

Migration status and fertility levels among the Igbo of Uzuakoli Community of South-east Nigeria

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ABSTRACT

Over the years, there has been competing views on the impact of geographical mobility on childbearing patterns. This paper is an attempt to contribute to the existing discussion by providing an analysis of the effect of internal migration on fertility looking at the retrospective event-history data of 608 respondents from the Igbo of Uzuakoli in Bende local Government Area of Abia State, Nigeria. The data was collected using both quantitative and qualitative research methods. After testing four hypotheses, we find that internal migrants largely exhibit lower fertility than those who have never migrated. Next, that majority of the female non-migrants have given birth to more children as compared to the majority of female migrants implying that the more the females migrate, the higher the likelihood of reduction in their fertility. Again, those migrants with lower educational status were seen to have higher fertility levels than their counterparts in the higher educational realm who have low parities of 1,2,3,4 children. The effect of migration on fertility is found to operate through the mechanism of education and such intervening socio-cultural variables like son preference values held in migrants' place of origin, the principle of anti-abortion, level of material wealth, cost and standard of living in the destination, the value placed on children as a sign of wealth, the economic conditions in the destination of migrants. The study concludes that considering the significant influence of the socio-cultural, economic, religious and psychological factors on the fertility level of Uzuakoli people both at origin and at destination, there is need for a reorientation targeted at changing their socio-cultural behaviour.

Keywords: Fertility levels, Internal migration, Parity, Socio-cultural and Uzuakoli.

INTRODUCTION

There has been a long-standing relationship between fertility and migration [1, 2, 3, 4]. As the volume of migration from rural to urban areas continues to increase, and as the levels of rural fertility are now better documented, there is need to understand the nexus between migration and fertility [5]. Again,

theories exist on the interrelationship of migration and fertility, and how migrant fertility may be linked with the culture of the place of origin. Also, there has been series of studies to elucidate the processes and mechanisms by which migration impacts on both long term and short term fertility levels. For example, in

a binominal study of Mexico-US migration, which tested for the presence of separation, assimilation, adaptation, diffusion, and selectivity effects of migration on annual birth probabilities and completed fertility, it was revealed that spousal separation due to temporary migration reduces birth probabilities in the short term but does not reduce marital fertility in the long term [6]. Other studies conducted in Ghana, Kenya, Philippines, Germany among others [7, 8, 9, 10, 11] have emphasized the significant role of migration processes and mechanisms on fertility levels. Migration among other factors, as a variable, has been found to be closely connected to fertility both at the place of origin and at the destination [12].

Currently, in Nigeria, the Total Fertility Rate is an average of 5.5 children per woman with the rural-urban variation in fertility indicating that women in rural areas will give birth to more than one child during their reproductive years than urban women (National Bureau of Statistics). Thus available statistics in Nigeria indicates that fertility varies by residence and region.

Notably, migration has been seen as important in the Igbo-speaking areas of south-eastern Nigeria, where the mass exodus of people from the overpopulated areas of Igboland has been one of the most striking phenomena of the 20th century [13, 14, 15, 16, 17] and the present time. For instance, by 1966 as many as two million Igbo were found in Northern Nigeria and a million and a half in other parts of the country as temporary or seasonal migrants [18, 19]. The specific example of Abiriba as given by Mabogunje is even more striking: 'In a sample survey of randomly chosen families in Abiriba in 1963, it was found that of a total of 177 people, as many as 116 (or nearly 70 per

cent) had migrated' [20, 21, 22, 23] Thus rural-to-urban migration has burgeoned in Nigeria over the past two to three decades, and the Igbo constitute a large proportion of this migrant population.

Every city and town across Nigeria has significant Igbo communities known for their domination of specific sectors of the marketplace [23]. To this extent, [24] explains, "As buying and selling or petty trading is said to be an integral part of Igbo culture, so is the habit of migrating from one area to another" [24] expresses that due to the significant migration pattern of the Igbo, one might expect that they would be a vanguard in Nigeria's and Africa's fertility transition. Despite this reality about Igbo migration as compared to other ethnic groups, Smith says: Igbo people continue to value relatively large numbers of children. Among 235 ever-married women surveyed in the village community, the women reported an average of 5.46 live births. Among younger people, the idea of planning a family has taken hold. But in southeastern Nigeria a planned family means having four or five children [26].

In Uzuakoli, a community in Bende Local Government Area of Abia State, there is limited in-migration, as there is also a significant level of out-migration [27]. There is also the presence of a sizeable population of non-indigenes who have lived in Uzuakoli for a long time in settlements around the railway line known as 'quarters', who do not mix with the indigenous population [28]. Also in terms of their demographic characteristics, according to [29], the Uzuakoli people have high birth rate and a declining death rate. The high birth rates are believed to be motivated by strong cultural and religious factors. For example, [30] argues that in the morality of Uzuakoli people, terminating

pregnancy is a spiritual crime that is committed against God. Cultural and religious laws such as this are very powerful binding force that compel couples to discourage abortions and may thus impact fertility behaviour regardless of the influence of migration.

In all, a common strand that explains the linkages between fertility and migration, is the applicability of four main theoretical perspectives or models (i.e., Generational (socialization) perspective, adaptation perspective, selectivity perspective and disruptive perspective) to the explanation of the differentials in fertility behaviors and attitudes between migrants and non-migrants [31]. However, to a large extent, the relationship between migration and fertility behaviour are poorly understood especially in this area of study. Therefore, a key challenge for demographers is to understand the links between migration and population change, and this includes the influence of migrants on future levels of fertility both at the region of origin and destination. Such understanding will be valuable for creating and assessing population projections and development planning both at regions of origin and destination, and can help to inform the decision-making of policy-makers working on population issues (such as ageing, infrastructural development, and the future demand for services) in a place like Uzuakoli community.

Indeed, several studies carried out in South-Eastern Nigeria—to which Uzuakoli belongs, have attributed the high rate of fertility in the area to a host of socio-cultural factors [32], none of the studies have isolated the possible effect of migration on fertility from other socio-cultural factors. Again, given that recently, migrants are typically young, and women are most likely to migrate in their peak reproductive years; not much

work and studies have been done on the rising role of female migration and its effect on fertility. Till date, not much has been done in examining the association between migration and fertility and other factors such as age, age at marriage, level of education, occupation, husband's occupation, marital type, and membership in formal organizations; As significant as the need for research on the interrelationships between migration and other population variables of fertility and family planning are, the relationship between migration process and reproductive behaviour still remains the least researched component of population dynamics as only few available studies have made recourse to providing empirical evidence on linkages between migration and fertility behavior. In the light of the foregoing, this study intends to address these problems by examining the relationship between migration and fertility in terms of the effect of migration on fertility level in Uzuakoli community of Bende L.G.A, Abia State.

Thus the objectives of the study include generally, to examine the relationship as well as the effect of migration on fertility level in Uzuakoli community of Bende L.G.A, Abia State. The specific objectives are as follow:

- To establish the relationship between migration status and fertility levels among the Igbo of Uzuakoli Community.
- To examine the influence of female migration on fertility levels among the Igbo of Uzuakoli Community.
- To determine the perceived socio-cultural factors on migrants' fertility in Uzuakoli.

- To ascertain the influence of migrants' educational levels on

their fertility levels as compared to non-migrants in Uzuakoli.

CONCEPTUAL AND THEORETICAL CONSIDERATION

Conceptual Consideration

The term fertility has been defined by authors [33, 34] within the confines of demography and population studies. One such definition sees fertility as the frequency with which births occur among groups or subgroups of humans who are of an age to procreate rather than the ability to procreate [34]. Also, the phenomenon of migration has always been an object of study (Porumbescu, n.d). Long time ago, it drew the attention of many researchers who belonged to different fields (demography experts, sociologists, geographers, economists). Each of them analyzed it from his/her own disciplinary perspective, therefore they differ one from another, each of them elaborating schemes and theories as explanations of the process (Porumbescu, n.d).

Indeed, the definition of migration (especially internal migration) tends to be met with difficulties and controversies from several scholar [22]. Despite these challenges, Kok's review on the conceptualization of migration defines it as the crossing of the boundary of a predefined spatial unit by one or more persons involved in a change of residence." [23]. Equally, [22] opines that migration "involves a change of residence from one community to another and usually the crossing of specified kind of internal administrative boundary." From here, internal migration becomes distinguishable from international migration, and intra-community

movement types of migration [26]. By whatever point of view the term migration is conceptualized, there is a strong indication that migration has played a pivotal role throughout the years in shaping the world as we know it today.

As it were, migration has a relationship with fertility. The nature of this relationship is at variance from one country to the other [27]. Decline or increase in fertility level among people in different places may have been propelled by social changes and certain demographic variables. For example, one can expect people moving from rural areas to urban centers having higher fertility may be less likely to use contraceptives to prevent conception, while people migrating from large, more modernized urban centers to smaller towns or villages being graduated towards more modern attitude and behavior, including a low reproductive behavior [28, 29]. Nevertheless, four competing hypothesis exist in providing the needed understanding regarding the link between migration and fertility. First is the socialisation hypothesis. The 'socialisation hypothesis' stresses the importance of childhood environment and posits that fertility would initially remain high among migrant groups, followed by generational convergence towards native born levels [30]. In other words, socialisation implies that people's values and beliefs concerning reproduction are formed at an early age and become deeply ingrained. Thus when people migrate to a new environment, they do not

immediately adopt the norms and attitudes of the host population, but go through a gradual process of developing new approaches to family-formation, which may take several generations [30].

The second is the adaptation hypothesis, which suggests a quicker convergence to fertility patterns as a result of adaptation to the normative behaviour of the host population or community [26]. In contrast to the socialisation hypothesis, adaptation implies that fertility ideals and behavior of immigrants do not remain constant from place of origin to destination— meaning that the peculiar circumstances of the destination place forces migrants to adjust their views and practices [32]. According to them, adaptation identifies two major factors that impact migrant fertility behavior: resources and cultural adaptation - that is, migrants first decrease their fertility due to the resource constraints related to childbearing in the destination place, and subsequently as a result of changing fertility ideals related to greater interaction with others in the new environment. Third is the selection hypothesis, which highlights that migrants are a select sub-population who may have different family building preferences than the majority population [26]. Finally, the disruption hypothesis suggests that immediately following migration, migrants show particularly low levels of fertility due to the disruptive factors associated with the migration process [21]. In other words, migration may interrupt family formation processes such as marriage and childbearing, resulting to low levels of fertility following migration, although fertility ideals may remain high [16, 17,18, 20].

Theoretical Consideration

The assimilation theory which is derived from the theory first proposed by Parkn&

Burgess (1921) is seen in terms of a “gradual process whereby cultural differences (and rivalries) tend to disappear” [5, 6, 8]. The most frequently discussed dimensions of assimilation in the immigration and fertility literature include acculturation and structural assimilation [9, 10, 11]. For this study, the assimilation theory is most valuable in providing an understanding of the relationship between fertility and migration among the Igbo of Uzuakoli, Bende LGA, Abia State. The assimilation theory is used in the general migrant incorporation literature; which implies that migrants eventually become like the host population with greater exposure—through the adaptation of the customs and values of that society [1]. For example, the classic assimilation theory posits an inevitable endpoint in the process of migrant incorporation where migrants eventually shed their own cultures and adopt that of the mainstream [1]. Even when migrants, who have spent a longer time in the host region, return to their region of origin, they still tend to maintain the new fertility behaviour in which they have become adapted. This also has the power to explain fertility levels and behaviour differentials between migrants and non-migrants at the origin.

Notwithstanding criticisms, the assimilation theory is a major contribution to demography. The theory has a general perspective and approach in explaining the relationship between these phenomena: fertility and migration, hence its adoption as the theoretical framework for the present study.

Research Hypotheses

The following hypotheses were used to guide the study:

1. There would be a statistically significant difference in the fertility

- levels of members of Uzuakoli community, who have ever migrated and those who have never migrated.
- 2. There is a statistically significant relationship between level of education and fertility levels among migrants and non-migrants.
- 3. There would be a statistically significant difference in the fertility

- levels of females in Uzuakoli community, who have ever migrated and those who have never migrated.
- 4. There would be a statistically significant relationship between the fertility levels of migrants and non-migrants and their respective perceived ideal numbers of children.

METHODS

This work being a behavioural research, a cross-sectional survey design was used to collect the quantitative data. This was complemented with the explorative qualitative research design to collect qualitative data for the study. To collect the required data, a Sample of 600 (for the questionnaire respondents) and 8 (for the in-depth interview) was chosen. To determine the sample size for the quantitative data, Cochran’s (1963) [7] formula was adopted, using 95 percent level of confidence (confidence interval). The sample size was arrived at, as follows:

$$n = \frac{[Z/\alpha]^2 (p q)}{e^2} \quad n = \frac{[Z/\alpha]^2 (P) (1-P)}{e^2}$$

Where: n= sample size, Z/α = confidence level ($0.95/\alpha=0.475=1.96$), p= rate of occurrence or prevalence (the estimated proportion of an attribute that is present in a population), q= complement of p and e= margin of error.

Therefore:

$$n = \frac{[1.96]^2 \cdot 0.5 (1 - 0.5)}{0.04^2} \quad n = \frac{3.8416}{0.0016} \quad n = 600.25 = 600$$

In the selection of the 600 respondents for the quantitative part of the present study, a multistage sampling approach was employed and systematic random sampling applied in the selection of the villages, households, and individual

research subjects. In doing this, the researcher randomly selected one household from each village after which every Gth (where sampling interval, $G = N/n$) element (in households) was systematically selected. In the end, each of the households that were selected produced married males and or females that summed up to give the sample size that generated the primary data for the study. To select respondents for the in-depth interview, the non-probability purposive sampling was used. 8 participants were selected by visiting households in the remaining two villages (Agbozu and Eluama) that were not selected for the quantitative part of the study so as to avoid biased due to sensitization and contamination due to prior exposure to the study. This data collection was done with the help of 2 indigenous research assistants who are well familiar with the people of the area. To qualify as participant, the following inclusion criteria were considered: (1) intending participant must be married; (2) intending participant must be an Igbo from Uzuakoli, (3) intending participant must have migrated outside Uzuakoli in the past, and (4) intending participant must show willingness to participate in the study. A semi-structured questionnaire instrument and in-depth interview (IDI) guide was employed to collect data for this study. A combination of quantitative and qualitative methods of data analysis was used for this study. In analysis of

data, the Statistical Package for Social Sciences (SPSS 20.0) was employed in the analysis of quantitative data. In doing so, descriptive and inferential statistics (chi-square test of independence; and the Independent-samples t-test (t) statistic, Pearson's Product Moment Correlation (PPMC) were used. The Cohen's d effect size, which shows the magnitude of the

difference between the mean scores of the various categories in the hypotheses, was reported according to Cohen's (1988) guideline for effect size. The basis for this was to test the main effect of each independent variable on fertility levels. All inferential analyses were carried out at .05 probability level.

DISCUSSION

The data in Table1 shows the distribution of respondents by some socio-demographic characteristics. Looking at the age data, a little over one-third of the respondents (35.1%) are between the ages of 23-27 years and little less than one-third of the respondents (31.0%) are between the ages of 18-22 years. Only about 11.8% are between the ages 33-43

and above. This means that the highest percentage of respondents in the study is between the ages of 23-27 years; indicating that there are younger persons than older respondents in the sample. Again, the survey result indicated that more females (52.7%), than males (47.3%) respondents.

Table 1: Socio-Demographic Characteristics of the Respondents

Age	Frequency (f)	Percent (%)
18-22 years	183	31.0
23-27 years	207	35.1
28-32 years	130	22.0
33-37 years	53	9.0
38-42 years	12	2.0
43 years and above	5	0.8
Total	590	100
Sex		
Male	279	47.3
Female	311	52.7
Educational Qualification	83	14.1
No primary school		
Primary school	305	51.7
Secondary school	127	21.5
University/Polytechnic or College of Education	63	10.7
Postgraduate education	12	2.0
Total	590	100
Income Level	72	12.2
≤ ₦5,000	94	15.9
₦6,000 – ₦14,000	112	19.0
₦15,000 – ₦24,000	95	16.1
₦25,000 – ₦34,000	120	20.3
₦35,000 – ₦44,000	67	11.4
₦55,000 – ₦64,000	30	5.1
≥ ₦65,000	590	100
Total		

Educationally, table 1 reveals that 14.1% of the respondents do not have a primary school education; majority of study respondents (51.7%) hold a primary school certificate as their highest educational qualification. Although 21.5% said they have secondary school education as their highest level of education, and 2.0% admitted having a

postgraduate degree Overall, this result indicates that a high percentage of the study population have low level of education .

Regarding the income level of respondents, the data reveal that though 12.2% of the respondents earn ₦5,000 or less a month, more than one third of the respondents earn between ₦25,000 -

₦44,000 monthly and only 5.1% earn ₦65,000 or more in a month. This result therefore indicates that on the average, the household income is low which translates to low standard of living.

This study further looked at some fertility characteristics and other related

issues of the respondents. Here, analysis of information regarding respondents' age at first marriage, number of children ever born and age at first birth Ideal number of children for couples, Age at first migration from Uzuakoli are presented.

Table 2: Fertility Characteristics of Respondents

Variables	Frequency (f)	Percentage (%)
(A) Age at First Marriage		
≤18 – 23 years	168	28.5
24 - 29 years	223	37.8
30-35 years	124	21.0
36 -40 years	41	6.9
41 and above	34	5.8
Total	590	100
(B) Age at First Birth		
≤18 – 23 years	155	26.4
24 - 29 years	212	36.1
30-35 years	141	23.9
36 -40 years	44	7.5
41 and above	36	6.1
Total	588	100
(C) Number of children ever born		
1	39	6.6
2	45	7.7
3	100	17.0
4	128	21.8
5	190	32.3
6	58	9.9
>7	28	4.8
Total		
$X = 4.14, SD = 1.48$		

(D) Views on the ideal number of children that is good for a couple**Ideal number children**

1	44	7.5
2	75	12.7
3	50	8.5
4	280	47.5
5	60	10.2
6	31	5.3
>7	50	8.5
	590	100

Total

(E) Responses on whether Respondents have ever migrated out of Uzuakoli (migration status) by Number of Children ever Born (fertility level)

Ever migrated from Uzuakoli?	Number of children ever born							Total
	1 n(%)	2 n(%)	3 n(%)	4 n(%)	5 n(%)	6 n(%)	>7n(%)	
Yes	28(8.7)	32(9.9)	64(19.9)	89(27.6)	100(31.1)	8(2.5)	1(0.3)	322(100)
No	11(4.1)	13(4.9)	36(13.5)	39(14.7)	90(33.8)	50(18.8)	27(10.2)	266(100)
Total	39(6.6)	45(7.7)	100(17.0)	128(21.8)	190(32.3)	58(9.9)	28(4.8)	588(100)

(F) Age at First Migration from Uzuakoli

Age	Frequency (f)	Percent (%)
<23 years	59	18.3
24 - 29 years	168	52.0
30-35 years	50	15.5
36 -40 years	34	10.5
41 and above	12	3.7
Total	323	100

The data in Table 2 show the distribution of respondents on the relationship between migration status and fertility levels among the Igbo of Uzuakoli Community. According to result, it was observed that majority of those who have migrated (66.1%) have had 1-4 live births, while the majority of those have never migrated (62.8%) have had between 5 to 7 or more live births. This revelation is an indication that there is a likelihood of an

association between migration and fertility levels of the people under study; such that migrants tend to have a lower fertility than non-migrants. This outcome is consistent with extant studies [12, 16, 18, 20], which found that migration is most likely to indirectly affect the fertility of migrants in a manner that migrants tend to have a lower fertility when compared to the fertility levels of non-migrants. One plausible explanation for

this outcome in a place like Uzuakoli is that the reduced fertility level noticed among migrants in the study may have been influenced by the rapid urbanization and rural to urban migration since majority of the study migrants migrated to city centers and within the Nigerian state.

Table 2 shows that over a quarter of the respondents (28.5%) married as early as between 18 and 23 years; and over one-third of the respondents (37.8%) said they first got married between the ages of 24-29 years. However, 27.9% first got married as late as 30 years and above. This data so far reveal that a significant proportion of the respondents got married at an early age which has positive implication for fertility. Furthermore, the data on the number of children ever born reveals that though few of the respondents have between 1 and 2 number of children, more than one-third (32.3%) of respondents have had a total of 5 children; with an average of 4.14 children. By modern standard, there is high fertility probably occasioned by an early at first marriage.

Cross tabulating the information on fertility levels of respondents and the migration status of respondents to determine the relationship that may have occurred. It should be noted that only the analyses of 588 respondents were cross-tabulated. The reason for this is because two (2) respondents stated that they have never given birth, hence their exclusion from the analysis. According to this interaction, 66.1% of those who have migrated had 1-4 live births, while the majority of those have never migrated (62.8%) have had between 5 to 7 or more live births. This revelation is an indication that there is a likelihood of an association between migration and fertility levels of the people under study. Finally,

considering age at first migration from the study area, the study found that over half of the respondents (52.0%) first migrated out of Uzuakoli between the ages of 24-29 years and only a very small percentage of the respondents (3.7%) migrated out of Uzuakoli at age 40 years and above. This means that a good number of who once migrated out did that at the prime of their life between ages 24-29 years.

Hypotheses Testing

This study attempted to examine the relationship as well as the effect of migration on fertility level in Uzuakoli community of Bende L.G.A, Abia State. In doing this various questions were raised and data elicited in that respect. This section of the study therefore deals with the discussion of data to all the hypotheses that were formulated in the study. First, the study attempted to establish the relationship between migration status and fertility levels among the Igbo of Uzuakoli Community.

Hypothesis 1

H₁: There would be a statistically significant difference in the fertility levels of members of Uzuakoli community, who have ever migrated and those who have never migrated.

H₀: There would not be a statistically significant difference in the fertility levels of members of Uzuakoli community, who have ever migrated and those who have never migrated.

In addressing the above hypothesis (I), the researcher considered responses from the independent variable (migration status) and the dependent variable (fertility level) and the computations presented in Table 3 below.

Table 3: Independent Samples t-test scores of migrants and non-migrants on their fertility level scores

Variables	Migrants		Non-Migrants		T	P	95%CI		Cohen's D
	M	SD	M	SD			LL	UL	
Fertility level scores	3.71	1.32	4.67	1.51	8.23	.001	0.73	1.19	0.68

Note. CI= confidence level, LL= lower limit, P= Sig. value (2-tailed), UL= upper limit, M= mean, SD= standard deviation, d= Cohen's effect size.

From the Table 3, it can be observed that non-migrants show a higher mean score as compared with migrants. This shows that there is a difference in the average fertility levels between migrants and non-migrants in Uzuakoli community. An independent-samples t-test that was further conducted to compare the fertility scores for respondents in the two groups revealed that there is a statistical significant difference in scores for migrants ($M=3.71$, $SD=1.32$) and non-migrants [$M=4.67$, $SD=1.15$; $t(586)=8.23$, $p<.001$]. The magnitude of the differences in the means was large (eta squared=0.68 or 68%) and therefore consistent with Cohen's (1988) guidelines for effect size. Given that the calculated t value (8.23) is greater than the tabulated t value (3.291) at 586 degree of freedom (df), the null hypothesis which states that: 'There would not be a statistically significant difference in the fertility levels of members of Uzuakoli community, who have ever migrated and those who have never migrated' is rejected while the alternative hypothesis which states that: 'There would not be a statistically significant difference in the fertility levels of members of Uzuakoli community, who

have ever migrated and those who have never migrated is accepted.

Hypothesis 2

H_1 : There is a statistically significant relationship between level of education and fertility levels among migrants and non-migrants.

H_0 : There is no statistically significant relationship between level of education and fertility levels among migrants and non-migrants.

In addressing the above hypothesis (2), Information on educational status as independent variable and fertility levels (children ever born) were computed. While respondents with no primary education and primary education were classified and recoded as respondents with low educational level, respondents who are not in this category were classified and recoded as respondents with high educational status. It should be noted that fertility level was treated as a categorical (nominal) variables with several levels. Summarily, responses from the independent variable (educational status) and the dependent variable (fertility level) were computed and presented in Table 4.

Table 4: Migrants and non-migrants' educational status by Number of Children ever Born (fertility level)

Migrants & Non-migrants' educational status	Number of children ever born							Total
	1 n(%)	2 n(%)	3 n(%)	4 n(%)	5 n(%)	6 n(%)	≥7n(%)	
High	16(8.0)	18(9.0)	28(14.0)	54(27.0)	62(31.0)	19(9.5)	3(1.5)	200(100)
Low	23(5.9)	27(7.0)	72(18.6)	74(19.1)	128(33.0)	39(10.1)	25(6.4)	388(100)
Grand Total	39(6.6)	45(7.7)	100(17.0)	128(21.8)	190(32.3)	58(9.9)	28(4.8)	588(100)

$X^2=13.9$, $df=6$, $N=588$, $p(.03)<.05$

Table 4 shows the distribution of migrants and non-migrants' educational levels and their fertility levels. According to the information reflected in the table, migrants with lower educational status were seen to have higher fertility levels (5, 6 and ≥ 7) than their counterparts in the higher educational realm. To further ascertain the statistical relationship between the variables, a chi-square test of independence was conducted and results revealed a statistically significant relationship between respondents with high education and low education status across their fertility levels ($X^2=13.9$, $df=6$, $N=588$, $p(.03)<.05$). The calculated value (13.9) was also compared to the tabulated value (12.59) and it was established that the calculated X^2 is greater than tabulated X^2 . Consequently, the null hypothesis is rejected and the alternative hypothesis which states that: "There is a statistically significant relationship between level of education and fertility levels among migrants and non-migrants." is accepted. Of all the 200 migrants and non-migrants with high educational qualification, 8.0%, 9.0%, 14.0%, 27.0%, 31.0%, 9.5% and 1.5% have ever given birth to 1, 2, 3, 4, 5, 6 and ≥ 7 children respectively. On the other hand, of the 388 respondents (migrants and non-migrants) who have a low educational status, 5.9%, 7.0%, 18.6%, 19.1%, 33.0%, 10.1% and 6.4% have ever given birth to 1,

2, 3, 4, 5, 6 and ≥ 7 . Based on the statistics provided in the table 2, migrants with higher education have higher fertility than non-migrants with higher educational status. Further comparison shows that migrants with lower educational status have higher fertility than non-migrants in the same educational status. It can also be observed that none of the migrants with higher educational levels have more than six (6) children. Although not consistent with the studies of authors like [4] who found an association between educational levels and migrants' fertility levels, with high fertility levels recorded among migrants with lower educational status, the present findings in the study aligns with the findings of Lee (1992) who also compared the influence of education on fertility levels of migrants against non-migrants in Cameroon. Lee found out in his study that rural-urban migrants were better educated and had fewer cases of infertility. When compared to non-migrants, descriptive statistics provided for migrants and non-migrants and a cross classification analysis showed that fertility is not lower for women with higher education, even when migration status is controlled for [13]. This can indicate two things: first, is that education in itself may not be able to account for the expected exclusive relationship and second, is that this result

may serve as a reflection of the socialization hypothesis, which states that fertility levels of migrants in their

recipient places would first remain high until it converges overtime.

Hypothesis 3

H₁: There would be a statistically significant difference in the fertility levels of females in Uzuakoli community, who have ever migrated and those who have never migrated.

H₀: There would not be a statistically significant difference in the fertility levels of females in Uzuakoli community, who have ever migrated and those who have never migrated.

In order to test this hypothesis, information on the fertility levels and

migration status of female respondents only (311 in all) was tested. While the independent variable (female migration status) was analyzed as nominal variable (having two levels - migrants and non-migrants), the dependent variable was treated as an interval variable (continuous) with different levels. The mean scores of the dependent variable were then calculated across the two levels of migration of females in the study and this is shown in the Table 6 below:

Table 5: Independent Samples t-test scores of female migrants and female non-migrants on their fertility level scores

Variables	<u>Migrants</u>		<u>Non-Migrants</u>		T	P	<u>95%CI</u>		Cohen's effect size.
	M	SD	M	SD			LL	UL	
Female fertility level scores	3.55	1.57	5.60	1.43	9.65	.001	1.31	1.98	1.37

Note. CI= confidence level, LL= lower limit, P= Sig. value (2-tailed), UL= upper limit, M= mean, SD= standard deviation, d= Cohen's effect size.

Table 5 shows figures from the result of an independent samples t-test between female migrants and non-migrants according to their fertility level scores. From the table, it can be observed that female non-migrants show a higher mean score as compared with female migrants. This reveals that there is a difference in the average fertility levels between female migrants and female non-migrants in Uzuakoli community. An independent-samples t-test that was further conducted to compare the fertility scores for respondents in the two groups revealed that there is a statistical significant difference in scores for migrants ($M=3.55$, $SD=1.57$) and non-migrants [$M=5.60$, $SD=1.43$; $t(309)=9.65$, $p<.001$]. The

magnitude of the differences in the means was large ($\eta^2=1.73$) and therefore consistent with Cohen's (1988) guidelines for effect size. Based upon this result, since the calculated t value (9.65) is greater than the tabulated t value (3.291) at 309 degree of freedom (df), the null hypothesis which states that: 'There would not be a statistically significant difference in the fertility levels of females in Uzuakoli community, who have ever migrated and those who have never migrated' is rejected while the alternative hypothesis which states that: 'There would be a statistically significant difference in the fertility levels of females in Uzuakoli community, who have ever migrated and those who have never

migrated.' is accepted. According to results as shown in Table 5, a majority of the female non-migrants have given birth to more children as compared to the majority of female migrants. This result therefore indicates that there is an association between female migration and their fertility such that the more the females migrate the higher the likelihood of reduction in their fertility. This finding is also consistent with those of [19, 20, 21, 22] who found that female migrants tend to have a lower fertility than female non-migrants both at the origin and destination. It should also be noted that these findings like the previous one is important in that the study area (Uzuakoli) share similar socio-cultural fertility behavior with other sub-Saharan African countries studied. One possible explanation for this outcome is reflected in the study of which revealed that women who migrate tend to maximize their other lifetime aspirations at the expense of their reproductive roles and performance. To achieve their ideal number of children, they put aside the

personal aspirations that may influence the fertility behavior of women in their destination, In all, the findings from this present study is also in agreement with the adaption hypothesis which suggested a quicker convergence to fertility patterns as a result of adaptation to the normative behaviour of the host population or community [8].

Hypothesis 4

H₁: There would be a statistically significant relationship between the fertility levels of migrants and non-migrants and their respective perceived ideal numbers of children.

H₁: There would not be a statistically significant relationship between the fertility levels of migrants and non-migrants and their respective perceived ideal numbers of children.

Table 6 Pearson's Product Moment Correlations between the ideal number of children that is perceived to be good for couples and the fertility levels of respondents

		Correlations	
		fertility1	Ideal no. of children
Fertility level of Respondents	Pearson Correlation	1	.932**
	Sig. (2-tailed)		.000
	N	588	588
Perceived Ideal no. of children	Pearson Correlation	.932**	1
	Sig. (2-tailed)	.000	
	N	588	588

** . Correlation is significant at the 0.01 level (2-tailed).

A Pearson product-moment correlation coefficient was computed to assess the relationship between the fertility level of respondents (in Table 2) and the perceived ideal number of children that is good for couples (in Table 2). While the

perceived ideal number of children that is good for couples was employed as the independent variable, the fertility levels of respondents was used as the dependent variable in the study. There was a positive correlation between the

two variables, $r = 0.932$ (93.2%), $n = 588$, $p = 0.001$. A scatterplot summarizes the results (Figure 1). Overall, there was a strong, positive correlation between the perceived ideal number of children that is

good for couples and the fertility level of respondents. Increases in the perceived ideal number of children were correlated with increases in the fertility level of respondents.

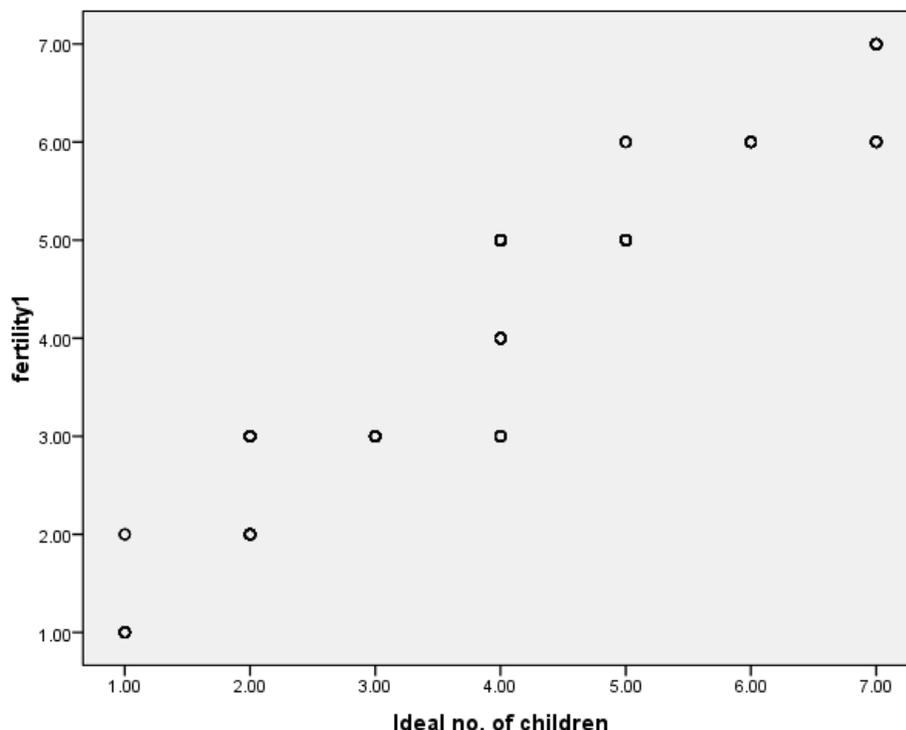


Figure 1: Relationship between the ideal number of children that is perceived to be good for couples and the fertility levels of respondents

Next, the study sought to determine the perceived socio-cultural factors on migrants' fertility in Uzuakoli. The data in Table 2 showed that such factors as the following influence migrants fertility level in their recipient places: son preference, values held in migrants' place of origin, Western education values in the destination influences migrants' fertility level, the type of occupation that a migrants take up in the destination religious beliefs of migrants, the principle of anti-abortion level of material wealth, cost and standard of living in the destination, the value placed on children as a sign of wealth, the economic

conditions in the destination of migrants, the types of family planning methods available in the destination, late marriage in the destination, the norms and values concerning the ideal family size in migrants' destination, level of migrants' education as well as exposure, the timing of parenthood in the destination, the length of time that migrants have spent at destination, the incidence of migration as a break in migrants life course that hinders family formation and spousal separation. Corroborating the above findings, [3] found that demographic, social and cultural settings influenced migrants' fertility levels in Nepal.

According to the study, age at first marriage, perceived ideal number of children, place of residence, literacy status, religion, mass media exposure, use of family planning methods, household headship, and experience of child death were the most important variables that explained the variance in fertility. This type of finding is no surprise since a place like Nepal share certain similarities in with regions in sub-Saharan Africa to

which Uzuakoli belongs. For instance, as it was found in the present study that there is an astonishing value attached to high fertility and child bearing, similar practice exists in the traditional Nepal society where children are considered a symbol of both social and economic well-being. Such value and other cultural and socio-demographic indices are mechanisms through which the fertility of migrants is shaped.

CONCLUSION

The goal of this study was to examine the relationship as well as the effect of migration on fertility level in Uzuakoli community of Bende L.G.A, Abia State. In doing this, some significant findings were made. First, that there is a likelihood of an association between migration and fertility levels of the people of Uzuakoli; such that migrants tend to have a lower fertility than non-migrants. Second, the study found an association between female migration and their fertility such that the more the females migrate the higher the likelihood of reduction in their

fertility. These findings go to show the important role of migration in the variation of fertility among migrants and non-migrants. The study having established an association between migration and fertility, it concludes that since migration affects fertility through such mechanisms as education, socio-cultural and other psychological factors therefore, to regulate the influence of these factors on the fertility, will require regulating the socio-cultural behavior of the people.

RECOMMENDATIONS

Based on the findings of the study, the following recommendations were made:

1. Given the dearth of data on fertility and migration and its consequences for rural development and growth, research to improve the understanding of the causes and consequences of migration and fertility, whether internal or international, is urgently needed. To provide a sound foundation for such research, special efforts need to be made to improve the quality, timeliness and accessibility of data on internal and international migration levels, trends and policies.
2. Migrants and citizens of destination societies should respect their legal obligations and benefit from a mutual process of adaptation and integration that accommodates cultural diversity and fosters social cohesion. The integration process should be actively supported by local and national authorities, employers and members of civil society, and should be based on a commitment to non-discrimination and gender equity. It should also be informed by an objective public, political

and media discourse on international migration.

3. In line with tackling the negative impacts of migration on rural communities like Uzuakoli, efforts should be made by the governments (at all levels), stakeholders and members of the community (who can design and implement ideas as well as invest) to develop such areas. The

development of these areas is expected to encourage immigration (from indigenes and non-indigenes) back to such deserted areas. When this is done, a path may thus be created for such areas to be re-populated, and its economic activities, which are usually based on agriculture and other business and trading activities would be rejuvenated.

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