



## Child Differentials: A Case Study, Staff of Federal Polytechnic, Ede

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**Abstract - The major focus of the study was to find out the socio-economic factors that affects child birth among the occupational cadres of an institution. The population of the study comprised senior and junior staff of the Federal Polytechnic, Ede. The instrument used in collecting data was questionnaire and data were analysed by using Chi-square. The findings revealed that child birth desirability of the respondents are affected by the educational attainment, income group and occupational ladders. Factors such as types of marriage and religion have no significant bearing on the number of children desired by the respondents. Recommendations were made to make those still aspiring for a large family see reality and have a change of heart.**

*Keywords: Child birth, Chi-square. Education, Marriage, Religion.*

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### 1. Introduction

According to Hawthorn, Geoffrey (2011), it is no secret that the “twelve-child” families of the last century are rare today. Today’s “smaller family”, however, does not mean that all families are proportionally small but very large families are becoming increasingly rare especially among the well placed in our society.

Some will say decrease in child birth is because of the use of contraceptives. Leridon (2004) submits that contraceptive devices have only provided the means but not the motive. Contraceptives are not the cause of low child birth any more than ropes are the causes of suicides. The motives for desiring low child birth carry us into many other aspects of life and life patterns. Heinemann, Isabel (2012) reiterates that a shift from an illiterate agricultural society to a literate, specialized, industrialized society has changed children from an economic asset into an expensive economic burden. Shifts in patterns of recreation, in aspiration for education and social mobility, and changing concepts of individual rights have all united to curb indiscriminate child bearing. As a contribution to the ongoing investigation into child birth variants of family all over the world, this paper focuses on intergroup difference in child birth usually refer to as child birth differentials.

Child birth differential deals with intergroup differences in child birth. Szreter (2000), states that the differentials were largely the result of differences in the rate of decline. It was expected that as the initial decline spread to all statuses and all areas, there would be a convergence of differentials in child birth. This has, to some extent, occurred but the child birth of the higher income groups has increased since late 1940s in industrial societies, with the result that the prospective convergence has been stopped, or at least delayed. Instead, there is now something of a reversal with the lower child birth among those of intermediate status and education.

The study of the differences in the child birth of various population groups has become increasingly important in recent years. Interest in differential child birth stems from the fact that it provides valuable

information with regard to the relative contributions of different groups in any given population to the overall level of child birth and consequently gives an indications as to probable future population changes.(Standing, 2002). The working assumption, therefore, is that at present among the occupational strata, there exist child birth differentials, with the “people of means” having the lowest child birth rate.(Dunson et al 2004).

The purpose of this study is to examine the child birth gap between the choosen occupational strata: the group with low child birth and those with high child birth will be compared to give confirmation to unconfirmed assertion that “upward occupational mobility leads to lower child birth, and downward occupational mobility to higher child birth”. Judging from the view point of income, facilities and conveniences, people of high occupational level are supposed to have more children than those in the low strata. Confirmation or otherwise of this, are part of what this write up will look into. For the purpose of this study, any number of children from four (4) above is considered high.

## **2. Methodology**

**Design of the Study:** For the purpose of finding the level of child birth differentials among workers of the Federal Polytechnic Ede, the study will be conducted using a survey research method.

**Population of the Study:** This study was conducted in Federal Polytechnic, Ede, Osun State. As at the time of this study, the polytechnic workforce was put at 997. A population of 100 respondents was expected which appropriates 10% of the workforce. 50 of the population shall be drawn from the low income (junior workers) group and 50 also from high income (senior workers) group.

The Establishment Affairs Division of the Polytechnic, categorizes workers within and above income level of 06 as high income cadre and are senior staff members and those below income level of 06 are in low income group and are regarded as junior workers. For the purpose of this study, the stratified sampling and systematic sampling methods were adopted as they were more appropriate for this study in terms of time, convenience and money. The population is first stratified into junior and senior occupational groups, then individuals are taken from each of the groups concerned at random.

## **3. Data Analysis**

The basic personal characteristics of the respondents are as below:

Majority of the respondents were between the ages of 18 and 35 years; 9% were above the age of 45 years. There were 65 male and 35 female respondents. All respondents were literate. 45% acquired university education and equivalent while 7% did not go beyond primary level of education. Religious affiliation showed 54% Christian, 42% Muslims, and 2% Traditional. All respondents were staff of the Federal Polytechnic, Ede as at the time of the study. To test the relationship between variables especially, the variables that affects level of fertility among respondents, Chi-square tests were conducted to know the level of relationship.

## Answering of Research Questions

### Question 1

What is the relationship between educational attainment and ideal number of children desired?

**Table 1:** Educational attainment by Ideal Number of Children Desired.

<b>Ideal No. of Children</b>	<b>Max 2</b>	<b>Max 4</b>	<b>Above 4</b>	<b>Don't Know</b>	<b>Total</b>
Educational: Primary	0.00	0.00	1.01	6.06	7.07
Secondary	1.01	2.02	5.05	5.05	13.13
Teachers	2.02	0.00	1.01	3.03	6.06
Technical	0.00	5.05	3.03	1.01	9.10
Special	6.06	4.04	8.08	2.02	20.20
University	4.04	29.29	8.08	3.03	24.24
<b>Total</b>	<b>13.13</b>	<b>40.40</b>	<b>26.26</b>	<b>20.20</b>	<b>100.00</b>

### Findings

$X^2 = 55.048$ ; d.f. = 15; Probability =  $1.304E - 06$ .

Significant relationship exists between educational attainment and the ideal number of children desired. Table 1 revealed that larger part of the respondents (53.53%) opted for maximum of 4 children or less, and those with primary and secondary education, mostly (11.11%) could not indicate any number, and out of 9.09% that do, 6.06% are in support of above 4 children. It could be deduced that those with primary and secondary education can not reason beyond the point that children are a sort of valuable asset.

### Question 2

What is the relationship between income group and ideal number of children desired?

**Table 2:** Income group by ideal number of children desired.

<b>Ideal No. of Children</b>	<b>Max 2</b>	<b>Max 4</b>	<b>Above 4</b>	<b>Don't Know</b>	<b>Total</b>
Income Group: ₦15,000 – ₦100,000	0.00	0.00	2.04	5.10	7.14
₦101,000 – ₦200,000	6.12	3.96	2.04	2.04	13.26
₦201,000 – ₦300,000	3.06	3.06	12.24	5.10	23.46
₦301,000 and above	4.08	27.55	8.10	5.10	41.83
Won't tell	0.00	7.14	4.08	3.06	14.28
<b>Total</b>	<b>13.13</b>	<b>40.81</b>	<b>25.50</b>	<b>20.40</b>	<b>99.97</b>

### Findings:

$X^2 = 48.89$ , d.f. = 12; Probability =  $2.186E - 06$ .

Respondents within the income group of ₦301,000 and above in large number (31.63%) opted for not more than 4 children. Those earning between ₦15,000 and ₦100,000 are not in support of any number of children less than 4 while those with unrevealed income are half way in support of maximum 4 and against 7.14% each. As in table 2, the relationship between income group and ideal number of children desired is significant. This buttresses the assertion that people with abilities to support large family do not have them.

**Question 3**

What is the relationship between occupational level and ideal number of children desired.

**Table 3:** Occupational level by ideal number of children desired.

<b>Ideal No. of Children</b>		<b>Max 2</b>	<b>Max 4</b>	<b>Above 4</b>	<b>Don't Know</b>	<b>Total</b>
Occupational Level:	Junior	9.09	7.07	19.19	15.15	50.50
	Senior	4.04	33.33	7.07	5.05	49.49
	<b>Total</b>	<b>13.13</b>	<b>40.40</b>	<b>26.26</b>	<b>20.20</b>	<b>99.99</b>

**Findings:**

$$X^2 = 29.354; \text{d.f.} = 3; \text{Probability} = 1.438E - 06$$

Table 3 shows a significant relationship between occupational level and ideal number of children desired of the respondents. It was discovered that junior workers are prone to having or desiring larger number of children (19.19%). This gives credence to the assertion that those at the lower levels of occupational ladder will be having higher fertility. But it is not exclusive because 9.09% of those junior workers desired only 2 children.

**Question 4**

What is the relationship between religion and ideal number of children desired.

**Table 4:** Religion by ideal number of children desired

<b>Ideal No. of Children</b>		<b>Max 2</b>	<b>Max 4</b>	<b>Above 4</b>	<b>Don't Know</b>	<b>Total</b>
Religion: Traditional		1.01	0.00	0.00	1.01	2.02
	Christianity	6.06	26.26	10.10	11.11	53.53
	Islam	6.06	13.13	15.15	8.08	42.42
	Others	0.00	1.01	1.01	0.00	2.02
	<b>Total</b>	<b>13.13</b>	<b>40.40</b>	<b>26.26</b>	<b>20.20</b>	<b>99.99</b>

$$X^2 = 10.078; \text{d.f.} = 9; \text{Probability} = 0.3442$$

**Findings:**

There is no significant relationship between religion and the ideal number of children desired by the respondents as presented by Table 4. This was due to the fact that people disregards their religious affiliation when it comes to desiring children. But it could still be deduced that Christians have preference for not more than 4 children (33.33%) than Muslims (19.19%).

**Question 5:**

What is the relationship between types of marriage and ideal number of children desired.

**Table 5:** Types of Marriage by ideal number of children desired.

<b>Ideal No. of Children</b>		<b>Max 2</b>	<b>Max 4</b>	<b>Above 4</b>	<b>Don't Know</b>	<b>Total</b>
Types of Marriage: Traditional		1.2	8.4	4.8	9.6	24.0
	Civil	0.0	12.0	4.8	2.4	19.2
	Church	3.6	10.8	4.8	3.6	22.8
	Moslem	3.6	12.0	9.6	6.0	31.2
	Others	0.0	2.4	0.0	0.0	2.4
	<b>Total</b>	<b>8.4</b>	<b>45.6</b>	<b>24.0</b>	<b>21.6</b>	<b>99.6</b>

$X^2 = 12.104$ ; d.f = 12; Probability = 0.4374.

## **Findings**

Table 5 also presents an insignificant relationship between types of marriage and number of children desired by respondents. As in case of religion, types of marriage do not have much influence on the desire for children. But from tables 4 and 5, respondents significantly opted for maximum of 4 children (40.40% in table 4 and 45.6% in table 5).

### **4. Findings of The Study**

The primary objective of the study is to examine the child birth gap between the junior and senior staff of the Federal Polytechnic Ede, and the relative contributions of some variables such as income level, educational attainment et cetera to child birth. The results indicate that in terms of total birth desire, senior workers appear to have lower child birth than the junior one. But in terms of number of children at the time of the study, no significant differential appeared to exist between the senior and the junior workers. It was clearly apparent from the study that the major determinants of child birth are educational attainment, occupational strata and income level, and not religious beliefs and type of marriage. It was clearly apparent from the study that the major determinants of child birth are educational attainment and income, and not significantly religious beliefs and type of marriage.

Child birth will probably remain high among the junior workers because preference for larger families and commitments to traditional customs are being reinforced by low education and absence of the conditions which can make high child birth uneconomical and perhaps disadvantageous. Most of the junior staff live with their illiterate relatives in family compound where they do not pay rents with illiterate neighbours and friends that are prone to keeping large families. It was also found that those that opted for fewer number of children do so for a number of reasons which include better upbringing, social status and convenience.

### **5. Conclusions**

The inspiration to embark on this study is to confirm with evidence that people on higher occupational ladder tend to have fewer children compared to those in lower occupational cadre have been achieved. In line with its objective, the study have succeeded in identifying and comparing occupational group with low child birth and that with high child birth, and give support to unconfirmed popular assertion that those in higher occupational level are mostly with lower child birth compared to those in lower occupational level. While stressing the tentative nature of this study, it should not be taken as exclusive as a study of child birth among Federal Polytechnic, Ede workers on a wider basis is desirable.

### **6. Recommendations**

Based on the findings, the following recommendations are made:

- i. The Polytechnic Management should embark on vigorous enlightenment on the need to give children optimum upbringing, and to conveniently do this as salary earners, the number should be less.
- ii. Efforts should be made to discourage workers (mostly juniors) from living in the family compound where they pay no rent and other bills so that the resources they rely on to afford large family with will be reduced.
- iii. Senior workers should tolerate and advice junior workers on the reality of situation in our society, especially, the old days relieve if the children were moderate and well trained.

iv. Junior woekrs should be encouraged on the need to detach one self from traditional ties such as wasteful spendings under the protest of culture and tradition.

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