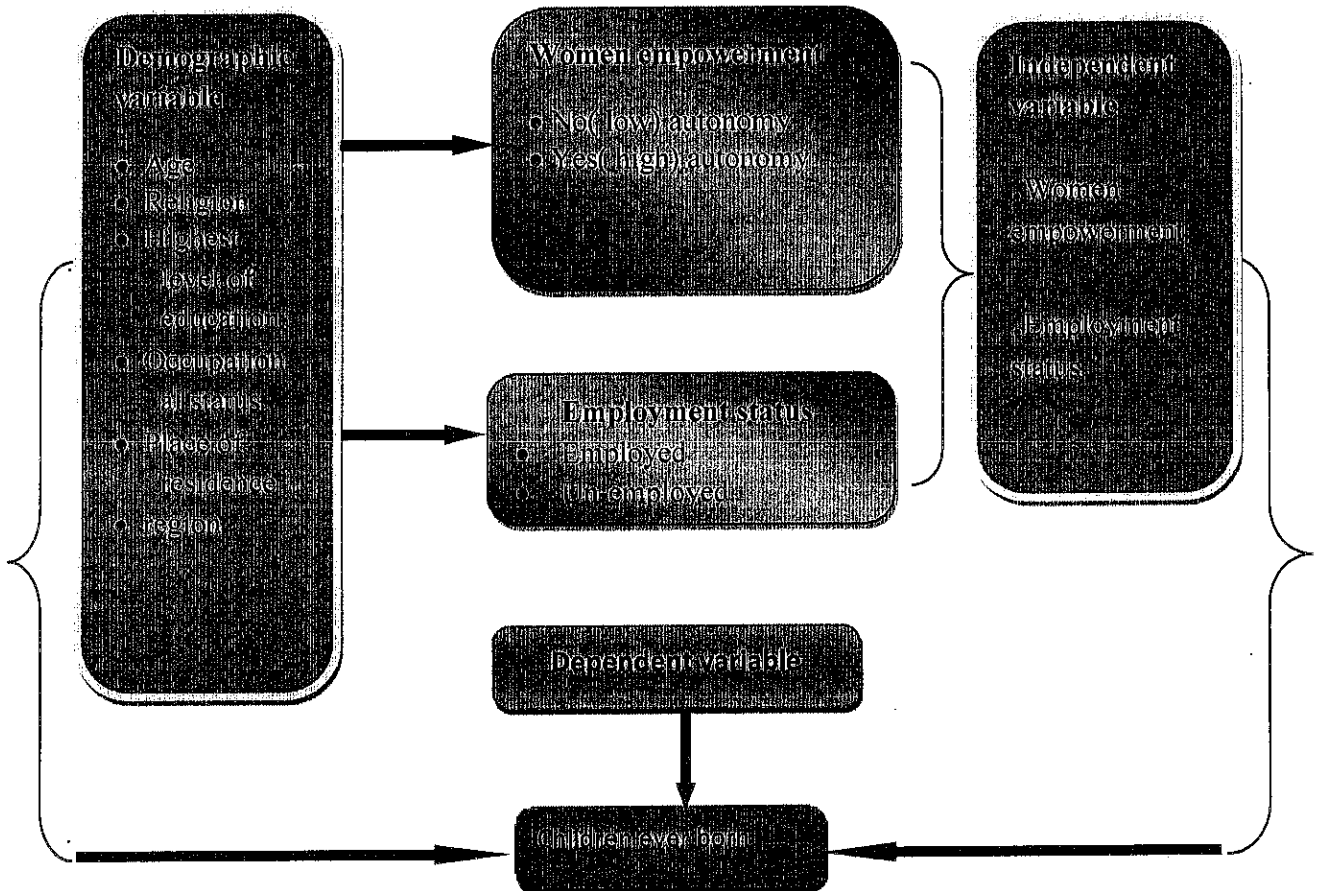
2.3 Conceptual Framework

The figure below is the diagrammatic illustration that depicts the relationship between socio-demographic characteristics, dependent and independent variables. It makes an attempt to explain how the dependent variable and independent influence each other. The dependent variable (women empowerment) uses two indices which are (1): Women participation in decision making and (2): Employment status of respondents to determine the relationship and how it influence fertility behavior. Indices use to test fertility behavior is children ever born.

The link shows how the variables are related. The extent a woman is empowered depends on fertility behavior. The more the empowerment of women, the lesser the fertility behavior should

be. This therefore depicts how the two variables linked together and showed the relationship between them.

Figure1: Conceptual Framework for Women Empowerment and Fertility Behaviour



CHAPTER THREE

RESEARCH METHODOLOGY

3.0 INTRODUCTION

This chapter discusses the methodology applied in this study. The research design, study location, study population, sample size and sampling procedure, variable description and measurements, methods of data collection and analysis are presented below.

3.1 STUDY LOCATION

The study was conducted in Nigeria, in the three Northern regions of Nigeria. The Northern region consist the North-central (Fct-Abuja, Benue, Kogi, Kwara, Niger, Plateau, and Nassarawa), North-East (Adamawa, Borno, Bauchi, Gombe, Yobe, and Taraba) and North-West (Jigawa, Kano, Kebbi, Katsina, kaduna, Sokoto and Zamfara).

3.2 STUDY POPULATION

The study population consists of married women within the reproductive ages of 15-49 years of age of Northern Nigeria.

3.3 SAMPLE SIZE

The weighted sample size of 22,999 women of reproductive age (15-49 years).

3.4 SAMPLING TECHNIQUE

The sample for this study was regionally representative and covered the entire Northern Region population residing in non-institutional dwelling units in the region. The study excluded all male

population in northern Nigeria, focusing attention to only women in their reproductive ages (15-49) years. This study used sampling frame list of enumeration areas (EAs) prepared for the 2006 Population Census of the Federal Republic of Nigeria, provided by the National Population Commission, which was derived from National Demographic Health Survey (NDHS 2013 report). The sample design allowed specific indicators to be calculated for women in their reproductive years only at each of the three northern regions.

3.5 DATA COLLECTION METHODS

For the purpose of this study, secondary data was used. The secondary data Source was obtained from NDHS 2013 (Nigeria Demographic and Health Survey) which constitute the data for this study. Demographic and Health Survey (DHS) is a project funded by the United States Agency for International Development and implemented by ICF Macro. DHS data are cross-sectional, nationally representative household sample surveys. Data for currently married women were extracted from the data of all women aged 15-49. Currently married women were analyzed using descriptive and inferential statistical techniques.

3.6 VARIABLES DESCRIPTION AND MEASUREMENT

The variables are classified into independent, dependent variables. The variables are described below:

Independent Variable: The independent variable of this study is Women empowerment. Women empowerment was measured using two indices which are:

- (1) Women's participation in decision making.
- (2) Employment status.

(1) Women's participation in decision making

Decision making can be a complex process, and the ability of women to make decisions that affect their personal circumstances is an essential aspect of their empowerment (NPC, ICF International, 2014). In order to assess women's decision-making autonomy, the 2013 NDHS collected information on women's participation decisions making. They are (a) Making decision on their own health care, (2) Making decision on major household purchases, and (3) Making decision on Visit to family or relatives (NPC, ICF International, 2014).

Women are considered to participate in decision making if they usually make decisions alone or jointly with their husbands (NPC, ICF International, 2014). The role of women in decision making varies according to the type of decision. From previous researches, only 6 percent of currently married women make decisions themselves on their own health care, while three in five women report that their husbands mainly make such decisions (NDHS, 2013). Sixty-two percent of women say that the husband is the main decision maker on large household purchases, while 32 percent say that they and their husband jointly make such decisions. Fifty-two percent of women report that decisions to visit family or relatives are made mainly by their husbands (NPC, ICF International, 2014).

(2) Employment status:

Employment, particularly employment for cash, and control over how earnings are used are important indicators of empowerment for women in (NPC, ICF International, 2014). In this study, employment status will be measured as employed and unemployed.

Dependent variables: The dependent variable of this study is Fertility Behavior. According to NDHS 2013, fertility behavior is divided into some indices which include:

(1): Children Ever Born (CEB): According to NDHS 2013, Information on the number of children ever born reflects the accumulation of births over a woman's entire reproductive period (parity) and therefore has limited reference to current fertility levels, particularly when the country has experienced a decline in fertility. NDHS 2013. However, as an indicator, the number of children ever born to all women is useful for observing how average family size varies across age groups and for observing the level of primary infertility (NPC, ICF International, 2014).

3.7 METHODS OF DATA ANALYSIS

Stata 13.0 was used for data analysis. The Independent and dependent variables: The relationship between women empowerment and fertility behavior respectively were established. Analysis was conducted at three levels: (i) Univariate using percentages, (ii) Bivariate using cross tabulation & chi square, and (iii) multivariate using logistic regression

Univariate analysis: This involves taking the percentage distribution and frequency count of the women demographic characteristics, women empowerment and fertility behavior and their respective frequency variables.

Bivariate analysis: involved the use of cross tabulation to analyze the relationship between women empowerment indices characteristics of respondents and the dependent variable.

Multivariate analysis: involved the use of multinomial logistic regression to analyze the effect of women empowerment and fertility behaviour characteristics.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.0 Data Presentation and Analysis of Results

This chapter focuses on the presentation of results of data analysis of the research work on women empowerment and fertility behavior in Northern Nigeria. The respondents' demographic characteristics such as respondent's age, religion, region, occupation, highest educational level, and place of residence, are presented. Also presented are the women empowerment variables which include women autonomy and occupation. Lastly, fertility behavior variable is also presented below which include children ever born. The demographic variables and women empowerment variables are presented below as the independent variables while the fertility behavior variable are presented as the dependent variables. The independent variables are tested with dependent variable to access the relationship that exists between them. This produces the univariate results, bi-variate results, and multi-variate result.

4.1 Univariate Analysis

Table 4.1.1 presents results of univariate analysis conducted. The Table shows the percentage distribution of the demographic characteristics.

UNIVARIATE ANALYSIS

Table 4.1.1: DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS.

VARIABLE NAME	FREQUENCY	PERCENTAGE%
REGION		
North Central	5,502	23.92
North East	5,708	24.82
North West	11,787	51.25
Total	22,999	100.00
RESPONDENTS AGE		
15-24 years	8,830	38.39
25-34 years	7,447	32.38
35-44 years	4,724	20.54
45+ years	1,996	8.68
Total	22,999	100.00
RELIGION		
Christian	5,021	21.83
Islam	17,754	77.19
Traditionalist	216	0.94
Others	7	0.03
Total	22,999	100.00
OCCUPATION		
Un-employed	9,435	41.02
Employed	13,564	58.98
Total	22,999	100.00
PLACE OF RESIDENCE		

Urban	6,445	28.02
Rural	16,553	71.98
Total	22,999	100.00
HIGHEST LEVEL OF EDUCATION		
No education	13,588	59.08
Primary	3,403	14.80
Secondary	4,892	21.27
Higher	1,114	4.84
Total	22,999	100.00

Source: Author's Work using NDHS, 2013.

DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

REGION

From the above study, it can be deduce that women who are in the North-Central region have the lowest percentage of respondents interviewed with 23.92%, while those from the North-East region have an increased percentage higher than that of the North-Central region with 24.82%, and those women from the North-Western region of Nigeria have the percentage of 51.52%. This shows that North-Western region of Nigeria has the highest percentage of women, and that region is the most populous region in Northern Nigeria.

RESPONDENTS' AGE

From the study, women who are in the reproductive ages of 45 and above have the lowest percentage of 8.68%, while those women in the reproductive ages of 35-44 years have 20.54%

which is higher than the percentage of women in 45+ years, young women in the reproductive ages of 25-34 years have 32.38% which is higher than that of those women in other ages aside that of the 15-24 years of age, and women in the reproductive age of 15-24 years have the highest percentage recorded in the study with 38.39 %. These women are usually called younger women. This revealed that younger women had the highest percentage recorded in the study. This is the affirmation that women get married in their early years of age. This can be attributed to the cultural and religious believe in the northern part of Nigeria.

RELIGION

From the above table, women who practice other forms of religion had the lowest percentage of 0.03%, while those women who practice traditional religion had the second to the lowest percentage of 0.99%. Women who practice Christian religion had higher percentage than those women who practiced traditional and other forms of religion with 21.83%, while those women who practiced Islam religion had the highest percentage of 77.19%. This shows that only two religions (Christian and Islam) dominate the Northern region of Nigeria with Islam religion having the highest percentage.

OCCUPATION

From the above table, in northern region of Nigeria, women who are un-employed had the lowest percentage of 41.02%, while those women who are employed had the highest percentage of 58.98%. This can be revealed that large numbers of women in the northern part of Nigeria are employed or engaging in labor activities.

PLACE OF RESIDENCE

From the table above, women who lived in the urban areas had the lowest percentage of 28.02%, while those women who lived in the rural areas have the highest percentage of 71.98%. This is an indicator that large number of women lived in the rural areas in the northern region of Nigeria, while those living in the urban places are lower in comparison.

EDUCATIONAL ATTAINMENT

From the above table, women who had higher education had the lowest percentage of 4.84%, women who had primary educational status had 14.80%, while those women in northern region of Nigeria who had secondary level of educational attainment had higher percentage than those with primary and higher educational level with 21.27%, and women with no educational qualification had the highest percentage of 59.08%. This shows that large numbers of women did not go to school or do not have any form of formal education in northern region of Nigeria. This may be as a result of the cultural and religious factors associated with the northern women of Nigeria.

Table 4.1.2 presents results of univariate analysis conducted which answer the research question. The Table shows the percentage distribution of the independent variable.

TABLE 4.1.2: PERCENTAGE DISTRIBUTION OF INDEPENDENT VARIABLES

VARIABLE NAME	FREQUENCY	PERCENTAGE%
OCCUPATION		
Un-employed	9,435	41.02
Employed	13,564	58.98
Total	22,999	100.00
WOMEN AUTONOMY		
less autonomy	21,677	94.25
high autonomy	1,321	5.75
Total	22,999	100.00

Source: Author's Work using NDHS, 2013.

PERCENTAGE DISTRIBUTION OF INDEPENDENT VARIABLES

WOMEN AUTONOMY

From the above table, it can be deduce that women in the northern region of Nigeria who said yes (they have high autonomy) had the lowest percentage of 5.75%, while those women who said no (they have low autonomy) had the highest percentage of 94.25%. This is an indication of the level of women empowerment has said in the objectives of this study to examine. Despite the mass campaign of gender equality, women empowerment in the world, large numbers of women with the highest percentage still had low autonomy which is an indicator of women empowerment in the northern region of Nigeria. Although, occupation and women autonomy are used as the only indicator to measure women empowerment in this study.

OCCUPATION

From the above table, in northern region of Nigeria, women who are un-employed had the lowest percentage of 41.02%, while those women who are employed had the highest percentage of 58.98%. This revealed that large numbers of women in the northern part of Nigeria are employed or engaging in labor activities. It is shocking to realize that large numbers of women are employed in northern region of Nigeria, but despite that, large number of them still had low autonomy in the region. This indicated that women are given the privilege to engage in economic activities but are not given the autonomy to decide or make decision on their own.

TABLE 4.1.3: PERCENTAGE DISTRIBUTION OF DEPENDENT VARIABLE

VARIABLE NAME	FREQUENCY	PERCENTAGE%
CHILDREN EVER BORN		
No children	5,586	24.29
1-4 children	9,377	40.77
5 and above children	8,035	34.94
Total	22,999	100.00

Source: Author's Work using NDHS, 2013.

CHILDREN EVER BORN

From the above table, Women with no children ever born in northern Nigeria had the lowest percentage of 24.29 %, while those women with 5 children and above ever born had higher percentage of 34.94% than those women with no children, and women who had 1-4 children ever

born had the highest percentage of 40.77%. This means women who had the children ever born of 1-4 children had the highest percentages recorded than all other women in northern Nigeria.

4.2 Bivariate Analysis

This section presents the bivariate analysis of the relationship between women empowerment and fertility behavior with the results of chi-square test of association.

Research question 3: Do other socio-economic characteristics mediate the relationship between Women empowerment and fertility behavior in Northern Nigeria?

Table 4.2.1 Percentage Distribution of Demographic characteristics by Children Ever Born.

VARIABLE	CHILDREN EVER BORN				CHI ² and P-Value
	NO CHILDREN & %	1-4 CHILDREN & %	5 AND ABOVE CHILDREN & %	TOTAL & %	
RELIGION	1929 (35)	2248 (41)	1329 (24)	5506 (100)	
Christian	3511 (21)	6712 (40)	6369 (39)	16592(100)	X ² = 575300
Islam	45 (21)	79 (36)	93 (43)	217(100)	Pr=0.000
Traditionalist	0 (0)	7 (70)	3 (30)	10(100)	
Total	5485 (25)	9046(41)	7794 (35)	22,325(100)	
EDUCATIONAL LEVEL					
No Education	1695(14)	5172(41)	5658(45)	12525(100)	
Primary	659(19)	1496(43)	1323(38)	3478(100)	X ² = 3600

Secondary	2542(51)	1829(37)	609(12)	4989(100)	Pr=0.000
Higher	589(44)	549(41)	204(15)	1342(100)	
Total	5485(25)	9046(41)	7794(35)	22325(100)	
PLACE OF RESIDENCE					
Urban	2102(34)	2370(39)	1671(27)	6143(100)	
Rural	3383(21)	6676(41)	6123(38)	16182(100)	X ² = 473.32
Total	5485(25)	9046(41)	7794(35)	22325(100)	Pr=0.000
RESPONDENTS AGE					
15-24	4619(55)	3765(45)	63(1)	8447(100)	
25-34	667(9)	3961(54)	2642(36)	7270(100)	X ² = 1200.0
35-44	144(3)	1023(22)	3477(75)	4644(100)	Pr=0.000
45+	55(3)	297(15)	1612(82)	1964(100)	
Total	5485(25)	9046(41)	7794(35)	22325(100)	
OCCUPATION					
Un-Employed	3512(39)	3464(39)	2015(22)	8991(100)	X ² = 2000
Employed	1973(15)	5582(42)	5779(43)	13,334(100)	Pr=0.000
Total	5485(25)	9046(41)	7794(35)	22,325(100)	

Source: Author's Work using NDHS, 2013.

RELIGION AND CHILDREN EVER BORN

From the table 4.2.1 above, the results shows that women in their reproductive ages that practice Christian religion who had 5+ and above children ever born had 24% which is the lowest percentage recorded, while women who had no children ever born had 35%. Also, women who

had 1-4 children were most represented (41%). Also, women in their reproductive ages that practice Islam religion who had no child had the lowest percentage of 21%, while those women who had 5+ and above children ever born had the percentage of 39% while those women who had 1-4 children ever born had the highest children ever born with 40%. 21% of women who practiced traditional religion had no children, while those women who had 1-4 children were 36%. Those women who had 5+ and above children ever born had the highest percentage of 43%. Those women who practiced other religion aside from the ones mentioned above who had no children ever born had the lowest children ever born with 0%, while those women that had 5+ and above children ever born had 30 % and those women that had 1-4 children ever born had the highest children ever born with 70%. The total percentage of women who had no children ever born had the lowest percentage of 25%, while the total percentage of those women who had 5+ and above children ever born had 35% and lastly, the total percentage of women who had 1-4 children ever born had the highest percentage recorded with 41%. From the chi-square analysis shows that there is a significant relationship between religion and children ever born with ($X^2=575.2965$, $Pr = 0.000$).

LEVEL OF EDUCATION AND CHILDREN EVER BORN

From the table 4.2.1 above, the results shows that women who had no educational attainment with no children ever born had the lowest percentage with 14%, while those with 1-4 children ever born had the percentage of 41%; also, about 45% of women had 5+ and above children ever born had. Also, those women who had primary educational attainment with no children ever born had the lowest percentage recorded with 19%, while about 38% of women had 5+ and above children ever born, while close to half percentage of women who had 1-4 children had the highest percentage recorded with 43%. Furthermore, those women who had secondary educational

attainment who had 5+ and above children ever born had 12%. This is the lowest percentage recorded for those women with secondary educational attainment. Also, women who had 1-4 children ever born had 37 % which is higher than that of those women who had 5+ and above children ever born. Finally, those women who had no children ever born who had secondary educational attainment had the highest percentage recorded of 51%. Those women who had higher educational attainment with 5+ and above children ever born had the lowest percentage of 15%, while those women who had higher educational attainment with 1-4 children ever born had 41% and lastly, those women that had no children ever born had the highest percentage recorded of 44%. The total percentage of women who had no children ever born had 25%, while those women who had 5+ and above children ever born had the percentage of 35%, and those women who had 1-4 children ever born had the highest percentage of 41%. From the chi-square analysis shows that there is a significant relationship between highest level of education and children ever born with ($X^2=3600$, Pr = 0.000).

PLACE OF RESIDENCE AND CHILDREN EVER BORN

From the table above, the results shows that women who lived in the urban place of residence who had 5+ and above children ever born had the lowest percentage of 27%, while those women who had no children ever born and lived in the urban place of residence had 34% . finally, those women who had 1-4 children ever born had the highest percentage of 39%. Those women who lived in the rural area with no children ever born had the lowest percentage of 21% , while those who had 5+ and above children ever born had 38% and those who had 1-4 children ever born had the highest percentage of 41%. Finally, the total percentage of women who had no children ever born had the lowest percentage of 25% and those women who had 5+ and above children ever born had 35% and those women who had 1-4 children had the highest percentage of 41% recorded. From

the chi-square analysis shows that there is a significant relationship between highest level of education and children ever born with ($X^2=473.3174$, Pr = 0.000).

RESPONDENTS AGE AND CHILDREN EVER BORN

From the table above, the result revealed that those women who are in the reproductive ages of 15-24 years age who had 5+ and above children ever born had the lowest percentage of 1%, while those women who are in the reproductive age of 15-24 years and had 1-4 children ever born had 45%. Those women who had no children ever born had the highest percentage recorded for those women who are in the reproductive ages of 15-24 years had 55%. Those women who are in the reproductive ages of 25-34 years and had no children ever born had the lowest percentage of 9%, while those women who had 5+ and above children ever born had 36% which is higher than that of the women who had no children ever born. Those women who are in the reproductive ages of 25-34 years but had 1-4 children ever born had the highest percentage recorded of 54%. Those women who are in their reproductive years of 35-44 years who had no children ever born had the lowest percentage recorded of 3% , while those women who had 1-4 children ever born but are in the reproductive years of 35-44 had 22% which is higher than those women who had no children ever born. Those women who are in the reproductive age of 35-44 years of age ,but had 5+ and above children ever born had the highest percentage recorded with 75%.However, those women who are in their reproductive years of 45+ but had no children ever born had 3%. This is the lowest percentage recorded, while those women who had 1-4 children ever born had 15% which is higher than those women who had no children ever born. Those women who had 5+ and above children ever born in the reproductive years of 45+ had the highest percentage recorded with 82%. The total percentage of women who had no children ever born had 25% which is the lowest percentage recorded, while the total percentage of women who had 5+ and above children ever born had 35%

which is higher than those who had no children ever born. the percentage of women who had 1-4 children ever born had the highest percentage recorded with 41%. From the chi-square result analysis shows that there is a significant relationship between respondents age and children ever born with ($X^2= 12000$, Pr = 0.000).

OCCUPATION AND CHILDREN EVER BORN.

From the table above, the result revealed that those women who are unemployed but had 5+ and above children ever born had the lowest percentage recorded of 22%. While those women who had no children ever born and are unemployed had 39% which is higher than those women with 5+ and above children ever born. Those women who had 1-4 children ever born and are unemployed had the same percentage with those women who had no children ever born with 39%. Furthermore, those women who are employed but had no children ever born had the lowest percentage recorded of 15%, while those women who had 1-4 children ever born and are employed had 42% which is higher than those women who had no children ever born. Those women who had 5+and above children ever born had the highest percentage recorded with 43%. The total percentage of women who had no children ever born had the lowest percentage recorded with 25% and those who had 5+ and above children ever born had 35% which is higher than the total percentage of women who had no children ever born,. While the total percentage of women who had 1-4 children ever born had the highest percentage recorded with 41%. The chi-square result analysis shows that there is a significant relationship between occupation and children ever born with ($X^2= 2000$, Pr = 0.000).

Table 4.2.2: Percentage distribution of women empowerment by Children Ever Born.

This table shows the percentage distribution of women empowerment by children ever born which answer the research question 2.

VARIABLE	CHILDREN EVER BORN				CHI ² and P-Value
	NO CHILDREN & %	1-4 CHILDREN & %	5 AND ABOVE CHILDREN & %	TOTAL & %	
WOMEN EMPOWERMENT					
Less Autonomy	5397(26)	8353(40)	7174(34)	20924(100)	X ² =270.370
More Autonomy	88(6)	693(49)	620(44)	1401(100)	Pr=0.000
Total	5485(25)	9046(41)	7794(35)	2235(100)	
OCCUPATION					
Un-Employed	3512(39)	3464(39)	2015(22)	8991(100)	X ² = 2000
Employed	1973(15)	5582(42)	5779(43)	13,334(100)	Pr=0.000
Total	5485(25)	9046(41)	7794(35)	22,325(100)	

Source: Author's Work using NDHS, 2013.

WOMEN AUTONOMY AND CHILDREN EVER BORN

From the table above, the result shows that women who said they had low autonomy and had no children ever born had 26% which is the lowest percentage recorded, while those women who had 5+ and above children ever born and had low autonomy had 34% . Also, those women who said no they had low autonomy and had 1-4 children ever born had 40%. This is the highest percentage .

recorded for those women who said no, they had low autonomy. Furthermore, those women who said yes they had high autonomy but had no children ever born had the lowest percentage recorded with 6%, while those women who had 5+ and above children ever born had 44%, those women who said yes, they had high autonomy but had 1-4 children ever born had the highest percentage recorded of 49%. The total percentage of women who had no children ever born had the lowest percentage of 25%, while the total percentage of women who had 5+ and above children ever born had 35% which is higher than that of those women with no children ever born. The total percentage of women who had 1-4 children ever born had the highest percentage recorded with 41%. From the chi-square analysis shows that there is a significant relationship between women autonomy and children ever born with ($X^2=270.3671$, $Pr = 0.000$).

OCCUPATION AND CHILDREN EVER BORN.

From the table above, the result revealed that those women who are unemployed but had 5+ and above children ever born had the lowest percentage recorded of 22%. While those women who had no children ever born and are unemployed had 39% which is higher than those women with 5+ and above children ever born. Those women who had 1-4 children ever born and are unemployed had the same percentage with those women who had no children ever born with 39%. Furthermore, those women who are employed but had no children ever born had the lowest percentage recorded of 15%, while those women who had 1-4 children ever born and are employed had 42% which is higher than those women who had no children ever born. Those women who had 5+ and above children ever born had the highest percentage recorded with 43%. The total percentage of women who had no children ever born had the lowest percentage recorded with 25% and those who had 5+ and above children ever born had 35% which is higher than the total percentage of women who had no children ever born,. While the total percentage of women

who had 1-4 children ever born had the highest percentage recorded with 41%. The chi-square result analysis shows that there is a significant relationship between occupation and children ever born with ($X^2= 2000$, $Pr = 0.000$)

In conclusion, the result revealed that there is a significant relationship between women empowerment and fertility behavior in northern Nigeria.

4.2.3 Test of hypothesis

H₀: There is no significant relationship between women empowerment and fertility behaviour in northern Nigeria.

H₁: There is a significant relationship between women empowerment and fertility behaviour in northern Nigeria.

Decision

From the chi-square test, the relationship between women autonomy and fertility behavior is statistically significant ($X^2=270.3671$, $Pr = 0.000$). We can conclude that there is a significant relationship between women autonomy and fertility behavior. Therefore we reject the null and accept the alternate hypothesis.

This study also revealed that the relationship between occupation and fertility behavior is statistically significant ($X^2= 2000$, $Pr = 0.000$). We can conclude that there is a significant relationship between occupation and fertility behavior. Therefore we reject the null and accept the alternate hypothesis.

The above chi-square test only reveals association, to further test the hypothesis for this study with regard to magnitude and direction of association between women empowerment and fertility

behavior in northern Nigeria, multivariate analysis using logistic regression was conducted. The results are presented in the next section.

4.3 Multivariate Analysis

The multivariate analysis using multinomial logistic regression was done to show the strength and the direction of the relationship between independent variables and dependent variables. The results are presented in odds ratios, associated p-values and confidence interval.

Table 4.3.1. FOR CHILDREN EVER BORN AND ALL INDEPENDENT VARIABLES

This table shows the strength and the relationship between children ever born and all independent variable.

CHILDREN EVER BORN	ODD RATIO MODEL1 (95% conf. interval)	ODD RATIO MODEL 2 (95% conf. interval)
WOMEN AUTONOMY		
Less autonomy	1 (RC)	1 (RC)
More autonomy	2.65*** (2.49 - 2.81)	1.05 (0.91-1.2)
EMPLOYEMENT STATUS		
Un-Employed	1 (RC)	1 (RC)
Employed	2.62***(2.46-2.78)	1.48**(1.35-1.6)
RELIGION		
Christian		1 (RC)
Islam		1.62**(1.45-1.82)

Traditionalist		1.34 (0.92-1.96)
Others		0.64 (0.15-2.82)
PLACE OF RESIDENCE		
Urban		1 (RC)
Rural		1.34 ** (1.21-1.47)
LEVEL OF EDUCATION		
No education		1 (RC)
Primary education		0.99 (0.89-1.11)
Secondary education		0.42**(0.37-0.48)
Higher		0.21**(0.17-0.25)
AGE		
15-24		1 (RC)
25-34		72.65**(56.36-93.65)
35-44		414.22 ** (319.33 – 537.31)
45+		577.60**(437.15 -763.17)
REGION		
North-Central		1 (RC)
North- East		1.67**(1.49-1.86)
North-West		1.75**(1.56-1.95)

Source: Author's Work using NDHS, 2013.

CHILDREN EVER BORN AND AUTONOMY (MODEL 1)

From the above table, with odd ratio (OR=2.65, $P > |z| = 0.000$) the result revealed that those women who have high autonomy are more likely to have more children than those women who have low autonomy. This showed that there is significant influence of autonomy on fertility behavior in the northern Nigeria.

Furthermore with odd ratio (OR=2.62, $P > |z| = 0.000$), the result revealed that those women who are employed are more likely to have more children than those women who are un-employed. This showed that there is significant influence of women who are employed on fertility behavior in northern Nigeria.

WOMEN AUTONOMY AND CEB

From the above table, the result revealed that those women who said yes they have high autonomy are more likely to have more children ever born than those women who said no they have low autonomy. There is no significant relationship between those women who have low autonomy and children ever born.

OCCUPATION AND CEB

From the above table, the result revealed that those women who are employed are more likely to have more children ever born than those women who are not employed. There is a significant relationship between those women who are employed and children ever born.

RELIGION AND CEB

From the above table, the result revealed that women who practiced Islam and traditional religion are more likely to have more children than those women who practiced Christian religion, while those women who practiced other religion are less likely to have more children ever born than those women who practiced Christian religion. Furthermore, the result revealed that there is a significant relationship between women who practiced Islam religion and children ever born. While the result revealed that there is no significant relationship between women who practiced traditional religion and children ever born with. Meanwhile, there is no significant relationship between those women who practiced other religion and children ever born.

PLACE OF RESIDENCE AND CEB

From the above table, the result revealed that those women who living in the rural areas are more likely to have more children ever born than those women who are living in the urban places. There is a significant relationship between those women who are residing in the rural areas and children ever born.

HIGHEST EDUCATIONAL LEVEL AND CEB

From the above table, the result revealed that those women who have primary, secondary, and higher educational level are less likely to have more children ever born than those women who had no educational level. There is no significant relationship between those women who have primary educational level and children ever born. while there is a significant relationship between those women who have secondary educational level and children ever born. while there is a significant relationship between those women who have higher educational level and children ever born.

RESPONDENTS AGE AND CEB

From the above table, the result revealed that those women who are in their reproductive ages of 25-34 years, 35-44 years and 45+age are much more likely to have more children ever born than those women who are in their reproductive ages of 15-24 years. There is a significant relationship between women who are in their reproductive ages of 25-34 years and children ever born. There is a significant relationship between women who are in their reproductive ages of 35-44 years and children ever born. There is a significant relationship between women who are in their reproductive ages of 45+age years and children ever born.

REGION AND CEB

From the above table, the result revealed that those women who in the North-East and North-West region of Nigeria, are more likely to have more children ever born than those women who are in North-Central region of Nigeria. There is a significant relationship between those women who are in the North-East and children ever born. While There is a significant relationship between those women who are in the North-West and children ever born.

4.3.2 Test of hypothesis

H₀: There is no significant relationship between women empowerment and fertility behaviour in northern Nigeria.

H₁: There is a significant relationship between women empowerment and fertility behaviour in northern Nigeria.

Decision

WOMEN AUTONOMY AND CEB

Without controlling for other confounding variables, the logistic regression result revealed that there is significant influence of women autonomy on fertility behavior in the northern Nigeria, therefore, we reject the null hypothesis and accept the alternative hypothesis, also women who are employed have significant influence on fertility behavior in northern Nigeria, therefore, we reject the null hypothesis and accept the alternative hypothesis.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This study examined women empowerment and fertility behavior in northern Nigeria. This chapter presented summary of findings, conclusion and recommendations drawn from the result of the study.

5.1 Summary and Discussion of Findings

The study analyzed data obtained from national demographic and health survey (NPC, ICF international, 2014). The sample size was 22,999 respondents.

Univariate analysis in this study was carried out using tables of frequency and percentage distribution to describe the background and demographic characteristics of respondents. Bivariate analysis was done using the chi-square table (χ^2) and cross tabulation to analyze the relationship between independent variables and the dependent variable.

Furthermore, multinomial logistic regression model was used for the multivariate analysis to analyze the effect of all independent variables on the dependent variable.

WOMEN AUTONOMY AND CHILDREN EVER BORN

In line with the main objective and the second specific objective, the table 4.2.2 above reveals that those women in the northern region who had high autonomy (i.e. they can decide for themselves), yet still have large number of children ever born than those women with low autonomy which is contrary from the previous literature reviewed. In fact, their percentage spans higher than those women who don't have autonomy or have low autonomy. For instance, those women with high

autonomy who have 5 and above children ever born had 10% higher children ever born than women who had low empowerment and 5 and above children ever born.

Almost same percentage goes for women who had 1-4 children ever born. To further justify this findings, similar occurrence was experienced among women who are employed (actively engage in labor active ties) had 3% 1-4 children ever born higher than those women who were not employed. Also, women who were employed and had 5 and above children ever born are 21% higher than those women who had 5 and above children ever born and are un-employed.

The result of the research showed negative expectation of the researcher. The researcher and other reviewed literature had the opinion that those women who are empowered, or have autonomy are suppose to limit their children ever born due to their autonomy to decide how, when to have children or space birth, but he reversed is the case.

RELIGION AND CHILDREN EVER BORN

In line with the third specific objective, The researcher further investigate what could have been the reason for the outcome of findings stated in the second specific objective, could it be religion, educational status, place of residence or other intervening variable. The researcher further noticed that there is a significant relationship between Islamic religion and children ever born in table 4.3.2.

PLACE OF RESIDENCE AND CHILDREN EVER BORN.

In line with the third specific objective, the multivariate analysis (table 4.3.1) reveals that rural place of residence had significant influence on children ever born. This ascertains the fact that women who lived in the rural place of residence had more children than those women in the urban

places. Rural place of residence and environmental factor could influence the fertility behavior of women in northern Nigeria resulting to higher children ever born.

EDUCATIONAL STATUS AND CHILDREN EVER BORN.

In line with the third specific objective, educational status also influences children ever born. It was noticed that from the table 4.3.1, women who attend secondary school had significant influence on children ever born. On the contrary in table 4.2.1, since education is a form of empowerment and meant to inform the women folk, it was supposed to have significant influence in reducing children ever born in northern Nigeria, but that is the case among those women with higher educational status. Despite the fact that most women attain secondary education also had a reduction in children ever born, but those with no children had the higher percentage.

Also, higher and secondary educational level is significant to children ever born but those women with secondary educational level still have more 1-4 children than those women with primary educational level and also those with no children.

RESPONDENTS AGE AND CHILDREN EVER BORN.

In line with the third specific objective, table 4.3.1 reveals that age had significant effects on children ever born.

It was noticed to have caused the increase in the children ever born amongst women in northern Nigeria. Although, from age 25-45 and above have significant influence on children ever born at the multivariate level since the younger women age 15-24 years is the reference category.

5.2: IMPLICATION OF WOMEN EMPOWERMENT ON FERTILITY BEHAVIOUR

The general believe about the implication of women empowerment on fertility behavior is expected to be positive by reducing the fertility behavior of women in their reproductive ages. The reverse is case in northern Nigeria when although, the chunk of the percentage of women were low empowered, while 59% of women were employed. Table 4.2.2 result showed that those women who were low empowered have much children ever born than those women who were empowered. This indicates that there will be an improvement in number of children ever born in Northern Nigeria when women are empowered.

The implication of this outcome is that the fertility behavior of women in northern Nigeria will increase much more than what was recorded earlier for that region if women are not empowered.

Secondly, the implication of this outcome is that, those women who were employed and had 1-4 children and 5 and above children had higher children ever born than those women who were not employed, except those with no children. The fertility behavior of this region (northern region) will double if this trend continues. The region will be recording high number of children ever born if more women are giving empowerment (employment) failed to reduce their fertility behavior in subsequent years.

Thirdly, the implication of this outcome is that the fertility behavior of Nigeria will continually increase, since the Northern region constitutes the larger junk of the country's population. The country's population figure will increase continually if more women are giving empowerment (employment) failed to reduce their fertility behavior thereby doubling the fast growing population trend of the country.

Fourthly, it will increase the poverty level of the region since women prefer to have much children ever born despite their empowerment. This may result to the poverty Reverend Thomas Malthus postulated in his theory.

Also, it may increase the prevalence of disease in the region due to large fertility behavior.

It may also lead to increase in maternal mortality rate since 82% of women who are in their reproductive ages of 45 years and above still have 5 and above children ever born. Those women have the much prevalence of having complications during child birth due to their age range and also, they may be increase in number of operation done for women in that region since large number of them still give birth to 5 and above children at late reproduction stage.

5.3 CONCLUSION

This study examined the relationship between women empowerment and fertility behavior in Northern Nigeria. It was found out that there is a significant relationship between women autonomy (women empowerment) and fertility behavior. Also, there is a significant relationship between employment status and fertility behavior. Islam religion has significant relationship on fertility behavior, rural place of residence has significant relationship on fertility behavior, women with secondary educational level has significant relationship on fertility behavior, women with higher educational level has significant relationship on fertility behavior, while respondents age group 25-34, 35-44, and 45+ have significant relationship on fertility behavior and north west and north east have significant relationship on fertility behavior.