

FEMALE OCCUPATION AND FERTILITY IN GHANA, 2008

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FEMALE OCCUPATION AND FERTILITY IN GHANA, 2008



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ACCEPTANCE

Accepted by the Faculty of Social Studies, University of Ghana, Legon in partial fulfillment of the requirement for the degree of M.A. (Population Studies)

Supervisor.....

Prof A. F. Aryee

31st July, 2013



DECLARATION

I Daniel S.Y. Godzo do hereby declare that except for duly acknowledged citation of references and ideas, this dissertation is my own original work and that it has not been presented in whole or in part anywhere for another degree.

Daniel S.Y. GODZO



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DEDICATION

To my wife Doris Mantey-Aboagyewa

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ABSTRACT

Female occupation is very crucial in this contemporary era where there exist several advocacy groups calling for involvement of women in decision making at all levels and particularly at the time where economic hardship has considerably reduced men's ability to take on the breadwinner's role. The objective of this study was to examine the relationship between female occupation and fertility in Ghana. The levels of fertility for the various categories of occupation are derived through the use of data from the 2008 Ghana Demographic and Health Survey.

Univariate and bivariate analysis in the form of percentages and means are used in the study to examine how female occupation relates to fertility. Multiple linear regression analysis is used to independently analyse the impact of occupation and place of work on fertility and again analyse the impact while controlling for other socio-economic and demographic factors. This analysis shows that women in professional / technical / managerial and clerical category of occupation have less number of children than those in other types of occupation.

Women in agricultural works are also found to have the highest number of children. The study has also found that other factors such as education, marital status, wealth index, age and place of residence significantly influence women's fertility. Nevertheless, while types of occupation influence females' fertility, occupation in general does not. As explained by high fertility of women engaged in agricultural works.

According to the findings of studies examined, women's education especially at secondary and higher levels reduces reproductive period in marriage, impart new values, and enables them have

knowledge on contraceptive methods and thereby lowering fertility. Besides, it has also been found that women working in rural areas have higher fertility than those in urban areas.

The study recommended the encouragement of more women to be engaged in occupations that require secondary and higher education to reduce fertility in the country through facilitating the enrolment of more females into schools among others.

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background

Women's occupation is recognized to play an important role in the variation in fertility levels (Becker, 1993); (Rindfuss and Brewster, 1996). Based on this, the relationship between female occupation and fertility is one of the most studied areas in fertility research. The participation of women in economic activity is presumed to compete with their maternal roles due to the fact that mothers often are those who are responsible for household duties including child birth and care. Accordingly, a negative relationship is generally expected between female occupation and fertility, at the micro level, although there is a controversy about the causal direction of the inverse relationship between the two phenomena (Cramer, 1980 (Felmlee, 1993); and Waite, (1977). While a consistent negative relationship between women's paid work and fertility has been found at the micro level in developed countries (Lloyd, 1991), no clear pattern has emerged in developing countries (Lloyd, 1991, Poirier and Neill, 1978).

Findings from research in developing settings have shown a positive association as well as the reverse. In sub-Saharan Africa in particular, it has been suggested that no relationship should exist between labour force status and fertility because of limited paid jobs outside the home, extended family networking, cheap domestic labour, as well as traditional social norms regarding gender roles and division of the household duties between men and women. However, it is likely that these mediating factors vary across different settings in sub-Saharan Africa, thereby resulting in the discrepancy in the work-fertility relationship in this region (Oppong, 1988; 1991).

In his work supporting the foregoing views Aryee, (1980) stated clearly, that increased absorption of women in the modern sector of the economy tends to generate a structural conflict between the maternal and occupational roles and that this in the long run seems to undermine high fertility norms. It follows therefore that in the pursuance of the Ghana government's policy of achieving a reduction in the level of fertility, any policies or programmes which would actively help to promote the absorption of the female population in such extra-familial occupational activities should be actively encouraged.

In a similar vein, Date-Bah, 1980 asserted, that the participation of Ghanaian women in the modern economic sector is viewed necessary for a number of reasons. Apart from helping them to improve their status in the society, it also enables them to contribute their quota to the country's development, while making it possible for the country to fully utilize its human resources. Furthermore, it has been observed that women's involvement in the modern economic sector often brings about a decline in their fertility since the demands of work in the modern economic sector, especially in the formal bureaucratic organizations are often irreconcilable with raising large numbers of children. Besides it ensures their participation in decision making in the major sectors of the society and in the home.

The above views are in line with the recommendation of World Population Plan of Action in Bucharest (1974) which called for the integration of the role of women in to the development process. Underlying this call was the assumption that an improvement in the social and economic status of women will contribute to smaller family sizes. This in turn will improve their status in society, as well as enable them to contribute their quota to a country's development, while making it possible for the country to fully utilize its human resources.

Henriette and Alexia, (2005), do not cancel the fact that a vast majority of empirical studies have found a negative relationship between female economic activity and fertility, they however noted that the effect may not be causal. The negative correlation may be the result of selection effects where women with stronger preferences for motherhood are also those with lower unobservable skills and motivation in the labor market. Henriette and Alexia, (2005), also made it clear that most of the studies that have produced the negative effects are from the developed countries. However, several authors in a variety of disciplines have recently noted an aggregate reversal in the cross country correlation between the total fertility rate (TFR) and the female employment rate in developing countries. The countries that now have the lowest levels of fertility are those with relatively low levels of female labour force participation and the countries with higher fertility levels tend to have relatively high female labour force participation rates.

Boserup, (1985) also revealed that “fertility decline in Asia and Europe, and the Americas has been the result of structural changes in economies, accompanying increasing industrialization. In this process, larger and larger shares of the populations become engaged in occupations that are conducive to lower fertility, for instance, because they are located in urban areas or require higher education. Moreover, the supports for large family size are eroded as the use of child labour declines”.

Sackey, (2005) on his part stated that employment outcomes in Ghana, like elsewhere, wield a great impact on the quality of life of workers in general and women in particular as well as their families. Generally, gender differences tend to occur in the forms and strategies for participation in economic activities. For example, the formal segment of Ghana’s labour market could be said to be male-dominated because employment in that sector is contingent on

participants' education and skill acquisition, among others, requirements that tend to be met more by males than females for various reasons (notably financial, institutional and cultural). On the other hand, the most widely used strategy women adopt to assist accommodating their family duties to the demands of paid employment is to relinquish responsibility for childcare during the hours they are engaged in paid work. Women in this modern time tend to rely on a wide range of childcare providers, including paid providers, preschools, and as children grow, schools and boarding facilities.

The purpose of this paper is therefore to investigate the influence of female occupation on fertility in Ghana for the year 2008 in order to assess whether women face a conflict between their occupation and reproductive roles and if so, to examine the possible differences that may occur between urban and rural women, for different types of occupation, in an era in which economic hardship has considerably reduced men's ability to solely take on the breadwinner's role.

1.2 STATEMENT OF THE PROBLEM

As a result of modernization and acculturation, the traditional childcare support (kin support) is virtually non-existent and the modern childcare support in the form of pre-schools, schools afterschool activities also come with high cost. Due to this, women are faced with the task of combining maternal roles with other occupations that provide the needs of the home. These roles come with the possibilities of role conflict. In other words, the situation presents a multidimensional opportunity cost associated with occupation and motherhood, where a mother foregoes a particular job and takes to child bearing or the vice versa, or in some cases combine the two. This combination in the past was sustainable as a result of extended family members giving support to mothers. (Blanc and Lloyd, 1994)

In spite of these challenges women continue to engage in all sorts of work and in recent times take up top administrative and managerial jobs which in the past were the preserve of men, women often engaged in these works either after a long period of schooling or working alongside schooling. (Sackey, 2005).

These circumstances pose the following questions that this paper seeks to answer.

- What relationship exists between female occupation and fertility in Ghana as at 2008?
- What other demographic and socio-economic factors influence fertility of Ghanaian women?
- How relevant are these for the evolution of gender related as well as family sensitive policies?

1.3 RATIONALE OF THE STUDY

It has been noted all over the world that women suffer a serious discrimination and restrictions in their socio-economic life particularly in the developing countries (United Nations, 1983). This discrimination adds to the cultural pressure already in existence for women to define themselves as mothers and to focus on their maternal function.

It has been realized by many governments all over the world, especially that of developing countries, that the inability of women to take control of their own fertility mainly emanates from lack of power and decision making ability. Hence, improvement in their legal rights, economic rights and opportunities is a very crucial factor in achieving family planning goals and desired fertility levels. (Population, Family and Sustainable Development, Ngor, 1992)

This is also timely, as it seeks to find answers and solutions to various discriminatory practices that the contemporary Ghanaian woman experiences as she tries to combine her maternal duties with the productive work.

The study is also very important as it intends to contribute to knowledge through its findings and conclusion by providing vital information for understanding the current demographic and the reproductive change taking place in Ghana and the factors that account for women's fertility.

1.4 OBJECTIVES OF THE STUDY

The general objective of the study is to examine relationship between female employment and fertility in Ghana. Its specific objectives are

- To examine fertility levels and occupational types in Ghana.
- To examine some factors accounting for fertility decline; and to consider implications for policy direction.
- To examine the effect of some socio-economic variables which together with female occupation may affect fertility levels in the country.

1.5 ORGANIZATION OF THE STUDY

The study has seven chapters. The first chapter contains a brief background of the study, the statement of the problem, rationale of the study and the objectives.

Chapter two looks at the literature review in which the findings of related studies were highlighted, in addition to the conceptual framework and the hypotheses.

The third chapter discusses the methodology used in the study. This was followed by chapter four where background characteristics including control variables and types of occupation of respondents were discussed using descriptive statistics.

Chapter five assesses the relationship between children ever born and independent/control variables using bivariate analyses.

Chapter six uses multiple linear regression to examine the relationship between control variables and fertility, as well as between fertility and occupation while controlling for other socio- economic variables where children ever born serve as the dependent variable.

Chapter seven provides the summery for the findings of the study, draws conclusion and makes recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

There are several studies on labour force participation and related issues in general and gender aspects in particular. Most of these studies revealed a negative relationship between employment and fertility among women where the nature and or location of the work makes it incompatible with maternal roles, while a few stated that there is no clear relationship between female's occupation and fertility in developing countries.

Date-Bah, (1980) explicitly stated in her work that the participation of Ghanaian women in the modern economic sector is viewed as necessary for a number of reasons. Apart from helping to improve their status in the society, it also enables them to contribute their quota to the country's development, while making it possible for the country to fully utilize its human resources.

(a)Inverse Relationship between Fertility and Occupation

Some of the studies that alluded to the inverse relationship between fertility and occupation include one carried out by Gasie and Nabila (1978). In their study in which they used using data from Ghana, they indicated that women who were employed had fewer children than their unemployed counterparts. Shapiro and Tambashe (1994) with their study in Kinshasa also state that there is a negative relationship between formal sector occupation and fertility, and that the life time levels of fertility among women in the formal sector of employment were generally low.

Aryee, (1980) using data from Ghana found that increased absorption of women in the modern sector of the economy tends to generate a structural conflict between the maternal and occupational roles and that in the long run, undermine high fertility norms.

Drawing from the experience of developed industrialized countries, Lin Lean Lim (2001) stated that women's employment is likely to lead to sustained declines in fertility when:

- (a) Women's employment is empowering or "status enhancing", so that they have control over income and resources and a greater say in family decision-making, including in fertility decisions;
- (b) The conflict between women's productive and reproductive roles significantly raises the opportunity cost of having children;
- (c) Childcare arrangements are not easily available and the time intensity and quality of childcare desired seriously constrain women's economic activities;
- (d) The interruption effects (of a period of labour force withdrawal to bear and raise young children) involve heavy costs;
- (e) The returns and satisfactions women derive from participation in economic activities are substantially higher than the returns and satisfactions of having additional children;
- (f) Women's employment and income-earning capacity enhances their economic or financial independence and reduces the need to have children as a form of security for old age or against adverse economic conditions;
- (g) Women's economic role and contribution to family welfare lead to reduced sex preference for children and changing attitudes toward the value of daughters;
- (h) Women's increasing participation in the labour force is linked to increasing investments in girls' education, and age at first marriage and age at first pregnancy go up; and
- (i) Women work and build up careers before marriage, and age at first marriage and age at first pregnancy go up.

(b) Lack of Clear Relationship between Fertility and Occupation in Less Developed Countries

Slightly different finding on the topic is by Stycos and Weller, (1967) who argued that in less developed countries, a clear negative relationship between work participation and fertility is lacking, and that wherever present it is typical only of small sub- groups of women. Stycos and Weller using Turkish data, concluded that if the nature of jobs was such that they did not generate incompatibility between the roles of mother and worker then there will be minimal effect on fertility.

The implication is that employment of a woman may have a negative impact on the number of children that she could have, only if the occupation she engages in serves as impediment to child bearing roles. In other words, if the woman finds it difficult to combine the two roles (maternal role and the role of a worker).

Harman, (1970) using individual data from the Philippines also found out that association between female work and fertility in less developed countries is not always clear and inversely related to as it is usually the case in more developed countries.

Oppong et al.'s (2012) argued that there is a crisis in the care of babies and children in Ghana. The study identified several factors that have contributed to this crisis, such as time among adults which has become scarcer, increased workload of women, labour migration resulting in male migrants' absence from children's households and female migrants, and lack of kin support in child care. Besides, cooperative practices of caring such as fosterage are not working well today, and men are avoiding their

responsibilities as fathers. As a result, women are in ‘an increasingly solitary struggle to maintain self and children’ Mothers are engaged in a ‘balance and reshuffle’, ‘they carried out adjustments that ensured [the] survival of all’. Upon all these it is not clear whether the crisis has decreased the fertility among the women rather what is certain that the wellbeing of children is compromised.

(c) Positive Relationship between Fertility and Occupation Due To Combination with Other Factors in Developing Countries

In a similar vein, studies have identified the co-existence of high rates of paid occupations for women with high fertility in Ghana. This was made clear in a comparative study of women’s work rates for 38 developing countries participating in the WFS programme of which 12 were in West Africa including Ghana; the study found recorded economic activities in Ghana to be the highest.(United Nations,1985) This finding implies that even though literature on women’s occupation and reproductive behaviours generally indicates incompatibility between the two, there are other essential factors or variables that also determine the relationship between them; some of these factors include location of the occupation, place of residence, type of the work(regarding rules and regulations), extended family support, and sometimes in terms of Africa and for that matter Ghana, the husband’s desire for children.

In a related study in Zambia, an observation has been made by Chipoma (1981) that urban dwellers had significantly fewer children than rural dwellers with the suggestion that the lower fertility could be partially as a result of attainment of higher education levels, as well as low value put on high fertility. Sackey (2005) using data from Ghana Living Standard Survey, asserted in a similar vein that parallel to the rising trend in female participation rates particularly in the formal sector, there has been a tendency towards a decline in fertility. At

the core of these patterns has been the schooling factor. Furthermore female schooling matters in both urban and rural localities; both primary and post-primary schooling levels exert significant positive impact on women's labour market participation, with opposite effect on fertility.

Lam and Duryea (1999) use data sets from the Brazilian economy to explore the effects of schooling on fertility, labour supply and investments in children. They observe that the impact of schooling on the relevant variables could theoretically be conceived of as being driven by tradeoffs along two margins. In the first of these margins is the race between home productivity and labour market productivity, which invariably gives direction to the extent to which better educated women are drawn into the labour force by higher wages which negatively impact on fertility.

A study on Ghanaian women in the 1980s adds further evidence that work-fertility relationship in developing countries especially in Africa is tied to cultural perceptions and norms concerning women as mothers and as workers (Oppong, 1984). In Africa, the maternal role is perceived by most women as their primary source of personal satisfaction and social status.

Oppong's study in the 1980s as well as subsequent ones also revealed that delegation of child care responsibilities to kin is common but changing. Among migrants and women who are employed in the formal sector, family members are not as likely to be available for childcare and some role strain and conflict among such women has been observed.

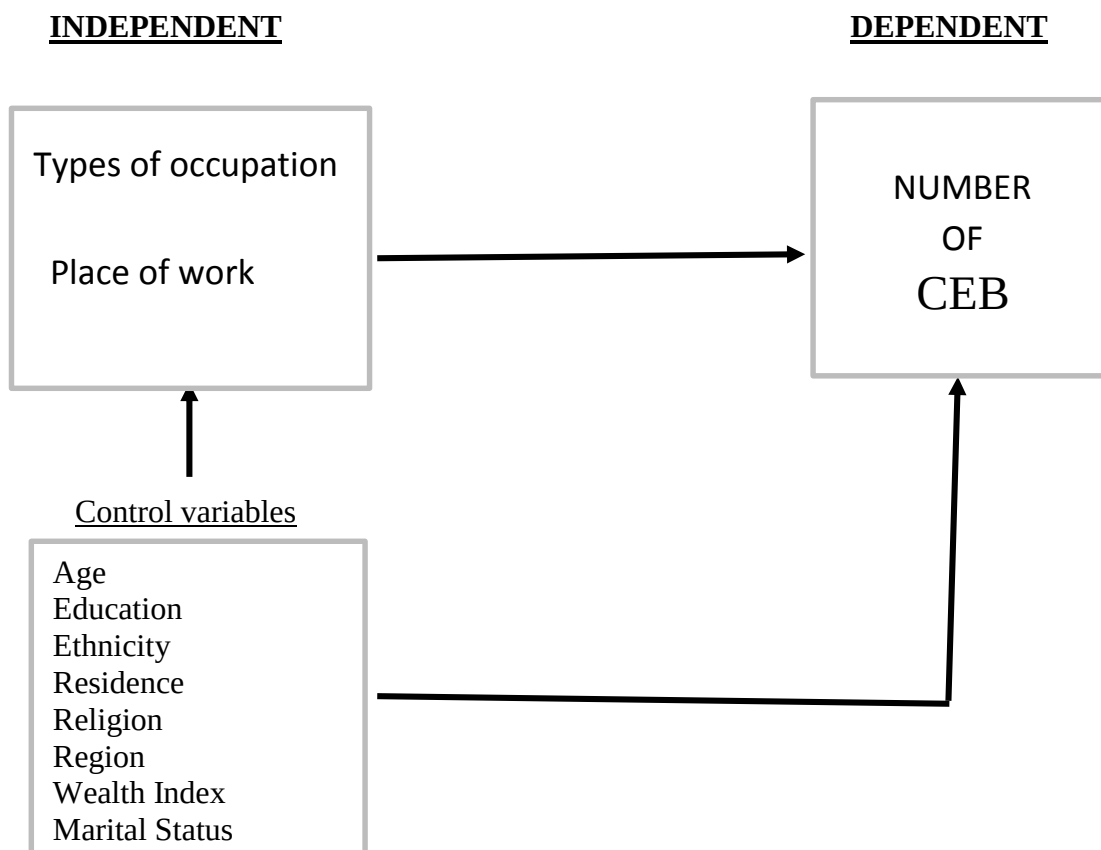
2.2 CONCEPTUAL FRAMEWORK

In socio-demographic literature, the work-fertility relationship is mainly explained by the maternal role and the formal sector work incompatibility hypothesis. This approach focuses on the ability of women to combine childbirth and work, which is determined by the complex nature of social and economic institutions in a given society. It is generally argued that female occupation is inversely related to fertility, due to the presumed conflict between women's work and their reproductive roles (Becker, 1993; Rindfuss and Brewster, 1996). The competition between the mother's and worker's roles is supposed to stem from the separation of home and workplace, the nature of occupation and social norms regarding the roles of men and women (Mason and Palan, 1981).

The frame work for analyzing the relationship between women's employment and fertility is based on the sociological perspective. In this case the emphasis is laid on the diverse roles that women play in daily life. Two main roles among them are a role as a mother and as a worker. If it becomes difficult for a woman to combine childcare with a particular type of work which is usually associated with strict rules and regulations, then there emerges an inverse relationship between fertility and her work. When such constraints are absent, as in the case of self-employed, there will be no relationship. In this study, some work related factors which determine the extent and nature of role incompatibility will be examined. These include the type and location of woman's work. For example it has been found out that those women who perform work for wages outside the home experience greater role incompatibility than women who work on family farm or who work in the home.

This paper makes use of occupational categories to define the type and location of work in order to determine the degree to which work is incompatible with child bearing and childcare. Since work form part of socio-economic factors of the general environment, some background characteristics are used in the analyses as control variables to examine what effect they could have had prior to or alongside the ‘occupational factor’. Such factors used in this paper are the education of the women as it affects employment opportunities of the women and therefore indirectly affect fertility. Type of place of residence, age and region, religion, ethnicity as well as wealth index are also considered factors indirectly affecting fertility alongside employment.

The diagram below shows the conceptualization of the work-fertility relationship used in this study.

CONCEPTUALIZATION OF THE WORK –FERTILITY RELATIONSHIP

Source: Author's construct.

2.3 HYPOTHESES

1. Controlling for age, education and other socio-economic factors, working women are likely to have fewer children than non-working counterparts.
2. Women working in the agricultural sector are likely to have more children than their counterparts in other sectors.
3. Women who work at home are more likely to experience higher fertility than those who work away from home.
4. Women working in rural areas are likely to have more children than those working in urban areas.

CHAPTER THREE

3.1 Methodology

This study is based on secondary data from the 2008 Ghana Demographic and Health Survey (GDHS); The GDHS is a nationally representative survey conducted by the Ghana Statistical Service and the Ghana Health Service. A sample of, 4,916 women age 15–49, with a response rate of 97%. This sample provides estimates for Ghana as a whole, for urban and rural areas, and for the 10 regions. Three questionnaires were used: household questionnaire, women's questionnaire, and men's questionnaire. For the purposes of this study, only the women questionnaire was used.

The independent variable in my analyses is female occupation which is represented by types of occupation and place of work. This has been recategorised in to five that is, not working, professional/technical/ managerial/clerical, Agricultural, sales and services, where 'not working' is used as the reference category. Place of work is categorized in to 'work at home' and 'work away from home'.

The control variables used include age, education, religion, place of residence, marital status, region of residence and ethnicity as well as wealth index quintiles.

Univariate analysis was carried out by the use of frequencies, means and percentages to statistically describe the main independent and control variables.

The bivariate techniques in the form of cross tabulations were used for the dependent, independent as well as control variables. The bivariate was used to analyse the mean children ever born against the independent variables / the control variables.

The multiple linear regression model was on the other hand employed to examine in the first place the impact of the control variables on the children ever born to women, secondly to assess how the independent variable impact on the mean number of children ever born without other factors and finally to examine the impact of independent variable on the number of children ever born (dependent variable) while controlling for the other socio-economic and demographic factors.

CHAPTER FOUR

BACKGROUND CHARACTERISTICS

4.0 Introduction

This chapter examines the background characteristics of the respondents. This is expected to a large extent; facilitate the interpretation of the final findings of the study. It is expected that knowledge on the characteristics of the respondents will enhance one's understanding of the study as well as help in identifying the critical areas to deal with when it comes to planning and implementation of programs that could improve the working environmental conditions of women.

4.1 Country Profile

Republic of Ghana is a Sub-Saharan African country located in the western part of Africa and a member of the regional grouping; Economic Community of West African States. Ghana extends from 4⁰ to 11⁰ north of the equator. It has a total area of 238,537 square kilometres and shares its boundaries with Togo to the east, Burkina Faso on the north and northwest, Cote d'Ivoire to the west and Gulf of Guinea to the south.

The country is divided into 10 administrative regions with Accra as the capital city. Ghana's population in 2008 was estimated to be 20.3 million. There are 10 administrative regions, Western, Central, Greater Accra, Volta, Eastern, Ashanti, Brong Ahafo, Northern, Upper East, and Upper West. The regions are sub-divided into 170 districts to ensure equitable resource allocation and efficient and effective administration at the local levels.

4.2 Age Distribution

Age is considered as one of the basic variables in most demographic analyses. It is even more so with regards to the study about fertility since Chidambaram & Sathar, (1984) indicated that the rate of child birth is lowest among women aged below 15 years and those above 34 years and highest among those aged 19 to 34 years. In this study, data is collected in terms of age of the respondent at last birth day as it is usual in census and surveys. As such, age of a respondent is obtained by basically asking the year and month in which the respondent was born. As usual, the five year age grouping is used to enhance cross tabulation with other variables.

The Table indicates that the largest age groups of the women interviewed were within the ages 15-19 years (21percent), Eighteen percent of the respondents fell within 20-24 years age group, while 45-49 years age group accounted for 9 percent. Besides, more than half (55.6%) of the women are under 30 years, and those above 39 years accounted for only 18.3% of the respondents.

Table 4.1 shows the age distribution of the female respondents in the survey.

Age group	N	Percentage
15-19	1025	20.8
20-24	878	17.9
25-29	832	16.9
30-34	644	13.1
35-39	638	13.0
40-44	470	9.6
45-49	429	8.7
Total	4916	100

Source: 2008 Ghana Demographic and Health Survey.

4.3 Region of Residence

The region of the respondents is identified as an important variable in the study for the fact that there are variations in the availability of job opportunities and infrastructures from one region another. This in effect may have influence on a woman's fertility level since a woman within a region with high agrarian activities may engage in these activities which may impact on her reproductive decisions. From Table 2.1, it can be seen that almost 2 out of every 5 (38%) of the women reside in Ashanti and Greater Accra regions and only about 5 percent and 3 percent came from Upper East and Upper West respectively. While 54% of them reside in the rest of the seven regions.

Table 4.2: Regional distribution of respondents

Region	N	Percentage
Western	447	9.1
Central	424	8.6
Greater Accra	853	17.3
Volta	431	8.8
Eastern	483	9.8
Ashanti	1011	20.6
Brong Ahafo	425	8.7
Northern	467	9.5
Upper East	253	5.1
Upper West	122	2.5
Total	4916	100

Source: 2008 Ghana Demographic and Health Survey.

4.4: Educational Level of Respondents.

A woman's educational level is identified as an important variable that can impact on her reproductive decision. Studies have indicated that female education directly affects fertility by increasing knowledge about birth control and by creating conditions where education places high value on the quality of life in a fewer number rather than more children produced in the family. They also recognized that education indirectly has a great impact on the age at first marriage, raises the capability of women to reduce the mortality of their infants and children thereby lowering the desire for additional births. While women with no education, or primary education, may have very little knowledge on contraceptives and may even be in some sort of flexible occupation, that may enable them have any number of children of their choice.

An individual's educational level in this case refers to the highest stage of formal school attended. Four categories are applied in this study, thus no education, primary education, secondary education and higher education.

The Table 4.3 indicates that almost 79 percent of the women interviewed have had some form of formal education, this shows an improvement over the 2003 GDHS with percentage of educated women of 72 percent. In case of respondents with secondary education as well, a slight improvement had occurred, 55percent (2008 GDHS) as against 49percent (2003 GDHS).

Table 4.3: Percentage distribution of respondents by educational level.

Highest level of education	N	Percentage
No education	1042	21.1
Primary	988	20.1
Secondary	2695	54.8
Higher	191	3.9
Total	4916	100

Source: 2008 Ghana Demographic and Health Survey.

4.5 Ethnicity of the respondents

Ghana is made up of different ethnic groups whose cultural norms, beliefs and practices differ. These to a large extent influence their reproductive behaviors. Besides, some ethnic groups are highly concentrated in urban areas and are more likely to have access to formal education which may lead to reduction in their fertility. On the contrary, those in the rural areas may have higher fertility. This implies that a woman from an ethnic group whose culture and beliefs tend to encourage high reproduction may behave so and the vice versa. However movement of the woman to either an urban or a rural area can change her fertility behaviour. The data in this study identified five ethnic groups namely, Akan, Ga-Dangme, Ewe, Mole-Dagbani and the other which includes Gruma, Grussi and Hausa.

Table 4.4 shows about 51percent of the respondents were Akan, followed by Mole-Dagbani and Ewe who constitute 16 percent, and 13 percent respectively. 2.4 percent of the women were Grussi.

Table 4.4 Percentage distribution of respondents by ethnicity

Ethnicity	N	Percentage
Akan	2493	50.7
Ga/Dangme	343	7.0
Ewe	633	12.9
Mole-Dagbani	795	16.2
Grussi	118	2.4
Gruma	184	3.7
Guan,Mande,other	348	7.1
Not stated	1	0.0
Total	4915	100

Source: 2008 Ghana Demographic and Health Survey.

4.6 Type of place of residence.

Most researches have shown that individual's place of residence influences his/her occupation and may in turn impact on her fertility behaviour. While urban dwellers as a result of easier access to education may be more endowed in terms of knowledge and skills, and as such have more job opportunities, women in the rural settings on the other hand, may be limited in choice of occupation. These differences may also go a long way to mould their behaviors towards marriage and child bearing. It may again mean that women in the rural areas lack adequate education, information and empowerment, for that matter cannot negotiate adequately for sex when dealing with their partners. They therefore usually experience higher fertility.

The 2008 GDHS indicates virtually an equal residential distribution of women as shown in table 2.5. With 49.5 percent living in urban areas, and 51.5 percent resident in rural areas.

Table 4.5: Percentage distribution by type of place of residence.

Type of residence	N	Percentage
Urban	2383	48.5
Rural	2533	51.5
Total	4916	100

Source: 2008 Ghana Demographic and Health Survey.

4.7 Religion of the Respondents

Religion is known to be associated with certain beliefs, practices and norms. It may therefore be possible to find people with different religious affiliations put up different attitudes and behaviours towards reproductive decisions. For example, a catholic may decide not to use

modern contraceptives as they are prohibited by the church, while Moslems are also generally pro-natalist. This study grouped religion in to seven categories, thus Catholics, Protestants, Pentecostal/Charismatic, other Christians, Moslems, Traditional and No religion/other. As shown in the table below, Ghana is dominated by Christians, comprising Catholics, Protestants,

Pentecostal/Charismatic and other Christians with about 78 percent out of which Pentecostal/Charismatic being the largest group of Christians. (37.2 per cent). While the least religious group comprised those belonging to No religion and others.

4.6 Percentage distribution of respondents by religion

Religion	N	Percentage
Catholics	610	12.4
Protestants	830	16.9
Pentecostal/Charismatic	1827	37.2
Other Christians	544	11.1
Moslem	738	15.0
Traditional	205	4.2
No religion/other	160	3.3
Not stated	2	0.0
Total	4916	100

Source: 2008 Ghana Demographic and Health Survey.

4.8 Respondents' Occupation.

The 2008 GDHS initially grouped respondents occupations into eleven categories, but for the purpose of this study they have been regrouped into seven categories as indicated in Table 2.6. almost 40 per cent work in sales and services, about 23 percent in agricultural category and 5 percent were in professional/technical, managerial and Clerical category.

Table 4.7 Percentage distribution of women by types of occupation

Occupation	N	Percentage
Agriculture	1097	22.3
Prof, Tech, Manag, Clerical	246	5.0
Sales/Services	1144	23.3
Manual	1963	39.9
Not working	417	8.5
Not stated	50	1.0
Total	4916	100

Source: 2008 Ghana Demographic and Health Survey.

4.9 Marital Status

Marriage in this study refers to the union between man and woman which involves certain rights and obligations fixed by law or customs. Marriage is a very important variable in any study concerning fertility, because in a pronatalist society such as Africa in general, and Ghana in particular, a married woman is more likely to be under social pressure to have a child than unmarried woman.

Marital status in this study is categorized in to the following groups, never married, married, living together, widowed, divorced and not living together. Table 2.8 suggests that about 45 percent of the women interviewed were married, about 32percent never married, while about 2 per cent were divorced.

Table4.8: Percentage distribution of respondents by marital status.

Marital status	N	Percent
Never married	1593	32.4
Married	2232	45.4
Living together	644	13.1
Widowed	101	2.1
Divorced	155	3.2
Not living together	190	3.9
Total	4916	100

Source: 2008 Ghana Demographic and Health Survey.

4.10 House Hold Wealth Index

Literature suggests that there is a relationship between level of wealth and fertility. There exist positive correlation between poverty and fertility. Poor people tend to have more children than the rich. This can be attributed to the poor people not having financial access to contraceptives, as well as considering children as social security in terms of assisting them in economic activities and providing their needs in their old age. 2008 GDHS data shows richest respondents constituted 32 percent, richer category made up 23 percent and the least category being poorest (16 percent).

Table 4.9: Percentage distribution of respondents by wealth index

Wealth Index	N	Percent
Poorest	783	15.9
Poorer	900	18.3
Middle	979	19.9
Richer	1119	22.8
Richest	1135	32.1
Total	4916	100

Source: 2008 Ghana Demographic and Health Survey.

4.11: Place of work.

Research has shown that place of work of women can impact on their fertility. It is assumed that women who work at home may make certain reproductive decisions different from women who work away from home which at the long run may lead to differences in fertility levels. Table 2.10 suggests that majority of women work away from home(59percent), only 18percent work at home and about 23percent were either not working or did not state their place of work.

Table 4.10: Percentage distribution of respondents by place of work.

Place of work	N	Percent
Work at home	892	18.1
Work away from home	2909	59.2
Not working /Not stated	1115	22.7
Total	4916	100.0

Source: 2008 Ghana Demographic and Health Survey.

4.12 Summary

The above univariate analysis shows that more than half of the respondents (56 percent) are below 30 years of age, while about 9 percent are 45years and above. In the area of education, majority of the women (55 percent) have attained secondary education, with only few recorded for higher level education and 21 percent had no education. These features coupled with the percentage of those married and living together (59 percent) point to a potential high fertility, since the young women living with their husbands are exposed to more frequent sexual intercourse which may translate in to pregnancy especially in the case of the un-educated ones who may lack knowledge about contraception. The relationship between the distribution of

women's employment and the background variables will be examined in the next chapter using bivariate analyses

CHAPTER FIVE

SOCIO-DEMOGRAPHIC CHARACTERISTICS AND FERTILITY LEVELS

5.1 INTRODUCTION

A woman's fertility is influenced either directly or indirectly by certain physiological, cultural and socio-economic factors. This chapter presents an analysis of the relationship between these variables which include age, region, educational level, ethnicity, type of place of residence, marital status, household wealth index and total number children ever born. The chapter focuses on how each of these control variables and the independent variables relate with total number of children ever born using bivariate analysis.

5.2 Mean Number of Children Ever Born and Age,

Age is identified as one of the important variable in most demographic analyses. It becomes more crucial with the study of fertility. This is so because studies have shown that the rate of child birth is lowest among women aged below 15 years and those above 34 years and highest among those aged 19 to 34years. Table 3.1 shows the distribution of respondents by age and children ever born. The table indicates clearly that children ever born increases with increase in age; while the average number of children ever born to the age groups 15-19 and 20-24 were less than one (0.11 and 0.81) respectively, those of 40-44 and 45-49 recorded almost 5 and 6 children respectively.

Table 5.1: Mean number of children ever born by Age

Current Age	Mean Number Of Children Ever Born	Number
15-19	0.11	1025
20-24	0.81	878
25-29	1.83	832
30-34	3.01	644
35-39	3.90	638
40-44	4.79	470
45-49	5.59	429
Total	2.33	4916

Source: 2008 Ghana Demographic and Health Survey

5.3 Mean Number of Children Ever Born and Educational level

Education is a very important variable when dealing with fertility as well as occupation since it has been identified by several studies to have indirect impact on fertility. Education equips women to be able to decide on the number of children they would like to have, this is because educated women tend to have more knowledge on various methods of contraception and be able to decide on the type(s) to use. In addition, education to some extent delays time at first marriage which in turn reduces the number of children, as reproductive age within marriage is reduced. Table 3.2 presents the distribution of respondents by education and children ever born. We can see from the table that education relates inversely with children ever born. The table shows that women were educated above secondary level, had an average number of one child, whereas those with no education had 4 children.

Table 5.2: Mean number of Children Ever Born by educational level born.

Highest Educational Level	Mean Number Of Children Ever Born	Number
No education	4.10	1042
Primary	2.71	988
Secondary	1.59	2695
Higher	1.01	191
Total	2.33	4916

Source: 2008 Ghana Demographic and Health Survey

5.4 Mean Number of Children Ever Born and ethnicity.

Different ethnic groups have diverse cultural norms and practices that can influence reproductive behavior leading to differences in fertility. On the other hand, the location the various groups (whether in urban or rural area) may also influence fertility as urban dwellers usually have higher educational level with lower fertility levels than rural dwellers.

The table 3.3 below shows the percentage distribution of respondents by ethnicity and Children ever born. The table indicates a slight difference among the ethnic groups in terms of average number of children ever born. Ga/Dangme women recorded the least number of children (1.9) which could be attributed to influence of location (urban area with more education on the use contraceptives). Gruma women on the other hand had the highest with 3.26 children, which could also be influenced by location and culture.

Table 5.3: Mean number of Children ever born by ethnicity

Ethnicity	Mean Number Of Children Ever Born	Number
Akan	2.22	2493
Ga/Dangme	1.93	343
Ewe	2.25	633
Mole Dagbani	2.76	795
Grussi	2.46	118
Gruma	3.26	184
Guan,Mande,other	2.06	348
Total	2.33	4915

Source: 2008 Ghana Demographic and Health Survey.

5.5 Mean Number of Children Ever Born and Place of Residence

A woman's place of residence can positively or negatively impact on her education and as such influence her fertility. Table 3.4 shows the percentage distribution of respondents by place of residence and occupation. The table shows that there exists a marginal difference in average number of children ever born. Women resident in the urban areas recorded almost 2 children as against rural women with 3. The difference can be linked to the provision of better educational facilities in the urban than in the rural areas. It could also be attributed to major economic activities prevailing in the two main places of residence. Thus while a woman in the rural areas may desire to have more children to help in agricultural activities, her counterpart in the urban area may lack this desire as it may inconvenience urban woman to in her economic activities.

Table 5.4: Mean number of Children Ever Born by Place of residence

Type of Place of Residence	Mean Number Of Children Ever Born	Number
Urban	1.76	2383
Rural	2.85	2533
Total	2.33	4916

Source: 2008 Ghana Demographic and Health Survey.

5.6 Mean Number of Children Ever Born and Religion

Religion remains a crucial variable that influences women's fertility since it interrupts with individual's decision regarding marriage and contraceptive use. Table 5.5 shows the percentage distribution of respondents by children ever born and religion. It indicates that women with traditional religion generally have higher children (4 children) than those in each of the other religious groups. The table again shows that among the Christian groups Protestants recoded the least number of children (1.9) even though with marginal difference from the rest. It is also worth mentioning that the table shows no significant difference between Christian and Moslem groups in terms of average number of children ever born.

Table 5.5: Religion and Mean Number of Children ever born.

Religion	Mean Number Of Children Ever Born	Number
Catholics	2.25	610
Protestants	1.91	830
Pentecostal/Charismatic	2.13	1827
Other Christians	2.51	544
Moslem	2.47	738
Traditional	4.02	205
No religion/Other	3.50	160
Total	2.33	4914

Source: 2008 Ghana Demographic and Health Survey.

5.7 Mean Number of Children ever born and Marital Status

Fertility of women is also influenced by marriage since it exposes women to higher frequency of sexual intercourse which may lead to higher fertility. Table 3.6 shows the distribution of respondents by marital status and children ever born. The table indicates that women who never married had lowest number of children ever born; which implies that most of the women

may be within 15-19 and 20-24 age groups most of whom may be in school or skill acquisition institutions. Widowed had the highest number of children ever born (almost 5 children) followed by married women with about 5 children. Widowed record can be attributed to assumption that most of them were the 45-49 age group and have virtually exhausted their reproductive years.

Table 5.6: Marital status and mean number of children ever born

Current Marital Status	Mean Number Of Children Ever Born	Number
Never married	.15	1593
Married	3.66	2232
Living together	2.45	644
Widowed	4.52	101
Divorced	3.41	155
Not living together	2.47	190
Total	2.33	4916

Source: 2008 Ghana Demographic and Health Survey.

5.8 Mean Number of Children Ever Born and Wealth Index

There is a relationship between wealth and fertility. The poor are likely to have more children than the rich; this may be due to lack of money to purchase contraceptives. It could also be as a result of the poor people's desire to compensate themselves for lack of money.

The table 5.7 presents the percentage distribution of respondents by wealth index and mean number of children ever born. The table shows that number of children ever born decreases with increase in wealth; in other words, there is inverse relationship between the two variables. While the poorest women had almost an average number of 4 children, the richest women recorded 2

children. Similarly, whereas the poorer women had about 3 children, the richer got an average of 2 children.

Table 5.7 Wealth Index and Children ever born.

Wealth index	Mean Number Of Children Ever Born	Number
Poorest	3.46	783
Poorer	2.82	900
Middle	2.45	979
Richer	1.89	1119
Richest	1.47	1135
Total	2.33	4916

Source: 2008 Ghana Demographic and Health Survey.

5.9 Children Ever Born and Region

The region of the respondents is considered as an important variable in the study as there are differences in the availability of employment avenues and infrastructures from one region to the other. These differentials impact seriously on a woman's reproductive behavior because for instance a woman within a region with much agricultural activities is likely to have more children to help in the activities. Table 5.9 presents percentage distribution of respondents by region and total children ever born. The table shows that women who reside in Greater Accra had the least number of children ever born (1.5) which suggests an influence of urban nature of the region. Again the table points to Northern region women as those who had the highest number of children ever born with 3 children. The rest of the regions only showed marginal differences in children ever born.

Table 5.8 Region of Residence and children ever born.

Region of Residence	Mean Number Of Children Ever Born	Number
Western	2.44	447
Central	2.73	424
Greater Accra	1.52	853
Volta	2.47	431
Eastern	2.24	483
Ashanti	2.18	1011
Brong Ahafo	2.41	425
Northern	3.15	467
Upper East	2.80	253
Upper West	2.78	122
Total	2.33	4916

Source: 2008 Ghana Demographic and Health Survey.

5.10 Children Ever Born and Occupation

As one of the socio-economic factors that impact on a woman's fertility, employment or economic activity empowers a woman to be able to take decision regarding reproduction. Besides, certain types of work limit the number of children a woman would have as a result of incompatibility of childbearing /rearing and the occupation. Table 5.10 presents percentage distribution of respondents by type of occupation and total number of children ever born. The table indicates that women employed in professional/technical and clerical occupation recorded the lowest level of fertility of 1 child. This suggests the conflict that is generated between those works and maternal roles which compel the women involved to adopt a convenient reproductive behavior.

The table on the other hand, shows that women in the agricultural occupation recorded the highest number of 4 children which could be attributed to lack of conflict between those

activities and child bearing. In contrast, women engaged in manual group of occupation recording a lower fertility of 2 children as compared to sales/services with 3 children. This appears quite strange and could be attributed poor quality of data.

Table 5.9: Types of Occupation and Mean Number of Children Ever Born

Type of occupation (grouped)	Mean Number Of Children Ever Born	Number
Not working	.68	1097
Prof/Tech/Manag/Clerical	1.05	246
Agric	4.07	1144
Sales/Services	2.56	1963
Manual	1.68	417
Total	2.34	4866

Source: 2008 Ghana Demographic and Health Survey.

5.11 Children ever born and place of work

Where a woman works from, together with the type of occupation she engages in can go a long way to influence her fertility. A woman who engages in professional or occupation and works away from home is likely to have difficulty in keeping her job and at the same time caring for children especially when the rules at the work place are not flexible. Table 3.8 shows the percentage distribution of respondents by children ever born and place of work. As can be seen from the table, there is no significant difference in the number of children ever born to women who work at home and those who work away from home.

Table 5.10: Percentage Distribution of Respondents by Children Ever Born and Place of work

Place of work	Mean Number Of Children Ever Born	Number
At home	2.89	851
Away from home	2.77	2959
Total	2.80	3811

Source: 2008 Ghana Demographic and Health Survey.

CHAPTER SIX

THE RELATIONSHIP BETWEEN WOMEN'S OCCUPATION AND FERTILITY

6.0 Introduction

Most often difficulties arise when women undertake maternal roles alongside certain types of occupation. These difficulties are posed by incompatibility of those types of occupation and child bearing/child care; Women who find themselves in a situation of this nature are some times to a large extent compelled to adopt certain reproductive behaviors in the form of either spacing or reducing the size of their family.

This chapter seeks to employ multivariate analysis to examine the effect of occupation on fertility while controlling for other demographic and socio-economic factors such as age, marital status, place of residence, religion, ethnicity, and education.

6.1 The Relationship between the Independent Variables and Fertility

The section looks at how types of occupation and place of work independently influence the number of children born to women by examining how significant it is statistically when separated from the other factors. As it has been observed so far in the study that the type of occupation a woman engages in may impact on the number of children that she will have. This is carried out by the use of children ever born and types of occupation together with place of work in a multiple regression analyses as shown below.

Table 6.1 Results of multiple regression analyses of children ever born on the independent variables (occupation)

Variables in Model	Unstandardised β coefficients	Standard. Error	Sig
Constant	.709	.063	0.00
Place of work			
Work at home(RC)			
Work away from home	-.362	.083	0.00
Type of occupation			
Not working(RC)			
Prof/Tech/Manag/Clerical	.684	.169	0.00
Agric	3.680	.114	0.00
Sales/Services	2.113	.098	0.00
Manual	1.181	.130	0.00

R Square 0.245

RC: Reference category

P value 0.000

Source: Computed by author from GDHS, 2008

This model is a poor fit with the R Square of about 25 per cent implying that only 25 per cent of the fertility of Ghanaian women is explained by occupation. The overall regression is however significant for the fact that its p-value is less than the level of significance (0.05) indicating a significant relationship between types of occupation (independent variables) and fertility (dependent variable).

Table 6.2 shows that effect of place of work on fertility is statistically significant in the model since it has produced a significance value of 0.00 which is less than 0.05. It again indicates that women who work away from home have 0.362 children less than their counterparts who work at home. This points to the assumption that those women who work at home may find it easier to combine economic activities with maternal roles than those who work away from home.

With regards to types of occupation, the table clearly indicates that women employed in Professional/technical/Managerial and Clerical works have less number of children than those in any other type of employment; which affirms my hypotheses that women whose work are not compatible with maternal roles are more likely to have fewer children than their counterparts in the other types.

It is however observed that women employed in this professional /technical /managerial and clerical category have 0.684 children more than women not working. This makes female employment in general not to be a good predictor of levels of fertility; as such making the relationship unclear which conforms to the findings of Lloyd, (1991) and Oppong, (1988; 1991). Those women in agricultural, sales/services and manual fields also respectively have an average of about 4, 2, and 1 child more than women who are not working. Showing that agricultural sector workers in Ghana have highest fertility among employed women. This is attributable to their desire to have more hands to help in their agrarian activities. Since most of them are in subsistent farming. Statistically, types of occupation have significant role in influencing fertility.

6.2 The Relationship between the Control Variables and Fertility

In order to look at how other factors without occupation influence fertility, the (control variables) are initially used in a linear regression with the dependent variable (children ever born) excluding the independent variables (types of occupation and place of work). This section will therefore examine the extent to which these control variables impact on fertility of women.

Table 6.2 below shows the results of the linear regression. In fitting the regression, firstly a test has been undertaken to ensure that the model chosen fulfills the four main assumptions; - linearity, normality, independence and equality of variance which are all met by the model.

Table 6.2 Results of Multiple Linear Regression Analysis of Children Ever Born On Control Variables

Variables in Model	Unstandardised β coefficients	Standard. Error	Sig
(Constant)	1.324	.164	.000
Age			
15-19(RC)			
20-24	.299	.072	.000
25-29	.987	.082	.000
30-34(RC)	1.951	.092	.000
35-39	2.746	.093	.000
40-44	3.589	.100	.000
45-49	4.396	.104	.000
Region			
Ashanti(RC)			
Western	-.051	.082	.531
Central	.169	.084	.044
Greater Accra	-.179	.077	.020
Volta	-.249	.105	.018
Eastern	-.110	.083	.186
Brong Ahafo	-.218	.084	.010
Northern	.026	.106	.806
Upper East	-.309	.131	.018
Upper West	-.100	.157	.524
Religion			
No religion/other(RC)			
Catholics	-.235	.129	.068
Protestants	-.281	.126	.026
Pentecostal/Charismatic	-.160	.120	.181
Other Christians	-.081	.131	.535
Moslem	-.165	.136	.226
Traditional	.253	.154	.101
Marital Status			
Never married(RC)			
Married/living together	1.075	.067	.000
Widowed	.918	.160	.000
Divorced	.158	.134	.240
Not living together	.198	.120	.099

R square: 0.669 P value 0.00
Source: Computed from 2008 GDHS

Reference category (RC)

Table 6.2 continued: Results of Multiple Linear Regression Analysis Of Children Ever Born On Control Variables

Variables in Model	Unstandardised β coefficients	Standard. Error	Sig
Place of residence			
Rural(RC)			
Urban	-.161	.057	.005
Education			
No education(RC)			
Primary	-.354	.070	.000
Secondary	-.840	.067	.000
Higher	-1.402	.126	.000
Wealth index			
Poorest(RC)			
Poorer	-.147	.077	.058
Middle	-.235	.083	.005
Richer	-.568	.089	.000
Richest	-.788	.099	.000
Ethnicity			
Guan,Mande,other(RC)			
Akan	.152	.095	.110
Ga/Dangme	.151	.120	.209
Ewe	-.056	.112	.617
Mole-Dagbani	-.060	.103	.557
Grussi	.057	.163	.727
Gruma	.165	.144	.252

R square: 0.669

P value= 0.00

Reference category (RC)

Source: Computed from 2008

GDHS

As shown in Table, the overall regression is significant, revealing that there is a significant relationship between the control variables and fertility. This is indicated by the p-value (0.00), besides, the R-square from Table 6.2 recorded 0.67 which indicates a very good fit, implying that 67 per cent of children ever born to women is explained by the control variables.

The table shows that the influence of age on fertility is very significant as all their significance values are less than 0.05; On the other hand, fertility (children ever born) increases with age. While women aged 20-24 had 0.299 children more than women aged 15-19, their counterparts aged 45-49 exceeded that of 15-19 year group by 4.4 children. The implication could be that the older a woman, the longer her number of years in marriage which exposes her more to pregnancy.

Region of residence is less significant since some of their significance values are greater than 0.05. However, it had impacted on the fertility of the women to some extent. For example, women living in the northern and Central regions respectively had 0.026 and 0.169, more children than their Ashanti counterparts. Whereas Volta and Upper East dwellers recorded 0.25 and 0.31 children less than women in Ashanti.

Religious affiliation as shown in the table statistically has less significant impact on fertility as depicted by the significance values. However, certain variations are recorded among the groups; traditional women have 0.253 children than women with no religion and other, while Moslem and individual groups of Christian women have fewer children than women with no religion.

With regards to marital status, women are married and living together have 1.075 children more than their counterparts who never married while those not living together have 0.198 children than those who never married indicating that those married women living together with their husbands are more exposed to sexual intercourse and for that matter have a higher risk of getting pregnant than those living away from their husbands. Besides, these two groups of women are individually more exposed to pregnancy than women who never married.

Widowed and divorced women also respectively have 0.918 and 0.158 children more than those who never married.

In the case of place of residence, it can be observed from the table that urban dwellers have 0.161 children less than women living in the rural areas. In another vein, the table shows place of residence as having very significant influence on fertility with significant value of 0.005; this goes to support my hypotheses that rural women are likely to have higher fertility than the urban women.

Education as shown on the table, impacts very significantly on fertility. It indicates that fertility reduces with increasing level of education; while women with primary education have 0.354 children less than women with no education; their counterparts with secondary and higher education respectively have 0.840 and 1.402 children less than those with no education. This is consistent with the fact that the higher the education level of a woman the more knowledgeable and conscious she becomes of the use of the various methods of contraceptives; also, the more she is likely to get engaged in modern formal employment which may be incompatible with child bearing/care and for that matter compel her to reduce number of children to have.

Similarly, wealth index statistically has significant influence on fertility and over here too, fertility decreases as wealth increases. That is all women who are poorer, middle, richer and richest have respectively 0.147, 0.235, 0.568 and 0.788 children less than poorest women. This indicates that poor women desire for higher fertility to help them in their economic activities.

In the contrary, ethnicity from the table has no significant impact on fertility; however some differences are recorded among the groups. Akan, Ga-Adangme, Grussi and Gruma women respectively have 0.152, 0.151, 0.057 and 0.165 children than Guan, Mande, other women while

Ewe and Mole –Dagbani women have 0.056 and 0.060 more children than the Guan, Mande, and other women.

6.3 The Relationship between the Fertility and Control/Independent Variables

The fertility of a woman is influenced by some other factors apart from occupation. These other factors include some demographic and socio-economic variables as the study has indicated so far. This particular section will for that matter undertake an analysis of these independent and control variables in a multiple linear regression to ascertain the importance of occupation in determining the fertility level of a woman. Table 4.3 presents the results of the multiple regression analysis of the children ever born and control /independent variables.

6.3 Results of Multiple Regression Analysis of Fertility on Independent /Control Variables

Variables in Model	Unstandardised β coefficients	Standard. Error	Sig
(Constant)	1.090	.166	.000
Age			
15-19(RC)			.
20-24	.365	.074	.000
25-29	1.052	.086	.000
30-34(RC)	1.989	.095	.000
35-39	2.742	.096	.000
40-44	3.594	.103	.000
45-49	4.387	.107	.000
Region			
Ashanti (RC)			
Western	-.048	.081	.550
Central	.164	.083	.049
Greater Accra	-.166	.076	.029
Volta	-.243	.105	.020
Eastern	-.072	.083	.383
Brong Ahafo	-.253	.084	.003
Northern	.076	.105	.473
Upper East	-.247	.131	.059
Upper West	-.047	.156	.764
Religion			
No religion/other(RC)			
Catholics	-.236	.127	.065
Protestants	-.293	.125	.019
Pentecostal/Charismatic	-.172	.119	.149
Other Christians	-.095	.129	.462
Moslem	-.182	.135	.177
Traditional	.187	.153	.222
Marital Status			
Never married(RC)			
Married/living together	1.040	.067	.000
Widowed	.875	.158	.000
Divorced	.151	.133	.258
Not living together	.218	.119	.068

6.3 Contd: Results of Multiple Regression Analysis of Children Ever Born On Independent /Control Variables

Variables in Model	Unstandardised β coefficients	Standard. Error	Sig
Place of residence			
Rural(RC)			
Urban	-.116	.057	.041
Education			
No education(RC)			
Primary	-.279	.070	.000
Secondary	-.748	.067	.000
Higher	-1.144	.140	.000
Wealth index			
Poorest(RC)			
Poorer	-.080	.077	.299
Middle	-.058	.084	.495
Richer	-.347	.092	.000
Richest	-.564	.102	.000
Ethnicity			
Guan,Mande,other(RC)			
Akan	.131	.094	.162
Ga/Dangme	.111	.119	.352
Ewe	-.056	.111	.617
Mole/Dagbani	-.064	.102	.529
Grussi	.050	.161	.756
Gruma	.112	.143	.435
Place of work			
Work at home(RC)			
Work away from home	-.011	.056	.843
Type of occupation			
Not working(RC)			
Prof/Tech/Manag/Clerical	-.418	.127	.001
Agric	.408	.092	.000
Sales/Services	-.096	.075	.199
Manual	-.359	.092	.000

R square: 0.676

P value= 0.00

Reference category (RC)

Source: Computed from 2008 GDHS

Regression results show that the number of children of women increases as the age increased. As could be observed, women aged 20-24 have 0.365 more than their counterparts aged 15-19 whereas women aged 25-29 and 30-34 respectively have an average number of 1.052 and 1.989 children more than those aged 15-19. It is clear from the table that age remains a significant determinant of fertility with the inclusion of the independent variables.

The table also reveals that region of residence has less impact on fertility. However, there were differences in fertility among the various regions; while women residing in Greater Accra and Brong Ahafo regions have 0.166 and 0.253 children respectively less than women in Ashanti (the reference category, women living in Central region have 0.164 children more than those in Ashanti).

In the case of religious affiliation, the regression table shows that it is not significant yet with certain variations. Traditional women have the highest number of children which may be due to non-acceptance of contraceptive use. Protestants on the other hand have the least number of children perhaps as a result of acceptance of the use modern methods of contraceptives.

Marriage, education and wealth index as shown in the table also remain statistically significant in the model just similar to the earlier tables.

Types of occupation (the independent variable) also strongly remain significant with the introduction of the control variables in the model except for sales and services which is not significantly different from the reference category, which suggests that work has significant influence on the number of children that women may have only to some extent. As shown in the table, women employed in professional/technical/managerial and clerical jobs remain those with the least average number of children among groups of women workers; affirming the hypotheses

that women engaged in the occupation whose rules and regulations make them incompatible with child bearing and care are likely to have lower fertility than their counterparts in compatible ones. This also supports some earlier findings cited in the study such as that of Gaisie and Nabila (1978) and Aryee, (1980).

Place of work as one of the independent variables has is not a significant predictor of female fertility, but it is clear from the table women who work away from home, have 0.011 children less than their counterparts who work at home. This suggests that those who work at home could be at work and be able to attend to children at the same time.

One could even observe that with the introduction of the control variables in the regression model, women in almost all types of occupation except agricultural workers recorded less average number of children than women who were not working; which conflicts with the outcome of the model which did not control for socio-economic and demographic factors. The still portray women in agriculture as those with the highest fertility.

CHAPTER SEVEN

7.1 Summary

This chapter is dedicated to summarizing the study of female occupation and fertility in Ghana, 2008. The study aimed at examining the effect of women's occupation and their fertility and the extent to which other social, economic and demographic factors play a role in influencing fertility.

Various methods were employed such as frequencies, percentages, means, cross tabulations and multiple linear regression to analyse the relationship between types of occupation as the independent variable, other socio-economic and demographic factors as control variables and fertility as the dependent variable; using data from the 2008 GDHS.

Findings from the study revealed that out of the total number of 4916 women aged 15-49 interviewed young population of below 25years accounted for 39 per cent, 21 per cent had no education and 59 per cent had secondary and higher education.

The study also suggests that about 40 per cent of women were engaged in manual occupation with only 5 per cent in the professional/technical/managerial and clerical types of work, while 59 per cent worked away from home. There is only about 1 per cent difference between total number of women living in rural areas (51.5 per cent) and urban dwellers (48.5).

The study further revealed through distribution by religious affiliation that the majority of the women interviewed were Christians (78 per cent). While ethnic distribution revealed Akan women with the highest population of almost 51 per cent; in terms of regional distribution, 21 per cent of the women were from the Ashanti region. Concerning marital status, 45 per cent

were married. In another vein, about 16 per cent of the women were grouped as poorest by wealth index quintile, and richest women recorded 32 per cent

Multiple linear regression undertaken to examine the factors that influence women's fertility in Ghana revealed that significant predictors include age, marital status, education, place of residence, wealth index and types of occupation. On the other hand, variables such as religion, ethnicity and region of residence were found not to have significant influence on fertility.

Concerning occupation, multiple linear regression has shown that a clear significant relationship between occupation and fertility does not exist; thus occupation in general is not a strong determinant of fertility. This is particularly highlighted when children ever born (the dependent variable) is used in the model independently with occupation without the control variables. Even when the other factors were controlled for, though unemployed women have more children than those employed, it was not so in the case of women engaged in agricultural works. Place of work is also found not to be a significant predictor of level of fertility.

It is however observed that professional/technical/managerial and clerical category of occupations has a significant impact on fertility.

7.2 Conclusion

As shown in the study, women's level of fertility is mostly determined by the interaction of various demographic and socio-economic factors. The study found that female occupation as a whole is not clearly significant predictor of fertility. However, professional/technical/managerial and clerical category has been found to be a significant factor

in determining the level of fertility among women. The implication is that types of occupation where regulations do not allow adequate time for child bearing and care tend to introduce conflict between the two roles of women; making women in these areas of work more likely to have smaller family sizes than those in other sectors, as well as women of age who are not working. In addition, women engaged in these type of occupations are mostly educated and therefore have control over their reproductive behaviour. It is also found in the study that women in agricultural type of occupation, particularly those that are self-employed are more likely to have larger family sizes than those in other sectors perhaps, as they desire to have more helping hands in the farms. More so, it is presumed that most of these women lack higher education as well as work mostly in the rural areas and for that matter have little or no knowledge on methods of contraception. The study has confirmed that women's place of work (work at home, work away from home) is slightly important in determining fertility levels.

The study has also found that other factors such as education, marital status, wealth index, age and place of residence significantly influence female's fertility. Women's education especially at secondary and higher levels reduces reproductive period in marriage as it delays marriage leading to lower fertility. This in turn interacts with type of occupation since it is women who attain the secondary and higher education levels that usually find themselves in the professional /technical/ managerial and clerical occupations.

Finally, female occupation has a negative effect on fertility in Ghana (if the type is not compatible with child birth) which conforms to earlier findings of Gaisie and Nabila and (1978) and Aryee, (1980) all in Ghana.

7.3 RECOMMENDATIONS.

The vital roles that women play in economic, social, psychological and demographic spheres of life cannot be over emphasized; the special role played in reproductive processes mostly singlehandedly is enough a reason for which contributions made by women toward the wellbeing of any society globally should never be underestimated. Upon these convictions the following recommendations are made.

It is very necessary to employ multi-pronged approach in reducing female fertility since the study has shown that besides occupation, there are other factors such as education, wealth index, marital status, age and place of work that impact on female fertility.

There is the need to encourage more women to get into the occupations that require secondary and higher education as the country aims at fertility decline. Measures to be taken to achieve this can include facilitating the enrolment of more females onto schools, by making female education attractive at all levels of education. In addition, government should provide scholarship and bursary schemes for adolescents as a way of keeping them in school. This will enable them take charge of their lives and participate fully in decision making at any level.

Based on the above findings and recommendations, further research can be conducted in the area of fertility and occupation to help further policy interventions

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