

INFLUENCE OF EDUCATIONAL LEVELS ON FERTILITY DECISIONS AMONGST FEMALES PARTICIPATING IN LABOUR FORCE IN ADO-ODO/OTA LOCAL GOVERNMENT AREA OF OGUN STATE NIGERIA

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ABSTRACT

The paper tries to examine the influence of educational levels on fertility decisions amongst females participating in labour force in Ado-odo/ota local government area of Ogun state, Nigeria. A total sample size of 106 of women was interviewed through questionnaires administration. Frequency tables and chi-square were used to analyze the data collected. Only one hypothesis was tested in this study. The fact obtained from frequency table buttressed that the highest proportion of female respondents acquired secondary educational qualifications. The result derived from the chi-square is that the higher the level of education, the lower the number of children that females participating in labour force had. However, the paper recommends that for Nigeria to be able to reduce her fertility level and achieve developmental goals simultaneously, then women's education should be vigorously encouraged by Nigerian citizens, government and non-governmental/multi-national agencies in terms of granting full scholarship awards to them.

KEYWORDS

Labour force participation, Females, Fertility, Educational levels and Chi-square.

INTRODUCTION

In recent times, one of the most striking phenomena has been the extent to which women have increased their participations in the labour force. The increasing participation of women in paid work has been driving employment trends and the gender gaps in labour force participation rates have been shrinking. In the 1980s and early 1990s, labour force growth was substantially higher for women than for men for every region of the world except Africa. Obviously, the increase in female labour force participation has been linked to the completion of the fertility transition in the developed industrialized world. However, fertility decline has been slow or stalled in many developing countries. International Labour Office (2001a) shows that by 1980, fertility levels in most of the developed industrialized countries were already close to or below the replacement rate of 2.1 children per woman. Labour force participation rates of women in the prime ages of 25-54 years continued to rise in the 1990s to between 60 to 85 percent and by the turn of the century fertility was well below replacement. However, the estimates from the developed countries shows that experienced the largest increases in female labour force participation rates (FLFPRs) in the 1980s also tended to have the largest declines in total fertility rates (TFRs). By the 1990s, changes in both FLFPRs and TFRs had slowed down. The economic participation of women has actually been falling in several of the transition economies particularly in the 1980s but there has been obvious decline in fertility rates especially in the 1990s, most to below replacement (International Labour Office, 2001b). Also, in the Asia-Pacific countries, there is no clear pattern between women's employment and total fertility rates. There are almost as many countries with high FLFPRs and high levels of fertility (for example, Nepal, Papua New Guinea) and as there are countries with similar high FLFPRs and total fertility rates around replacement level (for example, Democratic People's Republic of Korea and Thailand) and yet another group of countries where fertility had dropped below replacement but FLFPRs are only around 60 per cent (Hong Kong and Singapore). The aforementioned does not show a clear relationship between changing FLFPRs and fertility decline; Asia-Pacific countries with little increase in female participation showed sharper falls in TFRs than many of the countries with large increases in female participation (International Labour Office, 2001c). In Latin America and the Caribbean, there has been increasing FLFPR and declining fertility since 1980. Changes in both rates have generally been larger in the 1980s than in the 1990s. Women in the North African and Middle Eastern countries continue to have the lowest levels of labour force participation in the world but there has been a distinct fall in total fertility rates, albeit none to below replacement levels (International Labour Office, 2001d). It is also striking to note that FLFPRs fell or changed very little in most North African and Middle Eastern countries in the 1990s but fertility continued to drop sharply. In contrast, women in Sub-Saharan Africa have very high rates of female labour force participation and their fertility rates have remained high and even in the late 1990s total fertility rates were between 4 to 7 children per woman. The statistics further indicated that there has been very little percentage change in FLFPRs especially in the 1990s and the declines in TFRs have been small (International Labour Office, 2001e).

At this juncture, it is pertinent to define the term 'labour force' and 'fertility' as follows:

The term "labour force" involves the totality of persons who could produce that is, the goods and services if there were a demand for their labour and a desire to participate in such activity. To be straightforward, labour force can also be defined as persons in the population 15 years and above who contribute to the production of goods and services in the country. It includes those who are either employed or unemployed (United Nations, 2000a)

On the other hand, Fertility is the actual reproductive performance of an individual, a couple, a group or a population based on the number of life-births that occurred. With reference to the United Nations (2003), a life-birth is the complete extraction from its mother, a product of conception, irrespective of the duration of pregnancy, which after such separation breathes or shows any other evidence of life such as beating of the heart, pulsation of the umbilical cord or definite movement of the voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached, each product of such birth is considered as a life-birth. In other word, fertility is the ability to conceive and have children. It is also the ability to become pregnant through normal sexual activity (Medicine Net, 2011).

Indeed, past studies have investigated how female labour force participation influences fertility and it has been observed that an inverse relationship is likely to exist if economic activity occurs outside the domestic sphere, though the strength of the relationship would still depend on the type of employment. For instance, if the job consists of low level manual labour, there will be less likelihood of an inverse relationship than if the job provided opportunities for or demands occupational mobility (Kawashima, 1995 and Michaela, 2001).

The general hypothesis that female labour force participation reduces desired and actual fertility have been examined using international, national and sub-national aggregate data. The expected negative relationship has been widely observed (Standing, 1983).

According to Kasarda (1971), he conducted a cross-sectional study of sixty countries and discovered a negative partial correlation between fertility and the proportion of women employed in non-familial enterprises. He controlled for urbanization, industrialization and education. However, he concluded that an increase in employment of females outside the household inevitably influences the nation's fertility rate.

The conduct of this study is essential in many ways because it will greatly benefit the Nigerian government, economic planners, private organizations, the academic society, social scientists and policy makers for the following reasons: Firstly, the female labour force participation and their fertility rates in Sub-Saharan Africa have been consistently high over a decade ago and has not received adequate attention up till date. Secondly, there are not many studies recently done by Scholars on the effect of female labour participation on fertility in both Africa and Nigeria. However, many studies were carried out on this subject for almost a decade now in other parts of the world.

Despite the aforementioned background, this study tries to answer this bothering issue of concern: What has been the influence of educational levels on fertility decisions amongst females participating in labour force in Ogun state, Nigeria?

Basically, the main focus of this paper is to identify the influence of educational levels on fertility decisions amongst females participating in labour force in Ado-Odo/Ota local government area of Ogun State of Nigeria.

METHODOLOGY

A total sample size of 106 females that are gainfully employed (15-64years) was randomly selected from 2-wards in Ado-Odo/Ota Local Government Area of Ogun State, Nigeria. A multi-stage random sampling technique was used to select the females that are participating in labour force. Purposive sampling method was employed due to the fact that this research was a very sensitive one and in order to carry out the study effectively, females participating in labour force were randomly selected from these two wards. From each ward, a house-listing/street numbering was done by using Primary Health Care/National Bureau of Statistics (PHC/NBS).The systematic random sampling method was employed to select the number of households where the gainfully employed females are residing. In short, 53 females were randomly picked from each ward which constituted the total sample size of 106 in 2-wards. Information about demographic and socio-economic characteristics of respondents, responses on the effect of their work had on their desired number of children, respondents opinions on the effect of high level of education of women on fertility and whether the respondents work has affected the number of children they would have had were collected from them with the help of questionnaires instrument. The technique employed in this research was a quantitative approach. The data was collected from a face-to-face interviewed via structured questionnaire that was carefully designed to incorporate all the necessary questions on the issues at hand.

Analysis of the study was based on 106 females participating in labour force were interviewed on the influence of educational levels on fertility decisions amongst females participating in labour force in Ado-Odo/Ota Local Government Area of Ogun state. The data were analyzed with the aid of Statistical Packages for Social Scientists (SPSSversion15.0). After checking for incorrect responses, and missing values, descriptive statistics were calculated for all variables. Chi-square test was performed on the influence of educational levels on fertility decisions amongst females participating in labour force in Ado-Odo/Ota Local Government Area of Ogun state and the results were interpreted accordingly. The data for the study was analyzed by using the information obtained through questionnaires and personal interviews. The variables of consideration on the frequency tables for this study includes: age, sex, religion, marital status, highest level of educational attainment, ethnicity and occupational categories respectively.

The study was carried out in Ado-Odo/Ota Local Government Area of Ogun State due to the proximity or closeness to the researcher, fast expanding and economically developing and has one of the largest concentrations of Industries in the Federal Republic of Nigeria especially the manufacturing ones. The proximity Ado-Odo/Ota Local Government to Lagos state which is still the commercial nerve centre of the country is another reason for being chosen as the study area.

TABLES AND INTERPRETATIONS

DEMOGRAPHIC AND SOCIO-ECONOMIC CHARACTERISTICS OF FEMALES PARTICIPATION IN LABOUR- FORCE

TABLE 1: PERCENTAGE DISTRIBUTION OF RESPONDENTS BY AGE

	Frequency	Percent	Cumulative Percent
15 -24	53	50.0	50.0
25 -34	30	28.3	78.3
35 - 44	14	13.2	91.5
45 - 54	5	4.7	96.2
55 - 64	4	3.8	100.0
Total	106	100.0	

Source: Field Report, 2008

It was observed from the table 1 that large proportion of the respondents are young 15-24 years, with about 50%, which accounts for half of the population sample, followed by the 25-34 years age group with 28.3% of the respondents, then the 35-44 years age group with 13.2% and the 55-64 years age group with 3.8% of the total population.

TABLE 2: PERCENTAGE DISTRIBUTION OF RESPONDENTS BY RELIGION

	Frequency	Percent	Cumulative Percent
Christianity	76	71.7	71.7
Islam	29	27.4	99.1
Traditional	1	.9	100.0
Total	106	100.0	

Source: Field Report, 2008

It is evident from table 2 above that Christianity and Islam were the two religious groups that dominated the area of study. Majority of the respondents were Christians (71.7%) while Islam respondents constitute 27.4% and traditional constituting 0.9% of the population.

TABLE 3: PERCENTAGE DISTRIBUTION OF RESPONDENTS BY THEIR ETHNIC GROUP

	Frequency	Percent	Cumulative Percent
Yoruba	52	49.1	49.1
Igbo	29	27.4	76.4
Hausa	24	22.6	99.1
others	1	.9	100.0
Total	106	100.0	

Source: Field Report, 2008

From table 3 above, we can infer that majority of the respondents are Yoruba (49.1%). This is followed by Igbo with 27.4%, then Hausa with 22.6% and other groups constituting 0.9% of the population.

TABLE 4: PERCENTAGE DISTRIBUTION OF RESPONDENTS ACCORDING TO THEIR LEVEL OF EDUCATION

	Frequency	Percent	Cumulative Percent
Primary	3	2.8	2.8
Secondary	55	51.9	54.7
Tertiary	42	39.6	94.3
Others	4	3.8	98.1
no response	2	1.9	100.0
Total	106	100.0	

Source: Field Report, 2008

Table 4 showed that the highest percentage (51.9%) of the population had secondary education, 39.6% of the population went ahead to acquire tertiary education, 3.8% do not belong to any of the mentioned categories and 2.8% of the respondents had at least primary education. The table is an indication that the level of literacy among the respondents was high.

TABLE 5: PERCENTAGE DISTRIBUTION OF THE RESPONDENTS ACCORDING TO THEIR MARITAL STATUS

	Frequency	Percent	Cumulative Percent
single	2	1.9	1.9
married	92	86.8	88.7
separated	1	.9	89.6
widowed	1	.9	90.6
divorced	10	9.4	100.0
Total	106	100.0	

Source: Field Report, 2008

Table 5 showed high level of marriage stability among the respondents. From this, we can observe that a high level of marriage stability can be noticed in the area of study.

The frequency table shows that those married constituted the highest percentage which is 86.8%, 9.4% of them are divorced, the percentage of respondents currently single is 1.9% which is low, 0.9% are separated, 0.9% are widowed respectively.

TABLE 6: PERCENTAGE DISTRIBUTION OF RESPONDENTS BY AGE AT FIRST MARRIAGE

	Frequency	Percent	Cumulative Percent
15 – 24	81	76.4	76.4
25 – 34	11	10.4	86.8
35 – 44	12	11.3	98.1
45 – 54	1	.9	99.1
no response	1	.9	100.0
Total	106	100.0	

Source: Field Report, 2008

Table 6 revealed the age at first marriage of the respondents. And we can ascertain from the table that 76.4% of the respondents got married at early ages which is between 15 and 24 years, which is also the highest, those between 35 and 44 years with 11.3%, then we have those between 25 and 34 years with 10.4%, very low respondents at the 45-54 years age group with 0.9%.

TABLE 7: OCCUPATION OF RESPONDENTS

	Frequency	Percent	Cumulative Percent
Trading	50	47.2	47.2
Teaching	19	17.9	65.1
Banking	8	7.5	72.6
Others	27	25.5	98.1
no response	2	1.9	100.0
Total	106	100.0	

Source: Field Report, 2008

The table 7 above illustrates the percentage distribution of respondents by their occupation. A higher percentage of 47.2 are into trading, followed by 25.5% who are into other form of businesses, 17.9% are into teaching and 7.5% are into banking. We can therefore, see from this table that a very high percentage of the respondents are into one form of business or the other.

TABLE 8: RESPONSES ON THE EFFECT OF THEIR WORK ON THEIR DESIRED NUMBER OF CHILDREN

	Frequency	Percent	Cumulative Percent
Yes	16	15.1	15.1
No	87	82.1	97.2
Others	1	.9	98.1
no response	2	1.9	100.0
Total	106	100.0	

Source: Field Report, 2008

According to table 8, a higher percentage of 82.1% said that their work did not affect the number of children they would have had, 15.1% of respondents were of the opinion that their work affected the number of children they would have had while 0.9 % gave other responses.

TABLE 9: RESPONDENTS OPINIONS ON THE EFFECT OF HIGH LEVEL OF EDUCATION OF WOMEN ON FERTILITY

	Frequency	Percent	Cumulative Percent
Yes	65	61.3	61.3
No	40	37.7	99.1
no response	1	.9	100.0
Total	106	100.0	

Source: Field Report, 2008

From table 9, we can say that a high percentage of the respondents (61.3%) thought that high level of education amongst women reduces the level of fertility while 37.7% says it does not. **HYPOTHESIS 1**

H₀: Their levels of education do not affect their level of fertility.

H₁: Their levels of education affect their level of fertility.

TABLE 10: DO YOU THINK HIGH LEVEL OF EDUCATION AMONGST WOMEN REDUCES THE LEVEL OF FERTILITY

	O	E	O-E	(O-E) ²	$\frac{(O-E)^2}{E}$
Yes	65	35.3	29.7	882.09	24.99
No	40	35.3	4.7	22.09	0.63
No response	1	35.3	-34.3	1176.49	33.33
Total	106				X ² =58.95

Source: Field Report, 2008

From the table above, the calculated value is 58.95

For each observation, Degree of freedom = Df which is computed as follows:

$$Df = (r-1) (c-1)$$

Where r = number of rows

c= number of columns

$$Df = (3-1) (2-1)$$

$$= 2 \times 1 = 2$$

Therefore, the critical value or the tabulated value at 5% level of significance =5.99

The expected frequency (EF) = Total number of observed frequency/N

$$= \frac{65+40+1}{3}$$

$$= \frac{106}{3}$$

$$= 35.3$$

Decision: From the computations above, the calculated value of X² at 0.05 level of significance and degree of freedom of 2 which is 58.95 is greater than the critical or tabulated value which is 5.99, we reject the null hypothesis H₀ and accept the alternative hypothesis H₁ which states that 'The levels of education affects their level of fertility'. The conclusion that can be drawn from this is that the higher the level of education, the lower the number of children that women participating in labour force will have.

DISCUSSION OF RESULTS

From the above table 10, the following deductions are clearly interpreted as follows: the chi-square test in table 10 revealed that the levels of education of females participating in labour force affect their fertility levels. Here, it is vital to note that the chi-square result is buttressed by the accepted alternative hypothesis assertion in the only hypothesis of this study.

CONCLUSION

The primary focus of this paper is to empirically examine the effect of female labour force participation on fertility in Ado-Odo/Ota local government area of Ogun State, Nigeria. The paper is hereby concluded with evidences from frequency tables and chi-square tests. Evidences from frequency tables include; firstly, that the largest proportion (50 percent) of the respondents are young 15-24 years. Secondly, Christians dominated this study with 71.7 percent. Thirdly, that majority of the respondents are Yoruba with 49.1 percent. Fourthly, the highest percentage 51.9 per cent of the female respondents acquired secondary education in this study.

Fifthly, the highest proportions of respondents are married with 86.8 percent. Sixthly, the greatest proportion (76.4 percent) of the respondents got married at early ages which are between 15 and 24 years. Furthermore, highest percentage of female respondents with 47.2 percent engaged in trading. Also, more proportion of respondents (82.1 percent) said their work did not affect the number of children they would have had. Lastly, higher percentage of the respondents (61.3 percent) said that high level of education amongst women reduces their level of fertility.

On the other hand, the fact deduced from chi-square test indicated that the higher the level of education, the lower the number of children that women participating in labour force will have.

RECOMMENDATIONS

The paper is concluded with the recommendation that for Nigeria to be able to reduce her fertility level and achieve developmental goals simultaneously, the female education should be vigorously encouraged by Nigerian citizens, government and non-governmental/multi-national agencies in terms of granting full scholarship awards to them.

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