AN ASSESSMENT OF WOMEN'S AUTONOMY BY FERTILITY BEHAVIOUR IN NORTHERN NIGERIA

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CERTIFICATION

This is to certify that OLAJIMBITI OLUWAFEMI ISAAC of the Department of Demography and Social Statistics, Faculty of Social Sciences, carried out a research on the topic AN ASSESSMENT OF WOMEN'S AUTONOMY BY FERTILITY BEHAVIOUR IN NORTHERN NIGERIA in partial fulfillment of the requirements for the award of Bachelor of Science (B.Sc) in Federal University Oye-Ekiti, Nigeria under my Supervision

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DEDICATION

The project is dedicated to the Everlasting King (Almighty God), who has been with me from the beginning of my Academic pursuit in FUOYE 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. Olajimbiti.

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ABSTRACT

The study examined women's autonomy by fertility behaviour in northern Nigeria using Nigeria Demographic and Health Survey women recode dataset. Analyses were done at three levels, univariate level by means of frequency distribution, bivariate level by using Chi-square test and multivariate level by the use of multinomial logistic regression models. Findings revealed that 7.1% of women enjoyed autonomy. In all, 63.7% of women were working and there was a significance relationship between women's autonomy and fertility behaviour (X^2= 163.29, P=0.0000) women with low autonomy (87.1%) indicated they wanted more children compared to women with high autonomy (12.9%). In addition, a significant relationship was also observed between ethnicity and fertility behaviour (X^2 = 417.84, P=0.0000). Multivariate analysis revealed the influence of women's autonomy (OR=1.69, P<0.05, CI=1.21-2.36), Age (OR=2.33, P<0.05, CI=1.63-3.34), level of education (OR=1.51, P<0.05, CI=1.14-1.99), ethnicity (OR=0.49, P<0.05, CI=0.26-0.89), region (OR=2.67, P<0.05, CI=1.81-3.96) and religion (OR=0.68, P<0.05, CI=0.48-0.96) on fertility behaviour. The study concluded women's autonomy, age, level of education, ethnicity, region and religion were factors for consideration in designing programmes on fertility behaviour of women in north east, Nigeria.

Key Words: Fertility Behaviour, Women Autonomy, northern Nigeria.

CHAPTER ONE

1.0 BACKGROUND

Autonomy is known as the capacity for a woman to achieve well-being and a role in decision-making, which includes their ability to control the information received in making decisions about their private life and the life's of people who are close to them. The ability of women to make decisions that affect the circumstances of their own life is an essential aspect of autonomy. Although decision making is a complex process, women's ability to make decisions about their health, particularly their fertility is germane to the authority awarded to women in the society. 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 due to their status and level of autonomy in the society.(Hindin, 2000; Makinwa-Adebusoye, 2007; Mosha, Ruben, &Kakoko, 2013). Although studies abound on the relationship between women's education and fertility behaviour; and on women's employment and fertility, yet there are few studies on women's decision making autonomy and fertility in Nigeria.

Women's autonomy depicts freedom from external control and the ability to make choices, it's an important determinant of women's health and well-being and, therefore it has become a focus of global development effort (Malhotra and Schuler 2005; Rao, Vlassoff and Sarode 2013). Autonomy is associated with lower fertility (Basu 2002; Bloom, Wypij and Gupta 2001; Upadhyay and Karasek 2012), greater birth spacing (Feldman et al. 2009; Upadhyay and Hindin 2005), greater contraceptive use (Do and Kurimoto 2012; Govindasamy and Malhotra 1996), lower ideal family size and fertility preferences (El-Zeini 2008; Hindin 2000; Mason and

Smith 2000), lower risk of unintended pregnancy (Lee-Rife 2010), and increased access to maternal health care (Mistry, Galal and Lu 2009).

Nigeria as the most populous country in Africa with an estimated population of about 170 million people growing at an annual rate of 3.2% with a Total Fertility Rate (TFR) of 5.5 children per woman, like in many other sub-Saharan African (SSA) countries, Nigerian women are often under the collective decision making of their spouses on household issues and other issues relating to fertility (Bogale, Wondafrash, Tilahun, &Girma, 2011).

Nevertheless, understanding of the effect of women's autonomy on fertility behavior is not so clear especially in the developing nations. Much needs to be done to increase knowledge and deepened understanding. Since the mid-1980s, the term autonomy has become popular especially in reference to women. In grassroot programs and policy debates, autonomy has virtually replaced terms such as welfare, community participation, and poverty alleviation to describe the goal of development and intervention (Batliwala, 1994). In spite of the prevalence of the terms however, many people are confused as to what the autonomy of women implies in social, economic and political settings.

Furthermore, many large-scale programs are being launched with the explicit objective of making women autonomous and empowered. Central to this research work therefore, is to understand and explain the effect of women's autonomy on fertility behaviour of women resident in the northern part of Nigeria. This study will therefore examine the extent of women autonomy, and its effect on the fertility behaviour of the women in northern Nigeria.

1.1 STATEMENT OF PROBLEM

Fertility, mortality and migration are the factors that have caused changes in Nigeria population. Although low death rate with a corresponding high level of fertility is the major cause of increase in Nigeria population. The northern region had 5.3, 6.3, 6.7 total fertility rate for north-central, north-east and north-west respectively (NPC, ICF International, 2014). Most especially in northern region of Nigeria, women autonomy is discouraged compared to that of other major regions which are South-South, South-East and South West. Women are been marginalized in the northern Nigeria, their voices are not been heard, they are not really represented in governing of the affairs of the society and Nigeria as a whole (NPC, ICF International, 2014) due to this reason, this research work will examine the relationship of women autonomy and howit influences fertility behaviour in northern Nigeria.

1.2 RESEARCH QUESTIONS

1. **What is the pattern of women's autonomy in northern Nigeria?**
2. **To what extent does women's autonomy influence fertility behavior in northern Nigeria?**
3. **What other factors influence fertility behavior among women in northern Nigeria?**

1.3 RESEARCHOBJECTIVES

1.3.1 MAIN OBJECTIVE

The main objective of the study is to assess women's autonomy by fertility behavior in northern Nigeria

1.3.2 SPECIFIC OBJECTIVES

The specific objectives of the study are to:

1. **To assess the pattern of women's autonomy in northern Nigeria**
2. **To examine the influence of women's autonomy on fertility behavior in northern Nigeria**
3. **Determine other factors influencing fertility behavior among women in northern Nigeria**

1.3.3 HYPOTHESIS TESTING:

H_0: There is no significant relationship between women's autonomy and fertility in northern Nigeria.

H_1: There is significant relationship between women autonomy's fertility behaviors in northern Nigeria.

1.4 SIGNIFICANCE OF THE STUDY

The study will be of great importance to couples, families, institutions, the entire part of northern Nigeria and the country at large. The study will serve as a reference material or data bank to students and researchers who would wish to carry out related studies in future.The study explains the influence of women's autonomy on fertility behavior in northern Nigerian. Its findings will be beneficial to the ministry of health, women empowerment programs, the government and other stakeholders. The result of the research would help the country to lay more

emphasis on the autonomous power of women and women empowerment so as to help in the control of the fertility behaviour in the north and also in the country at large.

1.5 DEFINITION OF TERMS

Autonomy: Autonomy defines as the ability for a woman to achieve well-being and a role in decision making independently without the interference of any third party.

Fertility: Fertility refers to the average number of live born children produced by women of childbearing age.

Total Fertility Rate (TFR): In this study, 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) (NDHS 2013 report).

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

This chapter would review both published and unpublished documents that are relevant to the study. The purpose of this chapter, therefore, is to review what other writers have done about the key concepts on the subject under investigation. The literature would also inform the analysis, conclusion and the recommendations which would be discussed in the subsequent final chapters. The chapter mainly examines women autonomy with emphasis on fertility and fertility behaviour.The chapter discusses the concept of autonomy, concept of fertility, women autonomy and fertility behaviour, theoretical framework and the conceptual framework.

2.1 CONCEPT OF AUTONOMY

Early literature defined autonomy as "the degree of access to and control over material and social resources within the family, in the community and in the society at large". Recently, autonomy has been broadened in scope because it now includes "the ability to influence and control one's personal environment or "the ability to obtain information and make decision about one's private concerns and those one's intimates". Among women, attaining such control is viewed as a key to improve their living conditions.In many parts of the world today, women autonomy is a major function of fertility behaviour which is as a result of giving them the opportunity to take control of their affairs, make decisions and to reduce existing inequality when compared with.

In most societies of Africa, women have a low social status and low level of autonomy, so they have considerably a small role in decision making at household level. Several reports show a positive relation between autonomy of women and their role in decision making at household level. In the current globalizing economy, where women are increasingly crossing borders for work, it is important to understand women's relative power across various contexts and it is essential that measures of autonomy remain flexible enough to accommodate contextual changes.

Northern Nigeria society is also a traditional male dominated society in which male has power, control over resources and has a higher status and position than female. Women's autonomy has been studied in the context of its inhibiting influence on fertility and infant child mortality. Women are getting education and are becoming more aware of their rights, obligations and freedom etc. Women who are more educated have more empowerment than women with less education or uneducated. The women empowerment in economic decision making and in household decision making is satisfactory but empowerment in physicalmovement is low. The situation of women empowerment and autonomy is not very good in North.

Because women who live in North are rooted in the domestic sphere, family and kinship are the key factors defining the parameters of their autonomy (Das Gupta 1996; Dyson and Moore 1983; Jeffery and Jeffery 1993; Sharma 1980). In particular, individual women's roles, rights, and responsibilities are defined largely by household structure and by their relationships with affinal and natal kin because the kinship type in the North is Patriarchal in nature.

Women's autonomy is influenced because of religion and regions in Northern Nigeria. Region had a significant effect on position and level of autonomy of women because the social

settings are different from one another. People in urban areas had gender equitable attitude, women had involvement in decision making and had better family relations. Whereas in rural areas women had a fear of partner's position or negligence, resultantly women are given less important in decision making.Women's decision making authority was clearly related to the context in which they live, as urban women had more roles in decision making at household level but women who lived in rural settings were not having active role in decision making. Women's enhanced role in household decision making had its effect relevant to achieving gender equality and fertility reduction outcomes in Northern Nigeria.

2.1.1 CONCEPT OF FERTILITY

Fertility refers to the average number of live born children produced by women of childbearing age in a particular society (Giddens, 1994). Fertility is defined fertility as a measure of the total number of children born, on average to each woman during her reproductive years (Momsen, 2004). Birth rates are an expression of fertility of women (Giddens, 1994). Fertility rate is the number of children an average woman would bear if she were to complete her childbearing years and bear children at the same rate as those currently in the age group who have first passed the age of childbearing(Giddens, 1994).

In sum, fertility constitutes the incidence of childbearing which is an exclusive reproductive task of women.

Attempt to discover the explanation for fertility behaviour in the industrial world has been extended to the developing countries which have experienced fertility decline (UN, 2003). While understanding fertility behaviour is quite a complex issue, social scientists have made efforts to explain fertility transition (Hardiman and Midgley, 1982). In the following section, the study examines the concept of fertility behaviour in the early periods.

Concept of Fertility Behaviour in the Early Periods

Early period's explanation for fertility behaviour has been characterized by economic and social factors.Using economic factor to explain fertility behaviour, Hardiman and Midgley, argued that, fertility was rationally determined by the costs and benefits of childbearing (Hardiman and Midgley, 1982). Caldwell, confirm the cost-benefit analysis of childbearing when he established that the basic issue in demographic transition was the direction and magnitude of the intergenerational wealth, one from parents to children and the other from children to parents (Caldwell, 1978 in Hardiman and Midgley, 1982). Caldwell maintained that where children are used as economic resource and emotional satisfaction, the tendency for large family size would be high. However, where the costs and burden of childbearing increase and women enter wage employment and thus raising the opportunity costs of childbearing, the incentive to have many children declines.

Caldwell explained fertility behaviour in terms of culture and traditional belief system. They argued that sub-Saharan Africa may well offer greater resistance to fertility decline than any other world region due to cultural and religious belief systems that operates directly to sustain fertility (Caldwell and Caldwell, 1987). Masan maintained that the traditional emphasis on the lineage over the household and conjugal unit and the hierarchical lineage structure appear to have a higher maximum acceptable family size which serve as economic resources and enjoys shared burden of caring for large members of descendants (Masan, 2000 in Momsen, 2004). The common system of the separation of the household budgets which leads to the costs of childbearing on the mothers and the need for children to help mothers work on the land and assist the maternal unit is an inducement for large families. Cultural norms may lead to child

marriages which, in turn, could influence early childbearing and the total fertility rate of mothers (Crossette, 2001 in Momsen, 2004).

According to the World Fertility Report, the worldwide reduction of fertility has been accompanied by major shifts in the timing of childbearing (UN, 2003). The mean age of conception, in turn, affects fertility (Mandlin and Berelson, 1978 in Hardiman and Midgley, 1982). The preceding paragraph thus underlines the biological factors which influence fertility behaviour.

Social factors have equally play leading role in explaining fertility behaviour. Momsen argued that when women are exposed to education; they postpone their marriages, raise healthier and better-fed children and this reduces infant and child mortality (Momsen, 2004). Women's access to education, further, influences their knowledge in family planning and they become exposed to higher opportunity costs of childbearing as they are able to obtain better paid jobs. The influence of female education on fertility has, however, been contested by other scholars. It has been argued that decline in fertility can take place with a much lower rate of infant mortality and female literacy (Visaria and Visaria, 1994 in Sen et al, 2002).

Another explanation that has been provided for fertility behaviour is family planning. It has been established that there has been an increased use of family planning which has accounted for decline in fertility (Hardiman and Midgley, 14982). It has, however, been established that the effect of family planning is contingent on its availability, knowledge and effectiveness. In summary, the early proponents of factors explaining fertility behaviour emphasized social, economic, biological and cultural factors. However, the complexity in explaining fertility behaviour presupposes that those factors are non-exhaustive. In the subsequent section, the theoretical perspective of fertility behaviour in contemporary times shall be discussed.

2.1.2 WOMEN'S AUTONOMY AND FERTILITY BEHAVIOUR

One of the most visible of all strategic decisions for women centers is the decision to have children. Women's participation in childbearing decisions demonstrates control over their bodies. Men and women have to decide whether to have children, how many to have, and when to have them. Shared decision-making means men have to be open to women's participation and women have to have enough autonomy to participate. Female autonomy is a known determinant of fertility decline (Balk, 1994; Dyson and Moore, 1983; Mason, 1986). Women's autonomy affects fertility by capturing different aspects of women's roles and participation in fertility decision-making and behaviour.

There are several ideas about how women's household autonomy affects fertility. First, more autonomy can change a woman's fertility desires and allow for women's fertility desires to play an increasingly important role in fertility decisions. Greater autonomy is associated with the desire for fewer children (Hogan, Berhanu and Hailemariam, 1999; Kritz, Makinwa-Adebusoye and Gurak, 2000), but the association varies depending on how autonomy is measured (Moursund and Kravdal, 2003; Upadhyay and Karasek, 2012). In general, women's control over resources impact their gender value systems and fertility related attitudes in favor of fewer children (Amin and Lloyd, 2002; Kravdal, 2001; McDonald, 2000; Morgan et al., 2002).

Greater autonomy also enables women to enact these new fertility attitudes in relationships and make the wife's voice in fertility-related issues stronger (Mason, 1987). Essentially, a woman's ability to implement fertility decisions is reduced by her low position in the household hierarchy. Women's autonomy in household decision-making can stand between the young woman's desire to have a small family and her ability to implement it. Less autonomy may limit a woman's ability to achieve her own reproductive health goals by limiting her access

to information and her ability to negotiate the circumstances around sexual activity and fertility. Women with less control in relationships may be more restricted in family-planning decision-making, negotiations with partners about contraceptive use, and face more difficulty in enacting their fertility desires (Bawah et al,. 1999; Blanc, 2001; Harvey et al., 2002; Pulerwitz, Gortmaker and DeJong, 2000; Wolff, Blanc and Ssekamatte-Ssebuliba, 2000; Woolf and Maisto, 2008). For example, in Zimbabwe, women with no decision-making autonomy had more children than women with some autonomy (Hindin, 2000). Women with greater autonomy also have longer birth intervals, or time-to-conception intervals, demonstrating their ability to exert their fertility desires (Al Riyami and Afifi, 2003; Feldman et al., 2009; Upadhyay and Hindin, 2005). Longer birth intervals can also lead to fewer births.

A second idea is that more autonomy means that more weight is given to the woman's health and wellbeing in fertility decisions (Mason, 1987). Essentially, imbalances within sexual relationships favor males (Blanc, 2001; Gupta, 1995 and Blanc,2001) notes that when there is an imbalance of power, one partner can assert their reproductive health goals, and potentially lead to negative outcomes for the other partner (e.g., unwanted pregnancy). The wife pays a higher cost than the husband in getting and raising children so more autonomy causes the family to have fewer children and invest more in each child (Eswaran, 2002). As more autonomy is given to a woman to help her reach the level of autonomy a man has within the household, the woman and her needs play a greater role in fertility decisions.

Thirdly, a lack of autonomy may influence sexual and reproductive health through associations with increased risk of gender-based violence. The perpetration of male-female violence within a relationship is an extreme example of the lack of autonomy in a relationship, and much has been written about less contraceptive use and higher unintended pregnancy

consequences of violence within a relationship (Alio et al., 2009; Diop-Sidibe, Campbell and Becker, 2006; Sarkar, 2008; Williams, Larsen and McCloskey, 2008). Violence towards women is also associated with higher rates of sexually transmitted diseases including HIV/AIDS and adverse birth outcomes (Gielen et al., 1994). The fear of domestic and intimate partner violence is also a barrier to contraceptive use (Alio et al., 2009; Williams et al., 2008). More recently, attitudes towards intimate partner violence are also used as a measure of women's autonomy because the expression of violence is a product of cultural, socioeconomic, and power relations towards women (Ambrosetti, Abu, Amara and Condon, 2013; O'Campo et al., 1995; Uthman, Moradi and Lawoko, 2009).

A fourth perspective assumes that autonomy is associated with fertility in the same way as measures of women's status (education and employment) and fertility. Substantial research supports the association between women's educational achievement and increased use of contraceptives (Gwako, 1997; Jejeebhoy, 1995; Schuler et al., 1997) and many have shown that both individual increases in education and average community-level education are associated with lower fertility (Balk 1994; Dyson and Moore, 1983; Hindin, 2000; Jejeebhoy 1995; Kravdal 2001, 2002, Martin 1995; Martin and Juarez, 1995,Beaujouan, 2012). Women with lower education, both in the household and in the greater community, and women who are not employed also have shorter birth intervals compared to women of higher status (Setty-Venugopal and Upadhyay, 2002).

In fact, the direct impact of socioeconomic variables on the hazard of conception are very small (Baschieri and Hinde, 2007). However, education and employment do increase the cost of having children, which has a direct influence on fertility outcomes such as contraception use and desired number of children (Balk 1994 and Mason, 1987). Since there are competing demands

for women's time and resources, and women make choices depending on these constraints, decisions about children are made while taking other life course experiences, like education, into consideration. Some argue that increases in education attainment also increase knowledge of and access to contraceptives, which subsequently lower fertility, some argue that educational attainment leads to greater labor force participation as a competing behaviour to having children, and lastly, others posit that increases in education lead to gains in female autonomy, more control of fertility behaviour, and subsequently, lower fertility (Mason 1986, 1987; Presser and Sen, 2000). It is unclear if education gives women more autonomy or if it provides them with the opportunity to learn about modern contraception (Mason, 1986, Presser and Sen, 2000).

Whether women's autonomy is the pathway by which education influences fertility and operates directly and/or indirectly on fertility has not been fully explored. The tradition that measures autonomy through socioeconomic proxies is once again drawn into question since education and employment are independently associated with fertility and might affect fertility through women's autonomy. It is important to look at the independent effects of education and autonomy to disentangle the influence on fertility. Actual measures of autonomy, like decision-making, provide additional explanatory power for fertility related behaviours net of traditional measure of women's status such as education and labor force participation (Bhatti and Jeffery 2012; Hindin, 2000).

A fifth perspective explains the association between autonomy and fertility through increased access to care and contraceptive use. Greater autonomy leads to greater access to care and contraceptive use and subsequently, lower fertility. Due to limited mobility, access to financial resources, or subjugated position in the relationship, a lack of autonomy may influence sexual and reproductive health outcomes through limiting the ability for women to access

reproductive health services, including contraceptives (Ahmed et al., 2010; Kamiya 2011; Mistry et al. 2009; Mumtaz and Salway, 2005). The greater control over mobility women have, the more likely they are to obtain and use contraception (Govindasamy and Malhotra, 1996). Women who have more control over economic decision-making are also more likely to be involved with their husband's in family planning and therefore, more likely to use any method, female-only methods, and barrier methods compared with women who are not autonomous (Do and Kurimoto, 2012).

Importantly, while some work shows that more autonomy leads to greater contraceptive use, other studies have shown no association or negative associations. For example, in Bangladesh, autonomous women were more likely to use contraceptives, use contraceptives in the future, and have discussions with husbands about contraceptives (Rahman et al., 2014). Other studies have also shown that women who participate in decisions more often are also more likely to use contraceptives (Hogan et al., 1999b; Jejeebhoy, 1991; Presser and Sen, 2000). However, in Ethiopia, women's autonomy was not found to have a significant effect on couple's contraceptive use (Haile and Enqueselassie, 2006; Stephenson, Bartel and Rubardt, 2012). In several African countries, freedom of movement as a measure of autonomy was also not associated with contraceptive use (Do and Kurimoto, 2012). In trying to disentangle the mixed results for autonomy and contraceptive use, interactions with poverty have been found as poor women with less autonomy are the least likely to use contraceptives (Bamiwuye, De Wet and Adedini, 2013). Additionally, while autonomy within the relationship is important for contraceptive use, this varies widely by communities and community level factors (Elfstrom and Stephenson, 2012).

2.2 THEORETICAL FRAMEWORK

Theories of Women's Power and the Life Course

Theory of Gender and Power

The foundation for this theoretical framework is the theory of gender and power. In 1987 Robert Connell, an Australian sociologist, developed the theory of gender and power after identifying a need for an integrative feminist theory to explain gender and power (Connell, 1987). The theory of gender and power asserts that gender-based inequalities are pervasive societal characteristics which result in men's disproportionate power in society and their control over decision-making in a number of areas (Pulerwitz et al., 2000). This study directly integrates this theory by looking at different areas in which men are potentially exercising power over women and the implications for women's household autonomy.

The theory of gender and power functions at a structural level, addressing both institutional and societal aspects, and takes the broader context of women's lives into consideration. According to Connell, three major structures characterize the gendered relationships between men and women: the sexual division of labor, the sexual division of power, and the structure of cathexis (Wingood and DiClemente, 2000). The sexual division of labor is defined as the differential allocation of women and men to different occupations (Connell, 1987). The sexual division of power is differential allocation of power between men and women. The structure of cathexis is defined as the structure of affective attachments and social norms. This structure constrains and shapes people's emotional attachment to each other (Connell, 1987). As a unit, these structures function at societal and institutional levels and explain the gender roles assumed by men and women.

Sociopolitical forces that reinforce social norms and segregate power keep the structures rooted at the societal level. At the institutional level, these structures are shaped by the school system, work, family, religious institutions, medical systems, and the media. Through social mechanisms like discrimination, unequal distribution of resources, stereotyping, and the imbalance of control, the structures are reinforced (Wingood and DiClemente 2000). These mechanisms create gender-based inequities, which create exposures or risk factors that could adversely impact women's health. Exposures can be economic, social, or physical, and risk factors can be socioeconomic, behavioural, or personal. Risk factors produced by the structures function at the interpersonal or individual level. Social and structural support for inequitable gender norms negatively influences sexual and reproductive health behaviours by supporting male dominance of the female partner (Pulerwitz and Barker 2008; Pulerwitz et al. 2000). In this study, itidentifies specifically what exposures lead to risk factors for decreased autonomy of women in northern Nigeria.

The study integrate exposures derived from each of the structures by hypothesizing relationships between social and economic exposures and women's autonomy over time and relationships between dimensions measures of autonomy and fertility behaviour over time. For the sexual division of labor, since work and school are the primary institutions impacted by this structure (Wingood and DiClemente, 2000), the study hypothesize that increased exposure to education and employment is associated with greater autonomy. This aligns with the research on socioeconomic imbalances and women's autonomy.

For the sexual division of power, power is defined as "the power to act or change or having power over others" (Wingood and DiClemente, 2000). The sexual division of power can be measured through both physical and behavioural aspects such as perceived control,

communication skills, history of sexual and physical abuse, partner perceptions of health behaviours, and self-efficacy. The study integrates measures of women's participation in household decision-making as an indicator of autonomy and perceived control. The study hypothesizes that women with greater household decision-making capabilities will have greater control over their fertility and ultimately, fewer children.

Social mechanisms that reinforce the structure of cathexis include the biases people have about how men and women should express their sexuality, enforcement of gender roles, and taboos about women's sexuality (Wingood and DiClemente, 2000). Relationships, family, and religious entities are the primary institutions that drive this pathway. This study takes a multi-level approach to integrate the household environment in predicting autonomy over time and integrates measures of attitudes towards gender roles to capture the structure of cathexis.

According to the theory of gender and power, the greater a power imbalance in favor of men, the greater disadvantage for women and subsequently, greater risk. The theory acknowledges that there are large structural entities at play that limit the role or decision-making power of women in society and this study draws on this idea to identify pathways that increase or decrease women's autonomy.

Life Course Perspective

One of the central hypotheses is that autonomy changes across space and time. This stems from the life course perspective, which highlights the importance of the timing, sequencing, and duration of life events as well as their association with behavioural outcomes (Elder, 1998). The life course theory is built around the idea that 'human development and aging are lifelong processes and understanding development involves taking a long-term perspective' (Elder, Johnson and Crosnoe, 2003). The life course perspective also acknowledges that

historical times shape people's lives, events can have different effects depending on timing with a persons' life, an individual is embedded within a larger social system and that social system influences individual decisions, and people have agency and control over their decisions.

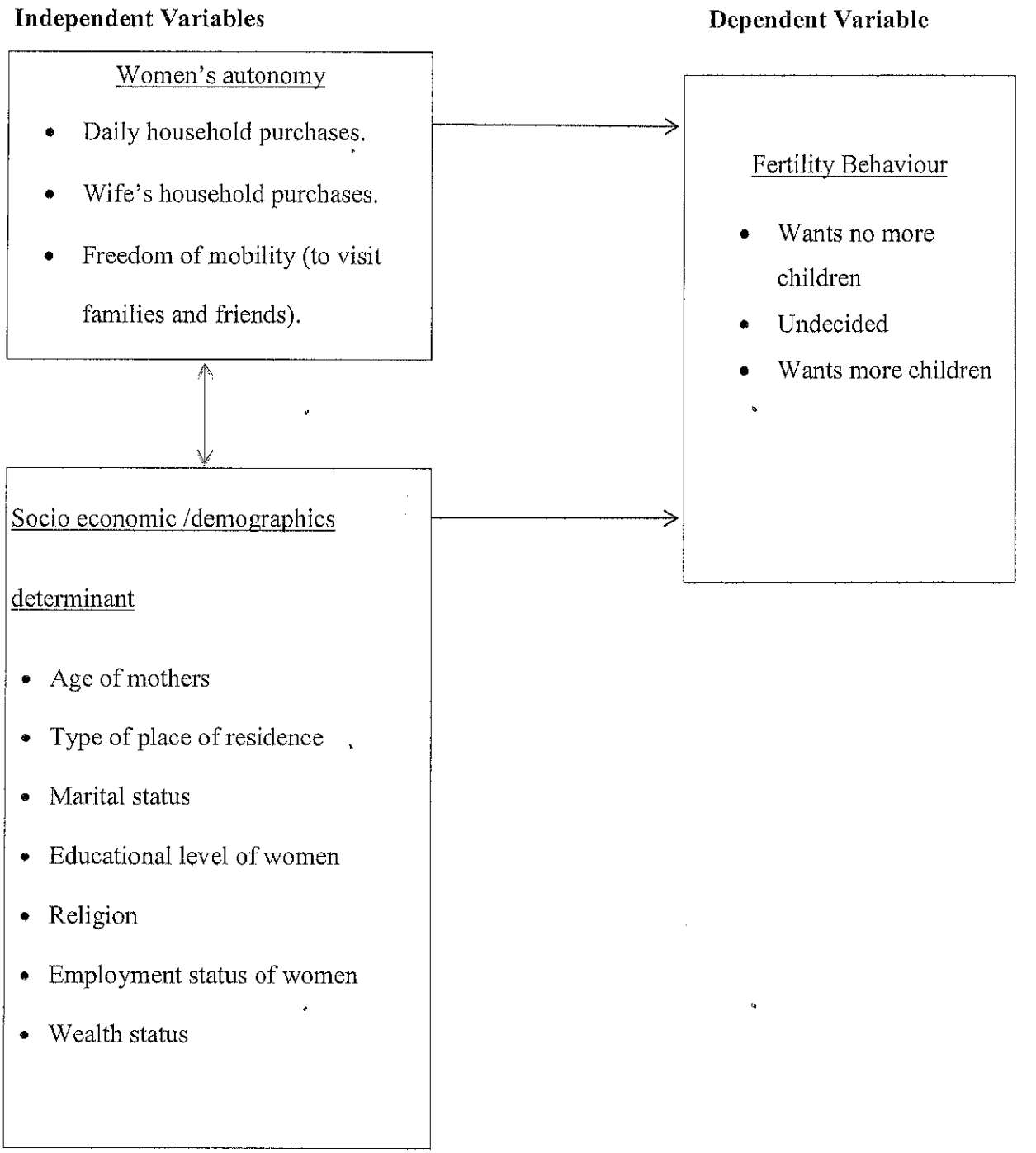
The life course perspective also implies multiple levels of study from the macro level of social institutions to the micro individual level (Elder et al., 2003). Essentially, larger social changes influence individuals through interpersonal contexts, like families. Also, since lives are interdependent, transitions in one persons' life creates transitions for others as well. Therefore, human behaviour cannot be understood in isolation from relationships with others. The life course perspective shows the importance of age, timing of events, and human interconnectedness as well as position individual choice and decision-making in a broader social and historical context. In terms of women's autonomy, this implies that there may be a substantial lag time between exposure to an event and autonomy or women's autonomy may fluctuate over the life course depending on events. Studies show that women's autonomy is low during early childhood, rises during adolescence, and drops sharply upon marriage, remaining low during the early reproductive years. Rising during the later reproductive years to a high when the woman becomes a mother-in-law and grandmother. It drops slightly in extreme old age (Gupta, 1995). By observing lives over substantial periods of time, using longitudinal data, there is potential to better observe the influence of social and historical changes on women's autonomy.

2.3 CONCEPTUAL FRAMEWORK

Fertility behaviour is considered in this conceptual frame work as the dependent variable and the unit of analysis is women. While this model is simple, it is however adequate to explain the fertility behaviour in northern Nigeria. The general characteristics of the population considered are age of mothers, type of place of residence, marital status, educational level of

women, religion, employment status of women and wealth status. Some important factors like daily household purchases, wife's household purchases, freedom of mobility (to visit families and friends) that influences fertility behaviour will be examined. These are demographic, socio-economic, and women autonomy factors. Fertility behaviour, the dependent variable will be classified as 'wants no more children', 'undecided' and "wants more children". This framework is schematically presented below.

Figure 1: Conceptual framework of the study



Source: Oyinloye, B. O. Titilayo, A, Asa, S. S and Joseph Ayodeji, 2017

Hypothesis:

H_0: There is no significant relationship between women's autonomy and fertility behaviour in Northern Nigeria.

H_1: There is significant relationship between women's autonomy fertility behavior in Northern Nigeria.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 INTRODUCTION

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

3.1 DESCRIPTION OF THE STUDY AREA

The Berlin Conference of 1884 and 1885 provided the area that would become the Northern Nigeria Protectorate to the British. The Royal Niger Company was formed in 1886 with George Taubman Goldie as the vice governor. The Company negotiated trade agreements and political agreements, sometimes coercive, with many of the chieftains, emirs, and the Sokoto Caliphate. In 1897, Frederick Lugard was the appointed head of the West African Frontier Force which was tasked with stopping Fulani resistance and possible French incursions in the northwest area. On 1 January 1900, the Royal Niger Company's charter was revoked and the British government took control, in a ceremony where Lugard read the proclamation (Falola and Toyin,2009). The Royal Niger Company was paid £865,000 and was given the rights to half of all mining revenue in a large part of the areas for 99 years in exchange for ceding the territory to the British government. Lugard was appointed the High Commissioner of the newly created Northern Nigeria Protectorate. Lokoja was the capital from 1900, but Zungeru became the headquarters for the protectorate in 1902 because it was the most northerly city accessible by river transport. Military operations began in 1902 and continued for about five years of sporadic fighting. The remnants

of the Bornu Empire were conquered in 1902 and the Sokoto Caliphate and the Kano Emirate were taken over in 1903. Fighting continued in 1904 in Bassa. In 1906 a large Mahdist revolution began outside of the city of Sokoto in the village of Satiru, a combined force of the British and the British-appointed Sultan of Sokoto,MuhammaduAttahiru II, destroyed the town and killed most residents involved (Falola and Toyin,2009). After 1907 there were fewer revolts and use of military force by the British and the focus of the High Commissioner turned toward taxation and administration

The British Administration began with Frederick Lugard as the first High Commissioner. In 1907, Lugard left Nigeria for Hong Kong and Percy Girouard became the new High Commissioner. Girouard had a long history of rail construction in Canada and Africa and was tasked with substantial railroad construction in the Protectorate. In 1909, Henry Hesketh Bell, the governor of the Uganda Protectorate was appointed high commissioner. In 1912, it was estimated that the area of Northern Nigeria was approximately 660,000 square kilometres (255,000 sq mi) and had a population of about 10 million people. Charles Lindsay Temple became the acting Head Commissioner in 1911 and 1912 and began overseeing, with close collaboration with Lugard, the creation of the Colony and Protectorate of Nigeria. One defining characteristic of administration in Northern Nigeria Protectorate was the inclusion of chiefs and emirs as "native authorities" fitting into British administration. Taxation proved very difficult in the protectorate for the first years of British rule. Lugard's attempts to institute poll taxes were foiled by the emirates, the need to introduce coin controversy, and attempts to tax trade were opposed by powerful merchants (Newbury and Colin, 2004). This created a substantial deficit in the budget of the Protectorate and public works projects had to be paid by grants from the British Empire. As a result, the British often had significant shortages of British personnel before 1907.

These pragmatic concerns resulted in incorporation of the traditional authorities within the British structure (Newbury and Colin, 2004).

3.2 TARGET POPULATION

The eligible respondents are women in the reproductive ages 19-49 years.

3.3 SOURCES OF DATA

The study analyses data from the women's recode data of the 2013 NDHS. The sample for the 2013 NDHS was designed to provide population and Health indicators at the National, zonal and stateof the Federal Republic of Nigeria

3.4 SAMPLING DESIGN

The sample for the 2013 NDHS was nationally representative and covered the entire population residing in non-institutional dwelling units in the country. The survey used as a sampling frame the list of enumeration areas (EAs) prepared for the 2006 Population Census of the Federal Republic of Nigeria, provided by the National Population Commission. The sample was designed to provide population and health indicator estimates at the national, zonal, and state levels. The sample design allowed for specific indicators to be calculated for each of the six zones, 36 states, and the Federal Capital Territory, Abuja. The 2013 NDHS sample was selected using a stratified three-stage cluster design consisting of 904 clusters, 372 in urban areas and 532 in rural areas. A representative sample of 30,327 households was selected for the survey, with a minimum target of 943 completed interviews per state. A fixed sample take of 45 households were selected per cluster.

All womenin the northern region 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 (NPC&ICF MACRO, 2014).

3.5 SAMPLE SIZE

The sample size is **18,272**women aged 19-49 years.

3.6 VARIABLE IDENTIFICATION

Dependent variable

This study uses the NDHS concepts of desire to have more children denote the prevalence of fertility behaviour. The occurrence of fertility behaviour is based on three criteria and coded as, those who did not decided on the number of children to have (undecided) =0,those who want no more children=1 and those who want more children=2.

Independent variables

The principal independent variables of interest are those reflecting women's involvement (final says) in decisions regarding four domains of household life: making large household purchases, making day-to-day household purchases, deciding on respondent's own health care and visits to family/relatives. In addition, another indirect measure of women's autonomy, besides, a few proxy measures were included in the analyses and type of residence was taken as a control variable to capture differences in women's life styles and living standards.

The 2013 NDHS collected information on direct measures of women's autonomy. In particular, questions were asked on women's participation in specific household decisions. For each question in the survey, five options were presented as replies: (1) respondent alone, (2)

respondent and husband/partner jointly, (3) respondent and other person in the household, (4) husband alone, (5) someone else. For statistical purposes, the response "respondent alone" has been renamed as "female autonomy" to show her exclusive autonomy; the responses "respondent and husband" and "respondent and other person" were categorized as "joint decision" and the responses husband alone and someone else are categorized as "husband's decision". Furthermore, an index was developed on women's decision-making autonomy. In doing so, women who have full/independent autonomy in at least two of the above four specified decision-making areas were assumed to have "high" decision-making power; women having the full autonomy in having their final say in only one of the four or those who make joint decision-making in all of the four decision-making areas were assumed to have "medium" decision-making power; and the remaining were assumed to have "low" decision-making power.

Women's educational attainment, employment, and household property possession were included as the proxy measures of women's autonomy. Household property possession was based on information related to household ownership of a number of consumer items (radio, television, refrigerator, bicycle, motor cycle and car). Based on the ownership of these six items, an index was developed to ease the statistical analysis and interpretation of results. For possession of one of these household items, a respondent received one point, otherwise zero points. The index took values between zero and five. Hence, those women who reported that they have none of these items were assumed to have "very low" household property possession; those who have only one of these items were assumed to have "low status" and those women who reported that they have at least two of the above items were considered to have "medium or high" household property possession.

VARIABLES	VARIABLES DEFINITION	MEASUREMENT
Women's age	Age of women of study in the population (15-49)	19-24 25-34 35-44 45-49
Residence of respondents	The area respondents live	1.Urban 2. Rural
Wealth index	The wealth index is a composite measure of a household's cumulative living standard.	1. Poor 2. Middle 3. Rich
Educational attainment	This is the level of education attained by the woman.	0. No formal education 1. Primary 2. Secondary 3. Higher
Occupation status	This is the occupation status of the woman	1. Working 2. Not working
Religion	The religion practiced by the respondent	1. Christianity 2. Islam 3. Others
Ethnicity	The ethnicity of the respondent	1. Yoruba 2. Hausa/Fulani 3. Igbo

		4. Others

3.7 DATA PROCESSING AND ANALYSIS

The NDHS 2013 data was processed and analyzed using STATA application package (STATA 13.0). The data processing was 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.

3.8 MEASUREMENT OF VARIABLES

Univariate analysis in this study was carried out using tables of frequency distribution to describe the background characteristics of the respondents and chart to display the fertility behaviour. Bivariate analysis wasdone using the chi-square (χ^2) test to show the association between fertility behaviour and women autonomy with various socio economic and demographic background characteristics. Furthermore, multinomial logistic regression wasused in the multivariate analysis to determine the predictors of fertility behaviour in the study area. The reason for employing multinomial logistic regression in this study is that the dependent variable (fertility behaviour) was coded as wants more, undecided and wants no more respectively.

CHAPTER FOUR

DATA PRESENTATION,ANALYSIS AND INTERPRETATION

4.0 INTRODUCTION

This chapter deals with presentation, analysis and interpretation of the data collected from secondary sources,Nigeria Demographic and Health Survey (NDHS, 2013) to show the women autonomy with socio-demographic characteristics effect on fertility behaviour in northern Nigeria. For the purpose of analysis, this study makes use of descriptive analysis and inferential analysis.

The descriptive analysis describes the relevant aspects of the phenomena under consideration and provide detailed information about these variables such as; women autonomy, socio-economic and demographic characteristicsand fertility behaviour. In addition,inferential analysis and Pearson Chi-square test were done to ascertain relationship while multinomial logistic regression analysis was used in testing the study hypothesis.

4.1 Distribution of Respondents by Socio-demographic Characteristics

Results in Table 4.1 below showed women socio-economic and demographic characteristics. It was reported that women age 25-34 years were mostly reported (37.2%), followed by age 19-24 years (28.9%), 35-44 years (24.1%) and lastly age 45-49 years (9.8%).Women from rural area was 76.5% and urban area by 23.5%. Women with no formal education were highly reported(67.9%), followed by primary education (15%), secondary (13.6%) and lastly were those reported to be higher education (3.4%). Also, women from

hausa/fulaniwas reported more (60.8%), Yoruba (2.4%) and igbo (0.9%). From the northern part women reported most from north-west (54.2%), north-east (25.2%) and those reported from north-central (20.6%). Muslim women reported (81.9%), Christian (17.1%) and lastly was traditional (1%). Women reported to be poor (61.3%), rich (20.7%) and middle wealth index (18%). Women reported to be working more(63.7%) and not working(36.3%). Women reported fertility behaviour that wants more children (75.8%), wants no more children (15.6%) and undecided (8.6%). Women reported no low autonomy (92.9%) and yes high autonomy (7.1%).

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

Background Characteristics	Frequency	Percent (%)
Age		
19-24	5,276	28.9
25-34	6,799	37.2
35-44	4,406	24.1
45-49	1,791	9.8
Place of residence		
urban	4,295	23.5
Rural	13,977	76.5
Educational level		
No education	12,414	67.9
Primary	2,748	15.0
Secondary	2,486	13.6
Higher	624	3.4
Ethnicity		
Yoruba	436	2.4
Hausa/Fulani	11,113	60.8
Igbo	167	0.9
others	6,556	35.9
Region		
North Central	3,767	20.6
North East	4,605	25.2
North West	9,899	54.2
Religion		
Christian	3,130	17.1
Islam	14,968	81.9

Traditional	174	1.0
Wealth Index		
Poor	11,199	61.3
Middle	3,286	18.0
Rich	3,786	20.7
Occupation		
Not working	6,601	36.3
Working	11,579	63.7
Fertility behaviour		
Wants more children	13,844	75.8
Undecided	1,574	8.6
Wants no more children	2,854	15.6
Decision making Autonomy		
No low autonomy	16,972.36	92.9
Yes high autonomy	1,299.56	7.1
Total	**18,272**	**100.0**

Source: National Demographic Health Survey (NDHS, 2013)

4.2.: Distribution of Respondents by Women Autonomy, Socio-demographic Characteristics and Fertility Behaviour.

Result from table 4.2 below revealed that there is significant association between women autonomy, socio-demographic characteristics and fertility behaviour among women ($P<0.05$). There is significant association between age and fertility behaviour (X^2 =5714.58, P =0.0000), women age 19-24 years (2.4%), followed by age 25-34 years (14.3), age 35-44 years (43.4%), and age 45-49 years (39.9%). There is significant association between places of residence and fertility behaviour (X^2 =36.65, P =0.0088) whereby women from rural areas wants more children (76.9%) and urban area (23.1%). Also, there is strong significant association between level of education and fertility behaviour (X^2 =174.04, P =0.0000) women with no formal educational attainment want more children by 61.1%, secondary education (19.3%), primary education (13.6%), and higher level of education (5.9%). There is strong significant association between ethnicity and fertility behaviour (X^2 =417.85, P =0.0000) whereby hausa women tends to wants

more children (64.2%), Yoruba women (1.9%) and igbo(0.8%). There is strong significant association between region and fertility behaviour (X^2 =382.45, P =0.0000) whereby women from north-west tends to wants more children (57.5%), north-east (25%0 and women from north-central (17.5%). There is strong significant association between religion and fertility behaviour (X^2 =617.89, P =0.0000) whereby muslim women wants more children (84.8%), Christian women (4.4%) and traditional women (0.8%).

Furthermore, there is strong significant association between wealth index and fertility behaviour (X^2 =78.74, P =0.0000) whereby poor women wants more children (62.6%), rich (19.8%) and women in the middle wealth status (17.7%). There is strong significant association between occupation and fertility behaviour (X^2 =255.02, P =0.0000) whereby working women wants more children by 60.6% and not working by 39.4%. There is strong significant association between Women autonomy and fertility behaviour (X^2 =163.29, P =0.0000) whereby women with no low autonomy wants more children 87.1% and yes highautonomy by 12.9% .

Table 4.2.: Distribution of Respondents by Women Autonomy, Socio-Demographic Characteristics and Fertility Behaviour.

Background characteristics	Fertility Behaviour			Statistics
	Wants more	Undecided	Wants no more	
Age				
19-24	35.9	14.7	2.4	
25-34	42.3	33.7	14.3	X^2=5343.50
35-44	18.5	38.2	43.4	Pr=0.0000
45-49	3.2	13.4	39.9	
Place of residence				
urban	23.1	19.9	27.5	X^2=36.65
Rural	76.9	80.1	72.5	Pr=0.0088
Educational level				
No education	68.4	76.8	61.1	
Primary	14.5	12.3	19.3	X^2=174.04
Secondary	14.1	9.1	13.6	Pr=0.0000
Higher	3.1	1.8	5.9	
Ethnicity				
Yoruba	1.85	1.3	5.6	
Hausa/Fulani	64.2	57.0	46.4	X^2=417.85
Igbo	0.8	0.3	1.8	Pr=0.0000
Others	33.1	41.4	46.3	
Region				
North Central	17.5	26.5	32.3	X^2=382.45
North East	25.0	28.0	24.6	Pr=0.0000
North West	57.5	45.5	43.1	
Religion				
Christian	14.4	11.9	33.3	X^2= 617.89
Islam	84.8	86.5	65.5	Pr=0.0000
Traditional	0.8	1.5	1.2	
Wealth Index				
Poor	62.6	63.2	54.2	X^2=78.74
Middle	17.7	17.8	19.7	Pr=0.0000
Rich	19.8	19.1	26.2	
Occupation				
Not Working	39.4	31.4	23.8	X^2=255.02
Working	60.6	68.6	76.2	Pr=0.0000
Decision making Autonomy				
No low Autonomy	93.9	93.9	87.1	X^2= 163.29
Yes High Autonomy	6.1	6.1	12.9	Pr=0.0000

Source: National Demographic Health Survey (NDHS, 2013)

4.3: Odds Ratio Based on Multinomial Logistic Regression Analysis of Women Autonomy, Socio-Demographic Characteristics and Fertility Behaviour.

Table 4.3 below showed the result of multinomial logistic regression of the relationsip of women autonomy, socio-demographic characteristics on fertility behaviour among women. Result from Model 1, reveals women 25-34 years were 0.53 less likely to wants more children to age 19-24 years (RC). Age 35-44 years were 0.19 less likely to wants children to age 19-24 (RC). Age 45-49 years were 0.09 less likely to want more children to women age 19-24 years (RC).

Also, women that attained primary school education were 1.36 times to wants more children than no formal education (RC). Women that attained secondary education were to wants more children than no formal education (RC). Women with higher education were 2.34 more likely to wants more children. Women from north-east were 1.69 more likely to wants more children than women from the north-central (RC). Women from north-west were 2.67 more likely to wants more children than women from north-central (RC). Muslim women were 0.68 less likely to wants more children to Christian women that are employed were 24% less likely to wants more children to women that are not employed (RC).

Result from Model 2, women with high Autonomy wants no more children were 1.69 more likely than no low Autonomy (RC). Women age 25-34 years want no more children were 2.33 more likely than age 19-24 years (RC). Women age 35-44 years want no more children were 6.85 more likely than age 19-24 years (RC). Women age 45-49 years want no more children were 22.68more likely than age 19-24 years (RC). Women with primary education wants no more children by 51% that women with no formal education (RC). Women with highest education wants no more children by 91% that women with no formal education (RC). Hausa/Fulani women less likely want no more children by 0.34 than Yoruba women (RC).

Muslim women were 0.22 less likely want no more children to Christian women (RC). Women practicing traditional religion were 0.25 less likely want no more children to Christian women (RC).

Table 4.3: Odds Ratio Based on Multinomial Logistic Regression Analysis of Women Autonomy, Socio-Demographic Characteristics and Fertility Behaviour.

Background Characteristics	(Wants more)		(Wants no more)	
	Odd Ratio	Upper-Lower confidence interval	Odd Ratio	Upper-Lower confidence interval
Base Outcome	**Undecided**		**Undecided**	
Decision making				
No low Autonomy (RC)	**1.00**		**1.00**	
Yes high Autonomy	1.27	0.94-1.71	1.69**	1.21-2.36
Age				
19-24 (RC)	**1.00**		**1.00**	
25-34	0.53***	0.45-0.63	2.33***	1.63-3.34
35-44	0.19***	0.16-0.24	6.85***	4.74-9.91
45-49	0.09***	0.07-0.12	22.68***	14.68-35.05
Place of residence				
Urban (RC)	**1.00**		**1.00**	
Rural	0.82	0.58-1.16	0.31	0.56-1.19
Educational level				
No education (RC)	**1.00**		**1.00**	
Primary	1.36*	1.07-1.72	1.51**	1.14-1.99
Secondary	1.45*	1.08-1.95	1.37	0.98-1.93
Highest	2.34**	1.43-3.82	1.91*	1.17-3.11
Ethnicity				
Yoruba (RC)	**1.00**		**1.00**	
Hausa	0.55	0.29-1.04	0.34**	0.16-0.70
Igbo	0.86	0.28-2.62	0.66	0.19-2.24
Others	0.49*	0.26-0.89	0.28***	0.14-0.54
Region				
North Central (RC)	**1.00**		**1.00**	
North East	1.69**	1.18-2.43	1.19	0.78-1.84
North West	2.67***	1.81-3.96	1.14	0.70-1.85
Religion				
Christian (RC)	**1.00**		**1.00**	
Islam	0.68*	0.48-0.96	0.22***	0.15-0.34
Traditional	0.58	0.19-1.72	0.25**	0.09-0.66

Wealth Index				
Poor (RC)	**1.00**		**1.00**	
Middle	1.03	0.81-1.32	1.07	0.81-1.41
Rich	0.84	0.64-1.11	0.88	0.60-1.29
Occupation				
Not working (RC)	**1.00**		**1.00**	
Working	0.88	0.76-1.02	0.88	0.73-1.06

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

Source: (Olajimbiti, 2018)

HYPOTHESIS TESTING

H_0: There is no significant relationship between women autonomy and fertility behaviour.

H_1: There is significant relationship between women autonomy and fertility behaviour.

Decision

From the multinomial logistic regression, the relationship between women autonomy socio demographic determinants and fertility behaviour is statistically significant in (P< 0.05), from this, we can conclude thatthere is a significant relationship between socio-demographic characteristics among women (Age, Educational level, Ethnicity Region and Religion) and fertility behaviour. Likewise we can conclude thatthere is a significant relationship between women autonomy (OR=1.69, P< 0.05, CI=1.21-2.36) and fertility behaviour. Therefore, we reject the null hypothesis and accept the alternative hypothesis.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECCOMENDATIONS

5.0 INTRODUCTION

This chapter is devoted to the presentation of the summary of findings, conclusion and recommendations drawn from the analysis of the research study. The overall objective of this study is to explore the effect ofwomen autonomy on fertility behaviour among women in northern, Nigeria. The study was based on the sample size of 18,272women of reproductive ages in the study area.

5.1 SUMMARY OF THE FINDINGS

With respect to socio-demographic characteristics of women who wants more children, undecided and wants no more.Women socio-economic and demographic characteristics. It was reported that age 25-43 years had greater percentage by 37.2%, age 19-24 years by 28.9%, age 35-44 years by 24.1%, and the least were age 45-49 years by 9.8%. Women from rural area were reported than women from urban. Women with no formal education reported by 67.9%,primary education by 15%, secondary with 13.6% and the least were those reported to be higher education by 3.4%. Also, women from Hausa/Fulani were reported by 60.8%, Yoruba by 2.4% and Igbo by 0.9%. From the northern part women reported most from north-west by 54.2%, north-east by 25.2% and those reported from north-central were by 20.6%. Muslim women reported by 81.9%, Christian by 17.1% and the least were traditional by 1%. Women reported to be poor by 61.3%, rich by 20.7% and the middle wealth index were 18%. Women reported to be working are higher than those that were not working. Women reported to reveal their fertility behaviour that wants more children by 75.8%, wants no more children by 15.6% and undecided by 8.6%. Women reported by low autonomy by 92.9%, medium and high autonomy by 7.1%.

Furthermore, there is a significant association between the following women autonomy, socio-demographic characteristics (age of child, place of resident, level of education, ethnicity,

region, religion, wealth index and occupation) and fertility behaviour when p-value less-than 0.05. There is a significant association between women decision making autonomy and fertility behaviour when p-value less-than 0.05.

In the multivariateanalysis result showed the effects of women autonomy, socio-demographic characteristics on fertility behaviour. Result from Model 1, reveals women 25-34 years were 0.53 less likely to wants more children to age 19-24 years (RC). Age 35-44 years were 0.19 less likely to wants children to age 19-24 (RC). Age 45-49 years were 0.09 less likely to want more children to women age 19-24 years (RC).

Also, women that attained primary school education were 1.36 times to wants more children than no formal education(RC). Women that attained secondary education were to wants more children than no formal education (RC). Women with higher education were 2.34 more likely to wants more children. Women from north-east were 1.69 more likely to wants more children than women from the north-central (RC). Women from north-west were 2.67 more likely to wants more children than women from north-central (RC). Muslim women were 0.68 less likely to wants more children to Christian women that are employed were 24% less likely to wants more children to women that are not employed (RC).

Furthermore, result from Model 2, women with high Autonomy wants no more children were 1.69 more likely than no low Autonomy (RC). Women age 25-34 years want no more children were 2.33 more likely than age 19-24 years (RC). Women age 35-44 years want no more children were 6.85 more likely than age 19-24 years (RC). Women age 45-49 years want no more children were 22.68more likely than age 19-24 years (RC). Women with primary education wants no more children by 51% that women with no formal education (RC). Women

with highest education wants no more children by 91% that women with no formal education (RC). Hausa/Fulani women less likely want no more children by 0.34 than Yoruba women (RC). Muslim women were 0.22 less likely want no more children to Christian women (RC). Women practicing traditional religion were 0.25 less likely want no more children to Christian women (RC).

5.2CONCLUSION

Without any doubt that there is significant influence of women autonomy on fertility behaviour among women age 19-49 years, p-value less than 0.05. Thus this study conclude that base on the facts from the result that some factors such as Age, Educational level, Ethnicity, Region, Religion and Occupational status influenced fertility behaviour where p-value less than five percent level of significant.

5.3 RECOMMENDATION

The findings suggest that there should more attention on fertility behaviour of women age 19-49 years considering these socio-demographicfactors associated with fertility behaviour such as Age, Educational level, Ethnicity Region, Religion and Occupational status. More so, there should increase in various form of women autonomy, has this research disclosed the significant level of effect and likelihood ratio of the influence of women autonomy on fertility behaviour in northern, Nigeria. The increase in women autonomy will enable women to decide their fertility behaviour interms of timing and spacing births and this will improve the mother's health and child's health.

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

1. Different partners in partnership with the Government to address the issue of autonomy, unemployment among women, to improve their economic status, hence for them to change their fertility behaviour.

2.Health care providers should provide information, education; communication programs and improvements in counseling are needed to have knowledge on women fertility behaviour.

3. Government and private institutions should come up with programs and support to enlighten women especially in northern Nigeria.

4. Government should make proper public awareness to mainly explain more of the issues of high fertility that is rampant among women in northern Nigeria. Belief system that enforces and teaches much number of children should be eradicated.

5. More theories and principles should put in place to lay more emphasis in women autonomy.

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