



Culture, Child Preference and Fertility Behaviour: Implications for Population Growth in Cross River State, Nigeria

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The sole author designed, analyzed and interpreted and prepared the manuscript.

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ABSTRACT

The study sought to examine the effects of culture on child preference and its implications for fertility behaviour as well as population growth in Cross River State, with a view to isolating factors which will be of importance to policy makers and planners in addressing high fertility levels. Data for the study was drawn from the 18 LGA's of the State. A total of 1200 respondents were selected from the population of study (ever married persons). Data for the study was gathered using a combination of quantitative and qualitative techniques of data collection. The study found that because the society is patrilineal in nature, with descent traced only through the male patriarch, there was a strong preference for male children, which in turn affects the fertility behavior of the people. The Pearson chi-square calculated for child preference and fertility behaviour revealed a likelihood ratio of 29.49; while the result for family size and fertility was 103.14 and 199.53 for socio-cultural norms and values. These results indicate that, the calculated chi-square for all the variables is higher than the table chi-square. Thus the stated hypotheses were accepted. Again, the multiple regression analysis also showed that of all the independent variables analyzed, child preference had a regression weight of 1.292 and a correlation coefficient of $r=0.89$, which indicates

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that there was a strong preference by couples for male children, with a resultant increase in the actual family size, thus contributing to the continuous growth in the population of the state. This situation, the study found, is given impetus to by the cultural norms and values prevalent in the State, which enhances and sustains male child preference. The study calls for a comprehensive development of the state, especially the rural areas, as one of the remedies for curbing those aspects of the culture that support and sustain male child preference and high fertility.

Keywords: Culture; child preference; fertility behaviour; population growth.

1. INTRODUCTION

High fertility has become an increasingly important concern for many governments in developing countries. As a result of the high fertility rate in Nigeria, the total population has been growing at an alarming rate. For instance, the population of Nigeria which stood at 30.14 million in 1952 had by 1963 increased to 55.7 million and 88.5 million in 1991 and currently 170 million. According to [1], the population of Nigeria has apparently tripled its size in the last four decades.

The role of fertility in population dynamics cannot be underestimated, being a major element of population that brings about change in the demographic, socio-economic and political structure of the nation. Couples once married want to have children. This is expected because of the need for the expansion of the lineages' demographic strength. High fertility according to the [2] is caused, particularly by a broad mix of economic, social and cultural factors including early age at marriage, diminishing practice of prolonged breast feeding, limited use of modern contraceptives, and relative low status of women and the relative lack of a clear population policy in many countries.

The influences of culture, tradition, and low socio-economic standards have made the rural people to remain unchanged in their attitude towards fertility. The desire of couples to have at least one child of either sex, and the continued support given by socio-cultural factors such as patriarchy, support for parents at old age, title inheritance, and morbidity issues are some of the factors that have been identified as contributing directly to continued high fertility in developing countries of Africa, Asia, and Latin America [3].

In some countries however, couples exhibit little or no preference and there are even few instances in which a preference for daughters have been documented. For example, the World Fertility Survey (WFS) found that considerably

more women wanted a daughter for their next child than a son in Jamaica and Venezuela [4]. The WFS also found little or no son preference of any type in South America, in parts of the Caribbean and in Kenya, so also Lesotho and the Sudan. But son preference has been found to be prevalent in all of East Asia and among groups outside that region that share a heritage of patriarchal traditions. According to [5], son preference in South Korea and Taiwan is both pervasive and extreme. With all of these there is little evidence that child preference has been a substantial obstacle to achieving significant fertility declines.

In Nigeria, there appears to be high fertility among many families. Among other factors mentioned earlier, child preference seems to keep the fertility rate high in most parts of Nigeria and Cross River State in particular. Child preference has been taken up here for study to ascertain the extent to which it accounts for high fertility rates in the state. Child preference may not necessarily be assumed to be the sole determinant of high fertility in Cross River State, but it may be a major contributory factor and tends to provide part of the answer in the search for the cause of high fertility in Cross River State.

The main cause of high fertility in most developing countries has been identified as the persistence of socio-cultural factors and norms which favour high fertility. One of such factors that have been identified and taken up for analysis in explaining fertility behaviour in Cross River State is child preference, which has been identified by several scholars as a major contributory factor in the continued growth of the population of Nigeria in general and Cross River State in particular. The study therefore, seeks to examine the effect of culture on child preference and fertility behaviour and its overall impact on population growth in Cross River State.

1.1 The Research Problem

The effect of culture on child preference as well as fertility is actually more complicated than

might appear at first glance. In Nigeria as in most countries of the world, there is a strong preference for male children. Logically, this does not make much sense because in most developing and underdeveloped countries, daughters typically help their mothers with household chores, thus one would be tempted to believe that their value would have increased but that is not so as clearly there are several countervailing factors to reduce the desire for daughters. This, it has been suggested, may be tied to the expenses of a dowry or the early loss of the daughters help through marriage [6].

To most people, children are precious but sons are essential. This has been attributed to the fact that most parents expect to rely on their sons for old age support, continuity of family name and property inheritance. Therefore they focus all resources towards their survival. The essential nature of sons as traditionally conceived prompted the investigation into the relationship between male child preference as it affects fertility behavior in Cross River State. Most people find it very difficult to stop having children when they do not have at least a son, even with many daughters [7,8]. Most marriages get dissolved for the sake of the absence of a male child [9]. In many instances most men go for a second or more wives just for the simple reason of getting a male child [10]. This search for a male child seems to be a major source of high fertility and in Cross River State. According to [11] the major roles of a woman are child bearing, child rearing and ultimately the care of the home. Therefore the inability of any woman to fulfill these all important roles is viewed with contempt and great disapproval and thus can lead to some major consequences such as separation and divorce. Thus, research questions emanating from the foregoing include; what are the possible socio-cultural factors that enhance or sustain male preference? Does the desire for male children bring about a change in the fertility behaviour of the people? Can it lead to a changes in the in the actual family size? Is the preference for males affected by the kind of roles assigned to males and females in the society? What prospects exist for developing a strategy to guide policy makers towards tackling the fertility problem in Nigeria generally and Cross River State in particular? The major concern of this paper therefore, is to examine the effects of culture and child preference on fertility behaviour in Nigeria and Cross River State in particular.

1.2 Literature Review: Culture, Child Preference and Fertility

Child preference has been well documented in a large number of countries though the degree of such preference varies from one country to another depending on such factors as the level of economic development, social norms, cultural and religious practices, marriage and family systems, degree of urbanization and the nature of social security system [12,13,14,8,11,2]. Child preference tends to be particularly pronounced in developing countries, in rural areas and among more traditional couples and couples of lower socio- economic status. Although child preference is still common even in many economically developed countries [15], the preference often exists side by side with parent's desire to have at least one child of each sex.

Many cultures the world over attach great importance to the act of procreation. In a review of studies on India, [16] reports that typically a woman knows of no acceptable alternative role for herself, than that of wife-mother. For all but a relative few, a woman's destiny lies mainly in her ability to procreate not just children but male children; the mark of her success as a person is in her having living sons.

In his study in China, [17] found that the Tallensi's regard the perpetuation of their line of decent as of transcendent importance. There is something wrong by native standard with men and women who never marry and they are few. To the Asante, prolific child bearing is honored. A mother often boasts of her achievement and is given a public ceremony of congratulation if she is able to give birth to three male children in a row. In contrast, barren women and those unable to give birth to male children are given little or no prestige and are regarded with contempt and malicious pity.

Another socio-cultural explanation for child preference and high fertility in certain societies was revealed by [18]. In the study of the Yoruba people of Western Nigeria, families of fewer than four children and with no sons were looked upon with horror. [19] reports that even if it could be guaranteed that two children would survive to adulthood, Yoruba parents would find such a family very lonely, and would always prefer that the two survivors be males so that they can get married in the future and bring in more members for the family. Because, many of the features of large family sizes, which have come to be

negatively valued in the west, such as noise and bustle, are positively valued by them.

In most countries where son preference is strong, it is closely linked to the low status accorded women in the society. Since creation, most traditional societies of Africa have strictly remained patriarchal. It is believed that the family line could only be carried on solely by descendants on the male side. Only the male offspring belonged to the clan community. The traditional customs of marriage and the family constituted the foundations of male supremacy. The improvement in marriage and divorce laws of some countries as well as improvement in education, occupation and job opportunities for women have not helped much in improving the status of women in the society. This has led to their continued treatment as second class citizens.

In Nigeria as in other parts of Africa, the family is dominated by a male patriarch and the practice of ancestor worship is common place. The patriarchal family structure and the resulting strong preference for sons became institutionalized values and therefore formed part of the way of life of the people. Thus according to the book of rites a woman is to obey her father before marriage, her husband during married life and her son in widowhood [6]. These traditions also stress the importance of carrying on the family line through male progeny, thus providing the justification for the tradition of female infanticide in countries like China.

Increasing evidence has been documented about sex selective biases in the allocation of food and health care within the house hold. Son preference in parental care, intra family food distribution, feeding practices and utilization of health care services and even access to education are some of the behavioral mechanisms which sex biased attitudes may have led to [20].

According to [21], in virtually every society, individuals feel pressured to have children, although in some societies these pro-natalist pressures are stronger than in others. This view is corroborated by [22] who found that the position in sub-Saharan Africa often seems to be that "there is an abhorrence of a family with no sons which might mean the extinction of descendants needed to perform the services for their ancestors; in traditional society nearly all parents have social and usually economic gains

which increases almost indefinitely with the size of the family and the birth of a son. Societies everywhere have developed social institutions to encourage child-bearing and reward parenthood in various ways, which in turn affects the fertility level and the actual family size. [23] discovered that among the Kgatla people in South Africa *it is inconceivable that a married couple should for economic or personal reasons deliberately seek to restrict the number of its off-spring, (pp186)*. He found several social factors that encouraged the Kgatla people to desire male children. This is because, *a woman with many sons is honoured. Married couples acquire new dignity after the birth of their first child and since the Kgatla people have a patrilineal decent system (inheritance passes through the son); the birth of a son makes the father the founder of a lineage that will perpetrate his name and memory, the mother's kins are pleased because the birth saves them from shame, (pp195)*

Although it is clear in many countries today that the status of women is steadily improving, it is nonetheless true that in many societies around the world, desired social goals can be achieved only by the birth and survival of a son. Since in most societies males have been valued more highly than females, it is easy to understand why families would continue to have children until they have at least one son.

It was reported in one of the National dailies, years ago (The Nation, Feb.25, 1987) that 15 Chinese women had publicly declared that they will rather die than give up their chances of having baby boys. As mothers of girls they lacked status and were targets of maltreatment by their husbands, mothers-in-law and even their own parents. Failure to produce a male offspring in their region was a lot "worse than death" they said. Such cultural and social values attached to male children can have very great effect on total fertility.

An extensive social science literature documents the existence of male preference in South and East Asia and the implications of this child gender bias for fertility, marriage and the relative wellbeing of boys and girls. There is little evidence, however, of parental discrimination in favor of sons in most of the developed world. Fertility patterns and surveys from many countries reflect a widespread desire for "balanced families" with at least one boy and one girl. The observable allocation of resources within families is not strongly discriminatory:

recent cohorts of young men and women receive comparable levels of education and sons and daughters appear to be treated equally in terms of parental transfers of wealth, [24].

According [25], the absence of significant discrepancies in the wellbeing of boys and girls does not however, imply that child gender has no impact on marital stability and parental behaviour in wealthy, industrialized societies. Sociologists and psychologists have documented differences in the parenting of sons and daughters, in levels of father involvement and in levels of marital satisfaction reported by parents of boys and girls. Some studies have found that the presence of a son significantly reduces the probability of divorce by American couples. This body of work has been recently augmented by research by economists who have found significant effects of child gender on marital stability and family structures as well as on parental time allocation and expenditures, [26].

The question now is what are the parental motives that lead to an emphasis on the birth, survival and education of sons, relative to daughters? Researchers have emphasized the role of institutions and cultural norms that increase the value of sons and increase the costs of daughters, such as the expectation that sons will care for parents in old age, or the need to provide daughters with a substantial dowry upon marriage. [27,28], examined the surprising persistence of son preference in the diverse economic environments of China, India and Korea, and argued that these countries are characterized by similar family systems that create disincentives to raise daughters. In patrilocal societies such as the one under study, a woman leaves her parents household when she marries and joins her husband's household. Even when the economic value of women's labour is substantial, a married woman contributes to the resources of her husbands' family: a girl's potential contribution to the welfare of her parents is therefore limited. Other institutions such as dowry and male responsibilities to aged parents and ancestors augment the net economic costs of girls relative to boys in these societies.

Again [29,30] maintain that male child preference has deep cultural roots in many Asian and African countries. The sex ratio at birth in these countries (China, Bangladesh, India) exceeds the expected ratio of 106 males per 100 females, possibly reflecting social or behavioural

interference. In China as in Nigeria where son preference has historically been strong, sons are needed to carry out farm work, offer financial support to aging parents, continue the family name and receive the family inheritance. In the past, they also were responsible for ancestor worship. Sons are particularly preferred in rural farming areas of China and among less educated parents. Using a small subset of Ghanaian population, [31] concludes that male preference is more predominant in rural agricultural areas, where the sex ratio at birth is generally higher than the ratio in the urban areas.

Male child preference is generally viewed as a socially determined bias in a patriarchal society where couples prefer to raise a child who has the culturally accepted characteristics, status and economic potential associated with the male gender. This preference often influences behaviour and may result in gender biases that negatively affect girls and women's welfare, health and survival. Thus preference may lead to discrimination. Male preference which has its roots in the patriarchal form of society may be an obstacle to further decline in fertility, thus necessitating the need for acceptance rather than rejection of whatever sex of child one has.

Male child preference and fertility behavior have been subjected to the influence of cultural practices, beliefs and values which concede to the man more authority and social privileges than the woman [32,33,34]. Most studies have come to the conclusion that husbands have too much say in their wives fertility behavior. In [35], it is reported that studies have specifically suggested that this dominant role of the man often extends to a couples' reproductive behaviour and that men have the final say in decisions about family size, sex of children and even the use of family planning methods and services.

Indeed, [13,36] have argued that the persistence of high fertility in sub-Saharan Africa as a whole can be explained neither by the absence of socio-economic development nor by the ineffectiveness of family planning programs but by the persistence of socio-cultural and traditional practices that hamper the implementation of programs geared towards fertility reduction.

Using data from four countries in Africa; (Kenya, Nigeria, Ghana and Cote d'Ivoire) and four other Asian countries (China, India, Indonesia and Thailand), the Caldwell's concluded that the

explanation lies largely in a religious/cultural belief system and an accompanying social structure that has accorded both spiritual and economic rewards to high marital fertility [13,30].

The conclusion here however is particularly relevant to Nigeria and indeed Cross River State where religious belief has a firm hold on the lives of the people and where children are seen as a blessing from God and procreation is an important part of marriage. Thus like many other sub-Saharan African societies, Nigerian traditional societies and religions stress the importance of ancestry and descent. Family life is embedded within the lineage system. Strong obsession exists with the female's procreative function primarily for perpetuation of the family and lineage. [37,38], explains this emphatically as follows: *The traditional African family forms part of a lineage, a corporate group whose members are recruited on the basis of filiations. One of its main characteristics is perpetuity. The lineages do not die; its members die and the membership is replenished through birth. Ideally a considerable expansion of membership enhances the power and prestige of the group and reduces the ever present danger of mortality. This really is the crux of the problem of persistent high fertility enhanced by increasing desire for sons, (pp275)*

It follows therefore that the social pressure arising from the obsession to replenish the lineage by giving birth to sons has conditioned the woman into a kind of "demographic martyr". She has come to believe strongly, that, it is a matter of life and death to marry and bear male children [39,40,41]. Thus demographic behaviour is part of a larger, more complex whole of behaviour patterns, learned as part of the general behavior pattern in a social group [42,36].

Male child preference in particular falls under close cultural influence because of its fundamental value for fertility increase. Sons perpetuate the family name and give social and psychological satisfaction to parents, the more male children a mother has, the more blessed she is regardless of the means to sustain the children, which, in the providentialist conception will be provided by God. Therefore performing her procreative function becomes an obsession even to the point of death. In Cross River State a woman who for instance has no children is referred to as "**Ara**", meaning barren and anyone who fails to give her husband a male child consequently suffers an insecure marriage.

1.3 Theoretical Framework

Max Weber, in his work, *Economy and Society* published in the 1920s noted that sociology is a science concerning itself with the interpretative understanding of social action with a causal explanation of its causes and consequences [43]. This forms the basis of understanding his social action theory. It suggests a scientific verification of action and reaction among individuals rather than collectives, at a subjective level of meaning and adapting to a subjective method of understanding-Verstehen. In other words, Weber proposed the use of subjective methods as a means of understanding causal relationship, between action and reaction. According to him, it is only when the subjective meaning behind an action is understood that an action could be regarded as a social action. This is based on the fact that the human subject is a free being who projects meanings and seeks ends. Such ends or goals of a social action are defined by the values of the society, while the means to achieve them are prescribed by the norms. Hence, central to the understanding of human behavior implies understanding the motives that lie in the social and behavioral circumstances of individuals. Weber's clear intent in this theory is to focus on individuals and patterns and regularities of action and not on the collective. Accordingly, action in the sense of subjectively understandable orientation of behavior exists only as the behavior of one or more individual human beings. In other words, he is concerned with how individual patterns and regularities of actions define and influence social structures and not vice versa. Human beings act to achieve goals in situations, to solve problems that confront them. Therefore in order to understand the social and behavioral contexts of groups and individual action, it is important to analyze and understand the collective meaning behind their actions, be it overt or covert, often oriented towards a group of people or to a particular system in the society.

Weber's type of social action is useful in understanding the action and reaction that take place in situations or societies where male child preference and high fertility are valued. It is important to note that child bearing, sex preference, sexuality, pregnancy, marital stability, contraception are reproductive behaviors or actions embedded in the socio-cultural belief systems which influence perception and attitude towards them. These elements act in collaboration with cultural factors

to influence the sexual and reproductive decisions that couples make.

In Nigeria, the social and economic costs of not bearing or having a male child can be enormous particularly for those who are married and have mostly female children. The husband may take an additional wife or threaten a divorce and the wife without a child may suffer from negative social stigmatization. In addition, where women face limited social, educational and economic opportunities, desire for male children, increase in family size and childbearing may not be viewed as an opportunity cost but rather, as a means of obtaining necessary resources, or insurance for the future or as a mark of social and personal achievement.

The foregoing underscores the need to understand the motive underlying individuals' actions and reactions. [8,44,45], has observed that social actions within the society are undertaken in accordance with shared values and normative dictates. Therefore sex preference is a function of shared values operating within a particular social structure. Weber's theory of social action tends however to suggest that most human action can be explained as a self-directed and purposive human action determined through established social pattern. But in reality, actions are not at all times purposively planned and directed to achieve definite motives, for example ultimate completed family size. Similarly, in certain situations the original motive of initiating an action may be lost, such as having a happy marital life/union or the total breakdown in marriage and marital values as a result of the lack of a male child, which does not also show the major influence of societal factors in influencing actions.

The paper adopts this framework because it provides adequate understanding of the issue of culture and child preference as well as an adequate frame of reference for this study. Accordingly, the society influences the ends, which the actor seeks and the means towards attaining them. Therefore, the society plays an important role in affecting an individual's goals and the means of achieving them. Essentially, the cultural environment predetermines the ends which an individual pursues by providing the cultural structure upon which an individual/couple can express their desire. Thus, one can say that the Nigerian cultural environment exerts very strong influence on a couple's preferences as well as their fertility behaviors, through the

transmission of concepts about acceptable norms, values and sex role behavior for men and women, the desire for male children tends to increase.

Similarly, cultural attitudes towards sex preference may also have direct impact on fertility behavior. Thus the insistence of some couples on having at least a male child to carry on the family name. Therefore, it is observed that the perception, attitudes and actions of individuals in relation to fertility are largely determined within the context of the socio-cultural norms and values of the society. The society provides the platform within which attitudes and behavior towards sex preferences and fertility are shaped. [46,47], summarizes this carefully, when he noted that the available opportunities, the role models, the reinforcement and contingencies that further shape behaviors, the social norms, the perceptions, the beliefs, attitude and values of an individual are mostly influenced by his social environment, which affects his behaviour.

2. METHODOLOGY

The major aim of the study is to examine the effects of culture on child preference and its implications for fertility behaviour as well as population growth in Cross River State. This is done with a view to isolating factors which will be of importance to planners and policy makers in addressing high fertility levels. Specifically however, the following objectives guided the conduct of the research.

1. To examine the relationship between culture, child preference and fertility behavior in Cross River State.
2. To examine the effect of child preference on actual family size and its consequent impact on population growth in Cross River State
3. To identify the place of socio-cultural factors in determining child preference in Cross River State.

The study was carried out in Cross River State, South-South, Nigeria. The population of the state as at the last census in 2006, stood at 2,526,542, giving a population density of 110 persons per sq km. The gender distribution of the population is 1,263,915 (50.03 percent) males and 1,262,627 (49.97 percent) females (National Population Commission 2007). The current estimated

population of 2013 is 3.0 million, based on an average annual growth rate of 2.9, [48].

With Calabar as its capital, Cross River state is often regarded as a miniature Nigeria because of its diversity in ethnic composition as well as its natural heritage. Cross River State is mainly an agricultural state with about 75% of its people engaged in subsistence agriculture, which probably accounts for the people's desire for male children. In spite of the fact that the state is in the oil producing area of the Niger Delta, income levels are exceedingly low and poverty is endemic with over 70 percent of the population living below the international poverty line of one U.S dollar a day.

Culturally, Cross River State is a very traditional and patriarchal society, where high fertility is valued and norms and values governing fertility and fertility behavior are held in high esteem. Descent is traced through the male, inheritance is also through the male. Residence is patrilocal, though there are pockets of matrilineal kins and matrilocal residential patterns especially among the Efiks and the Yakurr people of the state.

Literacy level in the state is almost at a 50-50 level with the males having 50.02% and the females having 49.08% (CR-SEEDS Document 2007). Maternal mortality is believed to be between 1,500 – 2,000 per 150,000 live births and perhaps the highest in the south – south zone. Access to, and the utilization of reproductive/family planning services is still very low (20-30%). The average life expecting is estimated to be 54 for CRS as against the 52 years, which is the national average [49,50,45, 51].

However, the population of study was ever married persons (males and females) that is, whether currently married, widowed, separated, or divorced between the ages of 15 and 60, who reside in both the rural and urban areas of the state. A total of 1200 ever married persons were sampled. Data for the study was generated using quantitative and qualitative methods of data collection.

The survey, which is a quantitative technique, made use of the questionnaire as the instrument for data collection. The questionnaire was structured, and contained closed and open ended questions. The schedule contained questions on respondents' socio-demographic background; fertility; marriage history; systems of inheritance; influence of culture and tradition;

child preferences and a host of other related questions. The schedule was framed in English but interpreted in the local dialects for the respondents who could neither read nor write.

To ensure the flexibility of the instrument, the questionnaire was both structured, that is pre-coded with fixed alternatives or close ended options as well as open-ended questions that allowed the respondents the freedom to express their true intentions, beliefs and attitudes. Focus Group Discussion (FGD) is primarily a qualitative method involving the administration of open ended questions to a carefully chosen target group. The objective is to make the subject an active participant. Thus 12 Focus Group Discussions (FGDs) sessions were held with the participants (males and females) who make up the sampled population. The goals of the FGDs were to collect information on the perceptions of the participants about the effects of culture, and child preference and how it affects fertility behavior as well population growth in Cross River State. The FGD was used in this study because of its unique ability to provide insights into complex patterns of behavior, attitudes, perceptions and motivations, and because they are in-depth exchanges in which groups participants talk about topics relevant to a particular set of research objectives.

Twelve FGD sessions were held in the six selected LGAs, that is, two sessions each for the six LGAs, that is, six sessions for men and six sessions for women. Three of the six sessions for men were held with groups of younger men who are still bearing children, while the other three sessions were held with groups of older men who have completed child bearing. Again, three sessions were held with groups of older women who have completed child bearing and another three sessions with groups of younger women who are still within the child bearing age. The participants for the FGD were homogenous in characteristics. Each FGD session comprised between six to ten discussants. Participants were chosen in a non-probabilistic manner to ensure a broad range of experiences within each group. Male field assistants were specially trained to conduct the session for male participants, while the sessions for the female participants were conducted by the researcher with the support of trained indigenous female research assistants. A discussion guide with proposed questions was prepared by the researcher for the focus group facilitators. It was translated into the local language of the area or Pidgin English for some

groups, especially those in the rural areas who felt more comfortable discussing these issues in their local language. The discussions were tape recorded, transcribed and translated. For accuracy of translations they were checked by a second person.

In depth interviews were also conducted with twelve (12) couples. That is couples who have children of the same sex (all males or all females), those who have a combination of males and females, and those who do not have at all. They were selected purposively to gather information for the study base on their experiences in marriage, especially on the issues of culture, child preferences and how it has affected their fertility behavior, (that is in terms of the actual family size) the stability of their marriages, spousal relationship, affection and support from family members etc. This enabled the researcher to elicit such vital information that assisted in the final outcome of the work.

The SPSS was used to analyze and generate data into frequency tables and cross tabulations to show the major trends and strength of relationship between the variables (dependent and independent), that would help us to draw some major conclusions on the issue under discourse. Analysis of qualitative data was done using thematic narratives and direct (verbatim) quotation of participants and key informants' views and opinions as expressed during the group discussions and interview sessions, after a thorough translation and transcription of all the information gathered from the focus group discussions (FGDs) and in-depth interviews (IDs). The results and information gathered from the interviews and focus group discussions were used to buttress and strengthen the results of the quantitative data analyzed.

2.1 Validity and Reliability Checks

Reliability of a measure is its capacity to yield the same results in repeated applications to the same sample of respondents or events. Thus if a questionnaire indicates the same attitude score of an individual each time it is administered, the questionnaire is said reliable. If on the other hand, it gives different scores each time, it is unreliable. [52,53], had listed three most used methods of testing reliability. They are the test-retest; the split-half and the multiple, parallel or alternative form. For this work however the multiple, parallel or alternative form was used to test the reliability of the instrument.

Another important property which a measure must possess is validity. This means that it should be free from consistent or systematic errors so that it is able to measure what it purports to measure. Thus, in order to validate the instrument, it was pre tested in one village (Neghe) outside the ones selected for the study to make sure that it was consistent.

3. RESULTS AND DISCUSSION

This section focuses on the presentation, interpretation and discussion of the data collected during the field work. It takes a look at the impact of culture on child preference and its subsequent effects on fertility behaviour and population size in people of Cross River State. In the survey instrument, questions relating to respondent's child preferences and number of children desired or preferred were asked to enable the researcher elicit information on the sex of children each respondent has, desires or prefers. Table 1 presents data on responses to questions relating to the sex of child preferred with one child option

In the survey questionnaire the respondents were asked questions on the sex of children preferred; such as 'suppose you were to have only one child in your life time what sex would you prefer?' Table 1 shows that 61.9 percent of the male respondents and 70.0 percent of the female respondents said they would prefer a male child while 38.1 percent of the male respondents and 30.0percent of the female respondents said they would prefer a female child. What is interesting about this result is that it was the women who showed more preference for male children than their male counterpart. This situation is understandable especially in a patriarchal society such as the one under study and where the security of the marriage is built on the number of surviving sons one gives birth to. The picture also became clearer when in one of the focus group discussions with a group of young women who are still within the child bearing age, a young, currently married female discussant exclaimed in Pidgin English:

If you want make dem throw you comot for house, make you no born boy, na so your husband and him people go just dey give you trouble like say na you de create pikin, like say na your fault say you no born boy.

This scenario played out in almost all the group discussions held which led to a follow up

Table 1. Sex preference with one child option

Sex Preferred	Male respondents		Female respondents		Total	
	frequency	percentage	frequency	percentage	frequency	percentage
Male	323	61.9	440	70.0	763	66.3
Female	198	38.1	189	30.0	387	33.7
Total	521	100.0	629	100.0	1150	100.0

Source: Field Survey 2016

question, 'how many daughters would you want to have before you stop child bearing, assuming you were to have just one son?' The analysis revealed that most of the couples sampled, 55.0percent (634) said they will keep trying until they have between 7 – 8 daughters. That is to say that they can only stop at seven or eight if more sons did not come, while 20.0percent (229) said 4 – 5 daughters, which means, they would actually try to get more daughters to compensate for the sons they do not have, but again some (25.0%) chose very few daughters which according to one of them 'was just enough because they were not trying to build a 'convent', thus expressing out rightly their displeasure for many daughters.

Table 2 shows respondents reasons for wanting or preferring a male child. As indicated above most of the respondents (51.1%) wanted male children to keep the family line, 8.4 percent of them wanted male children who could inherit and take care of their property when they are no more, 7.6 percent wanted children for prestige and recognition while others gave several other reasons that were not included in the checklist and they consist 28.0 percent. This includes the security of their marriage, which was raised basically by the female respondents who believe that without a male child in the marriage, the marriage is at the risk of breaking.

Table 2. Respondents views on reasons why they prefer a male child

Responses	Frequency	Percentage
To keep the family line	431	56.6
For prestige and recognition	77	10.0
To take care of or inherit property	87	11.5
To take care of parent at old age	46	6.0
Other reasons	122	15.9
Total	763	100.0

Source: Field Survey, 2016

Thus respondents agree that preference for a child affects the fertility behavior of the people of Cross River State. This position further confirms earlier findings by various other researchers in the same area [52,54,11,53,55]. Also drawing from Caldwell's theory of inter generational wealth flow, a male child is wanted for reasons relating to the continuity of family/lineage as has been revealed by the data presented.

To further buttress this point, a widow (who however was separated from her husband before his death) in one of the interview sessions said:

In trying to get a male child, I now have six daughters. In fact, it was until the doctor said if I don't stop I could die that was how I now stopped but even at the risk of losing my life my husband did not care; what was his problem was just getting a male child. It even got to a point he was calling our home a convent and that was why he was not going to return to the house until I leave with my prostitute daughters.

Another twist was also revealed during another interview session and focus group discussions with couples from the southern senatorial zone of the state. This zone comprises mostly the Efik speaking people of the state and it is predominantly urban. Interestingly, almost every couple interviewed or who took part in the discussion session said they would prefer to have more female children than male children. When questioned further, one discussant gave such reasons as:

Daughters bring peace to the home because they are quiet and not as troublesome as the boys. They can keep the family together, take care of their parents when they are old as well as their younger siblings and generally just keep the home together. In fact they are home makers.

Buttressing this position another male discussant that, though wants male children but prefers to have a female first said:

I prefer to have a daughter as a first child because they are always able to take care of the home and their younger siblings. My "Adiaha" (meaning first daughter) is more than a wife to me, she knows me much more than her mother and there is nothing I do or have that she does not know, and so if I die today, I will die in peace knowing that my properties and in fact all my other children are in safe hands because I know that she is very capable of taking care of everything I entrust into her care much more than her brothers.

Almost all the discussants in this axis seem to agree with what was said by the above discussant, probably that is why it can be observed that among the Efiks of Southern Cross River State, women are allowed to inherit properties from their fathers, and daughters who have problems in their marriages most times return to their fathers' house without any opposition. This situation as observed might make for an interesting area for further research.

Also confirmed is the fact that most respondents during the focus group discussion agreed that the search/preference for a male child can lead to an increase in the number of children that the person eventually has, as stated by this male participant:

When we got married we had agreed that we were going to have just three children, that is two boys and one girl, but when the children started coming the first three were girls and so we didn't have any option but to continue trying to see if we could get a boy and before we know it, we have six children it is only this last one that is a boy. So you see that it is not our fault, but what God gave us.

This position was further corroborated by another female participant who happened to be a mother of five girls, all in the attempt to have a male child. Incidentally she lost her marriage and now lives alone with her five daughters. She had this to say:

I now have five daughters, instead of just three children as I had earlier desired even before I got married. It happened that, the children that were coming were just girls and so we kept trying, hoping and praying that at least one would be a boy because already my husband had started making trouble and

was accusing me of not giving him a son and so I kept on and on until now that I have five girls and he decided to take in another woman and sent me away. But what can I do, I love my girls and they bring me so much joy after all it is not in my power to create children otherwise I would have done so, but all the same I thank God because only Him knows what is best for us.

The position of these two respondents is not peculiar to them alone as it is a reflection of the general situation in the area of study and even the country at large where the search for a male heir can become a do-or-die affair. People tend to increase the number of their children and indeed their family size because they are searching for a particular sex.

Another interesting situation was observed were there was conflict of desires/preferences between the husband and the wife. In most cases there was a situation where the husband had his preferences for more males than females while the wife wanted more females than males and vice versa. This type of situation would probably not have arisen if the couple had discussed their desires and preferences and reconciled them before contracting the marriage, so as not to create unnecessary tensions in the home. Analysis of qualitative data revealed that where there is conflict in terms of spouses' desires and preferences the husbands' preferences always supersedes, though not in all cases. For example, a couple that was interviewed during one of the interview sessions confirmed that they both came into the marriage with various desires and preferences as to the number and sex of children they individually desired, to the point that, it became very difficult to reconcile their desires. In fact, it took the intervention of some family members for them to be able to reconcile the issue. While the wife wanted and loved a large family of between 5 and 7 children, with more males than female children, the husband wanted a much smaller family of 2 to 4 children, with a balance between the sexes. However it was observed that where couples are disposed to discussions on the number and sex of children preferred, problems of preferences were minimal.

Notwithstanding this situation, some respondents expressed that they do not have any issues with having children of the same sex, because for them whether males or females, children can only be what you make out of them as expressed

by this male key informant who has all female children but does not seem to be bothered about the situation.

I wanted three children and I have got three children so whether they are females I don't care, what is important to me right now is making them who I want them to be.

For this informant and indeed many other people from Cross River State a balance of the sexes would have been good but with what they have, they are just okay and so it is with those who are trying to keep to their initial plans of having a particular number of children irrespective of their sex.

Data on Table 3 reveals that majority of the respondents (65.3%) agree that couples should continue child bearing if they do not have male child, irrespective of the number of children they already have. This is indicative of the fact that preference sex, particularly male child preference has a strong impact on the peoples fertility behaviour. That is to say that, the stronger the preference for a male child, the higher or stronger the willingness (fertility behavior) to continue child bearing.

Table 3. Willingness to continue child bearing without a male child

Responses	Frequency	Percentage
Yes	751	65.3
No	324	28.2
Others	75	6.5
Total	1150	100.0

Source: Field survey, 2016

Given the significant role that child preference plays in the ultimate completed family size and its eventual impact on the overall population growth rate, the determination of the respondents' family size preference will give an insight into the fertility situation in the society. In an attempt to find out respondent's family size preferences, that is, the total number of children wanted in their life time, respondents was asked what size of family they preferred. For this study a family size of 4 children and less was considered a small family size, while a family of 5 children and above was considered a large family size. On the respondents' family size preferences, that is, the total number of children wanted in their life time, respondents were asked how many children they want or desired in their life time. Typically, responses to such questions

can be taken as indicative of the fertility expectation of the respondents.

Again, out of the total population of 1150, only 387 persons said they prefer female children. Of this number 167 (42%) said they prefer female children for reasons relating to the collection of bride price when they are given out in marriage. Some said, to take care of siblings, while others said they preferred female children for old age support and security. Of the number only 18.1 percent said they wanted female children for reasons relating to inheritance and care for family property. This is understood because, apart from the Efiks of southern Cross River State, as found in the study, no part of the state allows women to inherit property.

This was further stressed by some discussants during a group discussion session with a group of older males in the central senatorial zone of the state. They maintained that because of the kind of socialization given to them, there are certain roles that can only be performed by a particular sex. In fact quoted directly from one male participant in a group discussion with older males:

In our society we know that there are some roles that men can perform and women cannot perform. For example, women are trained to be mothers and homemakers and not to perform roles that require strength and power, they are usually not allowed to hold positions in the traditional society, inherit properties, carry on the family name/title, women cannot do them, it is only the men that can do those things, that is why people will want to have at least one male child who will perform those roles considered to be the exclusive preserve of men.

In the same vein, a female discussant in another session with a group of older women confirmed:

Something happened in my family that made my mother say that no matter what it takes, all of her daughters must do everything in their power to make sure that they have a male child. This is because her husband left her and got married to another woman who now gave birth to two male children and whenever there was trouble in the house, my father and his other wife and the two boys will join together to beat my mother. This made my mother to be very sad. In fact even when all of us grew up and became

something in life, she never stops talking about what had happened to her and will always say to us even if it means giving up your life, make sure you give birth to sons so that people will not trample on you or insult you because if you have boys, you have strength.

Because we live in a society that places high premium on male children and the role they perform in society, people go through so much to make sure they can have at least one male child. However a currently married female interviewee brought a new twist to the whole discussion.

As far as I am concern there is nothing a man can do that a woman cannot do, it depends on the kind of training that they get, after all we have seen women taking care of families and taking up bread winner roles, so whether male or female it does not matter because it is God who gives children

The issue of child preference is one of those decisions influenced primarily by where a person comes from. In Nigeria as in many countries in Africa and Asia, high fertility is considered a blessing and a man with many children particularly sons seems to command much respect and prestige [56,57,51,58]. Also noted by [29,59,60] is the fact that, in many cultures people feel that life is incomplete without a son to carry on the family name. She further stressed that a more serious problem is the traditional legal system that does not allow females to inherit property in most cultures and that although the husband and wife may be quite contented with girls most times the relatives persistently make life unbearable for the husband until he marries another wife to continue the search for a male child.

For example among the Igbo's of South Eastern Nigeria and even in some parts of the northern senatorial zone of Cross River State, the search for a male child can become a-do-or-die affair, except for a few educated, urban dwellers, well placed respondents, culture is a big issue, [61,62,53]. During an interview with a couple in the northern part of the state, a husband had this to say:

In any place, having a male child is a thing of pride. If you don't have one you can't stand or talk where your friends are talking because you will be feeling inadequate and

incomplete. A son is your strength, your power, your future, your joy. It is him that will carry your family name on, so in our culture not having a male child makes you feel like a no body and even like an outcast, they might even deny you some rights and privileges that you are supposed to enjoy. So you see why people will do everything to make sure they have at least one male child.

The fact still remains that society expects children to be a sort of economic asset to aged parents. Thus, children are desired in the family not just as a fulfillment of their reproductive duties but as a sort of economic asset as well as social and traditional security and insurance against the unexpected and for what [63,41,28, 34] called the 'dynastic imperative'. Analysis of quantitative data also revealed that the overall response from the data indicates the influence of culture and tradition and the will of God, while not ruling out the ability to cater for the children as well as family pressure. This implies that the major socio-cultural factors that enhance child preference are the culture and tradition prevalent in the area, as well as the will of God.

Findings from the group discussions also revealed that most respondents in the urban areas said their major influence in determining the number and sex of children desired was their ability to cater for them and their level of income; this according to them is because of the present economic situation in the country. According to one participant:

The cost of everything in this country is very high, education, health, housing, feeding in fact everything, so why have plenty children that you cannot take care of, if you want to give your children the best in life you have to consider all of this, that is why for me i just want three children, in fact, children that I can give the best in life, so whether they are all boys or all girls I don't really care.

However, for the predominantly rural respondent, the will of God was what most of their responses were. For them, no man has any power to decide the number of children that he/she wants after all it is God who gives children. The revelation was most fascinating during a particular group discussion with some female respondents who were generally young and still within the child bearing age of 15-49 and fairly literate. According to one of them:

It is not in our place to decide how many children we want to have, it is the husbands that will tell you when they marry you, that he wants so and so number of children or how many should be boys or girls. You don't have any power whatsoever, sometimes even after he has said he wants four or five boys or girls as the case may be, God can decide otherwise, so it is God that decides the number of children that He wants to give to you.

This situation goes to confirm an earlier assertion made by [10,15,64,59,65,66], that women in most parts of Africa and indeed Nigeria cannot take independent reproductive decisions by virtue of their subordinate nature and the patriarchal nature of the society.

4. TEST OF HYPOTHESES

4.1 Hypothesis One

There is a significant relationship between, child preference and fertility behaviour of the people of Cross River State.

In testing hypothesis one, the chi-square test of significant relationship was used. In this case the study sought to find out the relationship between child preference and the fertility behaviour of the people. To calculate this, responses to the questions relating to male preference and the willingness to continue child bearing which was used as a measure for fertility behaviour were used.

Table 4a. Observed frequencies/cross tabulation for child preference and fertility behavior

Responses		Fertility behaviour			
		Yes	No	Others	Total
Male preference	Male	457	250	56	763
	Female	294	74	19	387
	Total	751	324	75	1150

Table 4b. Expected frequencies

Responses		Fertility behaviour			
		Yes	No	NR	Total
Male preference	Male	498.3	214.9	49.8	763
	Female	252.7	109.1	25.2	387
	Total	751	324	75	1150

$$Expected\ value\ (e_{ij}) = \frac{row\ total \times column\ total}{grand\ total}$$

Chi-Square formula is given as;

$$\chi^2_{cal} = \frac{\sum_{i=1}^r \sum_{j=1}^c (o_{ij} - e_{ij})^2}{e_{ij}}$$

Table 4c. Chi-Square results

S/N	(Oij) Observed Frequencies	(eij) Expected frequencies	(Oij – eij)	(Oij – eij) ²	$\frac{(Oij - eij)^2}{eij}$
1.	457	498.3	-41.3	1705.69	3.42
2.	250	214.9	35.1	1232.01	5.73
3.	56	49.8	6.2	38.44	0.77
4.	294	252.7	41.3	1705.69	6.75
5.	74	109.1	-35.1	1232.01	11.29
6.	19	25.2	-6.2	38.44	1.53
					$\chi^2 = 29.49$

$$\chi^2_{cal} = \frac{\sum_{i=1}^r \sum_{j=1}^c (o_{ij} - e_{ij})^2}{e_{ij}} = 29.49$$

4.1.1 Decision rule

Since $\chi^2_{cal} = 29.49 > \chi^2_{2,0.05} = 5.991$ that is the calculated chi-square is greater than the chi-square from the statistical table. The hypothesis is therefore accepted.

4.1.2 Interpretation of result

Table 4c shows the Pearson chi-square likelihood ratio of 29.49 at a degree of freedom of 2, which indicates that since the calculated $\chi^2 = 29.49$ is greater than the critical chi-square from the table, the hypothesis is therefore accepted.

Moreover, the analyses of qualitative data based on information obtained from the FGD sessions and key informants during the interview also confirmed the relationship as indicated from the analysis. The hypothesis is therefore accepted and concluded that, there is a significant relationship between male preference and the fertility behaviour of the people of Cross River State.

4.2 Hypothesis Two

There is a significant relationship between child preference and actual family size.

This hypothesis was tested using responses to the questions that relate to family size and child preference. This hypothesis was tested using chi – square test of significant relationship.

Table 5a. Observed frequencies/cross tabulation child preference and actual family size

Responses		Desired family size			
		1 – 4	5 – 8	Others	Total
Male preference	Male	206	467	90	763
	Female	88	244	55	387
	Total	294	711	145	1150

Table 5b. Expected frequencies

Responses		Desired family size			
		1 – 4	5 – 8	Others	Total
Male preference	Male	165.1	542.7	55.2	763
	Female	128.9	168.3	89.8	387
	Total	294	711	145	1150

$$Expected\ value\ (e_{ij}) = \frac{row\ total\ \times\ column\ total}{grand\ total}$$

Chi-Square formula is given as;

$$\chi^2_{cal} = \frac{\sum_{i=1}^r \sum_{j=1}^c (o_{ij} - e_{ij})^2}{e_{ij}}$$

Table 5c. Chi-Square results

S/N	(Oij) observed frequencies	(eij) expected frequencies	(Oij – eij)	(Oij – eij) ²	$\frac{(Oij - eij)^2}{eij}$
1.	206	165.1	40.9	1672.81	10.13
2.	467	542.7	-75.7	5730.49	10.56
3.	90	55.2	34.8	1211.04	21.93
4.	88	128.9	-40.9	1672.81	12.98
5.	244	168.3	75.7	5730.49	34.05
6.	55	89.8	-34.8	1211.04	13.49
					$\chi^2 = 103.14$

$$\chi^2_{cal} = \frac{\sum_{i=1}^r \sum_{j=1}^c (o_{ij} - e_{ij})^2}{e_{ij}} = 103.14$$

4.2.1 Decision rule

Since $103.14 > \chi^2_{2,0.05} = 5.991$ and $P - \text{value} = 0.00 < 0.05$ that is the calculated chi-square is greater than the chi-square from the statistical table, the hypothesis is therefore being accepted.

4.2.2 Interpretation of result

The hypothesis is therefore being accepted and concluded that there is a significant relationship

between sex preference and actual family size in Cross River State.

4.3 Hypothesis Three

There is a significant relationship between cultural norms/values prevalent in Cross River State and the preference for male children.

This hypothesis was tested using responses to the questions that relate to culture and the preference for sex of child. This hypothesis was tested using Chi-Square test of significant relationship.

Table 6a. Child Preference and Socio-cultural norms and values Observed frequencies/cross tabulation

Responses		Socio-cultural norms/values		
		Yes	No	Total
Child Preference	Male	461	302	763
	Female	241	146	387
	Total	702	448	1150

Table 6b. Expected frequencies

Responses		Socio-cultural norms/values		
		Yes	No	Total
Child Preference	Male	565.8	197.2	763
	Female	136.2	250.8	387
	Total	702	448	1150

$$\text{Expected value } (e_{ij}) = \frac{\text{row total} \times \text{column total}}{\text{grand total}}$$

Chi-Square formula is given as;

$$\chi^2_{cal} = \frac{\sum_{i=1}^r \sum_{j=1}^c (o_{ij} - e_{ij})^2}{e_{ij}}$$

Table 6c. Chi-Square results

S/N	(Oij) Observed Frequencies	(eij) Expected frequencies	(Oij – eij)	(Oij – eij) ²	$\frac{(Oij - eij)^2}{eij}$
1.	461	565.8	-104.8	10983.04	19.41
2.	302	197.2	104.8	10983.04	55.69
3.	241	136.2	104.8	10983.04	80.64
4.	146	250.8	-104.8	10983.04	43.79
					$\chi^2 = 199.53$

$$\chi^2_{cal} = \frac{\sum_{i=1}^r \sum_{j=1}^c (o_{ij} - e_{ij})^2}{e_{ij}} = 199.53$$

4.3.1 Decision rule

Since $\chi^2_{cal} = 199.53 > \chi^2_{1,0.05} = 3.841$ and P - value = 0.000 < 0.05 that is calculated chi-square is greater than the chi-square from the statistical table.

4.3.2 Interpretation of result

The hypothesis is therefore being accepted and concluded that there is a significant relationship between sex preference and socio-cultural norms/values prevalent in Cross River State.

4.4 Regression Analysis

Multiple regression analysis was also done in order to test for the strength and extent of the impact of male preference, family size, sex roles as well as cultural norms on fertility behaviour. This test is normally used to measure the level or extent of a relationship between one variable and other variables (i.e. a dependent variable and other independent variables).

5. MULTIPLE REGRESSION MODELS OF FERTILITY BEHAVIOUR AND OTHER FACTORS

The regression model showing the relationship between fertility behaviour and male preference, family size, sex roles and cultural norms is given as;

$$Y = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4$$

Where;

- B₀ = Fertility behaviour (Dependent variable)
 - B₁ = child preference
 - B₂ = Actual family size
 - B₃ = Sex roles
 - B₄ = Social-Cultural norms
- The model is given as;
 Y = Fertility behaviour + male preferenceX₁ + Actual family sizeX₂ + sex role performanceX₃ + Social-Cultural norms X₄

5.1 Result Interpretation

From the regression coefficient table presented above, it can be observed that the multiple regression models are given as;

$$Y = 3.617 + 1.292X_1 + 0.017X_2 + 0.351X_3 + 0.029X_4$$

With;

- The coefficient for child preference = 1.292
- The coefficient for desired family size = 0.017
- The coefficient for sex roles = 0.351
- The coefficient for social-cultural norms = 0.029

The coefficient results show that child preference, family size, sex roles and social-cultural norms all have significant impact on fertility behaviour, but the variable which has the strongest impact on fertility behaviour is male preference for a child as indicated by the regression weight (1.292).

Table 7a. Model Summary

Model	R	R square	Adjusted R square	Std. error of the estimate
1	.888 ^a	.788	.787	.40203

a. Predictors: (Constant), cultural norms and values, male preference, family size, Sex roles.

Table 7b. Regression coefficients of fertility behavior and other independent variables

Model	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std. error			
(Constant)	3.617	.066		54.881	.000
Child preference	1.292	.106	.701	-12.216	.000
Family size	.017	.020	.012	-.848	.397
Sex roles	.351	.105	.192	-3.344	.001
cultural norms and values	.029	.025	.016	-1.139	.255

a. Dependent Variable: Fertility Behavior

The correlation coefficient presented in Table 7a also indicated that $r = 0.89$, which indicates that male child preference has a strong impact on fertility behaviour.

6. CONCLUSION

High fertility and consequent large family size places pressures on families, households, environment and general development. A large family size makes it difficult for families especially families in the rural areas to provide adequate nutrition, education, health care, shelter and support for all the family members. In the urban areas, high fertility contributes to overcrowding and poor living conditions. While it is generally believed that population is a natural resource, if its growth rate is not properly managed it could be one of the constraints to development, improved quality of life and standards of living for the people of Nigeria. The consequences and implications of rapid population growth occasioned by socio-cultural factors such as male child preference and high fertility will need to be considered in the national effort to achieve sustainable development.

Again, male child preference has implications for the status of women. The status of women in Nigeria is lower than that of men due to prevailing cultural norms that places superior emphasis on the male child in all aspects of the socio-cultural life. The female child is not given the same opportunities in the family, society and even in growth and development, particularly in the rural areas and among couples of lower socio-economic status which has continued to make the desire for male children stronger and pervasive. Improvement in the status and opportunities available for women is very crucial in the task of reducing population growth rate. In empowering the women, they could assume and perform most of the roles performed by men in the society, which includes title inheritance, and carrying on the lineage. To improve the status of women will require the government and non-governmental organization (NGOs) to increase alternatives to marriage, such as education and employment which not only lead to delayed age at marriage but also provides them with choices as well as the confidence that they can achieve anything whether they are male or female.

7. RECOMMENDATIONS

Based on the factors that enhance child preference and its consequent effects on fertility

behaviour and population growth already identified. The following recommendations are made;

1. Men are currently inadequately targeted in all reproductive health programmes. This situation needs to be addressed as it is believed that the sexual behavior of men has implications for the health and well being of the family. Also the men play a dominant role in decision making about reproduction and sexual matters in the family, thus, it is pertinent to involve them in all reproductive health programmes both for their own benefits and that of other family members.
2. Moreover, population education should be encouraged and promoted. Government should draw up and include in the curriculum of primary and post primary education issues of population. It is believed that if young people become acquainted with population issues early enough, it will help in no small measure to reduce the fertility rate.
3. Government should put in place an initiative such as, the proper education of the girl child, which will improve the status of women and enhance their role and participation in the development process. Rural based programs geared toward bettering the lot of the rural women should be vigorously pursued. This is sure to affect the social and economic forces which would further help, to change the character of marriage and fertility in Nigeria
4. Given the findings of the study that child preference and its associated impact on fertility varies according to levels of education, occupation, income, place of residence as well as the socio-cultural and religious environment of the people, it is recommended that subsequent studies on fertility should be sensitive to the difference that normally exist between groups that exist under the same environment. This is bound to be of much demographic significance rather than treating them as though everybody possessed uniform demographic patterns.
5. Alongside the emphasis and attention by government and non-governmental organizations (NGOs) on family planning campaign, there is an equally urgent need to pursue those policies that will lead to the upliftment of the people's socio-economic conditions where it is hoped that this will

lead to the appreciation of small family sizes at the individual level. If therefore, government ever aims at changing the demographic culture especially in the rural areas, then rural development programs and efforts must assume an aggressive dimension, it is in fact in the opening of the rural areas that family planning and population regulation programs and campaigns can be more easily and positively enhanced.

6. The call for more development of the rural areas will help to reduce the norms and values that lay emphasis on the male children and a society that places so much importance on the position of the male in the society.
7. Given the desire for male children by most couples in Cross River, it will be almost impossible to reduce the number of children a couple desires without strict government enactments. Therefore incentives should be given to those who adhere to the policy goals.

COMPETING INTERESTS

Author has declared that no competing interests exist.

REFERENCES

1. Adepupo OO. Fertility of urban Yoruba working women: A case study of Ibadan City. *The Nigerian Journal of Economic and Social Studies*. 1997;19(1):130-135.
2. Akpan IW. Male role and fertility in Ukanafun LGA of Akwa Ibom State. A Ph.D Thesis carried out in the Department of Sociology, University of Calabar; 2008.
3. Ahmed MH. Determinants of fertility in advanced societies. Methuen, London; 1981.
4. Ahmed MH. Birth order, parental ages and sex of offspring. *Genet*. 2005;10(2):268-275.
5. Taubman PJ. Discrimination within the family: The treatment of daughters and sons. In Hoffman F, editor. *Essays on the Economics of Discrimination*. Mcgraw books, London; 2002.
6. Caldwell JC. Education as a factor of mortality decline: An examination of Nigerian data. *Population Studies*. 2002;33(3):187-195.
7. Akpan IW. Maternal and health facilities in rural Nigeria: A study of Southern Ukanafun in Ukanafun LGA. of Akwa Ibom State, Nigeria. An Unpublished Seminar Paper; 1998.
8. Isiugo-Abanihe UC. Fertility differentials in Nigeria: An examination of demand, supply and control factors. *NSASA Journal*. 1999;3:38-58.
9. Katzev AR, Warner RL, Acock AC. Girls or Boys: Relationship of child gender to marital instability. *Journal of Marriage and the Family*. 1996;56(1):86-100.
10. Isiugo-Abanihe UC. Male role and responsibility in fertility and reproductive health in Nigeria. Ibadan Centre for Population Activities and Education for Development (CEPAED); 2003.
11. Ottong JG. The male factor in family planning in Nigeria: Implications for population education in the Nigerian society. *Population Association of Nigeria Proceedings*. 1989;4:115-128.
12. Das Gupta M. Selective discrimination against female children in rural Punjab, India. *Population and Development Review*. 1987;13(3):77-100.
13. Caldwell JC. Towards a restatement of the demographic transition theory. In: *The Persistence of High Fertility, Family Planning and Fertility Change*. 1997;Series I Part I.
14. Bairagi R. Food crisis, child nutrition and female children in rural Bangladesh. *Population and Development Review*. 2001;12(2):307-315.
15. Arnold F, Kuo C. Measuring the effects of sex preference on fertility in Taiwan and Korea. *Demography*. 1984;20(4):131-142.
16. Benedict B. Social regulation of fertility. In: Harrison GA, Boyce AJ, editors. *The structure of human population*. Oxford University Press, London; 1998.
17. Bennett NG. Sex ratio in Nepal. *Economic Journal of Nepal*. 1983;15(1):30-37.
18. Lungberg S. The division of labour by new parents: Does child gender matter? Working Paper; 2005.
19. Gaisie MC. Economic correlates of non marital childbearing. *Family Planning Perspectives*. 1995;29(3):37-40.
20. Wallace R. A new approach to the economic theory of fertility behaviour. *Journal of Political Economy*. 1988;81:14-69.
21. Bennett NG, Bloom DE, Miller CK. The influence of non marital childbearing on the

- formation of first marriages. *Demography*. 1995;32(2):47–62.
22. Caldwell JC, Caldwell P. High fertility in Sub-Sahara Africa. *Scientific American*. 1990;118-125.
 23. Chen LC, Hug E, D'Souza S. Sex bias in the family allocation of food and health care in rural Bangladesh. *Population and Development Review*. 2001;7(2):55-70.
 24. Ware H. Population and development in Africa South of the Sahara: A review of the literature; 1987.
 25. Caldwell JC. The socio-economic explanation of high fertility. *Papers on the Yoruba society of Nigeria. Changing African Family, Monograph 1 Australia National University Press, Canberra*. 1998;54-78.
 26. Chaperon JC. Effects of children on women's remarriage project. *Journal of Family Issues*. 1996;1:497-515.
 27. Tahzib JY. Women's role in economic development. Allen and Unwin, London. 1995;354-368.
 28. Nigeria Demographic and Health Survey, (NDHS); 2003.
 29. Mcsweeney L. Love and life: Natural family planning- Billings method. African University Press, Ibadan; 1993.
 30. Olusanya PO. Human reproduction in Africa: Fact, myth and the martyr syndrome. *Research for Development*. 1999;6:69–97.
 31. Lundberg S, Rose E. Child gender and the transition to marriage, demography. 2003;40(2):333–350.
 32. Das Gupta M, Zhenghua J, Bohua L, Zhenming X, Chung W, Hwa-Ok B. Why is son preference so persistent in East and South Asia? A cross-country study of China, India and the Republic of Korea. *Journal of Development Studies*. 2003;40(2):153–187.
 33. Roam J, Railay M. Reproductive goals and achieved fertility: The 15 years perspective. *Demography*. 1980;16:523.
 34. UNAID. The extent and causes of female disadvantage in mortality: An overview. New York. UN Department of Economic and Social Affairs Population Division. 2003;1-15.
 35. Oniboloye O. Ideal family size and fertility preference in Nigeria. *Occasional Paper13 World Fertility Study*, London; 2012.
 36. Weeks JR. *Population* (5th Ed). Wadsworth, Belmont C.H; 2004.
 37. Pittin M. Sex ratio and sex sequences of birth in India. *Journal of Biosocial Sciences*. 1997;3(2):377.
 38. Nigeria Demographic and Health Survey, (NDHS); 2008.
 39. Ottong JG. The dynamics of demographic change: A case study of Manchok, Kaduna State. *Journal of the Environment and Social Science*. 1997;6(1):43-56.
 40. Cross River State SEEDS Document 2005 – 2007. State Planning Commission.
 41. Isiugo-Abanihe UC. Socio-cultural context of high fertility among the Igbo. Paper Presented at a Seminar on Women and Demographic Change in Sub-Saharan Africa, Dakar – Senegal; 1993.
 42. Hammel EA. A theory of culture for demography. *Population and Development Review*. 2000;16(3):455–485.
 43. *Population Reports. World Population Situation*; 2014.
 44. Tischler HL. *Introduction to sociology* (7th Ed). Wadsworth, United States of America, 234-254.
 45. Meadows SO, Land KC, Lamb VL. Assessing gilligan versus sommers: gender-specific trends in child and youth well-being in the United States, 1985 – 2001. *Social Indicators Research*. 2005;70: 1–52.
 46. United Nations Economic Commission for Africa (UNECA). *Socio-cultural Factors and Population Growth in Africa*. 2006;78-97.
 47. Isiugo-Abanihe UC. Child fostering and high fertility interrelationships in West Africa. *Studies in Third World Societies*. 1984;29:73-100.
 48. National Population Commission Nigerian Population Census Report; 2007.
 49. National Population Commission Nigerian Population Census Report; 2006.
 50. Isiugo-Abanihe UC. Consequences of bride wealth changes on nuptiality patterns among the Ibo's of Nigeria. In Bledsoe C, Pison G, editors. *Nuptiality in Sub-Saharan Africa: Contemporary anthropological and demographic perspective*. Clarendon Press, Oxford; 1994.
 51. Nigeria Demographic and Health Survey, (NDHS); 2005.
 52. Isiugo-Abanihe UC. Fertility preferences and contraceptive practice in Nigeria. *Annals of the Social Science Council of Nigeria*. 2005;9:1-20.
 53. May J. *Population problems in Africa*. Oxford University Press, London; 2006.

54. Akpan IW. The male factor and family size in rural development. A study of Ukanafun Local Government Area of Akwa Ibom State, Nigeria. *Journal of Social Issues*. 1998;2(1):115-131.
55. Isiugo-Abanihe UC. The socio-cultural context of high fertility among Igbo Women. *International Journal of Sociology*. 1994;9(2):237–258.
56. Caldwell JC. The wealth flow theory of fertility decline. *International Union for the Scientific Study of Population*. Liege; 1980.
57. Isiugo-Abanihe UC. Child fostering and high fertility interrelationships in West Africa: Studies in third world societies. University press, Ibadan; 1984.
58. Mandelbaum HC. Changing pattern of remarriage. *Journal of Marriage and the Family*. 2001;52(10):747-756.
59. Cleland J, Verall J, Vaessen MP. For the sex of children and their influence on reproductive behavior: World fertility survey comparative studies. Voorburg, Netherlands: International Statistical Institute. 1983;27.
60. Graham J. Does sex preference really matter? *Journal of Economics*. 1998;90(6): 283-307.
61. Caldwell JC, Caldwell P. Education and literacy as factors in health. In Haalstead, SB, Walsh JA, Warren, KS, Editors. *Good Health at Low Cost: Proceedings of a Conference held in Italy by Rockefeller Foundation, New York*; 1997.
62. Caldwell JC, Caldwell P. The cultural context of high fertility in Sub-Saharan Africa. *Population and Development Review*. 1998;13(3):409-437.
63. Ritzer G. *Sociological theory*. Mcgraw Hill, New York; 1996.
64. Caldwell JC. Mass education as determinants of the timing of fertility decline. *Population and Development Review*. 2000;6(2):225-255.
65. Caldwell JC. Routes to low mortality in poor countries. *Population and Development Review*. 2004;12(2):171-220.
66. National Population Commission Nigeria *Population Census Document*; 2006.

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