

Education as Correlate of Fertility Rate among Families in Southern Nigeria

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ABSTRACT The study examined the relationship between the level of educational attainment of families and their family size. The study identified educational attainments, urban and rural dwellings as correlates of fertility rate among families in Southern Nigeria. The analysis revealed that education and fertility rate are inversely related, both in urban and rural societies. However, education was found to be more inversely related to fertility among women and urban dwellers than men are and rural dwellers. The Nigerian love for children, their polygamous nature, irrespective of their educational attainment and the need for a particular sex of children, among others, were identified factors responsible for enlarged family size.

INTRODUCTION

The world emphasis on the importance of education in the process of socio-economic development of nations can hardly be over exaggerated. The continuous emphasis on the importance has informed the developing countries priority attention to the expansion of their educational systems. In Nigeria, expansions in education over the years have been enormous. Between 1960 and 1998, primary school enrolment increased from 2,912,619 to 17,942,400 or 516% rate increase. For the same period, secondary school enrolment rose from 55,235 to 6,056,700 or 10,865% increase while university enrolment increased from 71,095 to 249,287 or 250.64% rate increase between 1980 and 1999 (Okobia, 2002).

This level of educational expansion can only be appreciated when examined in relation to the corresponding population. World demographic data about Nigeria presents a frightening picture of a population crisis with grave consequences on the socio-economic and educational development of the country. For example, the Nigerian population has grown steadily from about 56 million in 1960 to 127 million in 2001 and is projected to rise to 204 million in the year 2025 (2001 world Population Reference Bureau – PRB). This represents a growth rate of 126.79% and 60.63% for the periods respectively. Indeed, this demographic trend of high fertility rate with 44% of the population being 15 years and below has enormous implicative contributions to

swelling student enrolment figures. In addition, the economic strain of maintaining and expanding the coverage of the educational system can be overwhelming.

Since the publication of the popular Malthusian Thesis on population, world leaders, demographers, educational planners, development economists and many international bodies like the World Bank, United Nations, UNDP, UNICEF and the World Population Bureau have made remarkable contributions towards population control, particularly in the developing countries. In particular, the 1994 International Conference on Population and Development (ICPD), held in Cairo further stimulated governments and these bodies to begin to formulate population policies to stem population growth through improvement in the lives of women and the populace.

In spite of the deliberate efforts by these bodies to educate the world on the consequences of a growing population, the growth rate in world population has been unprecedented in world history. However, the developing countries of Africa, Asia and Latin America have a greater proportion of the world population. For example, while average births per woman in the year 2000 remained 1.5 for developed countries, 2.8 for Asian and Latin American/Caribbean countries, for African countries, it was 5.3. Of the six billion people in the world by 2000 AD., 4.9 billion or 81.67% live in the developing nations (Ashford, 2001). That much has not been achieved in the developing countries by way of reduction in fertility rate has been very obvious for the fact

that most of their populations are mainly youths who are likely to either be in their child bearing ages or approaching it. This implies that world population must continue to grow and hence family planning is imperative.

Beginning from the 1974 World Population Conference in Bucharest with the theme, "Development is the best contraceptive" two important determinants of fertility decline have been identified namely: (i) organized family planning programs and (ii) education, urbanization, modernization and economic development. These two determinants are being received with mixed feelings. For instance, the African traditional and religious values as well as the Christian and Islamic doctrines do not accept the use of contraceptives as family planning mechanism. On the other hand, the level of education, urbanization, modernization and economic development has been so low to embrace the complex family planning mechanism in controlling fertility rate.

In addition, the rural nature of the Nigerian setting that is predominantly agriculture, their polygamous practices favour high fertility rate as children, and wives are looked upon as economic assets. In fact, most Nigerian parents hardly consider their economic or financial means as determinants of their family size. To them God gives and will always, provide for their upkeep. Hence, still favour large families as a blessing from God, while marriages are easily dissolved due to lack of child bearing. For instance, the meaning of native names such as "*Oghenevwaire*" which literally means God brought them or "*Emoefe*" meaning children are wealth; "*Emonefe*" - children exceed wealth; clearly attests to the value which most Nigerians accord children.

Different authorities have seen the relationship between education and fertility as a complex one. While some authorities argue that education reduces fertility, others believe that expansion of education particularly in a developing country may actually result in increased fertility. Cochrane (1979) while analyzing the relationship for the World Bank observed a negative correlation between education and fertility for the education of females than males. The study showed that the relationship is far from uniform. He argued that in some countries, education appears to be either unrelated to fertility or actually positively related. However, Cochrane's review of studies at the individual levels suggested that literacy is largely, associated with reduced fertility but that various

patterns exist. The relationship between education and fertility is more likely to be inverse in urban than in rural areas. Secondly, that in countries with high illiteracy rates, individuals with some education may appear to have higher fertility than those with no education, whereas in countries with low illiteracy rates, individuals tend to have lower fertility.

The report of the World Population Bureau (2001) indicated that researches over the last twenty years have shown that women with more education usually make a later transition to adulthood, and have smaller, healthier families, have their first sexual experience later. The UN (1997) also indicated that in many less developed countries, women with no schooling have about twice as many children as do women with ten or more years of schooling. Psacharopoulos and Woodhall (1997) Tinker et al. (2000) have shown that women in the poorest households and with lower education and lower income have the highest fertility and often experience early entry into motherhood; frequent pregnancies and a continued cycle of illiteracy and poverty. Hence, the World Bank (1995) and the PRB (2001) regarded women's education as the single most influential investment in the developing world. To them, educating women is an important end in itself and is a long-term strategy for fostering economic growth and the promotion of smaller families.

In the light of the above, this study becomes imperative because over the years some adult members of the Nigerian society have concerned themselves with procreation and "mass production" of babies without much concern for the moral, social, economic and educational well being of the babies. This has resulted to un-precedented cases of teenage pregnancy, child abandonment, and child labour and child abuse. Many adult and "premature" parents have lost control and care for their children resulting to increasing crime rate, school dropouts, militant youth and militant students' unionism, increased illiteracy among youths and youth unemployment. It also explains in part why successive governments in Nigeria have not been able to bear the financial burden of providing universal basic education in spite of the Addis-Ababa declaration of 1963 and the human rights declaration of education as a basic human right of all. This study therefore empirically examines the following questions.

1. What is the average fertility of the Southern Nigerian family?

2. Does the fertility rate of families differ significantly among the educational levels attained?
3. Is there any substantial difference in fertility rate of urban and rural families in Southern Nigeria?
4. What factors influence the fertility rate of families in Southern Nigeria?

METHODOLOGY

Sample and Sampling Procedures: The married couples in the eighteen states south of the River Niger generally called the Southern Nigeria formed the subjects of the study. The sampling was carried out in stages. First, simple random sampling technique was applied to sample eleven states and six local government areas from each of the states. Then, stratified sampling technique was used to obtain the subjects of study from the 66 local government areas based on urban and rural settings and educational attainment. The researcher randomly selected 6,973 families who formed the subjects of the study. These were distributed as follows: 1172 families without formal education (NFE, 16.8%); 501 sampled from the urban setting and 627 from the rural setting. Families with only first school leaving certificate (FSLC) were represented by 1832 families or 26.3% of the total sample made up of 1,114 and 718 families from urban and rural settings respectively. Among families with ordinary level certificate 2063 (29.6%) subjects were sampled, 1442 from urban and 621 rural. A total of 1905 (27.3%) families were sampled from among those with tertiary education (TE), out of which 1539 and 366 were resident in urban and rural areas respectively. The researcher however ensured that only families that have married for at least fifteen years qualified for sampling. This was to ensure that most women sampled were not likely to bear children again.

Instrumentation: The main instrument for the study was a questionnaire titled "Questionnaire on Education and family size (QEAFS)". The first part of the instrument sought to elicit responses on state of origin and residence; place of residence; age at marriage; and highest educational qualification. It also identified duration or age of marriage; number of children owned by the woman; other children of the husband as well as number of wives married.

The second part of the questionnaire identified 15 factors that encourage large families and the respondents were asked to score each factor (1-4) in an ascending order of influence.

Colleagues in the faculties of Education and the Social Sciences in collaboration with expert statisticians in the Delta State Ministry of Finance and Economic Planning (Statistics and Research Division) helped to validate the research instrument.

Data Collection and Analysis: The researcher's undergraduate and graduate students, particularly those undergoing the "Sandwich", part time and weekend degree programmes at the Delta State University, administered the research instruments. They acted as research assistants in their various states of residence namely: Anambra, Benue, Delta, Edo, Ekiti, Enugu, and Lagos, Ogun, Ondo, Oyo and River states. The research assistants were adequately trained and were assigned to each strata of the sample.

In analyzing the data, the responses were first coded according to variables of study; level of education, urban and rural respondents. For each category of respondents, the summation of the number of families, children per woman and father and the average number of children per family was obtained.

RESULTS

Research Question 1 - What is the Average Fertility Rate of the Southern Nigerian Family?

The average fertility rate was defined to imply the average size of the family or the average number of children per household.

As shown in Figure 1, the average fertility rate of a married woman in Southern Nigeria is 4.6 children while the fertility rate of a man is 6.3 children. On the average, there are 5.5 children per family in Southern Nigeria.

Research Question 2 - Does the Fertility Rate of Families Differ Significantly Among the Educational Levels Attained? As shown in Table 1, and Figure 2 fertility rates in Southern Nigeria tend to decline with level of education attained. Families without any formal education (NFE) had the highest average fertility rate (6.7); while those with highest level of educational attainment had the lowest average fertility rate (4.3).

Research Question 3: Is There Any Substantial Difference in Fertility Rate of Urban and Rural Families in Southern Nigeria?

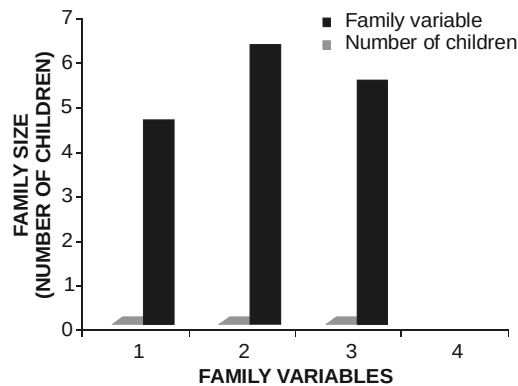


Fig. 1. Average family size in southern Nigeria

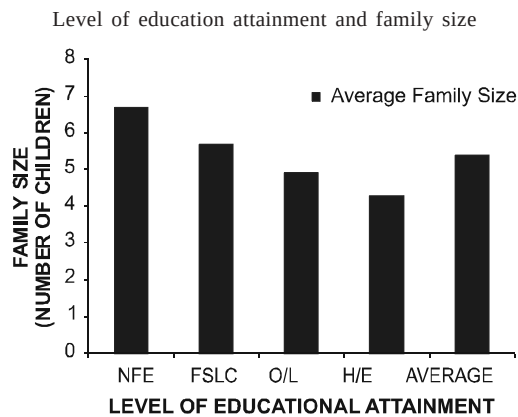


Fig. 2. Fertility rate of families

As revealed in Table 1 and Figure 3, fertility rates in Southern Nigeria tend to decline with urbanization. While the average fertility rate for an urban woman (UBW) was 4.3 children, her rural counterpart's (RUW) fertility rate stood at 4.8. The fertility rate for an urban man (UBM) and rural man (RUM) stood at 5.7 and 6.8 children respectively. Moreover, the average family size for an urban family (XUB) was 5.0 children as against 5.8 for the average rural family (XRU).

Research Question 4 - What Factors Influence The Fertility Rate of Families in Southern Nigeria? As indicated in Table 2, Love for children (13.15); Polygamous nature of most Nigerians (11.90); Need for a particular sex of children (10.99); Ignorance of the implications of a large family (6.15) and lack of willingness to embrace family planning (3.01) are the significant factors responsible for increased fertility rate among families in southern Nigeria.

Table 1: Fertility rates of families according to education and place of residence.

Level of education	Average no. of children			Average no. of children		Average of urban & rural	
	Urban woman	Urban man	X	Rural woman	Rural man	X	X
NFE	4.8	7.0	5.9	6.0	8.7	7.4	6.7
FSLC	4.6	6.1	5.4	5.0	7.0	6.0	5.7
O/L	4.2	5.2	4.7	4.4	5.8	5.1	4.9
Higher education	3.5	4.3	3.9	3.9	5.5	4.7	4.3
X	4.3	5.7	5.0	4.8	6.8	5.8	5.4

Source: Computed from field data.

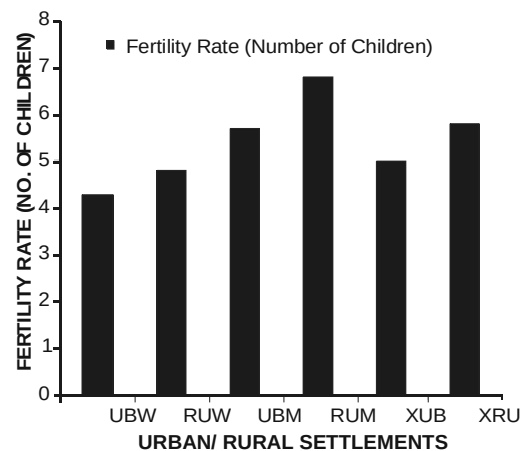


Fig. 3. Fertility rate of families according to geographical distribution.

DISCUSSION

This study examined the relationship between educational attainment of couples and their propensity to have children. It sought to ascertain whether the level of education of women and men; and their place of residence have relationship with their fertility rates. It also sought to find out the factors that influence their family size.

The evidence overwhelmingly supports the works of Cochrane (1979), Psacharopoulos and Woodhall (1997), UN (1997), Tinker et al. (2000), and the World population Reference Bureau (2001) to the effect that education of women has inverse relationship with their fertility rate. The average fertility rate of a rural woman without any formal education was found to be 6.0 children;

Table 2: Z-Score ratings of factors influencing family size

S. No.	Factors	Levels of education				
		NFE	FSLC	O/L	H/E	Total
1	Need for a particular sex of children	2.48	2.67	3.15	2.69	10.99*
2	The influence of couples' parents	-0.07	-0.69	-0.95	-0.43	-2.14
3	Non-legalization of abortion	-3.20	-3.66	-3.31	-3.66	-13.83
4	Lack of willingness to embrace family planning	-0.41	0.64	1.09	0.87	3.01*
5	My religion does not encourage family planning	-1.63	-1.78	-2.08	-2.29	-7.78
6	Love for children	4.51	3.41	2.65	2.58	13.15*
7	Having only female children	-1.08	-0.12	0.33	0.74	-0.13
8	Having only male children	-2.40	-1.91	-1.65	-1.26	-7.22
9	The large family aids farming/ economic activities	1.01	-1.10	-2.13	-2.08	-4.30
10	Polygamous nature of most Nigerians	2.69	3.06	3.02	3.13	11.90*
11	Ignorance of the implication of large family	0.43	2.02	2.11	1.95	6.51*
12	Influence of extended family member	-0.85	-1.19	-1.16	-0.74	-3.94
13	Lack of proper spacing of children	0.15	0.47	0.48	0.74	1.84
14	No government policy on number of children a couple can have	-1.15	-1.00	-1.15	-0.91	-4.21
15	Being the only child	-1.41	-0.85	-0.43	-1.14	-3.83

Level of significance >1.96 at 0.05 level

* Significant factors

while her counterpart with higher education (at least 15 years education) has 3.9 children. The finding can also be true to men. For example, the average fertility rate of a rural man with no formal education was 8.7 children while his rural counterpart with at least 15 years of schooling was 5.5 children. The finding thus supports the significant role which education plays in fertility decline. Indeed, with formal education, even the rural family can possibly reduce her family size by half. Again, as the educated man continues to live in the rural environment, his tastes and values begin to change to reflect the rural standards, more so, when they are too few to influence the rural people.

Evidence from the study also supports the works of Bjork (1971) and the Bucharest (1974) conference that urbanization; modernization and economic development can be forms of contraceptives. The findings revealed that at all levels of the educational systems, fertility rate remained more inversely related to education in urban than in rural settlements. While the average fertility rate for the urban family with no formal education remained at 5.9, the average for the rural family was 7.4 children. In addition, the urban family with no less than 15 years of education had a fertility rate of 3.9 children as against the average of 4.7 children for her rural counterpart. Illiteracy, underdevelopment and rurality are thus the bane of population growth in

Southern Nigeria. This is because illiteracy and rurality tend to make the people more religiously and culturally inclined and receptive to all forms of family planning.

Every family tends to regard child bearing as the dominant and fundamental purpose of marriage. This transcends into the love of children, as most crucial in influencing family size. Polygamous nature of most Nigerians was identified a second most influential factor (11.90). Most men in Southern Nigeria easily go polygamous, "disguised polygamy" or even divorce their wives either for lack of child bearing or for bearing only a sex of children particularly female. Indeed, parents and extended family members tend to persuade their sons whose wives have either few or only female children or none; to either marry more or have children from women outside.

Ignorance of the implication of a large family (6.51) and lack of willingness to embrace family planning (3.01) were also factors found to influence fertility rate among Southern Nigerian families. Ignorance makes the illiterate and rural families to regard many children as "economic assets" to aid them in their farming and other economic endeavours. This results to denial of basic education, child-abuse, neglect and a vicious circle of poverty and illiteracy.

The findings of this study have serious implications for the planning of education in

Nigeria. The study suggests that future generations of Nigerians should strive to embrace higher education. In particular, governments should endeavour to enforce a compulsory 12-year education policy. In addition, rapid socio-economic development programmes to transform and urbanize the rural communities should be vigorously pursued as did in Taiwan after World War II, which has substantially reduced their fertility (Zimmer et al., 2001).

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