# Bouncing baby boys, but crying baby girls: Assessing the socio-demographic impacts on male child preference in South Eastern Nigeria

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## Abstract

**Background**: Sex preference is a social phenomenon that has continued to persist even amidst modernization. As a result, it has been studied across disciplines due to its social and demographic suggestions.

**Objective**: The study examined the impacts of socio-demographic factors on male child preference in South Eastern Nigeria.

**Method**: The study adopted a cross sectional questionnaire-based quantitative research method of data collection and analysis.

**Result**: The study demonstrated a developing inclination for male children compared to females among female parents ($M$=2.74, $SD$=1.39) than male parents ($M$=1.38, $SD$=0.49) resulting from the desire to maintain their marital status. We found that the major characteristics of the respondents that impacted on sex preference are: education, age, religion, and area of residence. Findings also showed a correlation between family size and social mobility. We also found that acquisition of higher levels of education influences the preferences for the sex of a child.

**Unique contribution**: We found a growing inclination for preference of male children over female children among female parents as against what is found in scholarly literatures where the opposite were reported.

**Conclusion**: Although, there is a growing preference for male child among women, this preference is not born out of the need for lineage perpetuation, as is the case with men, but for the purposes of status enhancement and maintenance.

**Key recommendation**: There has to be renewed encouragement of people to achieve a few level of education as this will help to inculcate the idea that every sex is equally important in the society.

**Keywords:** male; demographics; social mobility; preference; family size.

## Introduction

The preference for male children exists in different forms all over the world. Purewal (2012) recorded that the preferences for male children go past numerous social orders and societies; making it an issue of great significance globally. In spite of the fact that male preference as a phenomenon is not modern and has been verifiably connected to parts of Asia and Africa, its present-time practice is an indication of an unequal gender structure which is directly observable in our socio-cultural, political, religious, and economic life (Nnadi, 2013). El-Gilany and Shady (2007) contended that the desire for boys by culture and custom may be a broadly known social phenomenon in many developing countries where the status of girls and women is low and subordinate compared to their male counterparts. Nonetheless, there are evidences suggesting that male preference is worldwide and not peculiar to developing societies (e.g., Iyang-Etoh & Ekanem, 2016; Ushie *et al.*, 2013).

To trace how male child preference was practiced in the past, Akintola (2001) identified the variations across societies and civilizations. According to the author, inheritance was traced only through males in India; in ancient Athens, women were treated as children no matter their age (they could neither inherit nor own property); in Rome, women were not only used as wards, they lacked political or legal power. Regardless of time and changes in culture, the male child has been given more recognition and acceptance than his female counterpart. And this shows the disdain toward the noteworthy campaigns for gender equality (Eguavoen *et al.*, 2007).

In many African societies, there are documented evidences of male child preference in varying degrees. Fuse's (2008) review of empirical evidence on gender bias in North Africa concluded that there is proof of strong gender bias against girls. Also, in their research on gender preferences in Africa, Rossi and Rouanet (2014) reported that male child preference was more prevalent in North Africa than other regions in Africa. However, other studies have presented evidences of the prevalence of male child preference in sub-Saharan Africa (Flato & Kotsadam, 2014; Friedman & Schady, 2012). For instance, Flato and Kotsadam (2014) found that newborn child mortality increments were more for girls than for boys. They clarified that such a contrast is due to discrimination against female children. Further to this, the desire for male child has been linked to maternal morbidity and mortality in a sub-Saharan country like Nigeria (Osakwe, 2019).

There are studies that have looked at the phenomenon of gender preference in Nigeria (e.g., Izugbara, 2010; Fayehun *et al.*, 2011; Olubayo, 2013; Onwutuebe, 2013; Edewor, 2001 & Nnadi, 2013). Each of these studies focused on male child preference from different perspective with each mainly highlighting the different reasons such preferences existed. For instance, Edewor's (2001) study of how fertility affect the value of children among the Isoko of Delta state, Nigeria, showed that male children are respected and sought for because of their contribution to retaining or preserving family name; serving as a source of social prestige and defense to parents; provision of old-age security; and so on. Izugbara (2010) contends that Nigerian culture tends to put male and female children as different people with distinctive capabilities, possibilities, and this significance of the male child as compared to his female counterpart can be seen within the inheritance rights of males and females in certain African nations. On the whole, Fuse (2012) observes that such attitude could cause bias against children of the less-desired sex, and these could have unfavourable social and demographic implications. As Raji *et al.* (2016, p.58) had quipped; "the desire for a male child has resulted in a situation where husbands keep pressuring their wives to have more children, which in turn predispose the health of their wives to danger."

The foregoing clearly demonstrates the proclivity among Igbo parents to have male children in other to perpetuate their linage. The Igbos who are the original inhabitants of the southeast Nigeria, make up the third largest ethnic group in the country. According to Ohagwu *et al.* (2014), male gender preference is a core part of the Igbo culture, which could explain why both men and women desire a male child at all cost. This culture can be clearly observed in the lived experience of the people. These experiences are often sustained by sexist maxims, which are referred to as proverbs. For example, there is an Igbo proverb which says: "Nwoke kuru nwanyi ihe agaghi asi n'okuru mmadu ihe" (loosely translated to mean that a man who beats up a woman has not beaten anyone—no human person). Other traditions (i.e., inheritance, widowhood discrimination, female genital mutilation, etc.) which disproportionately disfavour girls and women tend to help explain why the male child is always preferred. As one of the most lasting cultural values among the Igbos, male child preference continues to dominate public

discourse. Therefore, there is an urgent need to adopt evidence-based approaches in addressing this problem with regards to how it leads to female gender disadvantages. By examining the value parents attach to the biological sex/gender of their child, we might begin to understand the specific cultural and contextual dynamics of male child preference in Southeast Nigeria. Consequently, the study examined the impacts of socio-demographic factors on male child preference in South Eastern Nigeria.

**Theoretical framework**

The social capillarity theory was used as a guide to the study. The theory was developed by Arsene Dumont in 1980. In his work, Dépopulation et civilization (Depopulation and Civilization, 1890), Dumont argued that adults with ambition tend to limit their family size because numerous offspring are an obstacle to success and achievement. He stressed that for people who want to rise socially, "many children make inconvenient luggage" (Dumont, 1890, p.77). Furthermore, he argued that same holds for those who extend their aspirations onto their children as "numerous offspring dilute parental resources and therefore complicates or aggravates the social situation in the next generation" (Dumont, 1890, p.91). Conversely, he states that when a person is surrounded by large family, the person tend not to move up on the social ladder or scale. Engaging social capillary theory as a theoretical concept is significant in the understanding of the impact of family size on social mobility as many families in their pursuit of male child do not give recourse to the family size and the attendant implications. This theory aided our understanding of the demographic impacts of continued search for male child in south eastern Nigeria, Nigeria as a whole and other developing countries. Based on this theory, the following hypotheses were formulated:

*H1:* Male parents are more likely than female parents to desire for male children
*H2:* Demographic variables significantly impact on awareness and preference for male child
*H3:* Levels of education significantly influence sex preferences for children
*H4:* Demographic factors will predict the likelihood that respondents would report that they perceive family size as influencing social mobility

**Materials and Method**
**Study Design and Study Area**

This was a cross sectional questionnaire-based quantitative study of parents who are desirous of male child/children. The study was carried out between the months of October 2019 to February, 2020 in Nsukka, Udenu, and Igboeze North areas of Enugu, Nigeria. These areas are located in Enugu state; an Igbo society. According to the National Population Commission [NPC] (2006), the population of Nsukka Local Government Area (LGA) was 309,633, consisting of 149,241 males and 160,392 females. With an annual growth rate of 2.3% (NPC, 2006), the 2016 population of Nsukka LGA was 316,922 persons with 152,754 males and 164,167 females. Udenu, which borders Nsukka to the East have a population of 178,687 persons according to the 2006 census with a projected population of 241,200 persons as at 2016. Igbo-Eze North on the other hand borders Nsukka to the North with a population of 258,829 persons and a projected population of 349,400 persons. The choice of these areas for the study was because they differ significantly in their cultural practices, yet they are all patriarchal in nature.

**Sample size and Sampling procedure**

We used a quantitative method of data collection and analysis for the study. Six hundred (600) respondents were selected for the study. Respondents who met our eligibility criteria were between the ages of 30 years and above, with at least two children as minimum and were indigenes of the study area either by birth or by marriage.

The study adopted the simple random, availability, and purposive sampling methods which are strands of the multi-stage sampling techniques. We adopted this method because of the nature and the size of the study population. The researchers utilized random sampling (balloting) to select Udenu and Igboeze North while Nsukka was purposively selected because of its geographical location. In each chosen areas, participants were selected using a purposive and availability sampling procedure. To achieve this, we approached prospective participants at their places of residence and shops as the case were. Participants who showed interest were screened for eligibility and were selected as part of the study sample. However, because of the nature of the study and the need to meet the required sample size, we also used a snowballing sampling technique. We did this by asking the already selected participants to refer us to other members of their community they felt might show interest in the study.

**Instrument**

The study employed structured interview guide designed by the researchers. Sixteen items in Likert-scale were developed to measure the respondents' opinion about the substantive issues of the research. The importance of each of these items was rated by participants on a 5-point scale: 1 = strongly agree, 2 = agree, 3 = disagree, 4 = strongly disagree and 5= neither agree nor disagree. We developed a scale (sex preference scale) used for the study. The scale features a great inner consistency, with a general Cronbach's alpha (α) coefficient of .92. The scale has three subscales: (i) Awareness of and Preference for Male Child (TGAPMC). This subscale has a total of six items. Example of items in this subscale includes: "I am aware of male child preference in my community." It has a good internal consistency with a Cronbach alpha (α) of .82. (ii) The Perceived Impact of Male Child Preference on Population Growth (TPIMCPP) with a total of five items. A reliable Cronbach's alpha (α) of .72 was obtained. (iii) The Perceived Impact of Male Child Preference on Social Mobility. This subscale also has five items. The scale showed excellent reliability (α = .88). The independent variables such as age, education, number of children, and marital status were re-coded to aid statistical analysis.

**Data analysis**

Six hundred copies of questionnaires were distributed, out of which 588 were retrieved. To manage collected data, SPSS version 23 was employed. Descriptive statistics was used to present result as appropriate. Associations/relationships between the variables were predicted using Logistic regression analysis–likelihood of reporting relationship between family size and social mobility and gender, residence, age, number of children, occupation, level of education, as well as income level of respondents. To aid the use of logistic regression, the options for the scale item, "From what I can see around, family size impacts on social mobility" was re-coded to categorical (binary=yes or no). Standard multiple regression was used to assess the impact of four control measures (education, age, religion, and area of residence) on awareness and preference of male child. *t*-test was also used to assess differences between groups. To be considered statistically significant, all p-values must be 0.05 or less.

**Ethical approval**

In accordance with the Nigerian national guidelines and regulations, ethical approval is not required for this study as it did not involve human or animal subjects in a way that might cause harm by any means [National Health Research Ethics committee (NHREC, 2020)]. Assent was properly gotten from all members included within the study. However, for purposes of confidentiality, all participants were anonymized.

**Results**

The table below shows the socio-demographic characteristics of the 588 respondents to the questionnaire (see table 1).

**Table 1: Respondents' demographic characteristics**

| Characteristics | | Frequency | % |
|---|---|---|---|
| *Sex* | Male | 299 | 50.9 |
| | Female | 289 | 49.1 |
| *Age* | 30-40 | 123 | 20.9 |
| | 41-50 | 312 | 53.1 |
| | 51 and above | 153 | 26.0 |
| *Occupation* | Civil servant | 231 | 39.3 |
| | Trader | 174 | 29.6 |
| | Artisan | 183 | 31.1 |
| *Level of Education* | Lower education | 201 | 34.2 |
| | Medium education | 167 | 28.4 |
| | Higher education | 220 | 37.4 |
| *Marital status* | Married | 536 | 91.2 |
| | Not married | 52 | 8.8 |
| *Number of children* | Small | 133 | 22.6 |
| | Moderate | 120 | 20.4 |
| | Large | 335 | 57.0 |
| *Religion* | Christianity | 345 | 58.7 |
| | ATR | 114 | 19.4 |
| | Others | 129 | 21.9 |
| *Income level* | 18,000 and below | 296 | 50.3 |
| | 19, 000 – 100,000 | 224 | 38.1 |
| | Above 100,000 | 68 | 11.6 |
| *Area of residence* | Nsukka | 196 | 33.3 |
| | Udenu | 195 | 33.2 |
| | Igbo-Eze North | 197 | 33.5 |

An Independent Sample *t*-test was performed to ascertain the gender difference in parents' preference for male child. We observed a statistically significant difference between males and females across their male child preference score [$t(355.07)= 15.701$; $p=0.000$; CI= 1.53-1.19]. Result showed that female parents ($M=2.74$, $SD=1.39$) were more likely to prefer male child compared to male parents ($M=1.38$, $SD=0.49$). The magnitude of the difference between the gender was moderate ($d=0.06$).

**Table 2: Impact of socio-demographic variables on awareness of and preference of male child**

| Independent variables | Slope | Std.error | t-ratio | Prob. |
|---|---|---|---|---|
| Education | .362 | .218 | 10.898 | .000 |
| Age | -.427 | .245 | -14.164 | .000 |
| Religion | .071 | .204 | 2.355 | .019 |
| Area of residence | .185 | .213 | 5.931 | .000 |
| | | | | |
| Constant | 11.155 | | | |

$R^2$ = .530
F-ratio = 164.553   p<.05
SEE = 3.82963
N = 588

Note: slope are standardized coefficients from linear regression

Standard difference relapse (see table 2) was utilized to survey the effect of four control measures (education, age, religion, and area of residence) on awareness and preference of male child. Preliminary analyses were conducted to ensure no violation of assumptions of normality, linearity, multicollinearity, and homoscedasticity. The four independent variables were simultaneously entered. The total variance explained by predicting variables was 50%, $f$ (4, 587) =164.55, p< .000. All the measures reached statistical significance with age recording the highest beta value ($\beta$ = -.427) compared to the scores of education ($\beta$ = .362), area of residence (beta = .185), and religion ($\beta$ = .071) respectively. The result showed that the independent variable, age, makes the strongest unique contribution to explaining the dependent variable when the variance explained by all other variables in the model is controlled for. The Beta value for religion was lowest (.071), indicating that it made minimal contribution to the model.

A one-way between groups analysis of variance was conducted to explore the impact of educational status on child preference as measured by the sex preference scale. Participants were divided into three groups according to their educational qualifications (group1: lower education; group 2: medium education; group 3: higher education). There was a statistically significant difference at the $p < .05$ level in sex preference for the three educational levels: $F$ (2, 585) = 30.7, $p$ = .000. The actual difference in the mean scores between the groups was medium. The effect size, calculated using eta squared, was .09. Post-hoc comparisons using the Turkey HSD test indicated that the mean score for Group 1 ($M$ = 1.49, $SD$ = .99) was statistically different from Group 2 ($M$ = 2.45, $SD$ = 1.39) and Group 3 ($M$ = 2.39, $SD$, 1.57). Meanwhile, Group 2 & 3 did not significantly differ from each other.

**Table 3:** *Logistic regression showing likelihood of reporting relationship between family size and social mobility.*

| | *B* | S.E. | Wald | df | P | Odds Ratios | 95.0% C.I. for Odds Ratio | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | Lower | Upper |
| Sex | 3.066 | .728 | 17.750 | 1 | .000 | 21.458 | 5.154 | 89.347 |
| Occupation | 2.561 | .723 | 12.538 | 1 | .000 | 12.949 | 3.137 | 53.440 |
| Educational status | -1.485 | .678 | 4.797 | 1 | .029 | .226 | .060 | .855 |
| Number of children | -.518 | .356 | 2.114 | 1 | .146 | .596 | .297 | 1.197 |
| Age | 3.425 | .455 | 56.729 | 1 | .000 | 30.730 | 12.603 | 74.932 |
| Income | 2.465 | .490 | 25.300 | 1 | .000 | 11.766 | 4.502 | 30.746 |
| Constant | -10.365 | 1.429 | 52.611 | 1 | .000 | .000 | | |

Logistic regression (see table 3) was performed to examine the influence of a number of factors on the likelihood that respondent would report that family size influences social mobility. The model contained six independent variables (sex, occupation, educational status, number of children, age, and income level). The full model containing all predictors was statistically significant $\chi 2$ (6, N = 588) = 297.4, p < .001), indicating that the model was able to distinguish between respondents who affirmed that family size impact on social mobility and those who did not affirm. The model as a whole explained between 39.7 % (Cox and Snell R square) and 61.6 % (Nagelkerke R square) in the social mobility status and correctly classified 91.0 % of cases. As shown in table 3, all the independent variables made unique statistically significant contributions to the model (sex, occupation, educational status, number of children, age, and income level). The strongest predictor of reporting a perceived relationship between family size and social mobility was age, recording an odds ratio of 30.7. This indicates that respondents who reported increase in age are 30 times more likely to report a relationship between family size and social mobility, controlling for other factors in the model. The odds ratio of .23 for educational status was less than 1, indicating that for every additional increase in educational status, respondents were .23 times less likely to indicate a relationship between family size and social mobility, controlling for other factors in the model. See table 3 for further information.

**Discussion**

This study examined the socio-demographic impact of male child preference in south eastern part of Nigeria. The study found that female parents were more likely than male parents to desire for male child. The finding is consistent with extant studies like that of Ohagwu *et al.*, (2014) who found a high preference for male child among pregnant Igbo women. This finding is however, not in agreement with Newport (2018) which averred that despite reports of the decline in male child preference in the United States, result still showed that parents prefer sons over daughters; and that among parents, males more than female parents desired boys more than girls (43% to 24%). A plausible explanation for the difference in preference between a western

society like the US and our study area could be associated with culture and status enhancement. The south eastern part of Nigeria is majorly a patrilineal society. It is therefore, not surprising that much importance is attached to the male child. Aware of this and considering the significance women attach to marriage in this part of the world, most women will likely do anything possible to have a male child in order to maintain their "married" status and cement their place in their husband's house. Therefore, for these women, it is not necessarily a case of inheritance and continuity as professed by men; rather, it is a case of status maintenance as lack of male child could lead to divorce or total rejection. Study by Eguavoen *et al.,* (2007) showed that 89.5% of women preferred sons to daughters.

The study equally found that as educational qualification increases, the more likely it is that people will become aware of the existence of male child preference in these areas. The study also found that age was positively related to male child preference. This suggests that as parents advance in age, the higher the possibility that he/she will prefer a male child over the female child. Therefore, increase in age comes with an increasing realization of the importance of male child. Evidence from the study also showed that one's area of residence contributes to the awareness and preference for male child. As one changes location, his/her perception about male child preference changes as well. Although, the result showed no substantial difference among the three communities studied, it however highlights the disparity in the level of advancement among these communities. For one thing, Nsukka as a community is home to many migrants which might have impact on their world view.

Furthermore, it was found that respondents' religious affiliation impacted on their preference for male child. This finding may not be unconnected with the fact that the two most prominent religions in the study areas are Christianity and African Traditional Religion (ATR) which somehow contribute to the patrilineal structure and the patriarchal power relations among the Igbos. For example, ATR is anchored on a traditional belief that male children are of inestimable value that should be courted at all cost for the purposes of inheritance and successorship. This finding is in an agreement with that of an earlier study conducted by Raji *et al.,* (2016) which found a significant relationship between the understanding of religion and preference for the male child.

Findings from the study also depicts that whereas there is a difference in the perception of male child between those with lower level education and the other two educational levels (medium and higher), there was no difference in male preference between medium and higher education levels. This shows a link between higher level of education and lower probability of desiring a male child. This finding is consistent with other studies conducted in Ghana, India, and Egypt (e.g., El-Gilany & Shady, 2007 & Frempong & Codjoe, 2017). Worthy of noting however, is that at times, educational level has no bearing on the preference for male child/children. For instance, Adeleye and Okonkwo (2010) as well as Eguavoen *et al.,* (2007) showed that in some parts of sub-Saharan Africa, profoundly taught people have displayed an inclination for male children over girls. This still boils down to the fact that the influence of a culture which puts a male child at an advantage over a female child is superior to the influence of formal education and other associated factors.

Finally, study found that a number of demographic variables (sex, occupation, educational status, number of children, age, and income level) impact on social mobility. Findings show that as an individual advances in age, the more the likelihood that he/she will perceive family size as impacting on social mobility. The other variables (sex, occupation, educational status, number of children, and income level) also showed a relationship between

them and social mobility. Of particular interest to this present study is the finding that family size significantly impact on social mobility. This has further reaffirmed the position of Dumont (1890), which is the theoretical foundation of this study that when one is surrounded by large family size, he tends not to rise on the social ladder. The major implication of this finding is that as parents continue to search for male child, more children will be born. This increases the pressure on the available resources and reduces the possibility of proper and adequate training of the children. Again, on the side of the parents, it reduces their likely movement on the social scale as resources which would have been used for other investment purpose will be channeled to the large number of children. This is consistent with the findings of Jan *et al.*, (2011) which found that people with many children were more likely to end up in the lower classes.

This work is not without limitations. First, we did not include other communities which have been observed to be matrilineal in nature; their input would have been insightful. Again, we felt that limiting the number of communities used for the study to three was a bit inadequate. It should have been expanded to accommodate more communities. Future research in this area should encompass this. In spite of these limitations, the discoveries of this study are comparable to discoveries from other studies and it adds to the sex inclination studies in Africa and beyond.

**Conclusion**

Evidence from the study that women are more likely than men to desire for male children depicts a paradigm shift. Women have started to give a lot more importance to male children. Though as earlier observed, it is more connected with status maintenance rather than for inheritance and continuity. The finding of nonappearance of sex inclinations among people with a low level of education emphasizes the significance of education on fertility connected issues. Education plays an imperative part in information transmission. Through education, one may be mindful that both genders are similarly vital to the society. It therefore, heralds the need for progressed education levels among people as this may influence fertility wants (Frempong & Codjoe, 2017). Findings showing a correlation between family size and social mobility indicate that the more the children, the less likely it is that one will rise in his social standing. Currently, there is no regulation in Nigeria on the number of children couples should have. Absence of a male child could lead couples to have as many children as possible thereby putting unnecessary pressure on the population on one side, and limiting couples' chances of upward movement in the social ladder on the other side.

**Conflict of interest:** Authors declare no conflict of interest.

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