

EMPIRICAL EVIDENCE OF MALE FACTOR AS A DETERMINANT OF REPRODUCTIVE BEHAVIOR IN THE CENTRAL SENATORIAL DISTRICT OF EDO STATE, NIGERIA

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Abstract

This study examined the relationship between male factors and reproductive behavior in Central Senatorial District of Edo State. The background to this study was derived from the need to find out more about why the population growth has continued to increase unabated despite the existence of a population policy (population control) at ensuring a relatively population size in Nigeria. For this course, five (5) objectives and four (4) hypotheses were generated. A sample size of nine hundred (900) respondents (that is, married couples of childbearing age) was selected from the five local government areas that constitute the Central Senatorial district of Edo State using the multistage sampling method. Data collection focused on the social survey method, mainly on the questionnaire. This study was adopted to find out if there were relationships between: (i) educational attainment and reproductive behavior (ii) religious belief system and attitude to family planning, (iii) husband's attitude to family planning and spouse's reproductive behavior and (iv) sex of children and reproductive behavior. For data analysis, the socio-economic and demographic attributes of respondents were considered by percentage, and the developed hypotheses were examined using the Chi-square (χ^2) statistical test. However, Cramer's v contingency coefficient test was used to ascertain the relationship's strength. The findings revealed a high literacy level. Up to 96.07% of the respondents had one or the other form of education. Despite the high percentage of education acquired among the people, certain traditional values persisted. The percentage of male children's preference (34.22%) was far higher than the percentage of female children's preference (4.97%), reflecting the standing value order of keeping the family's name. The following findings were equally revealed: the existence of an association between educational attainment and family size, the existence of a relationship between religious belief system and attitude to family planning, and the existence of an association between the sex of children and reproductive behavior. However, some recommendations were made to prevent the adverse or negative effects that could be derived from male factors in relation to reproductive behavior and ensure a more sizeable population of 'carrying capacity' for sustainable development.

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INTRODUCTION

The rapid population growth in the past three decades (1970-1980, 1980-1990, 1990 – 2000) and the prospects of even more rapid growth remain, a concern to all nations of the world. The problem of rapid population growth and its implications for national development is an item that constantly features (directly or indirectly) on the agenda of international population conferences. This rapid population growth is associated with rapid socio-economic changes more in developing countries (Nigeria inclusive) than in developed countries. The ever-increasing nature of the world population and the rapidity with which it is moving in developing countries cannot sometimes be adequately imagined. The United Nations Population Fund (UNFPA, 1994) estimated the world annual rate of population increase since 1975 to be 1.7%. In 1960, the world population was 3.0 billion, and by 1993, it was 5.57 billion, an increase of 2.57 billion. That is a 46.1% increase. The data showed an addition of about 72 million and 93 million to the population in 1975 and 1992, respectively.

Although there has been significant decline in fertility in Africa, the present demographic picture shows very little evidence of such a decline. The demographic trends shown in the human development report (2007/2008) clearly support this view. By 2005, the total population of developing and least developed countries (including Nigeria) was 5.2 billion and 765.7 million, respectively. The figures for the Arab States, East Asia and the Pacific, Latin America and the Caribbean, South Asia, sub-Saharan Africa and Central Africa, and Europe were 313.9 million, 1.9 billion, 556.6 million, 1.5 billion, 722.7 million, and 405.2 million, respectively. By 2015 and 2018, the world population was estimated to be 7.2 billion and 7.6 billion by 2015 and 2018, respectively. Similarly, the Population Division of the United National Department of Economic and Social Affairs (2017) estimated, the world population by 2020, 2025, and 2030 to be 7,795, 682, 309 (7.8 billion), 8,185,613, 757 (8.2 billion), and 8,551,198,644 (8.6 billion), respectively.

The fear of the direct consequences of such a rapid growth rate has led to the formulation of population policies by some of the nations within sub-Saharan Africa on how to abate the rapid population growth. The researchers of this study are convinced that the realization and implementation of these population policies could lead to a significant reduction of the ever-rapid population growth in the African continent (as the developing and least developed countries) through continuous empirical demographic research on the factors influencing such growth process, which is the thrust of this study.

1.1 Statement of the problem

The population situation emphasizes the enormity of the task that confronts not only individual countries but also, the entire human race. The situation in Nigeria is worrisome, considering the unabated or uncontrolled rapid population growth rate and the consequential effects it has on both individuals and the entire society. Therefore, it becomes important for us to critically examine the situation in Nigeria compared with that of the United States of America (USA) in order to appreciate the problem and propose solutions to it.

The total estimated population figures for Nigeria in 1990, 1995, and 2000 were 108.5, 126.9, and 147.7 (in millions), respectively. For the United States the figures for the same periods were 250, 263.1, and 275.3 (in million), respectively. If the increase in population between 1990 and 2000 for the two countries is compared, we find that the rate is higher for Nigeria (36.30%) than the USA (10.12%) (UNFPA, 1994).

The social consequences of this type of rapid population growth are felt in both rural and urban communities of Nigeria. This may lead to a situation in which population growth exceeds the agrarian sector's capacity to support it, rural poverty, and environmental degradation.

It should be noted that other existing demographic data arising from research cannot be said to be completely useful in arriving at an accurate estimate of demographic changes and population behavior in the country, because of contradictions that are found here and there. Unlike Western European demographic studies, which

do not emphasize the relationship between reproductive behavior and the socio-cultural context in which they occur, African population movements can be best analyzed and understood by relating reproductive behavior to the socio-cultural content of African societies. Of course, this is the gap in knowledge of the population situation in Nigeria and Africa in general, which this study intends to fill. Therefore, the problematic research questions that readily come to mind for this study are as follows: What are people's attitudes to the idea of reproduction and family planning systems? What factors determine such attitudes? How can such factors be handled to achieve the objective of reducing fertility? Are there wide variations between women's attitudes in such traditional societies? The researchers believe that answers to the above questions and other related ones can best be provided by relating reproductive behavior to the socio-cultural context of the people with thorough demographic investigations into the various dynamics of the Nigerian population. It is noteworthy that since the 1980s, attempts have been made to redirect demographic studies to those that see reproductive behavior as occurring within the socio-cultural context of a given society.

The Central Senatorial District of Edo State, as our study area, has not been isolated from such a changing socio-economic situation. For this course, holding the bull by the horns by x-raying male factor is on the right context as it relates to reproductive behavior among married couples of child-bearing age.

1.2 Study Objective

The specific objectives of this study were as follows:

1. examine the influence of educational attainment on reproductive behavior in the study area
2. examine the influence of belief system on reproductive behavior in the study area
3. examine the adoption and practice of fertility control measures by married women within the study area
4. examine children's preference in relation to reproductive behavior
5. Look up to some recommendations on abating rapid population growth for sustainable development.

1.3 Hypotheses

1. No significant association was found between educational attainment and family size
2. No significant relationship was found between religious belief system and attitude to family planning.
3. No significant relationship was found between the husband's attitude to family planning and the spouse's reproductive behavior.
4. No significant association was found between the sex of children and reproductive behavior

Literature Review

Governments all over the world formulate social policies, including population policies, which express the government view and concern over certain issues. These policies also reflect measures that the government intends to take to influence the nature and direction of the issues under consideration. In short, the social policies of the government, including population policies, seek to contribute to national development and welfare goals through measures that directly or indirectly influence the process and overall quality of life (Igbitoria, Okonofua and Ozunde, 2005: 23).

Although there has been a need for population control in Nigeria, no formal official was shown until 1988 when the first population policy, tagged the National Policy for Population for Development, Unity Progress and Self-Reliance, was promulgated (National Population Commission, 2004:77).

The major goal of the 1988 population policy, as noted in Nigeria's Baseline Report (1994), was to reduce the growth rate of the nation's population by means of voluntary fertility regulation. Unfortunately, the policy objectives have not been conscientiously implemented, and hence, none of them have been realized. In fact, infant mortality and fertility rates have remained very high. Access to family planning programs and services has remained very low, and social amenities in rural communities are inexistent. Ironically, despite notable

failure, the policy has not been reviewed to date. Hence, the 1988 population policy remains Nigeria's official population policy

Of all the socioeconomic status indicators of reproductive behavior, the most widely used has been education or the level of schooling. Education level is a powerful predictor of demographic or reproductive behavior because of its impact on the start of reproductive life.

Cleland (2008) noted that the influence of education could be seen as "highly contexts specific." However, most research findings have shown a relative relationship between education level and reproductive behavior. Caldwell (1982), Axinn (1991), and Odu (2005) reported the relationship between schooling education levels and reproductive behavior.

The belief system of a people formed a major segment of the socio-cultural context analysis of reproductive behavior. Belief systems, as defined in this study, refer to people's organized system of ideas and mental constructions of reality on social facts, which determines their ways of doing things or their worldview. Some aspects of this belief system which are examined in this study as they affect reproductive behavior are: religious belief, the role or position or authority of male adults in homes (husband's attitude or male dominance), kinship ties (or parental or extended family pressures) and sex preference (son's preference). The ideal family size or desired number of children is also influenced by the belief system of a people. The influence of belief system, like other determinants of fertility or reproductive behavior, is contextual.

The influence of belief systems on reproductive behavior in Africa is strong. This strong influence is reflected in the belief that no marriage is referred to as successful when a male child has not been had by the couples and that one cannot have a female child and name her "Iribhogbe, that is, progenitor or family keeper. According to Aiworiaboakuelu (2019), males are for continuity of family's name, inheritance of family's property and as means of parents seeing themselves. A family without male children automatically loses its position as a family because such a family is already out of board. Therefore, for this singular reason, male children are preferred because they will not only produce the needed joy for the family but also ensure the family's perpetuity and cohesiveness.

According to Alam (2012), having children is delightful for parents in certain ways; more importantly, having male children is considered a matter of pride. Since the son becomes the 'need', a family should have his presence. Isiugo-Abanihe (1994) noted that family life in Nigeria is guided by normative principles, institutions, and beliefs that vary among ethnic groups". He further notes that the characteristic male-dominant and patrilineal traditions (in Nigeria) support large family size and that men's reproductive motivation, to a large extent affects the reproductive behavior of their wives.

David (2008), Ibisomi (2009), and James (2010) established a relationship between socio-cultural factors, such as gender role, cultural norms, parental pressure, religion, the desired number of children and reproductive behavior. David showed that a strong relationship exists between gender role (spouses' attitude) and reproductive behavior and also between social network (extended family, friends neighbours, political groups, church groups, youth groups and other formal and informal associations) and reproductive collected from twenty four focus group discussion sessions in Nigeria and reported religion and culture as, key drivers of the current desired number of children in Nigeria. However, the desired number of children did not play a noticeable role in the observed fertility of the people (Ibisomi, 2009). However, James (2010) showed strong relationship between parental pressure, social norms and reproductive behavior as revealed by an analysis of their influence on teenage marriage and childbearing. Using determination of children's time of entering into marriage, Ushire, Eneji, Nsemo, Osonwa, and Enang (2011) found a relationship between gender role and fertility behavior among Calabar and Oban communities in Cross Rivers State, Nigeria.

Odu; Jadumola and Parakoyi (2005):13-19) also found a strong relationship between the husband's attitude to reproduction and reproductive behavior Hussain, Fikree and Berendes (2000), in their studies of reproductive behavior in Pakistan, found that pregnancies become increasingly unwanted as the number of surviving sons increased and that the sex of surviving children was strongly correlated with subsequent fertility and contraceptive behavior.

Conclusively, the literature review examined the relationship between socio-economic variables, socio-cultural norms and belief systems, and people's reproductive behavior, it was revealed that relationships existed between them, although in some cases, there was no consistency in such relationships. Rather, such relationships were found to be contextual.

Theoretical Framework

Theory generates ideas that help a scientist explain social, mechanical, electrical, or even mathematical events. It suggests alternative ways to solve a particular problem of interest to a researcher (Turner in Charles, 2005:4). The importance of theory in explaining reality in any research course cannot be overemphasized. In this study, a combination of three theoretical perspectives (the demographic transition theory, the hypothesis of cultural lag, and the differential association theory) was used to guide this research's orientation.

The classical demographic transition theory has always been used to present the fertility data of developing countries, as in the case of Western European countries. This postulates four stages of population growth rate.

Stage 1: A traditional period of high birth and death rates in approximate balance

Stage 2: A high growth period affected by a lowered death rate and a continuing high birth rate

Stage 3: A transitional period during which the birth and death rates start to decline.

Stage 4: The establishment of a new birth and death rate, leading to a stable population

Demographic Transition Theory (DTT) further assumes that the attainment of stage three, the 'transitional period of declining birth rate,' is possible because of a combination of socioeconomic factors associated with what is variously referred to as urbanization, modernization, secularization, or westernization, a situation where traditional values and ideas are challenged and eventually weakened or broken down completely. However, Kirk (1972) demonstrated, that there is a new demographic transition in the developing world, a situation attributable to the diffusion of Western values and ideas about fertility and family life with those of traditional ones. In this type of situation, what we obtain about fertility cannot be said to be due to the process whereby traditional values and ideas have been replaced by western values and ideas, but rather a type of synthesization of two differing situations. It should also be noted that in this situation, we find the persistence of certain values, either in terms of totality or traits, despite the level of education, awareness, and development attained.

The theory argues that changes in various parts or units of society do not occur simultaneously and to the same degree. Changes in certain units can be taken as the cause of changes in other units. This non-simultaneous occurrence of changes in the various units of society necessitates adjustment and adaptation in, some units, which may be immediate for others or could, take decades. This period before final adjustment or adaptation is attained is, referred to as 'cultural lag. The thesis of the theory advanced by Ogburn is that: the various parts of modern culture are not changing at the same rate, and some parts are changing much more rapidly than others. A rapid change in one part of our culture requires adjustments through other changes in the various correlated parts of culture because there is a correlation and interdependence of parts. There are two components of this culture: materials, such as manufactured products, foodstuffs, machines, factories, and other material objects. The other part is made up of laws, governments, beliefs, customs, etc. Ogburn refers to this later part as the adaptive culture (nonmaterial culture). The argument of this theory is that changes usually occur first in the former, while later attempts to adjust or adapt to such changes. According to Ogburn (1974), "when the

material conditions change, changes occur in the adaptive culture.” However, these changes in the adaptive culture do not synchronize exactly with the change in materials culture, and there is a lag that may last for varying lengths of time, sometimes even for many years”.

In this study, factors that are seen as capable of reducing fertility levels or bringing about changes in reproductive behavior (such as drugs, foodstuffs, machines, etc.) will be taken as the first component of our material conditions, while such conditions as belief in the decision of family planning, belief in male child, belief in traditional values, etc., will be taken as the adaptive culture. The view being held here is that the reasons for the changes in socio-economic conditions of Nigerians (Esan people, in particular) or people in sub-Saharan Africa have improved greatly, leading to the development and introduction of various fertility-reducing measures. The adaptive culture features as expressed above are yet to synchronize exactly with the changes noted above. This has the effect of keeping the fertility rate high in these areas high, because reproductive behavior of the people has not changed.

Differential association theory holds that people behave differently because of different situations affecting their attitude and behavior. In this study, it is assumed that people with different beliefs and socio-economic conditions will behave differently, and that the differences in the behavior in cultural traditional values and the level of education will lead to a differential attitude toward reproduction, fertility-reducing measures, and child sex preference.

Methods of the Research

The study area is the central senatorial district of Edo State, also known as Esan Land. This area comprises five (5) Local Government Areas with 51 political wards. The study population comprised married couples of child-bearing age. A sample size of 900 respondents was drawn from the entire population of interest to the researchers. A multistage sampling method was used to select 180 respondents from each local government area stratified into urban, semi-urban, and rural (i.e., 60 respondents from each stratified area), thereby having a total of 900 respondents for five (5) Local Government Areas. Meanwhile, each local government area was stratified into three (3) areas: urban, semi-urban, and rural. For the five (5) local government areas, we have 15 stratified areas (i.e., 5 urban areas, 5 semi urban areas and 5 rural areas) and assigned or allotted the same number of respondents. Hence, each stratified area produced sixty (60) respondents and three (3) stratified areas produced 180 respondents, while the 15 stratified areas (or the five local government areas) produced 900 respondents as the sample size for this study. Thus, data collection was conducted using two major types: quantitative and qualitative research methods.

The adoption of both methods enabled the researchers to gather information that can provide a detailed overall picture of the socio-economic and demographic profile of the study area. However, data analysis was based on percentage and chi-square (χ^2) statistical test.

However, 870% of the 900 respondents were subjected to the survey method (quantitative method), whereas 30 respondents were subjected to focus group discussion (qualitative method).

Data Analysis and Interpretation

The initial eight hundred and seventy (870) designed surveys had a reduction of five (5) questionnaires, leaving eight hundred and sixty-five (865). Therefore, this formed the basis upon which data gathered by the quantitative method were presented.

Information gathered from 30 respondents who were subjected to FGD was analyzed and interpreted separately to complement the analyzed data collected through the quantitative method.

5.1 Analysis of the Socioeconomic and Demographic Attributes of the Respondents

Percentage distribution of respondents by socio-economic and demographic attributes: “sex, education attainment, religious affiliation, age at marriage, family size, sex preference of children, approval of family planning, husband’s attitude toward family planning, ideal number of children, and current use of any family planning.

Variable	Number of Respondents	Percentage (%)
Sex:		
Male	364	42.08
Female	501	57.92
Total	865	100.00
The highest level of school attended:		
None	34	3.93
Koranic only	03	0.35
Primary	295	34.10
Secondary	310	35.84
Post-secondary	223	25.78
Total	865	100
Religious affiliation (belief system):		
Islam	27	3.12
Christianity	778	89.94
Traditional religion	43	4.97
Others	17	1.97
Total	865	100.00
Age at marriage:		
Below 18 years	69	7.98
18 years and above	796	92.02
Total	865	100.00
Family Size		
Large (above 4 children)	493	56.99
small (1-4 children)	372	43.01
total	865	100.00
Children’s sex distribution and sex preference		
More boys	296	34.22
More girls	43	4.97
Equal number of sexes	353	40.81
No particular sex preference	173	20.00
Total	865	100.00
Family planning approval		
Yes	475	54.91
No	390	45.09

Total	865	100.00
Husband's attitude toward family planning		
Approval of family planning	190	52.20
Disapproves of family planning	174	47.80
Total	364	100.00
The ideal number of children		
One	0	0.00
Two	6	0.69
Three	64	7.40
Four	126	14.57
Five	178	20.58
Above five	104	12.02
Up to God	387	44.74
Total	865	100.00
Current use of family planning		
Yes	55	10.98
No	446	89.02
Total	501	100.00

Source: Field survey conducted in 2024.

Sex: The distribution of sex showed that more females than males were reached in this study. Among the total respondents, 364 were males and 510 were females, representing 42.08% and 57.92%, respectively. Although this distribution was not deliberately done, it was good for this type of study. Highest level of school attended: Educational attainment in the above table revealed high literacy level in the study area. The distribution showed that 831 (96.07%) respondents had formal education (including Korean education). Of the 831 (96.07%) educated respondents, 295 (34.10%), 310 (35.84%), and 223 (25.78%) had primary, secondary, and post-secondary school qualifications, respectively. This signifies that the majority of respondents have formal schooling, and this level of education among the respondents is a sign that the whims of nature that have prevailed and greatly affected the life of the people are gradually declining to a reasonable level and gradually eroding the traditions in this study area.

Religious affiliation (belief system): The table shows the distribution of respondents according to their religious affiliation. As revealed, 27 (3.12%) of the respondents were Muslims, 778 (89.94%) were Christians, and 43 (4.97%) were believers of the traditional African religion. The category of others represented 17 (1.97%) respondents who constituted religious groups that did not fall into any of the above categories. Such respondents belong to religious groups such as the Grail Message Movement, Eckanker, and Hare Krishna. However, the above distribution showed that the Central Senatorial District of Edo State (Esanland) is a highly Christian-oriented environment. Although traditional and Islamic religions are older than Christianity in the study area, Christianity is evidently now the major belief system of the people in the area. The breakdown of the traditional belief system's stronghold is a product of many factors, such as trade, travel, missionary activities, and urbanization. As reported by Okogie (2004), the Islamic religion was introduced into Irrua (one of the urban towns in the study area) in 1898. The Orthodox Catholic and Protestant (Anglican Church) religions came into influence in Ishan (Esan) around the early 1900s. The catholic and Protestant religious

belief systems came into existence in the study area in 1900 and 1908, respectively. This dominance of Christianity in the study area may be attributed to the humane and persuasive activities of the early Christian missionaries and the influence of Western education, which was imbibed very early by the people.

Age at marriage: The table reveals the distribution of respondents by age at marriage. When the total sampled population was taken together, the majority of marriages occurred after 18 years. The distribution showed that 796 (92.02%) of the respondents married at the age of 18 years and above, which is a significant age bracket in relation to child-bearing age, while 69 (7.98%) of the respondents married below 18 years.

Family Size: The table revealed the distribution of family size into two categories as large and small, showing 493 (56.99%) and 372 (43.01%) respondents, respectively. This implies that large family size still prevails in the study area, which is a reflection that Nigerians' total current fertility or parity is still above 6. This is in line with the Nigeria Demographic and Health Survey (NDHS, 2008), which puts a parity of 6.9 for Nigerian women nearing the end of the child-bearing years.

Children's Sex Distribution Sex Preference: The table shows the percentage distribution of the respondents by children's sex distribution preference. Close to half of them preferred equal children sex distribution, represented by 40.81% of the total sampled population. Respondents who preferred more boys (sons) to girls (daughters) had 296 (34.22%). This was followed by the respondents having 173 (20.00%) of the sampled population for those who gladly accept any child sex that comes to them. By the distribution in the table regarding children sex preference, the low percentage (4.97%) recorded for those who preferred more daughters (females) when compared to the percentage (34.22%) for more sons (males) clearly reflects the traditional belief of the people. In the study area, inheritance is through the male and descent is patrilineal; thus, no marriage is successful without a male child. Names (such as Iribhogbe, i.e., family keeper) given to male children in the study area reflect this traditional preference for male children over female ones.

Approval of Family Planning: The above table reveals how respondents reacted to the family planning method. Out of the total 865 respondents, 475 (54.91%) approved of family planning as opposed to 390 (45.09%) who showed disapproval. However, the respondents who approved the family planning method as a measure of controlling the high fertility rate were slightly more than those who declined it. Therefore, this means that people are becoming more responsive to the use of family planning compared to what it used to be in the past.

Husband's Attitude to Family Planning: From the distribution above, it was revealed that 190 (52.20%) of the total male respondents (364) of the sampled population approved family planning, while 174 (47.80%) of them disapproved family planning. The implication of this is that wives to husbands in this category will definitely shelve the idea of adopting any method of contraceptives in controlling birth, except for the wives of the 190 (52.20%) male respondents who may adopt any birth control. The assured possibility of controlling large families from featuring is not very certain.

Ideal Number of Children: As shown in the table, no respondent wanted to be childless, even though the percentage of those who desire three (3) children was as low as 7.40%. However, 178 (20.58%) and 104 (12.02%) respondents desired five children and more, respectively, while those who bent it as "up to God" for an ideal number of children comprised 387 (44.74%) of the sampled population. In other words, close to half of the sampled population posited that the issue of the ideal number of children should be left to God to decide for every married couple of child-bearing age.

Current use of any family planning method: The table on this aspect revealed the distribution of respondents according to current contraception adoption. As shown, 55 (10.98%) out of the total female respondents (501) were currently using contraceptive measures to prevent pregnancy, whereas 446 (89.02%) were not using any method.

The implication of this is that if the majority of the respondents are opposed to the use of contraceptives, then the tendency of high fertility is very sure at present and in the future.

5.2 Hypothesis testing and interpretation

The four hypotheses described in this study were tested and interpreted as follows:

1. No significant association was found between educational attainment and family size
2. No significant relationship was found between religious belief system and attitude to family planning.
3. No significant relationship was found between the husband’s attitude to family planning and the spouse’s reproductive behavior.
4. No significant association was found between the sex of children and reproductive behavior

Decision Rule

The decision rule states that if the calculated Chi-Square (x^2c) value is greater than the table value of Chi-Square (X^2t), the null hypothesis (H_0) will be rejected.

Symbolically, chi-square is expressed as follows:

$$x^2C = \sum \frac{(oi - ei)^2}{ei}$$

Hypothesis one

H_0 : No significant association was found between educational attainment and family size

H_1 : Significant association between educational attainment and family size

Association between educational attainment and size of family

Educational Attainment (Education level)	Family Size		Row Total
	Large (above 4)	Small (1-4)	
None	30	04	34
Koranic only	03	00	3
Primary	179	116	295
Secondary	175	135	310
Post-secondary	87	136	223
Column total	474	391	865

Source: Field Survey of 2024

Calculated chi-square (x^2c) = $\sum (O_i - e_i)^2 / e_i = 44.73$

Table 1. Value of chi-square (x^2t) = 9.49

Degree of freedom (Df) = 4

Alpha level of significance = 0.05

Decision: Because the calculated chi-square value x^2c of 44.73 was greater than the table value chi-square (x^2t) of 9.49, at alpha level of 0.05 and a degree of freedom of 4, the null hypothesis (H_0) is rejected. This means that an association exists between the level of education and family size. To ascertain the strength of this association, Craner’s v contingency was calculated based on the value of the calculated X^2 , the total sampled population, and the least value of (C-1) and (r -1). The calculated cramer’s v value was 1.52. This value indicates that the association is a strong positive association.

Hypothesis Two

H_0 : No significant relationship was found between religious belief system and attitude to family planning.

H_1 : Significant relationship between religious belief system and attitude toward family planning

Relationship between religious belief system and family planning attitude

Religious affliction	Attitude toward family planning		Row Total
	Approved	Not approved	
Islam	8	19	27
Christianity	495	283	778
Traditional religion	18	25	48
Others	10	7	17
Column total	531	334	865

Source: Field Survey of 2024

Calculated chi-square ($\chi^2 c$) = $\sum (O_i - E_i)^2 / E_i = 20.08$

Table 1. Value of chi-square ($\chi^2 t$) = 7.81

Degree of freedom (Df) = 3

Alpha level of significance = 0.05

Decision: Since the calculated chi-square ($\chi^2 c$) value of 20.08 was greater than the table value of chi-square ($\chi^2 t$) of 7.81 at an alpha of 0.05 and agreed of freedom of 3, the null hypothesis (H_0) is rejected. Therefore, this signifies a relationship between religious belief system and attitude toward family planning.

However, when Craner’s v was used to test the strength of the relationship, a value of 0.152 was displayed by the test, which implies that a weak positive relationship exists between the variables.

Hypothesis Three

H_0 : No significant relationship was found between the husband’s attitude to family planning and the spouse’s reproductive behavior.

H_1 : A significant relationship exists between the husband’s attitude to family planning and the spouse’s reproductive behavior.

Husband’s attitude toward family planning	The spouse’s reproductive behavior		Row Total
	High (large family)	Low (small family)	
	110	80	190
	83	91	174
Column total	193	171	364

Source: Field Survey of 2024

Calculated chi-square ($\chi^2 c$) = $\sum (O_i - E_i)^2 / E_i = 23.79$

Table 1. Value of chi-square ($\chi^2 t$) = 3.84

Degree of freedom (Df) = 1

Alpha level of significance = 0.05

Decision: Because the calculated chi-square value ($\chi^2 c$) of 3.79 was less than the table value of chi-square ($\chi^2 t$) of 3.84 at an alpha level of 0.05 and a degree of freedom of 1, the alternative hypothesis (H_0) was accepted. This implies that there is no relationship between the husband’s attitude toward family planning and the spouse’s reproductive behavior (family size).

Hypothesis Four

Ho: No significant association was found between the sex of children and reproductive behavior

Hi: Significant association between the sex of children and reproductive behavior

Relationship between children’s sex preference and reproductive behavior (desire for more children)

Children’s sex preference	Level of preference/desirability for children		Row total
	High	Low	
More boys	225	71	296
More girls	25	15	43
Equal number of sexes	204	149	353
No particular sex preference	92	81	173
Column total	549	316	865

Source: Field survey, 2023

$$\text{Calculated chi-square } (x^2c) = \sum \frac{(oi-ei)^2}{ei} = 32.94$$

Table 1. Value of chi-square $(x^2t) = 7.85$

Degree of freedom (Df) = 3

Alpha level of significance = 0.05

Decision: From the table above, since the calculated chi-square value (X^2C) of 32.94 was greater than the table chi-square (x^2t) of 7.85 at an alpha level of 0.05 and a degree of freedom of 3, the null hypothesis is rejected and therefore accept the alternative hypothesis. This implies that there is a relationship between children’s sex preference and reproductive behavior (i.e., desire for more children because of a particular sex need). Therefore, to ascertain the strength of the relationship by Craner’s v contingency test, a fairly strong positive relationship of 0.195 was discovered.

Discussion of the Findings

This provides a general discussion of the findings revealed in this study. The literature review established, that education is widely used as an indicator of reproductive behavior. It is seen as a powerful predictor of demographic or reproductive behavior because of its impact on the start of reproductive life. As reported by Axinn (1991) and Odu (2005), a relationship exists between levels of education and reproductive behaviors.

Therefore, this study revealed that an association exists between educational attainment and family size.

The study revealed a high literacy level, although the majority of respondents had little formal schooling. This implies that the more educated couples are, the more they tend to have a family size they can conveniently handle and shun any pressure that would have made them do otherwise.

The expression above is complemented with the following focus group discussion:

It was resolved from the discussion that education is the most widely used of the socio-economic indicators of reproductive behavior, and that it can make other variables more effective for any course intended. Hence, it has the capacity to positively influence reproductive behavior of married couples of childbearing age (Focus Group Discussion organized in political ward 4 Eguare Uromi, Esan North-East Local Government Area).

As observed by Odu, Jadumola, and Parakoyi (2005), a strong relationship was found to exist between religious affiliation and reproductive behavior, as well as between husband’s attitude to reproduction and reproductive behavior. In a similar manner, Ibisomi (2009) analyzed data collected from 24 focus group discussion sessions in Nigeria and reported religion and culture as key drivers of the current desired number of children in Nigeria.

Therefore, this study revealed that a relationship exists between religious belief system and attitude to family planning, which means that religious belief system has the propensity to determine the family size of married couples in the Central Senatorial District of Edo State. However, there was no relationship found to exist between husband's attitude to family planning and the spouse's reproductive behavior. This implies that the husband's attitude to family planning has no determined force as much on the spouse's reproductive behavior compared with previous studies, such as Odu et al.'s (2005) viewpoint.

To complement the above with focus group discussion, the following expression was established from the discussion by respondents on religions issue as it relates to reproductive behavior in one of the political wards, Esan Central Local Government Area:

Religion has an effect in determining people's life situation. It has a full grip on the people; hence, it pervades all aspects of life. Once one marries, the religious belief that as far as one is fertile and in good health, he/she can procreate as many children as desired is binding because it is seen as God's divine approval. Therefore, family planning is not easily patronized except in rare cases (the main resolution from the discussion of the FGD held in pol ward 9, Opoji in Esan Central Local Government Area).

Previous studies have revealed that no marriage is referred to as successful when a male child has not been born by the couples and that a female child cannot be named the progenitor or family keeper. Isingo- Abanihe (1994) noted that "family life in Nigeria is guided by normative principles, institutions, and beliefs that vary among ethnic groups." Furthermore, he notes that the characteristic male-dominant and patrilineal traditions support large family size. Sex preference is a cultural factor believed to have a strong impact on people's reproductive behavior, particularly in African and Asian countries.

The results of this study established that an association exists between sex of children and reproductive behavior. This implies that married couples who are involved in the selection of sex or in a particular sex preference, especially male preference, always end up having a large family size.

The above is complemented with the following:

In reality, every child born is appreciable.

However, when you are married to a husband who has more than one wife, the issue of male child becomes more valued than the issue of female child because it is the male child at this time who solidifies your marriage and position as a woman in the family as long as the marriage lasts and even after death. In fact, the pressure of the community where we live is that a married woman without a male child or children has no defined and recognized position in her marriage. It has been categorically expressed that a family without a male child or children is said to lose its position as a family because such a family is already on the verge of extinction.

Therefore, for this particular reason, male children are preferred because they will not only produce the needed joy for the family but also ensure the family's perpetuity and cohesiveness. Hence, married couples avoid all means to ensure that male children are among the children they have. Otherwise, any sex is desirable (Focus Group Discussion held in political ward 10, Illeh-Ekpoma, Esan West Local Government Area)

Conclusions and Recommendations

This study was inspired by the need to inform decision on male factor influencing reproductive behavior of married couples in the Central Senatorial District of Edo State. From the various results of this study, it is established that people's customs, traditions, and religious beliefs contribute significantly to the incidence of male child preference. Thus, the following findings were drawn from the analysis and interpretation of the tested hypotheses: the existence of an association between educational attainment and family size, the existence of a relationship between religious belief system and attitude to family planning, and the existence of an association between the sex of children and reproductive behavior. Though the percentage for those who opted

for an equal number of sexes has the highest (40.81%) in the distribution, the percentage of male children's preference (34.22%) when compared with the percentage of female children's preference (4.97%) is far higher, which, by implication, is a reflection of ensuring the perpetuity and cohesiveness of the family's tagged family progenitor.

In spite of the level of modernization and probably the influence of westernization, some cultural traits in the study area and indeed Nigeria have remained persistent.

Based on the above, these recommendations were advanced:

Efforts should be made by the government through implementable policies to combat cultural practices that oppress women and prevent them from taking part in family decision-making. For instance, instead of allowing only the husband to decide on the number of children because he is the head and decision-maker of the family, women should equally be allowed to take part in such opinions so as to make it a joint decision since the upbringing and care of children solely rest on the collective responsibility of both spouses with a caring leaned more on the mothers than fathers.

The issue of male preference hinging on the perpetuity of the family's name and inheritance of family property, as well as the stability of the position of women in the family, has in the long run led to a large family size far beyond the intended desired for every couple, especially when such preference is delayed in manifesting or featuring or even fails to feature wholly. To avoid the adverse effects, the researchers posit that married couples of childbearing age should embrace sexes as equal importance and accept in good faith any sex of child born and are therefore ready to give equal treatment to them in all aspects of life. This will not only put them in the right footing but also exposes them to being more focused on how to add to the value of life already laid down by their parents rather than thinking and manipulating how to inherit their parents' property. On the other hand, the married couples were relieved from the anxiety and stress of wishing for a particular sex. The researchers also believe that the tradition that forbids women from bearing their fathers' names after they have married should be abolished, and an enforceable 'abridged name' concept that allows women to bear their fathers' names alongside their husbands' family names should be introduced, as already being experienced by some married women today in Nigeria, such as the former Honorable Minister of Finance Dr. (Mrs) Ngozi Okonjo-Iweala, who is currently the Director-General of the World Trade Organization.

In another policy development, a strategic arrangement should be put in place to provide education on population and reproductive health for the people. This can help change their present conservative attitude toward family planning.

Therefore, it is a strong opinion of the researchers that if the above recommendations are implemented, unpleasant and negative effects (such as large family size, threat to both maternal and child health through a prolonged exposure of women to prolong risk of reproductive behavior, and others) caused by male preference will be redeemed and constantly remain under control subsequently.

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