

**INVESTIGATING THE DETERMINANTS OF BASIC SCHOOL ENROLLMENT IN
GHANA: A CASE STUDY OF THE KUMASI METROPOLIS AND THE ATWIMA
MPONUA DISTRICT OF THE ASHANTI REGION.**

by

Naomi Opoku B.A Economics (Hons.)

A Thesis submitted to the Department of Economics,

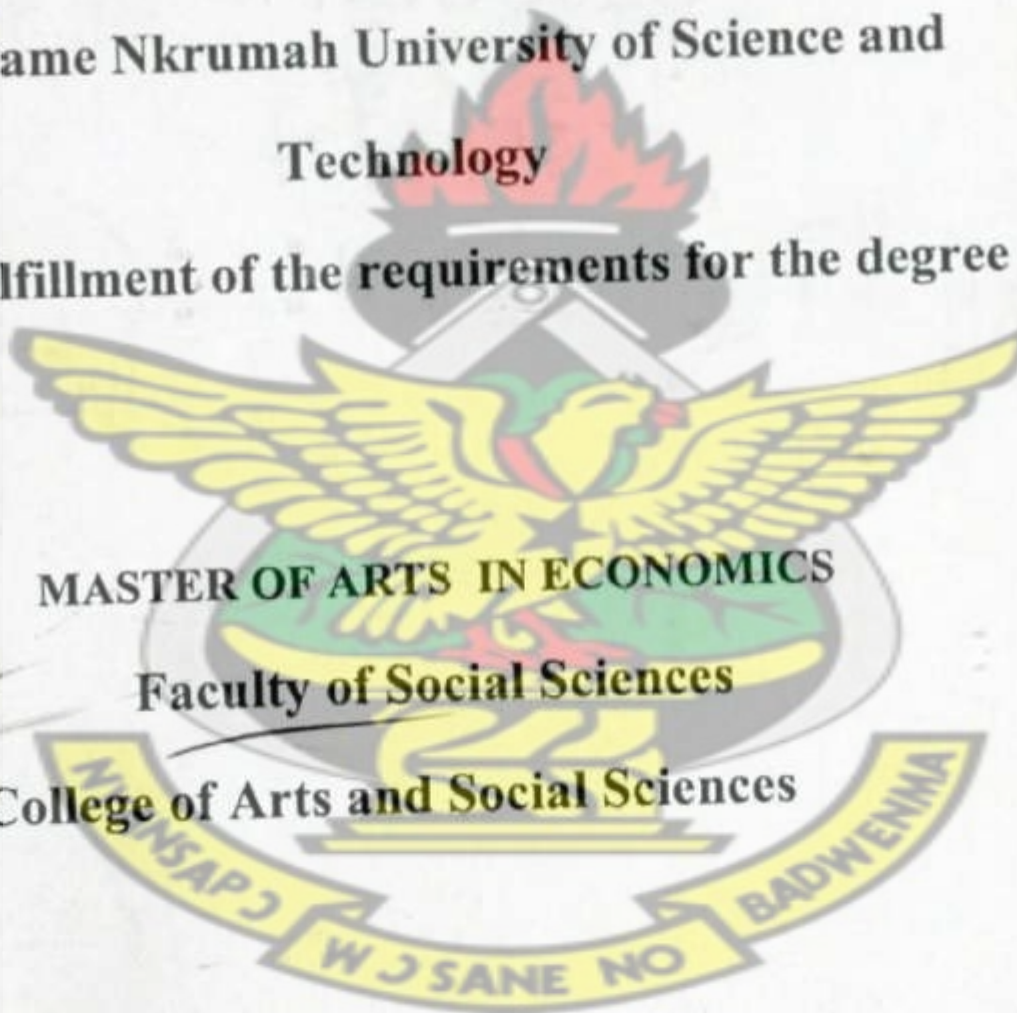
**Kwame Nkrumah University of Science and
Technology**

in partial fulfillment of the requirements for the degree of

MASTER OF ARTS IN ECONOMICS

Faculty of Social Sciences

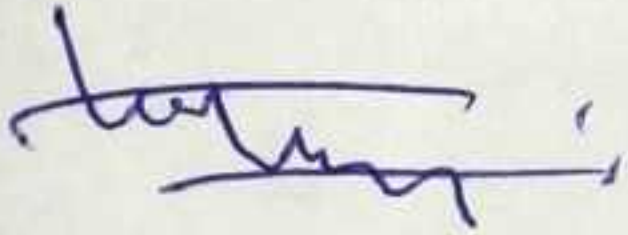
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DECLARATION

I declare that this thesis submitted herein is an original work I have personally undertaken under supervision except where due acknowledgement has been made in the text.



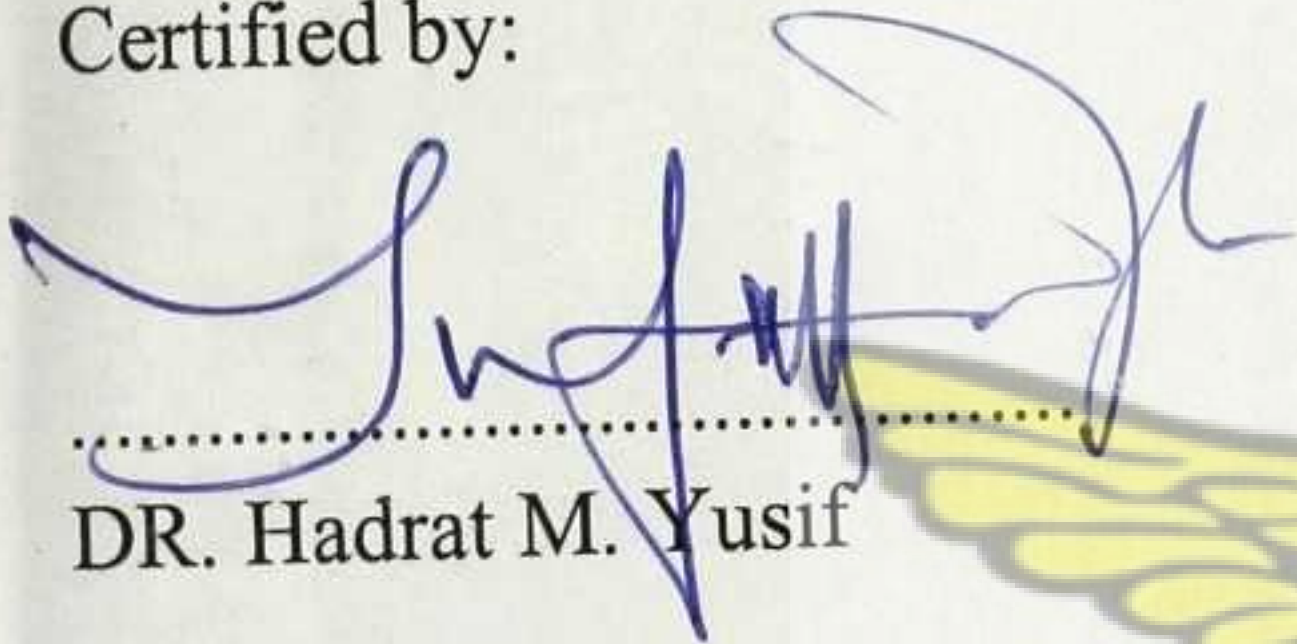
Naomi Opoku

27-03-13

Date

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Certified by:



DR. Hadrat M. Yusif

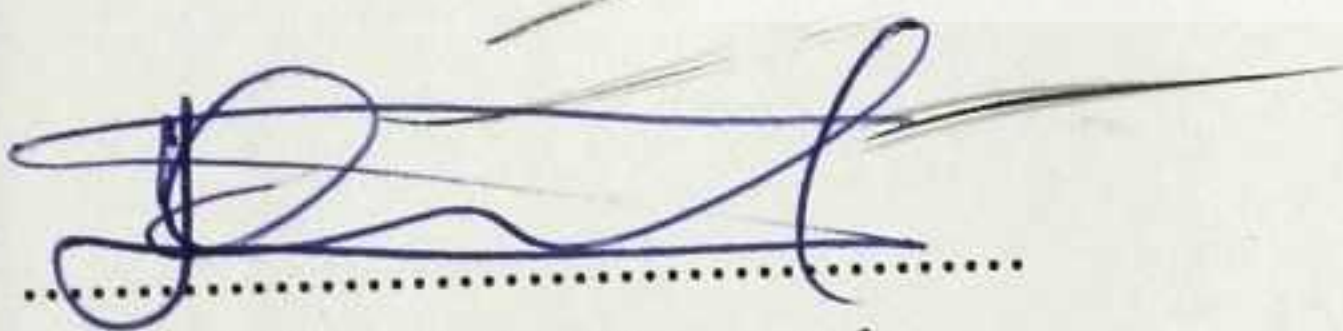
(Supervisor)

27th March, 2013

Date



Certified by:



Mr. J. Appiah Nkrumah

(Head of Department)

15-04-2013

Date

DEDICATION

This study is dedicated to my children, Akosua Obeaa Owusu Ansah, Ama Nyarko Owusu Ansah and Yaa Kyerewaa Owusu Ansah.

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ACKNOWLEDGEMENT

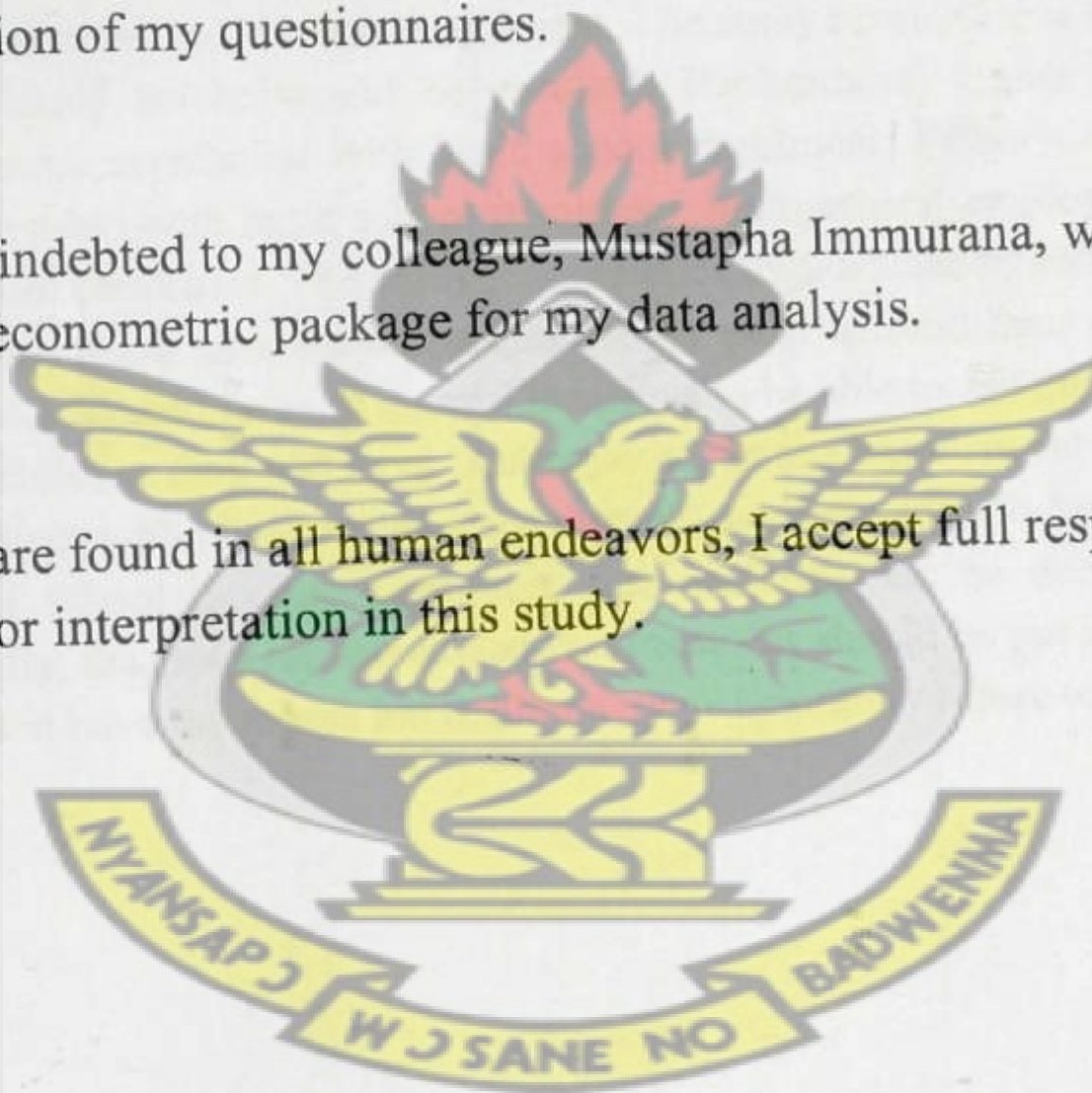
I am most grateful to the Almighty God for the gift of life and his guidance throughout my life and for making this work a success.

I also wish to express my profound thanks and gratitude to my supervisor, DR. Hadrat M. Yusif whose constructive criticisms, suggestions, comments and guidance have made this thesis a standard one.

This section will be incomplete, if I fail to acknowledge all friends who aided me in the administration of my questionnaires.

I also feel highly indebted to my colleague, Mustapha Immurana, who introduced me to Stata 11.2 econometric package for my data analysis.

Lastly, as errors are found in all human endeavors, I accept full responsibility for any error of fact or interpretation in this study.



ABSTRACT

According to UNICEF(2007) and the World Bank Report 2008, Ghana has made a sluggish progress towards achieving the Goal 2 of the MDGs which seeks to ensure that by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary education. This report has come in the wake of several interventions being made by the Government of Ghana towards achieving the MDGs. Yet not much is known regarding determinants of basic school enrolment in the country. Few studies have investigated determinants of senior high school enrolment. (Yusif and Yussif,2010). Therefore, the goal of this study was to examine the major determinants of basic school enrolment in the country. A sample of 400 children in two districts in the Ashanti Region, (KMA and Atwima Mponua) was selected. Some of the items in the questionnaire include age, gender distance from school and parental characteristics. Logit regression model was applied to the data. The dependent variable was basic school enrolment. It was found that gender does not have any significant impact on basic school enrolment. Also, age of a child does not determine basic school enrolment. The study revealed that the more siblings a child has, the less likely he/she would be enrolled. Furthermore, higher levels of parental education had a positive correlation with basic school enrolment. Father's employment status had a negative relationship with basic school enrolment, but mothers' employment significantly influenced basic school enrolment. The study recommends that, education and campaigns should be embarked upon to inform uneducated parents on the need to send their children to school. Also, parents must be educated on birth control measures to be able to use their limited resources to cater for the few children they will have. Among other things basic education should be made entirely free for children with poor parents since mother' employment was found to be important and the concepts of school feeding, capitation, free uniforms, etc be deepened to cover all deprived areas. Finally, the study recommended that measures should be put in place to deal with father's who work and have the means but deliberately or ignorantly refuse to send their children to school.



TABLE OF CONTENTS

ITEM	PAGE
Title page.....	I
Declaration.....	II
Dedication.....	III
Acknowledgement.....	IV
Abstract.....	V
Table of contents.....	VI
List of tables.....	IX
Chapter One	
Introduction	
1.0 Background of the study.....	1
1.1 Problem Statement.....	2
1.2 Objective of study.....	3
1.3 Hypothesis.....	3
1.4 Scope of the study.....	4
1.5 Justification of the study.....	5
1.6 Limitations of the study.....	5
1.7 Organization of the study.....	5
Chapter Two	
Literature Review	
2.0 Introduction.....	7
2.1 Theoretical review.....	7
2.1.1 Human capital theory.....	7

2.1.2 Implication of Human capital theory. For educational development.....	8
2.1.3 Measuring Human Capital.....	9
2.2 Empirical Literature Review.....	10
2.2.1 Parents Education.....	10
2.2.2 Parental Income.....	11
2.2.3 Family size.....	12
2.2.4 Health and Nutrition.....	13
2.2.5 Gender.....	14
2.2.6 Schooling access in rural and urban areas.....	16
2.3 Conclusion.....	16

Chapter Three

Methodology

3.0 Introduction.....	17
3.1 Type and source of data.....	17
3.2 Data Analysis.....	18
3.3 Model Specification.....	18
3.3 .1 Variable Description.....	17
3.4 Expected signs of the estimated parameters.....	20
3.5 Profile of the study area.....	24
3.5.1 Atwima Mponua District.....	23
3.5.2 Kumasi Metropolis.....	31

Chapter Four

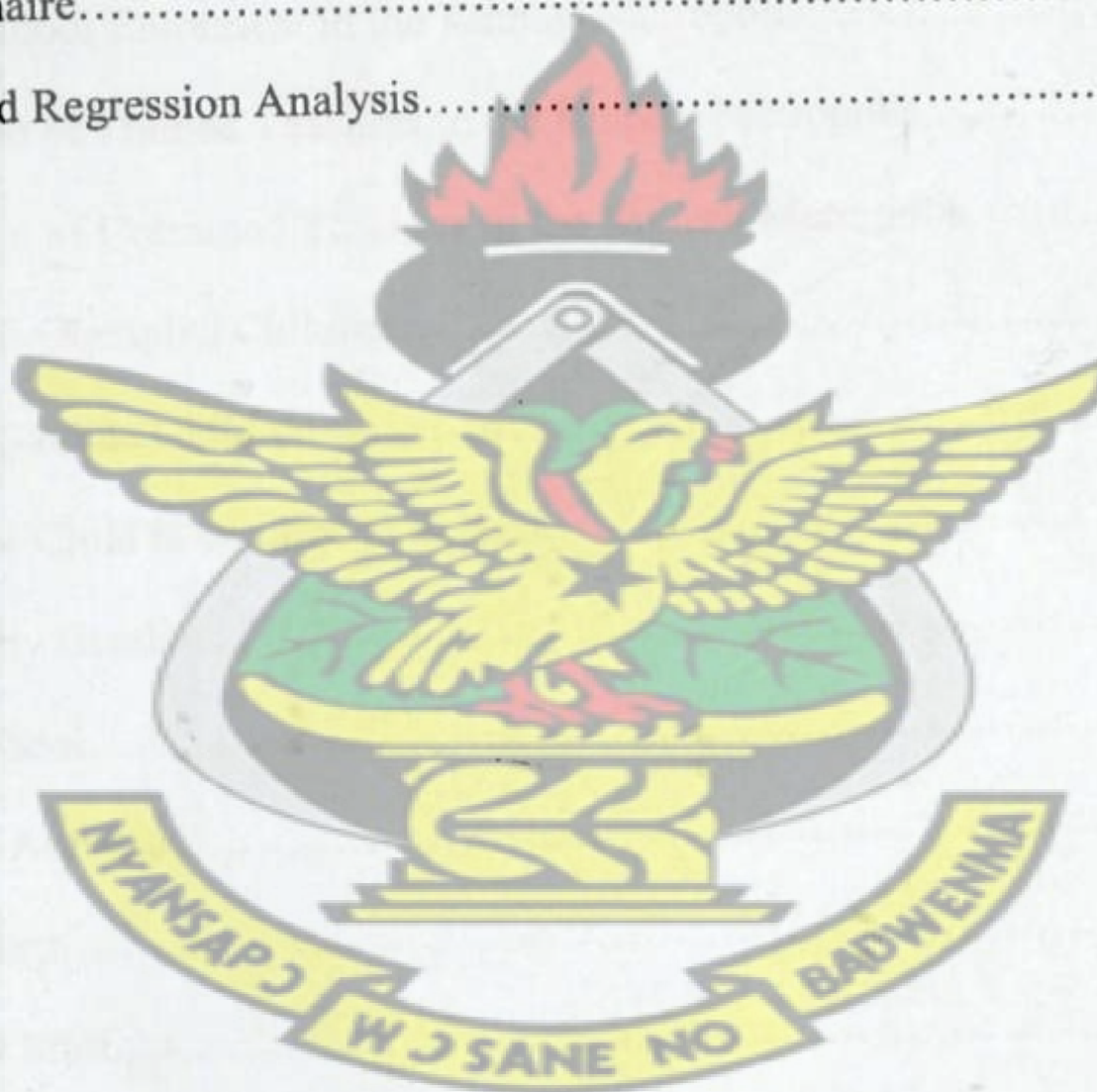
Analysis of results

4.0 Introduction.....	37
4.1 Descriptive analysis.....	37
4.2 Analysis of regression results.....	59

Chapter Five

Summary of major findings and policy recommendation

5.0 Introduction.....	65
5.1 Summary of major findings.....	63
5.2 Conclusion.....	68
5.3 Policy recommendation.....	68
5.4 Recommendation for future study.....	70
References.....	71
Appendix 1 Questionnaire.....	79
Appendix 2 Tables and Regression Analysis.....	82

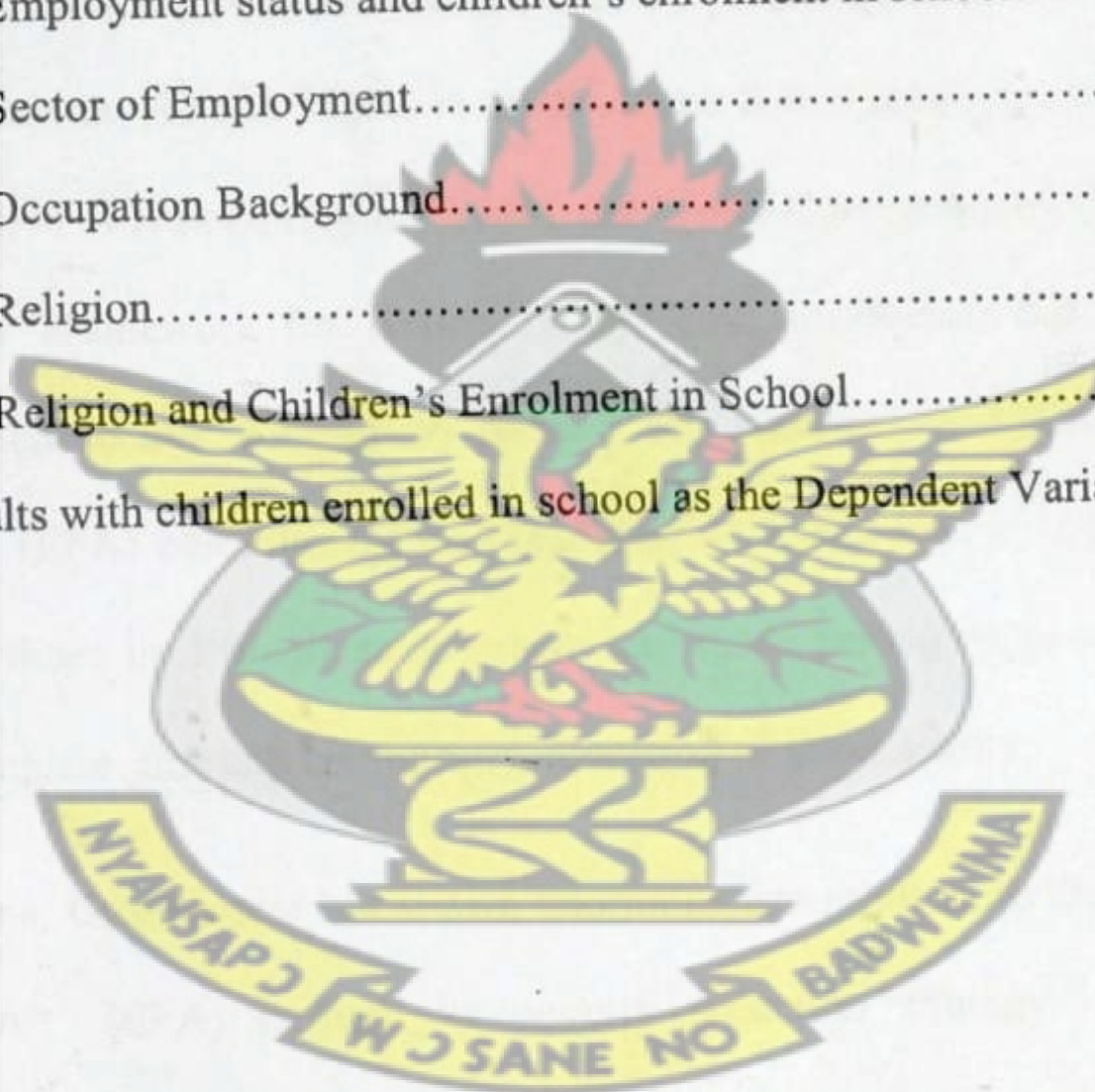


List of Tables

Table 3.0 Variable Description.....	21
Table 3.1: Population Distribution of the Atwima Mponua District.....	23
Table 3.2: Economic activities in the Atwima Mponua District.....	24
Table 3.3: Distribution of Schools in the Atwima Mponua District-2004/2005.....	25

Table 3.4: Facilities in Schools - Atwima Mponua District.....	26
Table 3.5: Primary School Enrolment in the Atwima Mponua District for 2004/2005	27
Table 3.6: Transition to J.H.S in the Atwima Mponua District.....	27
Table 3.7: Repeaters in the Atwima Mponua District in the 2004/2005 Academic year.....	28
Table 3.8: School Drop-outs in the Atwima Mponua District 2004/2005.....	28
Table 3.9: The Distribution of Pre-Schools in the Kumasi Metropolis.....	31
Table 3.10: Pre-School Enrollment in the Kumasi Metropolis.....	27
Table 3.11: The Pre-School Enrolment among the Private and the Public Schools in the Kumasi Metropolis.....	32
Table 3.12: Primary School Enrolment in the Kumasi Metropolis.....	33
Table 3.13: Distribution of Trained Teachers in the Kumasi Metropolis.....	33
Table 3.14: Distribution of Untrained Teachers in the Kumasi Metropolis.....	34
Table 4.1: Gender of the Sampled Children.....	36
Table 4.2: Age of the Sample Children.....	37
Table 4.3: Whether the Child is enrolled in School.....	38
Table 4.4: Schooling by Gender.....	38
Table 4.5: Type of School.....	39
Table 4.6: Children's Ambition.....	40
Table 4.7: Order of Birth.....	41
Table 4.8: Number of Siblings.....	42
Table 4.9: The Person(s) the Child Lives with.....	43
Table 4.10: Comparing School Enrolment and the Person(s) the Child Lives with.....	44
Table 4.11: Distance between House and Nearest School.....	45
Table 4.12: Comparing School Enrolment and Distance.....	46
Table 4.13: Father's Level of education.....	47
Table 4.14: Relationship between Father's Educational Level and Children's Schooling.....	48

Table 4.15: Father's Employment Status.....	49
Table 4.16: Father's Employment Status and Children's Enrolment in School.....	49
Table 4.17: Father's Occupation.....	50
Table 4.18: Father's Sector of Work.....	51
Table 4.19: Father's Religion.....	51
Table 4.20: Father's Religion and Children's Enrolment in School.....	52
Table 4.21: Mothers Level of education.....	53
Table 4.22: Relationship between Mother's Educational Level and Children's Schooling.....	54
Table 4.23: Mother's Employment Status.....	55
Table 4.24: Mother's Employment status and children's enrolment in school.....	55
Table 4.25: Mother's Sector of Employment.....	56
Table 4.26: Mother's Occupation Background.....	56
Table 4.27: Mother's Religion.....	57
Table 4.28: Mother's Religion and Children's Enrolment in School.....	57
Table 4.29: Logit results with children enrolled in school as the Dependent Variable.....	58



CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND

Education has been found to have a significant positive impact on individuals, firms and states (Foster and Rosenzweig, 1996). In addition, education is seen as a means to improve health and reduce fertility of people, Schultz, (1999, 2002;) Strauss and Thomas, (1995). Consequently, education has been declared as a basic human right since the adoption of the Universal Declaration on Human Rights in 1948. Since then, human rights treaties i.e the Universal Declaration of Human Rights (1948), the World Conference on Education for All (1990) and Dakar Framework for Action (2000) have reaffirmed this right and have supported entitlement to free, compulsory primary education for all children. In 1990, the Education for All (EFA) commitment was launched to ensure that by 2015, all children, particularly girls, those in difficult environment and those belonging to ethnic minorities, have access to complete, free and compulsory education of good quality.

Therefore in Ghana, Government has shown enormous commitment to the achievement of “Education for All” (EFA) through its poverty reduction strategy. Central to the Government of Ghana’s Poverty Reduction Strategy (GPRS) is the provision of quality education. Certainly, some successes have been achieved in Ghana with regards to access to primary, secondary and tertiary education. For example, enrolment rates have risen in the Primary, Junior Secondary School and Post basic sub-sectors (Primary Education Sub-sector Report, 2004). Indeed, the Gender Parity Indicators (GPI), Gross Enrolment Rates (GER), survival and completion rates at

the national levels have all improved. Primary school enrolment growth has been sustained at 3.5% in 2003-04, with an overall growth of 8.6% between 2001 – 02 and 2003-04. This has resulted in an increase in enrolment from 2.27 million to 2.96 million over the period from 2001- 2004. Primary enrolment growth for girl pupils increased by 3.24% in 2003-04 and 9.32% over the period 2001-02 to 2003-04. The increase in enrolment has outstripped the projected population growth, estimated at 2.7% per year, and as a result the Gross Enrolment Ratio (GER) has increased from 84% (from 80% to 83% for female and from 87% to 90% for male) over the two year period (Education Sector Performance Report, 2004).

1.2 STATEMENT OF PROBLEM

In 2008, the United Nations Organizations came out with the MDGs, the objective of which was to improve the well being of people in the developing countries. Goal 2 of the MDGs seeks to ensure that by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary education. In fact, this goal is not new in the development agenda of Ghana. For example, the Governments of Ghana, since independence have put in place some social interventions to improve basic school enrolment. These include, free compulsory basic education, free textbooks for all pupils and the creation of local education authorities with responsibilities for buildings, equipment and maintenance grants for primary schools, Asiedu-Akrofi, (1982).

In spite of these social interventions, progress is not evenly distributed in the country, EMIS, (2008) and also enrolment at primary level has not been increasing sufficiently to meet the goal of Universal Primary Completion Education by 2015, UNICEF, (2007). According to the World Bank Report (2008) 422,319 boys and 460,174 girls making a total of 882,493 of the population are out of school and have not received any formal education that will enable

them contribute meaningfully in the national development effort. Again, it is reported that about one million children between the ages of five and fifteen are out of school and are found on most streets in Ghana engaging in some sort of child labour during school contact hours.(Challenging Heights-Ghana , 2012) However, in the review of relevant literature, it was observed that few studies have been conducted to investigate the factors influencing basic school enrolment in Ghana. A study by Yusif and Yousef (2010) was on the Senior high school and tertiary levels in Ghana. Other studies, Haveman and Wolfe (1995), Chenichovsky (1985) investigated basic school enrolment but these studies were conducted in the OECD countries. Therefore given the fact that the MDG 2 of ensuring universal access to basic education may not be attained by 2015 and coupled with the fact that previous studies have not focused on the determinants of basic school enrolment in a developing country like Ghana, there is a knowledge gap and this thesis proposes to fill this gap.

1.3 OBJECTIVES OF STUDY

The general objective of this study is to determine the factors that influence basic school enrolment in Ghana. The specific objectives are to

- find out the characteristics of children of basic school-going age.
- evaluate basic school enrolment and drop-out rates in the selected districts.
- measure the factors influencing enrolment in basic schools in the selected districts.

1.4 HYPOTHESIS

The following hypotheses were formulated bearing in mind the stated objectives of the study.

1. H_0 : Gender does not influence basic school enrolment.

H_1 : Gender influences basic school enrolment.

2. H_0 : Age does not influence basic school enrolment.

H_1 : Age influences basic school enrolment.

3. H_0 : Number of siblings does not influence basic school enrolment.

H_1 : Number of siblings influences basic school enrolment.

4. H_0 : Order of birth does not influence basic school enrolment.

H_1 : Order of birth influences basic school enrolment.

5. H_0 : Distance of the school does not influence basic school enrolment.

H_1 : Distance of the school influence basic school enrolment

6. H_0 : Parental education does not have effect on basic school enrolment.

H_1 : Parental education has effect on basic school enrolment.

7. H_0 : Parental employment does not influence basic school enrolment.

H_1 : Parental employment influences basic school enrolment.

1.4 SCOPE OF THE STUDY

The study was limited to two districts in the Ashanti region. These are the Kumasi Metropolis and the Atwima Mponua district. Information about children's school enrollment status, age, gender, order of birth, number of siblings, etc. was collected. Also, information about their parents in terms of their level of education and employment status was gathered. Thus by visiting households, 200 children from each of these areas were sampled and asked information about their school enrolment status, age, order of birth, number of siblings e.t.c. Thus, the study looked at the determinants of basic school enrolment in the study areas by

focusing on child characteristics and parents' characteristics of four hundred children between the ages of six and sixteen. The Kumasi Metropolis was chosen because of its heterogeneous nature. Also both study areas were chosen because of their proximity and familiarity to the researcher.

1.5 JUSTIFICATION OF THE STUDY

This study will add to information on economics of education in Sub- Sahara Africa in general and Ghana in particular. Also, it will be useful to researchers and graduate students in economics of education. Previous studies in Ghana have not focused on the determinants of basic school enrolment in Ghana in spite of the continuous efforts being made by several international agencies as well as the Government of Ghana to attain universal basic education for all, this study upon its completion would help give much deeper insights as to what to inform all stakeholders on how to attain the MDG 2. Thus the study gives information as to which factors must be given priority when it comes to efforts being made to ensure universal access to basic education. The study also fills the knowledge gap when it comes to the determinants of basic school enrolment in Ghana as well as prescribes several concrete policy measures to help attain universal access to basic education.

1.6 LIMITATION OF THE STUDY

This study covered two districts in the Ashanti Region. Two districts were selected because of time and financial constraints. It could have been extended to cover selected schools in all the ten regions of Ghana.

1.7 ORGANIZATION OF THE STUDY

The study is divided into five chapters. Chapter one is the introduction and presents the background of the study, the statement of the problem, justification of the study, objectives,

hypothesis, limitation and organization of the study. Chapter two presents an overview of existing literature. This chapter provides a review of already existing literature on this topic. Chapter three is about the data that forms the basis for the research that are reported in this study and provides an overview of models used in the study. Again, it deals with the theoretical framework and the empirical model that underpin the analysis of the data and profile of the study areas. Chapter four reports the regression and discussion of results of the empirical analysis. That is, it deals with the presentation, analysis and discussion of the data collected.. Chapter Five consist of summary of findings, conclusion, and policy recommendation of the research.



CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter is in two parts; in the first part, we present the theoretical review and recast empirical review in the second part.

2.1 Theoretical Review

In this section we give an overview of human capital theory.

2.1.1 Human Capital Theory

Human capital is different from the other two forms of capital, that is natural capital (e.g. the forest), and machine capital (e.g. the machines used for cutting down the forest.). Human capital, according to Schultz (1981), represents those abilities and information that have economic value. The intangible inner resources of human beings that replace material assets as the defining dimension of wealth. Furthermore, human capital is a renewable resource and, unlike other forms of capital, there is no theoretical limit to its supply. Schultz also contended that education influences favorably the ability to deal with disequilibria associated with economic modernization. With the recent explosion in technology and global competition, the nation's economic prospects seem linked more directly than ever to the development of a knowledgeable and well trained workforce, and hence to "human capital".

One of the basic tenets of Schultz's Human Capital theory is that training is a response to future needs, and that it represents a safeguard against the ever present threat of economic obsolescence. According to this view, today's training programs should prepare us for tomorrow's reality and the economic challenges to come.

According to Becker, the decision of individuals and families to invest in education is largely guided by the consideration of future return on schooling Becker, (1968; 1991). Parents whose altruistic behavior maximizes the utility of any investment of the family's welfare may have to choose to invest in certain children more than others, depending on the promise of a return on that investment. In this regard, Becker and Thomes (1976) have found that parents tend to invest in the human capital of the more able children rather than the less able ones. This means that children who are performing better in school are likely to be favoured by parents making decisions about education investment. Human capital theory suggests that education or training raises the productivity of workers by imparting useful knowledge and skills, hence raising workers' future income by increasing their lifetime earnings. Becker, (1964) and Mincer (1974) provide an explanation that links investment in training with workers' wages. In particular, their models draw a crucial distinction between general education and firm-specific training. Becker (1964) suggests that education or training raises the productivity of workers by imparting knowledge.

2.1.2 Implications of Human Capital Theory for Educational Development

The central difference in the policy implications of the human capital model and the alternative models relates to the desirable level of public expenditure on education. The basic implication of the human capital model is that allocation of resources on education should be expanded to the point where the present value of the streams of returns to marginal investment is equal or greater than the marginal costs. If human capital theorists

are correct in arguing that education is the primary cause of higher earnings, then it obviously makes sense to provide more education to low-income groups of society to reduce poverty and the degree of income inequality.

This analysis suggests that the primary focus of subsidies to education should be on ensuring that all those who can benefit from education, have access to appropriate opportunities, rather than on reducing costs incurred by those who would undertake higher education in any case.

2.1.3 Measuring Human Capital

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Measurement is important to gauge the impact of human capital interventions and address areas for improvement, but measurement is a problematic issue. However, some researchers have identified a number of ways of measuring the impact of human capital. The process identified by some researchers, e.g. Guest et al (2000), Patterson et al (1997), is to specify the key human capital dimensions and assess their characteristics. It is then essential to measure these practices in terms of outcomes (financial measures, measures of output or goods and services – units produced, customers served, number of errors, customer satisfaction, measures of time - lateness, absence etc. Locke & Latham (1997), Guest et al (2000). Preference is to adopt a stakeholder perspective, which 'would give some emphasis to performance outcomes of concern to the range of stakeholders'. These outcomes, Guest argues, 'should reflect employee attitudes and behavior, internal performance, such as productivity and quality of goods and services; and external indicators, such as sales and financial performance. In other words, if the research is to guide policy and practice, we need to collect a number of potentially related outcomes that extend beyond a narrow definition of business performance based on just financial indicators.

Research has focused on outputs, employee turnover, productivity, and financial performance Delaney & Huselid (1996). The difficulty in relying on one performance is that, apart from ignoring important other measures outlined above, it may be that within organizations, business units have different objectives. Some may be focused on market share, others on profit, for example, and the Human Resource practices may not be the same in both. If research is at an organizational level, rather than at a business unit level, such differences may reflect in a poor linkage between human capital and unit performance, Becker & Gerhart (1996).

The adoption of a stake holder perspective reflects the concern to have multiple measures of performance outcome. This perspective is supported by the popularity of the 'balanced scorecard' concept, Kaplan & Norton (1993), which is intended to weigh the interest of various stakeholders. According to Kaplan & Norton, attention should be given not just to traditional financial measures, but to people, processes and customers. The measures for people are more difficult to specify than say the financial aspects, but Ulrich (1997) argues for three categories: productivity, people, and people and process. Huselid (2003) believes that the 'people' box in Kaplan and Norton's original formulations does not say enough about what is required for Human Resource or capital. He and colleagues propose further nested scorecards, including a workforce scorecard that is focused on workforce behaviors and deliverables' and then a Human Resource scorecard, which addresses the issue of the infrastructure needed to deliver the deliverables.

2.2 Empirical Literature Review

Many researchers, Haveman and Wolfe (1995), Card (1999), Aakvik et al (2005) have investigated determinants of education especially in the industrialized countries and to a

wider extent the middle income countries. In almost throughout these studies the following factors have been measured.

2.2.1 Parents Education

In a study in Norway, Ankvik et al (2005) found that having a father with college degree have an average of about 1.3 more of education compared with children from family without this background in Norway. Parental education is a decisive factor in the educational attainment of their children. Card (1999) reported that there is a strong intergenerational correlation in education. The quantity and quality of time devoted by parents to their children is positively related to the parents' education status. Similarly, Haveman and Wolfe (1995) reported that the most fundamental economic factor is the human capital of parents. Usually measured by the number of schooling years attained, parental education reflects a sort of intergenerational transmission of socioeconomic status. The authors observe that a mother's education tends to be more closely related to the child's schooling attainment than does the father's. Jongsoong Kim and Lydia Zepeda (2004) found that the higher the parents' education level, the higher the probability children will work but the fewer hours they will work. There is a significant effect of father's secondary education that is restricted to girls. Mothers' education to the level of middle or secondary school has a huge negative effect on child work for both genders, in contrast to Ghana where mothers' education reduces the work of boys but not girls. Rasheda Khanam (2003), in the study of child labour and school attendance by using Bangladeshee data indicated a positive gender coefficient that girls are more likely than boys to combine schooling with work in Bangladesh. Tilak (1989) also notes that better educated parents tend to have better access to information and these parents are more likely to have first-hand knowledge of the economic benefits of education. Hence, they are more willing to send their children to school and keep them

there longer. Also, Wahba shows that Egyptian parents, who were child laborers themselves, would most likely send their children to work. In other words, for those parents education may not necessarily be considered as an investment.

2.2.2 Parental Income

Parents' income affects the quality and quantity of goods that bear directly on home investment Leibowitz,(1974). According to Haveman and Wolfe (1995), the amount of family income or household resources allocated to children and the timing of their distribution ultimately affects the schooling attainments of children. Household wages and unearned income constitute the financial resources at the disposal of the household to finance various activities including the education of children. Parent occupation is very important in determining children's activity such in this study that if the father is employed in a vulnerable occupation, for example, day labour or wage labour, it raises the probability that child will work full time or combine work and study.

2.2.3 Family Size

Another widely studied variable is the family size. The composition of the family may improve or suppress the resource limitation within the household. It has been found that the number of children in a household has an inverse relationship with children's educational opportunities Yaslu (2009). The larger the number of siblings, the smaller the amount of money that is invested in the education of each child since many children will be competing for fewer resources. However, Chernichovsky's (1985) study in Botswana has challenged this notion with two convincing arguments. First, he revealed that a larger number of school age children within a household enhance the likelihood for a child to be enrolled in school. This finding, as argued by Chernichovsky, reflects the lower demand for labour of each individual child at home when more children are available, and reduces the indirect cost of

educating a child. Second, the consideration of family type suggests that the extended family could militate against the family size effect. Therefore, by having grandparents residing in the same household, children are more likely to be enrolled in school than those in nuclear families Chernichovsky (1985).

The extended family may be a source of emotional as well as material support, which can facilitate children's schooling. Embodied in the resource dilution perspective is the argument that it is not the size of the family that determines children's educational participation but the birth order and the child's position in the family, which may influence his or her educational opportunity. As parish and Willis (1993) have noted, "a large number of children in the family can lead to improved educational opportunities for the later born. Once they begin to work, early born children continue to send or bring resources back to the family" Parish and Willis, (1993)

2.2.4 Health and Nutrition

It has also been revealed that health problems have potential implications on schooling, Pridmore (2007). Research by the Ghana National Commission on Children GNCC (2000) found that in total, a little over 16 percent of school-age children surveyed suffered from recurring health problems. Of those indicating health problems, 22 percent cited headache, 28 percent malaria/fever, 19 percent stomach disorder and 31 percent other ailments. Research by Fentiman, Hall and Bundy (2001) in the Eastern Region, revealed that 70 percent of all primary school-age children were anemic. Sarris and Shams (1991) studied malnutrition among school age children in Ghana and found that about 36 percent of children surveyed were malnourished. Most weighed below the 80 percent Harvard weight-for-age standard.

Glewwe and Jacoby (1995); Fentiman et al (2001) found that there is correlation between malnutrition, stunted growth and delayed enrolment in school. Glewwe et al and Fentiman et al (2000) matched 65 in-school boys and 65 in-school girls by age (6-7 years) and sex with 65 out-of-school children and found that; those who were not enrolled in primary school were significantly stunted than enrolled children. A further 65 boys and 65 girls who were over-age enrollers to primary school were also surveyed in this study; these children were significantly more stunted than children in school at the correct age. Studies also indicate that health status has implications for attendance, retention and drop out. Fentiman et al, (2001) suggest that hunger, malaria, headaches and poor eyesight were major causes of absenteeism and dropping out. Health issues were also often gendered, with girls reporting more health-related problems than boys. Painful menstruation, a lack of sanitary facilities and pregnancy were factors leading to both absenteeism and drop-out of adolescent girls, Fentiman, Hall, & Bundy (1999, 2001).

2.2.5 Gender

Gender is another variable that has been studied widely. According to Shabaya & Konadu-Agyemang (2004) girls are generally disadvantaged compared to boys in terms of educational access, but the probability of attending school is further worsened for those girls living in rural areas and peripheral regions. Yet in a research by Fentiman et al there were more girls enrolled in schools in Fumbisi than boys (46 percent girls; 30 percent boys), which appears to be against the norm for the Upper East Region. Johnson and Kyle (2001) reported that dropout rates for girls are higher than boys. Avotri (2000) also found that boys tend to drop out more than girls to work and this may also be a result of initial low enrolment rates of girls. The point raised though, is that while some general patterns might

be found around gendered access, these might not be applicable across board and need also to be viewed in location specific contexts.

The Academy for Education Development (2002) calls barriers to education for girls, 'multifaceted and interrelated' but notes a common denominator to be poverty. Other factors influencing female enrolments have been identified as: beliefs and practices and the perception of the role of girls by families and communities, Academy for Educational Development (2002), Shabaya & Konadu-Agyemang (2004); costs, Academy for Educational Development (2002), Avotri (2000), the opportunity cost of sending girls to school, Academy for Education for Development (2002); Avotri (2000) revealed that faced with affordability constraints, parents tend to send boys to school over girls. Similarly, Yidana (2000) noted the main factors accounting for the disparities in male and female enrolment ratios and low retention of female students in the Mamprusi District of Northern Ghana. He found that poverty, unemployment and lack of a regular source of income were often cited by parents' as the main reasons for their inability to support the education of their girl child. This also seems to indicate socio-cultural factors which privilege boys' education over girls' education. Several studies suggest that traditional societies' preference for boys' education restricts girls' access to education. There are also many religious and cultural practices in some communities' that discriminate against the education of girls see Sutherland-Addy (2002); Chao and Alper (1998); Stephens (1998).

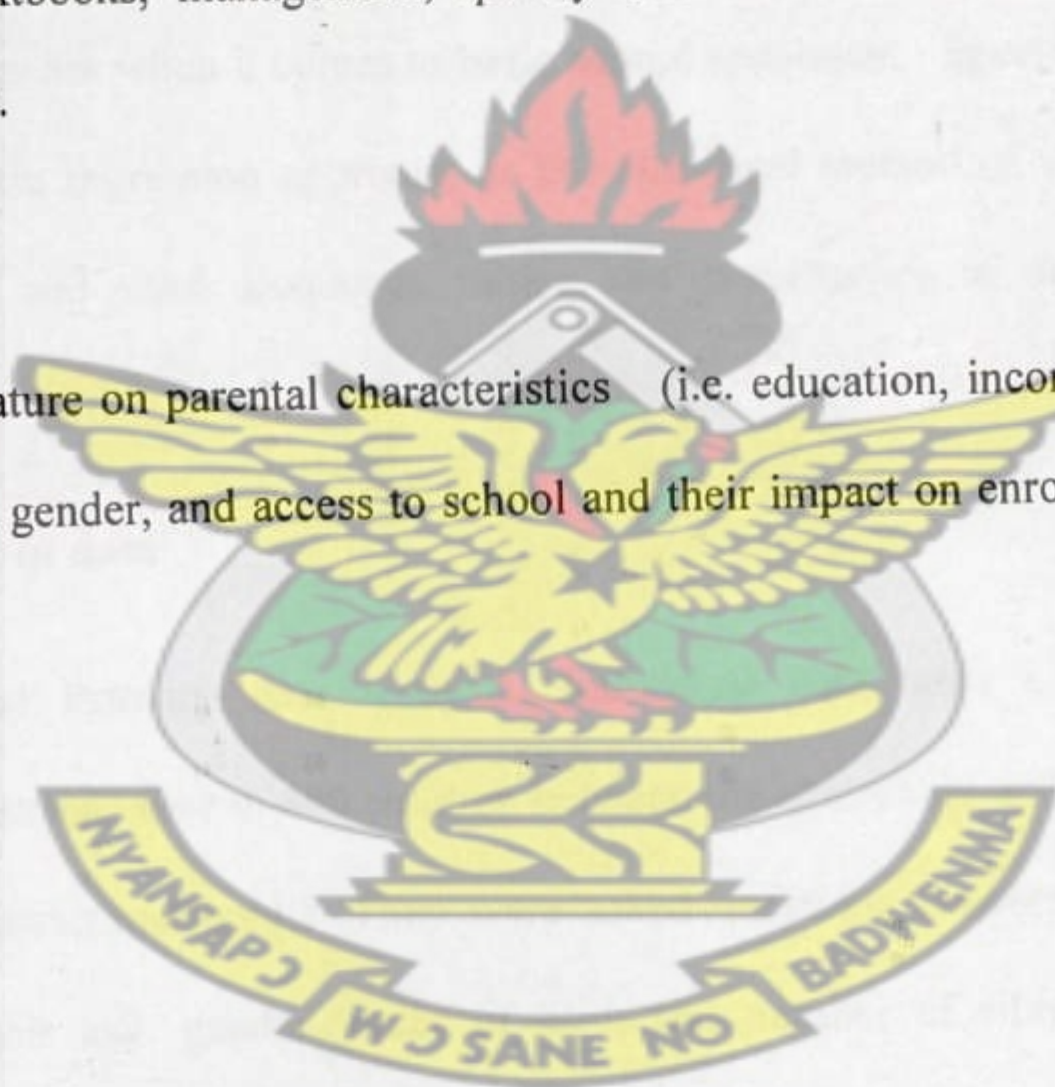
Experiences and practices of schooling are also often gendered, Dunne, Leach et al (2005) discuss this more. Studies on the access and retention of girls also allude to the important role having female teachers and role models plays, Fentiman, Hall & Bundy (1999). Yet Casely-Hayford and Wilson (2001) describe the difficulties in getting female teachers into remote rural areas of Ghana and the poor supply of females in these areas.

2.2.6 Schooling access in rural and urban areas

Research suggests there are large differences in schooling access in rural and urban areas of Ghana with rural areas on the whole having significantly lower levels of educational access. Demand and supply-side factors interact to produce these differentials. Kraft et al (1995) described the inequities in the quality of educational provision between urban and rural schools in Ghana. They recorded the 'dramatic difference' between the opportunities of the children in rural settings compared to those in urban and peri-urban settings. These differences could be found in most aspects of schools including buildings, curriculum, furniture, toilets, textbooks, management, quality and motivation of teachers, parental wealth and education.

2.3 Conclusion

In this chapter, literature on parental characteristics (i.e. education, income), family size, health and nutrition, gender, and access to school and their impact on enrolment have been reviewed.



CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter presents the method of data collection and the study is designed to find out the determinants of basic school enrolment in Ghana by focusing on the Kumasi Metropolis and the Atwima Mponua District. It also sought to find out whether factors such as parental employment and level of education influence the basic school enrolment of their children. The study sought to further find out how important a child's age, gender, order of birth and the number of siblings are when it comes to basic school enrolment. Specifically, the study used a logit or logistic regression approach as the empirical method of estimation under quantitative method and used frequency tables and percentages to analyze the data descriptively.

3.1 Type and source of data

The study employed Primary data analysis. Individual data were collected through administration of questionnaires to 400 children between the ages of six and sixteen (i.e 200) from each of the district/metropolis. They were asked questions concerning their school enrolment status, their age, gender, order of birth and number of siblings. Thus four hundred children between ages six and sixteen were randomly sampled. Also information about these children's parental employment status and level of education was gathered by asking anyone in the household who could provide the needed information about the children's parents. The reason for using primary data is that the information needed was not in existence. Purposive sampling method was used by this study in selecting the children in

the study areas. The reason is that, we were looking for children within the age bracket who were either enrolled or not enrolled.

3.2 Data Analysis

The data gathered was analyzed both descriptively and quantitatively. According to Alan (2008), a quantitative technique helps us to describe specific differences between people in terms of the features being studied as well as providing a consistent yard stick for arriving at such distinctions. It also provides the foundation for the actual estimate of the degree of relationship between concepts. As stated earlier under the quantitative section, the logit regression model was adopted because the dependent variable (basic school enrolment: whether a child is enrolled in basic school or not) being studied is dichotomous. According to Merriam (1998) descriptive method provides a detail analysis and gives room for a richer and an in-depth understanding of how people make meaning of their situation or interpret phenomena. By descriptive statistics, the study used frequency tables and percentages to analyze the data on the sampled children and their parents.

3.3 Model Specification

Logit regression model was used by the study to find out the determinants of basic school enrolment in the Kumasi Metropolis and the Atwima Mponua District of Ghana.

In the study, the dependent variable Y , is basic school enrolment, that is whether a child is in school or not. If the child is enrolled, $Y = 1$ and if not, $Y = 0$. So in the model the control group was children who were not in School. The equation to be estimated is given as:

$$Y_i = \ln \frac{p}{1-p} = \beta_1 + \beta_2 G + \beta_3 A + \beta_4 N + \beta_5 O + \beta_6 D + \beta_7 FU + \beta_8 FP + \beta_9 FS + \beta_{10} FB + \beta_{11} FW + \beta_{12} MU + \beta_{13} MP + \beta_{14} MS + \beta_{15} MB + \beta_{16} MW + \epsilon_i$$

3.3.1 Variable Description

The variables comprise of dependent and independent. The dependent variable, Y is operationalized using school enrolment of a sample of four hundred children. Thus in the Logit model above, Y_i is a qualitative dependent variable which takes the value 1 if child is enrolled in basic school and 0 if child is not enrolled in basic school.

The independent variables were grouped into two; child characteristics (age, gender, order of birth, number of siblings) and parental characteristics (educational level and employment status)

G=Dummy variable (G= 1 if male, G=0 if female)

A=Age

N = Number of siblings of the child

O= Order of birth of the child

D= Distance between child's house and the nearest available school

FU= Dummy variable (FU= 1 if father has University education, FU=0 if otherwise)

FP= Dummy variable (FP= 1 if father has polytechnic, teacher's training college or nurses training education, FP= 0 if otherwise).

FS = Dummy variable (FS= 1 if father has senior high education, FS= 0 if otherwise)

FB = Dummy variable (FB= 1 if father has basic level education, FB= 0 if otherwise)

FW = Dummy variable (FW = 1 if father is employed, FW= 0 if unemployed)

MU = Dummy variable (MU = 1 if Mother has University education, MU= 0 if otherwise)

MP = Dummy variable (MP= 1 if mother has polytechnic, teacher's training college or nurses training education, MP= 0 if otherwise)

MS = Dummy variable (MS= 1 if mother has senior high education, MS= 0 if otherwise)

MB = Dummy variable (MB= 1 if mother has basic level education, MB = 0 if otherwise)

MW = Dummy variable (MW= 1 if mother is employed, MW = 0 if unemployed)

E_i = Stochastic error term.

The probability (likelihood) of being enrolled in school among the sample population is given by: $P = e^{\beta X} / (1 + e^{\beta})$

Where βX = the mean of the predicted Y_i values.

If $P \approx 1$, there is a likelihood that a child in the sample population will be enrolled in basic school. On the other hand, if $P \approx 0$, there is no likelihood that a child in the sample population will be enrolled in basic school.

3.4 Expected signs of the estimated parameters

The relationship between basic school enrolment and gender (G), age (A) as well as the order of birth (O) is unknown because we don't know how being a male or female or a child's age or order of birth affects his/her enrolment in basic school hence the expected signs of β_2 , β_3 and β_5 are unknown. The number of siblings (N) is expected to have a negative impact on basic school enrolment and hence the expected sign of β_4 is negative.

This means that, the higher the number of siblings of a particular child, the greater the probability that the child will not be enrolled in school because parents have to share the limited parental resources available among many siblings.

The distance between a child's house and the nearest available school (D) is expected to have a negative impact on basic school enrolment and hence the expected sign of β_6 is negative. This means that, the wider the distance, the greater the probability that the child will not be enrolled in school because the child would have to move or walk several distances before he/she gets to school which comes with some cost and risk.

Concerning fathers level of education, fathers with tertiary education (FU), polytechnic, teacher or nurses training education (FP), senior high education (FS) and basic education (FB) are expected to send their children to school than those fathers without any formal education (control group). Therefore the expected sign of β_7 , β_8 , β_9 and β_{10} is positive. The reason is that people with formal education have trained their minds for high income jobs and are well placed to understand the importance of education than the uneducated fathers.

Also fathers who are employed (FW) are expected to send their children to school as compared to those who are not and hence FW is expected to have a positive impact on basic school enrolment of children and therefore the expected sign of β_{11} is positive. Thus working fathers are expected to earn income to send their children to school as compared to unemployed fathers (control group).

With regards to mothers level of education, mothers with tertiary education (MU), polytechnic, teacher or nurses training college education (MP), senior high education (MS) and basic education (MB) are expected to send their children to school than those mothers without any formal education (control group). Therefore the expected sign of β_{12} , β_{13} , and β_{14} is positive. The reason is that people with formal education have trained their minds for

high income jobs and are well placed to understand the importance of education than the uneducated mothers (control group).

Finally mothers who are employed (W) are expected to send their children to school as compared to those who are not and hence MW is expected to have a positive impact on basic school enrolment of children and therefore the expected sign of β_{15} , is positive. Thus working mothers are expected to earn income to send their children to school as compared to unemployed mothers (control group).

Table 3.5 Variable Description

KNUST

Variables	Description	Hypothesis
Dependent variable		
Enrolment	DV, 1 if respondent is enrolled, 0, otherwise.	
Independent Variables		
Child characteristics		
Age	Continuous variable and measured by years	Positive/ Negative
Gender:		
Male	DV, 1 for male	Positive/ Negative
Female	Omitted variable	
Number of siblings		
One	DV, 1 if child has one sibling	Positive
Two		Positive
Three	DV, 1 if child has two	Positive/Negative

	siblings	
Four or more	DV, 1 if child has three	
Order of Birth	siblings	
First	Omitted variable	Positive
Second		Positive/Negative
Third	DV, 1 if child is first born.	Positive/Negative
Fourth or more	DV, 1 if child is second	
	born.	
Distance from school	DV, 1 if child is third born	
	Omitted variable	Negative
Parental characteristics	Distance is a continuous	
Parent basic education	variable and is measured in	
	kilometers	Positive
Parent sec. education	DV, 1 if parent has basic	Positive
	education	
Parent poly	DV, 1 if parent has sec.	Positive
	education.	
Parent university	DV, 1 if parent has	Positive
	polytechnic education	
Parent work	DV, 1 if parent has	Positive
	university education	

	DV, 1 if parent is employed	
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3.5 Profile of the Study Area

As stated above, the study areas in this research are the Kumasi Metropolis and the Atwima Mponua District. Let us now take a look at the profiles of these areas.

3.5.1 Atwima Mponua District

The Atwima Mponua District is located in the south-western part of the Ashanti Region covering an area of approximately 894.15 square kilometers. The District shares boundary in the south with the Amansie West District. Ahafo Ano South to the north, Atwima Nwabiagya in the east and Bibiani – Anwhiaso – Bekwai District in the west. Nyinahin, the capital and Mpsaatia are currently the dominant communities Marks Publication and Media Services (2006). The population size of the district assembly according to the 2000 population census was 108,235 and can be seen in Table 3.0 below.

Table 3.1: Population Distribution of the Atwima Mponua District

GENDER	NUMBER	PERCENTAGE
MALES	55,719	51.48
FEMALES	52,516	48.52
TOTAL	108,235	100

Source: National Population Census, 2000.

From Table 3.1, we can see that the Atwima Mponua District was made up 55,719 males and 52,516 females making a total of 108,235 with an average population growth rate of 3.6% (National Population Census, 2000).

Table 3.2: Economic Activities in the Atwima Mponua District

Agriculture	79%
Commerce/Services	15%
Industry	6%
Total	100%

Source: (Marks Publication and Media Service, 2006)

From Table 3.2, we can see that the district is predominantly agrarian with 79% of the labour force engaged in agriculture. Three main types of farming systems are practiced by the people namely, mono, mixed and plantation cropping. The commerce and service sector ranks second in importance to agriculture in the district with 15% of economic activities.

Commercial activities are small and scattered throughout the district. The Government sector dominates in the service sector with teachers taking the lead. Incomes from the commerce/service sector are quite moderate and are above the poverty level. The industrial sector is third with 6% of economic activities. Manufacturing activities in the District are practiced on small and medium scale. These include Wood-based industries (carpentry), metal works, block molding, gari production (cassava processing), akpeteshie distillery, corn milling, etc. Apart from relying on unpaid apprentices, entrepreneurs in these industries employ few people to facilitate the production processes. The average size of members is about three and ten people in the case of small and medium scale production respectively. In some few cases, chemical (petrol, diesel) the electric energies and used. Through various

interventions, the drudgery associated with gari processing has been eliminated in some pilot communities through the supply of gari-processing machines (Marks Publication and media Services, 2006).

Table 3.3: Distribution of Schools in the Atwima Mponua District – 2004/2005

Level	Public	Private	Total
Pre-School	41	20	61
Primary	95	12	107
J.H.S	47	2	49
S.S.S	2	0	2
Voc/Technical	0	1	1
Total	185	35	220

Source: Marks Publication and Media Services, 2006).

From table 3.3, we could see that, as the 2004/2005 academic year, the District had 61 Pre-Schools, 107 Primary Schools and 49 J.S.S in six education circuits. There were 41 public and 20 private Pre-schools representing 67.2% and 32.8% respectively. Whiles there were 95 public and 12 private Primary schools. For that of J.S.S, there were 47 public and 2 private schools representing 95.9% and 4.1% respectively of J.H.S. schools whiles in the SHS division; there were only 2 which all are public. In the Vocational/Technical category, there is only 1 private school. All the circuits have a fair number of schools. However, the location of some schools requires pupils to walk an average of 5km to and from school daily. (Marks Publication and Media Services, 2006).

Table 3.4: Facilities in Schools – Atwima Mponua District

LEVEL	URINAL			TOILET For all categories of people
	Boys	Girls	Staff	
Pre-School	26	29	19	19
Primary	51	56	11	30
J.H.S	32	29	11	11
Total	109	114	60	60

Source: Marks Publication and Meads Services, 2006.

From Table 3.4, it can be seen that out of the 61 pre-schools, 26 pre-schools had separate urinals for boys only with a shortfall of 35. Also of these 61 pre-schools, 29 pre-schools had urinals for girls only with a shortfall of 32. Also, only 8 of the 61 pre-schools had separate urinals for staff, having a shortfall of 53. Out of the 107 primary schools, 51 (48%) have urinal for boys, showing a shortfall of 56 (52%) of the schools had urinals for girls showing a shortfall of 51. Also only 11 (10%) of these schools had urinals for staff showing a shortfall of 96. Also out of the 49 junior high schools, 32 (65%) have urinals for boys showing a shortfall of 17. Also 29 (59%) have urinals for girls showing a shortfall of 20 and only 11 (22%) have urinals for Staff showing a shortfall of 38. However, only 5 are in good condition. Toilet facility is not adequate in schools in the district. Only 19 (31%) of the 61 pre-schools had toilet facilities for all categories of people. Only 30 (28%) of the 107 Primary Schools had toilet facilities. Also only 11 (22%) of the 49 JSS had toilet facilities. The rest usually used other means, with particular emphasis on Public Toilets (Marks Publication and meads Services, 2006).

Table 3.5 Primary School Enrolment in the Atwima Mponua District for 2004/2005

Academic year.

GENDER	NUMBER	PERCENTAGE
Boys	9369	53.78
Girls	8051	46.22
Total	17,420	100

Source: Marks Publication and Meads Services, 2006

The 2000 population census revealed that there were 20703 children in the District. Out of this figure as can be seen in Table 3.4, a total of 17420 (84%) children were enrolled in primary schools for the 2004/2005 academic year and of this number, 9369 were boys and 8051 were girls. Also gross enrolment rate for boys (89%) was relatively higher than that of females (79%) (Marks Publication and meads Services, 2006).

Table 3.6: Transition to JHS in the Atwima Mponua District in the 2004/2005

Academic Year.

GENDER	NUMBER	PERCENTAGE
Boys	1092	56.1
Girls	853	43.9
Total	1945	100

Source: marks Publication and Meads Services, 2006.

There were 2040 pupils in class six during the 2003/2004 academic year. Out of this number as we can see from Table 3.5, a total of 1945 pupils comprising 1092 (56.1%) boys and 853 (43.9%) girls were promoted to JSS 1 in the 2004/2005 academic year. The Transition rate was 95.3% with the boys recording 95.6% while the girls recorded 95.2% (Marks Publication and Meads Services, 2006).

Table 3.7: Repeaters in the Atwima Mponua District in the 2004/2005 Academic Year

GENDER	PRIMARY	J.H.S	TOTAL
Boys	624	50	674
Girls	512	31	543
Total	1136	81	1217

Source: Marks Publication and Meads Services, 2006.

From Table 3.7 we can see that, at the primary school level in the 2004/2005 academic year, 1136 representing 6.5% of the total number of 17420 children were repeated. This comprised of 624 boys (54.9%) and 512 girls (45.1%). There were 81 (1.7%) repeaters at the JSS level within the period. This figure comprised of 50 boys (61.7%) and 31 girls (38.3%) (Marks Publication and Meads Services, 2006).

Table 3.8: School Drop-Outs in the Atwima Mponua District – 2004/2005.

GENDER	PRE-SCHOOL		PRIMARY	
	NO	%	NO	%
Boys	26	46.1	203	52.5
Girls	28	51.9	184	47.5

Total	54	100	387	100
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Source: Marks Publication and Meads Services, 2006.

From Table 3.8, 441(54 + 387) pupils dropped out of school in the 2004/2005 academic year. Out of this number, 54, comprising 26 boys and 29 girls were in pre-school. The remaining 387, comprising 203 boys and 184 girls were in primary school. Nyinahin circuit recorded the highest drop – outs of 32 whilst Adiembra circuit had no drop-out Marks Publication and Meads Services, (2006).

Concerning teachers in the district, as at the academic year 2004, there were 114 teachers of different categories for pre-school. 26 (22.8%) of this number were un-certificated but trained to teach Pre-school, 69 (60.5%) were un-certificated and untrained to teach Pre-school, 7 (6.1%) were certificated but not trained to teach Pre – school and 12 (10.5%) certificated and to trained to teach Pre-school. Also there were 473 teachers in the Primary schools. 206(43.6%) were Untrained, 6 (1.3%) were Trained by un-certificated, 120 (25.4%) were 4 year certificate 'A' holders, 136 (28.8%) had certificate 'A' (Post Secondary) and 3 (0.6%) had Diploma qualification. 380 (80.3%) of the Primary School teachers were males while 93 (19.7%) were Females. Marks Publication and Medis Services, (2006). Basically Health delivery in the Atwima Mponua District is offered through 8 government and 6 non-government facilities: 1 Hospital, 5 health Centers, 2 Clinics and 5 Maternity Child Health. In addition, outreach clinical activities are organized in some communities by the District Health Directorate from the District from the District Hospital at Nyinahin. Marks Publication and Medis Services, (2006).

A modern Health Center constructed at Kotokuom to improve access to health services is yet to be equipped and staffed. The major health problem of the District is malaria which in 2005 accounted for 54.3% of all OPD cases in the District. Malaria is followed by colds and

coughs, intestinal worms and accidents and home injuries. In addition to the “common” diseases there have been reported cases of other disease as Buruli Ulcer (58 case since 2002), Guinea worm (6 reported cases in 2004), Yaws, Yellow fever. Immunizations activities are carried out daily in the Health facilities and at periodic out-reach programs to the smaller settlements. (Maks Publication and Medis Services, 2006). Opportunities for tourism development exist at Sreso Tinpom in the form of the Yaa Asantewaa Museum. There is also the Boaso River Falls in Nyinahin. The sites are not developed as their potentials are hindered by poor access roads and lack of hospitality facilities in the District.

3.5.2 Kumasi Metropolis

The Kumasi Metropolis, the capital of the Ashanti Region, is located in the centre of the region. The metropolitan area shares boundaries with Kwabre District to the north, Atwima District to the west, Ejisu-Juaben District to the east and Bosomtwe-Atwima-Kwanwoma District to the south. It has a total area of 299 square kilometers (Marks Publication and Medis Services, 2006). The metropolis and its surrounding areas have water supplied from two sources, the Owabi and Barekese headworks both of which were rehabilitated in 1999. The main distribution centre in the metropolis is Suame. The major markets are Kumasi Central Market, Moro at Tafo Nhyiaeso, Alamo at Asawasi and the European market at Adum. Agriculture is not dominant and accounts for only 10% of GDP because Kumasi is an urban centre. (Maks Publication and Medis Services, 2006). There is small, medium and large scale industrial activities including pharmaceuticals and medical accessories, mechanical and electrical engineering works, logging and saw milling, alcoholic beverages and textiles, footwear, cosmetics, soap making, carpentry and joinery, foam and plastic, printing and stationery and metal works. Kumasi metropolis is well endowed with clay

deposits which is good for pottery. Stone winning operations are also scattered at the periphery of the metropolis.

Educational facilities in the city are provided by the public and private (individual and religious bodies) sectors. The private sector provides the bulk of these institutions at the pre-school, first and second cycle levels, whereas the public sector is the leader at teacher training colleges and tertiary levels.

Table 3.9: The Distribution of Pre-Schools in the Kumasi Metropolis

Level	Public	Private	Total
Pre-School (2003/2004)	148	459	607
Pre-School (2006)	155	478	633

Source: Marks Publication and Media Services (2006).

From Table 3.9, we can see that, in 2003/2004, the private sector accounted for 459 out of the 607 Pre-school structures representing 75.6%. In 2006, it again provided 478 out of the 633 Pre-school structures representing 75.5%.

Table 3.10: Pre-School enrolment in the Kumasi Metropolis

Pre-School Enrolment	Pre-School Population	Actual number Enrolled in Pre-School	Percentage in Pre-School.
(2003/2004)	129,770	36,971	28.5%
(2005/2006)	144,978	58,530	40.4%

Source: Marks Publication and Media Services (2006).

From Table 3.10 we can see that, in the 2003/2004 academic year, 36,971 children were in pre-school. The pre-school population in the metropolis then was 129,770. This gave a pre-

school participation rate of 28.5%. However, in 2005/2006 a total of 58,530 children were in pre-school as against the proportion of 144,978 who constitute children of pre-school going age, giving a school participation (current projected population, 1,610,867) rate of 40.4%. Notwithstanding the fact that the pre-school participating rose from 28.5% during the 2003/2004 academic year to 40.4% during the 2005/2006 academic year the figure is on the low side (Marks Publication and Media Service, 2006).

Table 3.11: The Pre-Schools Enrolment among the Private and the Public Schools in the Kumasi Metropolis.

Level	Public	Private	Total
Pre-School (2003/2004)	10023	26939	36971
Pre-School (2006)	17209	41321	58530

Source: Marks Publication and Media Services (2006).

In terms of Pre-School Enrolment in 2003/2004, the private sector accounted for 26,939 out of the 36,971 total enrolment figures for both sectors, thus representing 72.9%. The same trend was established in 2006 where out of the 58,530 total Pre-School enrolments, the private sector accounted for 41,321 representing 70.6%. However, from 2003/2004 to 2005/2006 the public sector has seen some growth in terms of Pre-school structure provision and enrolment (Marks Publication and Medis Services, 2006). The public sector's development of Pre-school is constrained by the requirement of high and costly standards while the private sector resort to the use of flexible conditions by operating in residential and temporary structure. With enrolment, whereas the private sector's percentage contribution fell from 72.9% in 2003/2004 to 70.6% in 2005/2006, the public sector made some percentage gains from 27.1% in 2003/2004 to 29.4% in 2005/2006. This dramatic increase

in enrolment is attributable to the introduction of the Capitation Grant and the School Feeding Programme in some selected schools.

Table 3.12: Primary School Enrolment in the Kumasi Metropolis

Pre-School Enrolment	Pre-School Population	Actual number enrolled in pre-school	Percentage in Pre-School.
(2003/2004)	410,939	227,179	55.3%

Source: Marks Publication and Media Services (2006)

Statistics, from the year 2003/2004 academic year show that out of an estimated population of 410,939 as can be seen in Table 3.12, those who fall within the basic school going age of 6-15 years totaling 227,179 were in school leaving 183,760 who were not in school. Given that the basic school participation rate was 55.3%, they fell short of the national participation rate of 80% by 24.7% (Marks Publication and Media Services, 2006).

Table 3.13: Distribution of trained teachers in the Kumasi Metropolis

Trained Teachers	Public	Private	Total
Trained Teachers (2003/2004)	313	152	465
Trained Teachers (2005/2006)	400	162	562

Source: Marks Publication and Media Services (2006).

From Table 3.13, we can see that, in 2003/2004 and 2005/2006 the number of trained teachers in the public sector were 313 and 400 respectively representing 67.3% and 71% of

the total number of trained teachers in both the public and private sectors. During the periods the private sector's share of trained teachers was 152 and 162 representing 32.7% and 29% respectively.

Table 3.14: Distribution of Untrained teachers in the Kumasi Metropolis

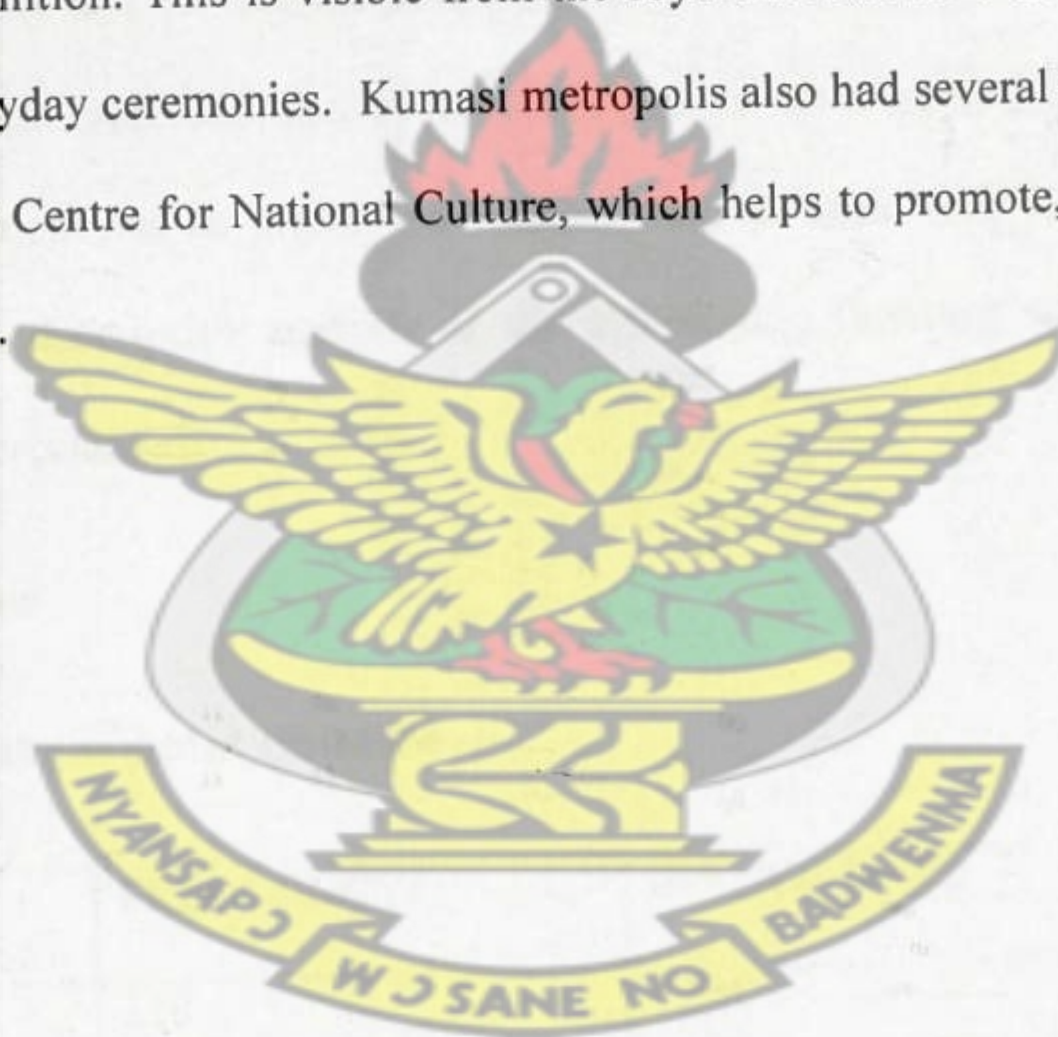
Trained Teachers	Public	Private	Total
Trained Teachers (2003/2004)	828	13	841
Trained Teachers (2005/2006)	1,121	15	1136

Source: Marks Publication and Media Services (2006)

From Table 3.14 it can be observed that, in terms of untrained teachers the public sector had 13 in the 2003/2004 academic year and 15 in the 2005/2006 academic year representing 1.5% and 1.3% respectively of the total number of untrained teachers in the metropolis, whereas the private sector had 828 in the 2003/2004 academic year and 1,121 in the 2005/2006 academic year representing 98.5% and 98.7% respectively. The Metropolis has a lot of senior high and some Tertiary Institutions which include: the Kwame Nkrumah University of Science and Technology (KNUST), University of Education Winneba, Kumasi Campus (UEW-K), Christian University College (private) and the Kumasi Polytechnic e.t.c. The Metropolitan Health Services are organized around five (5) Sub Metro Health Teams: namely, Bantama, Asokwa, Manhyia North, Manhyia South and Subin. The Metro Health Team is led by its Director of Health Services who has the overall

responsibility for planning, monitoring and evaluating the performance of the Health Sector in the metropolis. The city has a number of health facilities in both the public and private sectors. Notable among them are the Komfo Anokye Teaching Hospital (KATH), which is one of the two (2) national autonomous hospitals, four (4) quasi health institutions, five (5) health care centres owned by the Church of Christ and the Seventh-Day Adventist Church. In addition, there are over two hundred (200) known private health institutions and 13 industrial Clinics in the metropolis (Marks Publication and Medis Services, 2006).

Rich unadulterated culture is up for tourists viewing in Kumasi and for this, the metropolis has gained much recognition. This is visible from the royal Akwasidae Festivals to fetish rituals and even to everyday ceremonies. Kumasi metropolis also had several unique tourist attractions. One is the Centre for National Culture, which helps to promote, preserve and protect Ghana's culture.



CHAPTER FOUR

RESULTS AND DISCUSSION

4.0 Introduction

This chapter used Stata 11.2 to analyze the information obtained on 400 randomly sampled children both descriptively and quantitatively. A logit regression model was used to find out whether a child's age, gender, order of birth, number of siblings as well as the distance between the child's house and the nearest possible school has an influence on basic school enrolment. Also, the logit regression model was used to find out whether parental level of education and employment has an impact on whether their children would be enrolled in school or not. Also, a descriptive analysis of the information obtained was done using frequency tables and percentages.

4.1 Descriptive analysis

Table 4.1: Gender of the sampled Children

GENDER	FREQUENCY	PERCENTAGE
MALES	210	52.50
FEMALES	190	47.50
TOTAL	400	100.00

Source: Researcher's field survey 2012

In Table 4.1 above, out of the 400 randomly sampled children, 210 of them constituting 52.50% were males whilst 190 of them constituting 47.50% were females.

Table 4.2: Age of the Sampled Children

AGE	FREQUENCY	PERCENTAGE
6	14	3.50
7	17	4.25
8	14	3.50
9	26	6.50
10	31	7.75
11	58	14.50
12	55	13.75
13	70	17.50
14	59	14.75
15	38	9.50
16	18	4.50
TOTAL	400	100.00

Source: Researcher’s field survey 2012.

Table 4.2 gives a summary of the ages of the sampled children and it shows that out of the 400 sampled children, 14 of them constituting 3.50% aged 6, 17 of them forming 4.25% were 7 years of age, 14 of them constituting 3.50% were 8 years of age, 26 of them constituting 6.50% of the sampled respondents were 9 years of age, 31 of the respondents were 10 years of age constituting 7.75%, 58 of them constituting 14.50% were 11 years of age, 55 of them were 12 years of age and they constituted 13.75% of the sampled respondents, 70 of them constituting 17.50% of the sampled children were 13 years of age,

59 of them constituting 14.75% of the respondents were 14 years of age, 38 of them constituting 9.50% of the sampled children were 15 years of age whilst 18 of them constituting 4.50% of the sampled children were 16 years of age. From the above we could see that this paper sampled children between the ages of 6 to 16.

Table 4.3: Whether the child is enrolled in school

SCHOOLING	FREQUENCY	PERCENTAGE
YES	263	65.75
NO	137	34.25
TOTAL	400	100.00

Source: Researcher's field survey 2012

Table 4.3 summarizes the schooling status of the sampled respondents and we could see that out of the 400 sampled children, 263 of them constituting 65.75% were enrolled in school whilst 137 of them constituting 34.25% were not in school and this calls for serious attention because the law of Ghana as well as the Millennium Development Goal 2 are all pushing for universal coverage in terms of basic education.

Table 4.4: Schooling by Gender

SCHOOLING	FREQUENCY (GENDER)		TOTAL
	MALE	FEMALE	
YES	144	119	263
NO	66	71	137
TOTAL	210	190	400

Source: Researcher's field survey 2012.

Table 4.4 gives information on the number of boys and girls who were in school and we could see that out of the 263 children who were in school, 144 were males whilst 119 were females. Also from the same table, we can see that out of 137 respondents who were not enrolled in school, 66 of them were males whilst 71 of them were females. From this we can see that out of the sampled respondents the males in school were more than the females but as to whether gender influences basic school enrolment, the regression results would let us know.

Table 4.5: Type of School

Type of School	FREQUENCY	PERCENTAGE
Public	153	58.17
Private	110	41.83
TOTAL	263	100.00

Source: Researcher’s field survey 2012

Table 4.5 gives information on whether the sampled children who were in school attended a public school or a private school and we could see that out of the 263 of the 400 children who were enrolled in school, 153 of them constituting 58.17% of the children enrolled in school attended a public school whilst 110 of them constituting 41.83% of those enrolled in school attended a private school.

Table 4.6: Children’s Ambition

AMBITION	FREQUENCY	PERCENTAGE
SING	25	6.25
ATHLETICS	64	16.00
UNIVERSITY	275	68.75
TEACHER OR NURSE	32	8.00
OTHER	4	1.00
TOTAL	400	100.00

Source: Researcher’s field survey 2012

Table 4.6, summarizes the future ambitions of the sampled children and out of the 400, 25 of them constituting 6.25% said they would want to be musicians in future, 64 of them constituting 16.00% said they would want to be athletes, 275 of them constituting 68.75% of them said they would want to go to the university, 32 of them constituting 8% of the sampled children said they would want to go to either the teacher’s training college or the nurses training college and 4 of them constituting 1.00% of the respondents said they would want to pursue other ambitions apart from the above. Thus with the majority of the children having the ambition to go to school up to the university level, there is the need for a study to find out the key determinants of school enrolment and how these factors can be handled.

Table 4.7: Order of Birth

ORDER OF BIRTH	FREQUENCY	PERCENTAGE
1	150	37.50
2	97	24.25
3	54	13.50
4	85	21.25
5	1	0.25
6	1	0.25
7	2	0.50
9	10	2.50
TOTAL	400	100.00

Source: Researcher’s field survey 2012

Table 4.7 shows the birth order of the sampled children and out of the 400, 150 of them constituting 37.50% were first in terms of birth order, 97 of them constituting 24.25% were of the birth order second, 54 of them constituting 13.50% were third in terms of birth order, 85 of them constituting 21.25% were fourth in terms of birth order, 1 of them constituting 0.25% of the respondents were of fifth in terms of birth order, 1 of them constituting 0.25% were seventh in terms of birth order and finally 10 of them constituting 2.50% of the sampled children were tenth in terms of birth order. We can see that majority of the children were fourth in terms of birth order but as to whether the birth order influences basic school enrolment or not, the logit regression results would tell us.

Table 4.8: Number of Siblings

NUMBER OF SIBLINGS	FREQUENCY	PERCENTAGE
1	18	4.50
2	24	6.50
3	117	29.5
4	83	20.75
5	111	27.75
7	6	1.50
8	1	0.25
9	15	3.75
10	5	1.25
11	4	1.00
12	7	1.75
14	2	0.50
15	1	0.25
16	1	0.25
17	2	0.50
18	1	0.25
19	2	0.50
TOTAL	400	100.00

Source; Researcher's field survey 2012

Table 4.8 gives us information concerning the number of siblings of the sampled respondents. From this table, 19 children constitute 4.50% of the sampled respondents had only siblings, 24 of them representing 6.00% had 2 siblings, 117 of them forming 29.25% had 3 siblings. Another 83 respondents which represents 20.75% had 4 siblings, while 111 of them making 27.75% of the sampled children had 5 siblings, 6 of them constituting 1.50% had 7 siblings, 1 child representing 0.25% had 8 siblings, 15 of them which forms 3.75% had 9 siblings, 5 of them making 1.25% had 10 siblings, 4 of them constituting 1.00% had 11 siblings, while 7 of them representing 1.75% had 12 siblings, 2 of them (0.50%) had 14 siblings, 1 child representing 0.25% had 15 siblings, another 1 (0.25%) had 16 siblings, 2 of them constituting 0.50% had 17 siblings, 1 forming 0.25% had 18 siblings and 2 of them constituting 0.50% had 19 siblings.

Table 4.9: The Person(s) the Child Live With

LIVING WITH	FREQUENCY	PERCENTAGE
BOTH PARENTS	221	55.25
FATHER ONLY	22	5.50
MOTHER ONLY	47	11.75
OTHER RELATIONS	110	27.50
TOTAL	400	100.00

Source: Researcher's field survey 2012

Table 4.9 gives information on the people the sampled children lived with and we can see that out of the 400 sampled children, 221 of them constituting 55.25% lived with both parents, 22 (5.50%) lived with their fathers, 47 of them representing 11.75% lived with only their mothers whilst 110 of them forming 27.50% lived with other relations.

Table 4.10: Comparing School Enrolment and the Persons (s) the Child lives with

SCHOOLING	LIVING WITH				TOTAL
	BOTH	FATHER	MUM	OTHER R.	
YES	151	11	25	76	263
NO	70	11	22	34	137
TOTAL	221	22	47	110	400

Source; Researcher’s field survey 2012

Table 4.10 gives information on the relationship between school enrolment and the people the child lives with and we can see that, out of the 263 children who were enrolled in school, 151 of them lived with both parents, 11 of them lived with only their fathers, 25 of them lived with only their mothers and 76 of them lived with other relations. Also out of the 137 who were not enrolled in school, 70 of them lived with both parents, 11 of them lived with their fathers only, 22 of them lived with only their mothers and 34 of them lived with other relations. The result appear that majority of the children enrolled in school were living with both parents and conversely the majority of those who were not in school also lived with both parents.

Table 4.11: Distance between House and Nearest School

DISTANCE (Km)	FREQUENCY	PERCENTAGE
1	218	54.50
2	123	30.50
3	31	7.75
4	24	6.00
5	4	1.00
TOTAL	400	100.00

Source: Researcher’s field survey 2012

Table 4.11 shows the distance between respondents’ house and the nearest school. It was found that 218 (54.50%) lived a kilometer away from the nearest school, 123 forming 30.75% resided 2km away from the nearest school. 31 representing 7.75% stayed a distance of 3km from the nearest school. 24 of them constituting 6.00% lived in houses whose distance from the nearest school was 4km and 4 of the 400 sampled children constituting 1.00% lived 5km from the nearest school.

Table 4.12: Comparing School Enrolment and Distance

SCHOOLING	DISTANCE/Km					TOTAL
	1	2	3	4	5	
YES	141	83	18	19	2	263
NO	77	40	13	5	2	137
TOTAL	218	123	31	24	4	400

Source: Researcher's field survey 2012.

Table 4.12 shows the relationship between school enrolment and the distance between the nearest school and respondents house. The table indicates that, out of the 263 respondents who were in school, 141 of them lived in houses whose distance with the nearest school was 1km, 83 of them lived in houses whose distance with the nearest school was 2km, 18 of them lived in houses whose distance from the nearest school was 3km, 19 of them lived in houses whose distance from the nearest school was 4km and 2 of them lived in houses whose distance from the nearest school was 5km. Also out of the 137 who were not enrolled, 77 of them lived in houses whose distance from the nearest school was 1km, 40 of them lived in houses whose distance from the nearest school was 2km, 13 of them lived in houses whose distance from the nearest school was 3km, 5 of them lived in houses whose distance from the nearest school was 4km and 2 of them lived in houses whose distance from the nearest school was 5km. From the above it is very difficult to tell whether distance

matters when it comes to school enrolment and therefore the regression results will give us the real impact.

Table 4.13 Father’s Level of Education

FATHERS LEVEL OF EDUCATION	FREQUENCY	PERCENTAGE
UNVIERSITY	74	18.5
POLT/TRAINING	34	8.50
COLLEGE/NURSES T.C		
S.H.S/OLEVEL	60	15.00
BASIC	130	32.50
UNEDUCATED	102	25.50
TOTAL	400	100.00

Source: Researcher’s field survey 2012.

Table 4.13 gives information on the level of education of fathers of the sampled children and we could see that 74 out of the 400 fathers constituting 18.5% had education up to the university level, 34 of them constituting 8.50% had education up to the Polytechnic, Teachers Training College or Nurses Training College level, 60 of them constituting 15.00% had education up to the Senior High Level/O level, 130 of them constituting 32.50% had education up to the basic level and 102 of them constituting 25.50% were uneducated.

Table 4.14: Relationship between Father's Educational Level and Children's Schooling

SCHOOLING	FATHER'S EDUCATIONAL LEVEL					TOTAL
	UNIV. POLY/TTC/NTC	SHS	BASIC	UNEDUCATED		
YES	73	27	48	93	22	263
NO	1	7	12	37	80	137
TOTAL	74	34	60	130	102	400

Source: Researcher's field survey 2012.

Table 4.14 shows the relationship between father's educational level and children's enrolment in school and it can be seen that, out of the 263 children who were enrolled in school, 73 of them had father's with education up to the university level, 27 of them had father's with education up to the Polytechnic, Teachers Training College or Nurses Training College level, 48 of them had father's with education up to the Senior High Level, 93 of them had fathers with education up to the basic level and 22 of them had fathers who were uneducated. Also, out of the 137 children who were not in school, only one of them had a father with education up to the university level, 7 of them had father's with education up to the Polytechnic, Teachers Training College or Nurses Training College level, 12 of them

had fathers with education up to Senior High school level, 37 of them had fathers with education up to the basic level and 80 of them had fathers who were uneducated.

From the above one can conclude that father's level of education influences children's enrolment in school and therefore the higher a father's level of education, the higher the probability that his child would be enrolled in school. As to the actual impact of fathers' education on children's enrolment in school, this can be shown through a regression analysis and that would be seen later.

Table 4.15: Father's Employment Status

FATHER'S EMPLOYMENT STATUS	FREQUENCY	PERCENTAGE
Working	271	67.75
Not Working	129	32.25
TOTAL	400	100.00

Source: Researcher's field survey 2012

From Table 4.15, it is clear that out of the four hundred sampled fathers, 271 of them constituting 67.75% were employed and 129 of them constituting 32.25% were unemployed.

Table 4.16: Father's Employment Status and Children's Enrolment in School

SCHOOLING	FATHER'S EMPLOYMENT STATUS		TOTAL
	WORKING	NOT WORKING	
YES	224	39	263
NO	47	90	137
TOTAL	271	129	400

Source: Researcher's field survey 2012.

Table 4.16 shows the relationship between father's employment status and Children's Enrolment in school and it can be seen that out of the 263 children who were enrolled in school, 224 of them had their fathers working and only 39 of them had their fathers not working. Also, out of the 137 children who were not enrolled in school, only 47 of them had fathers who were employed and 90 of them had fathers who were not employed.

The implication is that, father's employment plays a key role in whether the child would be enrolled in school or not and from the above, we can see that, if a child's father is working, the probability that the child would be enrolled in school is very high and vice versa.

Table 4.17 Father's Occupation

FATHER'S OCCUPATION	FREQUENCY	PERCENTAGE
SENIOR EXECUTIVE	4	1.48
PROFESSIONAL	64	23.62
JUNIOR	10	3.69
TRADER	39	14.39
CLERICAL	3	1.11
TECHNICAL	23	8.49
FARMER	66	24.35
OTHER	62	22.88
TOTAL	271	100.00

Source: Researcher's field survey 2012.

Table 4.17 shows the occupational breakdown of the employed fathers and it shows that out of the 271 employed fathers, 4 of them making 1.48% were senior executives, 64 of them

making 23.62% were professionals,10 of them constituting 3.69% were junior executives, 39 of them making 14.39% were traders, 3 of them constituting 1.11% were clerks, 23 of them constituting 8.49% were technicians or technical people, 66 of them constituting 24.35% were farmers and 62 of them constituting 22.88% belonged to other occupations.

Table 4.18: Father’s Sector of Work

FATHER’S WORK	SECTOR OF WORK	FREQUENCY	PERCENTAGE
PUBLIC		96	35.42
PRIVATE		175	64.58
TOTAL		271	100.00

Source: Researcher’s field survey 2012

In Table 4.18, we can see that, out of the 271 employed fathers, 96 of them constituting 35.42% were working in the public sector and 175 of them constituting 64.58% were with the private sector.

Table 4.19 Father’s Religion

FATHER’S RELIGION	FREQUENCY	PERCENTAGE
Christian	285	72.25
Muslim	57	14.25
Traditional	56	14.00
Other	2	0.5
TOTAL	400	100.00

Source: Rsearcher’s field survey 2012

Table 4.19 summarizes the religious background of fathers and we can see that 285 out of the 400 fathers constituting 71.25% were Christians, 57 of them constituting 14.25% were Muslims, 56 of them constituting 14.00% belonged to the traditional religion and 2 of them forming 0.5% belonged to other religions.

Table 4.20 Father’s Religion and Children’s enrolled in School

SCHOOLING	FATHER’S RELIGION			
	CHRISTIAN	MUSLIM	TRADITIONAL	OTHER
	TOTAL			
YES	194	35	33	1
	263			
NO	94	22	23	1
	137			
TOTAL	285	57	56	2
	400			

Source: Researcher’s field survey 2012

Table 4.20 summarizes the relationship between father’s religion and children’s enrolment in school and we could see that, out of 263 children who were enrolled in school, 194 of them had Christian Father’s, 35 of them had Muslim fathers, 33 of them had fathers with a traditional religious background and only 1 of them had a father belonging to other religions. Also, out of the 137 who were not in school, 91 of them had Christian fathers, 22 of them had Muslim fathers, 23 of them had fathers with a traditional religious background and only 1 of them had a father belonging to other religions.

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Table 4.21: Mother’s Educational Level

MOTHER’S LEVEL OF EDUCATION	FREQUENCY	PERCENTAGE
UNIVERSITY	80	20.00
POLT/TRAINING COLLEGE/NURSES T.C	78	19.50
S.H.S/O LEVEL	114	28.50
BASIC	58	14.50
UNEDUCATED	70	17.50
TOTAL	400	100.00

Source: Researcher’s field survey 2012

Table 4.21 summarizes the educational background of mothers and from the table we can see that 80 out of the 400 mothers constituting 20.00% had a university level of education, 78 of them constituting 19.50% had education up to the Polytechnic, Teachers Training College or Nurses Training College level, 114 of them constituting 28.50% had education up

to the senior high level, 58 of them constituting 14.50% had education up to the basic level and 70 of them constituting 17.50% were uneducated.

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Table 4.22: The relationship between mother's level of education and children's enrolment in school.

SCCHOOLING	MOTHER'S EDUCATIONAL LEVEL					TOTAL
	UNIV	POLY/TTC/NTC	SHS	BASIC	UNEDUCATED	
YES	68	64	83	40	8	263
NO	12	14	31	18	62	137
TOTAL	80	78	114	58	70	400

Source: Researcher's field survey 2012

Table 4.22 shows the relationship between mother's educational level and children's enrolment in school and it can be seen that, out of the 263 children who were enrolled in school, 68 of them had mother's with education up to university level, 64 of them had mother's with education up to the Polytechnic, Teachers Training College or Nurses Training College level, 83 of them had mother's with education up to the senior High Level, 40 of them had mothers with education up to the basic level, and 8 of them had mother's

who were uneducated . Also out of the 137 children who were not in school, 12 of them had a mother with education up to the university level, 14 of them had mothers with education up to the Polytechnic, Teachers Training college or Nurses training College Level, 31 of them had mothers with education up to the Senior High School Level, 18 of them had mothers with education up to the basic level and 62 of them had mothers who were uneducated.

From the above it is clear that mother’s education really influences children’s enrolment in school and therefore the higher a mother’s level of education, the higher the probability that her child would be enrolled in school. As to the actual impact of mothers’ education on children’s enrolment in school, this can be shown through a regression analysis and that would be shown later.

Table 4.23: Mother’s Employment Status

MOTHER’S EMPLOYMENT STATUS	FREQUENCY	PERCENTAGE
Working	282	70.50
Not Working	118	29.50
TOTAL	400	100.00

Source: researcher’s field survey 2012

From Table 4.23, we could see that out of the 400 sampled mothers, 282 of them constituting 70.50% were employed and 118 of them constituting 29.50% were unemployed.

Table 4.24: Mother’s Employment Status and Children’s Enrolment in School.

SCHOOLING MOTHER’S	EMPLOYMENT STATUS	TOTAL
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	WORKING	NOT WORKING	
YES	227	36	263
NO	55	82	137
TOTAL	282	118	400

Source: Researcher's field survey 2012

Table 4.24 shows the relationship between mothers employment status and Children's Enrolment in school and it can be seen that, out of the 263 children who were enrolled in school, 227 of them had their mothers working and only 36 of them had mother's who were not working. Also out of the 137 children who were not enrolled in school, only 55 of them had mothers who were employed and 82 of them had mothers who were not employed. The implication is that, mothers' employment plays a key role in whether the child would be enrolled in school or not and from the above, we can see that, if a child's mother is working, the probability that the child would be enrolled in school is very high and vice versa.

Table 4.25: Mother's Sector of Employment

MOTHER'S SECTOR OF WORK	FREQUENCY	PERCENTAGE
PUBLIC	61	21.63
PRIVATE	221	78.37
TOTAL	282	100.00

Source: Researcher's field survey 2012

In Table 4.25, we can see that, out of the 282 employed mothers, 61 of them constituting 21.63% were working in the public sector and 221 of them constituting 78.37% were with the private sector.

Table 4.26: Mother's Occupational Background

MOTHER'S OCCUPATION	FREQUENCY	PERCENTAGE
SENIOR EXECUTIVE	3	0.71
PROFESSIONAL	33	11.70
JUNIOR	4	1.42
TRADER	168	59.57
CLERICAL	9	3.19
FARMER	58	20.57
OTHER	8	2.84
TOTAL	282	100.00

Source: Researcher's field survey 2012.

Table 4.26 shows the occupational breakdown of the employed mothers and it shows that out of the 282 employed mothers, 2 of them making 0.71% were senior executives, 33 of them making 11.70% were professionals, 4 of them constituting 1.42% were junior executives, 168 of them making 59.57% were traders, 9 of them constituting 3.19% were clerks, 58 of them constituting 20.57% were farmers and 8 of them constituting 2.84% belonged to other occupations.

Table 4.27: Mother's Religion

MOTHER'S RELIGION	FREQUENCY	PERCENTAGE
Christian	332	83.00
Muslim	55	13.75
Traditional	13	3.25
TOTAL	400	100.00

Source: Researcher’s field survey 2012

Table 4.27 summarizes the religious background of mothers and we can see that 332 out of the 400 mothers constituting 83.00% were Christians, 55 of them constituting 13.75% were Muslims and 13 of them constituting 3.25% were Traditional religious worshippers.

Table 4.28: Mother’s Religion and Children’s Enrolment in School.

SCHOOLING	MOTHER’S RELIGION			TOTAL
	CHRISTIAN	MUSLIM	TRADITIONAL	
YES	220	38	5	263
NO	112	17	8	137
TOTAL	332	55	13	400

Source: Researcher’s field survey 2012

Table 4.28 summarizes the relationship between mother’s religion and children’s enrolment in school and we could see that, out of the 263 children who were enrolled in school, 220 of them had Christian mothers, 38 of them had Muslim mothers and 5 of them had mothers with a traditional religions background. Also out of the 137 who were not in school, 112, of them had Christian mothers, 17 of them had Muslim mothers and 8 of them had mothers with a traditional religious background.

Table 4.2: Analysis of Regression Results

The result of the logit model specified in the previous chapter is shown in Table 4.29 below;

Table 4.29: Logit Result with Children Enrolled in School as the Dependent Variable

Variable	Coefficients	Standard Error	P-value
Child Characteristics			
Male	0.0937	0.3109	0.763
Age	-0.0185	0.6669	0.781
Number of siblings	-0.2596	0.0909	0.004
Order of birth	0.0624	0.1106	0.572
Distance	-0.0712	0.1709	0.677
Father Characteristics			
University education	7.1294	1.5399	0.000
Poly/TTC/NTC education	1.5706	0.6867	0.022
S.H.S. education	1.2061	0.5399	0.025
Basic education	1.3502	0.4348	0.002
Employed	0.6941	0.3824	0.070
Mother Characteristics			
University education	2.4511	0.8122	0.003
Poly/TTC/NTC education	2.3327	0.7809	0.003
S.H.S. education	1.6786	0.7411	0.024
Basic education	2.0863	0.7333	0.004
Employed	1.2904	0.3878	0.001
Constant	-2.3783	1.0732	0.027

Source: Researcher's field survey 2012.

Table 4.29 shows the logit or the logistic regression results of the study. In Table 4.29 we have children who were enrolled in school as the dependent variable with those who were not enrolled in school being the control group. From the table we could see that, the male variable even though had a positive coefficient of 0.0937, it was not significant at 5% significance level because its p-value of 0.763 was above 0.05 and therefore we say that with female being the control group, being a male does not have any significant impact on whether a child will be enrolled in school or not. Thus from the results, gender does not have any significant impact on enrolment in school. Therefore the H_0 hypothesis which states that gender does not influence basic school enrolment is accepted at 95% confidence level. Concerning age we can say that its negative coefficient of -0.0185 met the expected sign of the study but it was not significant at 5% significance level since its p-value of 0.781 was greater than 0.05 which implies that, based on this study, the age of the child does not determine whether the child will be enrolled in school or not and therefore the H_0 hypothesis which states that age does not influence basic school enrolment is accepted at 95% confidence level. With regards to the number of siblings, its sign of -0.2596 met the expected sign of the study and conforms to what economic theory states. Also the number of siblings was significant at 5% significance level since its p-value of 0.004 was below 0.05 and this implies that the number of siblings had a negative significant impact on basic school enrolment. Therefore the higher the number of siblings of a particular child, the lower the probability that the child will go to school and the lower the number of siblings of a particular person the greater the possibility that, the child will be enrolled in school. This means that, the H_0 hypothesis which states that, number of siblings does not influence basic school enrolment is rejected at 95% confidence level and the H_1 hypothesis which states that number of siblings influence basic school enrolment is accepted at 95% confidence level. This finding is in line with the results of a study by Yaslu (2009) which found that the

number of children in a household has an inverse relationship with children's education opportunities. Also the order of birth was not significant at 5% significance level since its p-value of 0.572 exceeded 0.05 and therefore the H_0 hypothesis which states that, order of birth does not influence basic school enrolment is accepted at 95% confidence level. This implies that, the order of birth does not influence the probability that a child will be enrolled in school or not. Concerning distance, even though its negative coefficient of -0.0712 met the expected sign of the study, it was not significant at 5% significance level since its p-value of 0.677 was greater than 0.05. This means, distance according to this study does not have any significant impact on basic school enrolment even though its sign is in conformity with what economic theory states. Thus the H_0 hypothesis which states that distance does not influence basic school enrolment is accepted at 95% confidence level. These results can be attributed to the fact that, the study area is relatively developed with a lot of schools and with relatively good roads.

Dealing with father's educational level, the logistic regression results show that fathers with university education, polytechnic, training college, nurses training college, senior high and basic level education met the expected sign of the study because they were all positive. Also fathers educational variables (university education, polytechnic, training college, nurses training college, senior high and basic level education) with uneducated fathers being the control group were all significant at 5% significance level since all their p-values, were below 0.05. Thus with fathers with university education, polytechnic, training college, nurses training college, senior high and basic level education having a positive significant impact on basic school enrolment, it means that the H_0 hypothesis which states that, fathers education does not influence basic school enrolment is rejected at 95% confidence level. This means that if a father has at least basic level of education, the probability that his child would be enrolled in school is very high as compared to an uneducated father (the control

group). This therefore means father's education plays a key role when it comes to basic school enrolment.

Employed fathers with unemployed fathers being the control group in the logistic regression above has a positive sign which met the expectation of the study and therefore its sign conforms with what economic theory postulates. Even though the employed fathers met the expected sign, it was not significant at 5% significance level because its p-value of 0.070 was greater than 0.05. This implies that if a father is working, it does not have any impact on the enrolment of his child in school as compared to father's who are not working (control group). Therefore the H_0 hypothesis that states that father's employment does not influence basic school enrolment is accepted at 95% confidence level. These results can be attributed to the fact that a father can be working but would not be responsible and this has been happening in our societies living the burden of the child on the mother and other relations even if both parents are still married.

Dealing with mother's educational level, the logistic regression result show that, mothers with university education, polytechnic, training college, and nurses training college, senior high and basic level education met the expected sign of the study because they were all positive. Also mothers educational variables (university education, polytechnic, training college, nurses training college, senior high and basic level education) with uneducated mothers being the control group were all significant at 5% significance level since all their p-values, were below 0.05. Thus with mothers with university education, polytechnic, training college, nurses training college, senior high and basic level education having a positive significant impact on basic school enrolment, it means the H_0 hypothesis which states that, mothers education does not influence basic school enrolment is rejected at 95% confidence level. This means that if a mother has at least basic level of education, the

probability that her child would be enrolled in school is very high as compared to an uneducated mother (the control group). This therefore means mother's education plays a key role when it comes to basic school enrolment. This result is in line with a study by Ranjan Ray (2000) in Peru and Pakistan which found that mother's education can positively influence the schooling of their children.

The positive significant impact of the education of both parents on the schooling of their children is also in conformity to a study by Behrman and Wolfe (1987) in Nicaragua, King and Bellew (1988) in Peru and Behrama and Sussungkarn (1987) in Thailand which found that the effects of the mother's and father's schooling on children's schooling achievements do not significantly differ from each other but they all have positive significant impact.

Finally dealing with the employed mothers with the unemployed mothers being the control group it had a positive sign (1.2904) which met the expectation of the study. Also employed mother's as a variable had a significant impact on basic school enrolment of their children since its p-value of 0.001 was below 0.05. The positive significant impact of the employed mother's implies that, if a mother is employed, the probability that she would send her child to school is very high as compared to a mother who is unemployed (control). This implies that the H_0 hypothesis which states that mother's employment does not influence basic school enrolment of their children is rejected at 95% confidence level. Finally the overall regression has a p-value 0.0000 which means that all the variables jointly have an impact on basic school enrolment

CHAPTER FIVE

SUMMARY OF MAJOR FINDINGS AND POLICY RECOMMENDATION

5.0 Introduction

This study was carried out basically to investigate the determinants of basic school enrolment in Ghana focusing on some selected municipality and district in Ashanti region. Chapter five will therefore deal with a review of the major findings of this study as well as churning out policy recommendations and conclusions from the entire study.

5.1 Summary of major findings

The study revealed that, out of the 400 randomly sampled children, 210 of them constituting 52.50% were males whilst 190 of them constituting 47.50% were females and their ages ranged from 6years-16years. Also out of the 400 sampled children, 263 of them constituting 65.75% were enrolled in school whilst 137 of them constituting 34.25% were not in school and this calls for serious attention because the laws of Ghana as well as the Millennium Development Goal 2 are all pushing for universal coverage in terms of basic education. Also it was found that, out of the 263 children who were in school, 144 were males whilst 119 were females and out of the 137 respondents who were not enrolled in school, 66 of them were males whilst 71 of them were females. From this we can see that out of the sampled respondents the males in school were more than the females.

The study further revealed that, the order of birth of the 400 sampled children ranged from the first born to the ninth born and none of them was an eight born and the number of siblings from 1 to 9 siblings and none of them had 13 siblings. Concerning whether gender influences basic school enrolment, the study revealed that, with female being the control group, being a male does not have any significant impact on whether a child will be enrolled

in school or not. Thus from the results, gender does not have any significant impact on enrolment in basic school. Also even though age met the expected sign of negative, it was found to be not significant and therefore the age of the child does not determine whether the child will be enrolled in school or not. In addition the study revealed that, based on the 400 sampled children in the study area, the order of birth does not influence the probability that a child will be enrolled in school or not.

Also the number of siblings was found to have a negative coefficient and also significant at 5% significance level and this implies that, the number of siblings had a negative significant impact on basic school enrolment. This therefore means, the higher the number of siblings of a particular child, the lower the probability that the child will go to school and the lower the number of siblings of a particular person the greater the possibility that, the child will be enrolled in school. Concerning the distance from home to the nearest possible school, the study revealed that, distance does not have any significant impact on basic school enrolment even though its negative sign is in conformity with what economic theory states. This results can be attributed to the fact that, the study areas especially Kumasi is relatively developed with a lot of schools and with relatively good roads. With regard to fathers level of education, the study found that fathers with university education, polytechnic, training college, nurses training college, senior high and basic level education have a positive significant impact on basic school enrolment as compared to uneducated fathers (control group). This means that if a father has at least basic level of education, the probability that his child would be enrolled in school is very high as compared to an uneducated father (the control group). This therefore means father's education plays a key role when it comes to basic school enrolment.

Also concerning father's employment status, the study revealed that, even though the employed fathers met the expected sign, it was not significant at 5% significance level. This implies that if a father is working, it does not have any impact on the enrolment of his child in school as compared to fathers who are not working (control group). This result can be attributed to the fact that a father can be working but would not be responsible and this has been happening in our societies leaving the burden of the child to the mother and other relations even if both parents are still married. With regards to mother's level of education, the study found that mothers with university education, polytechnic, training college, nurses training college, Senior high and basic level education had a positive significant impact on basic school enrolment as compared to uneducated mothers (control group). This means that if a mother has at least a basic level of education, the probability that her child would be enrolled in school is very high as compared to an uneducated mother (the control group). This therefore means mother's education plays a key role when it comes to basic school enrolment of their children.

Finally concerning mother's employment status, the study revealed a positive significant impact of the employed mothers on school enrolment of their children as compared to the unemployed mothers (control group), this implies that, if a mother is employed, the probability that she would send her child to school is very high as compared to a mother who is unemployed (control).

5.2 Conclusion

From the revelation above, it can be concluded that based on the randomly sampled 400 children, a person's age, order of birth and the distance from home to the nearest school are not that important when it comes to basic school enrolment.

Also it can be concluded that, the higher the number of siblings of a child the lower the probability that, the child will go to school and this can be attributed to the fact that, if the family size is too big then huge sums of money would be needed to cater for all the members of the family and therefore if these huge sums of money is not available then it will affect certain key needs such as children's education. The study can further conclude that, the educational level of both parents are very key when it comes to the enrolment of their children in school and therefore if parents are educated, the possibility that they would send their children to school is very high.

Finally the study can conclude that if a mother is working, the probability that she would send her child to school is higher than that of a working father. This means when it comes to basic school enrolment of children, mother's employment is more important than father's employment.

5.3 Policy Recommendation

Based on the above findings, the study would prefer the following recommendations as follows:

1. Given the fact that uneducated parents are highly unlikely to send their children to school, this study would want to recommend that, major campaigns and education

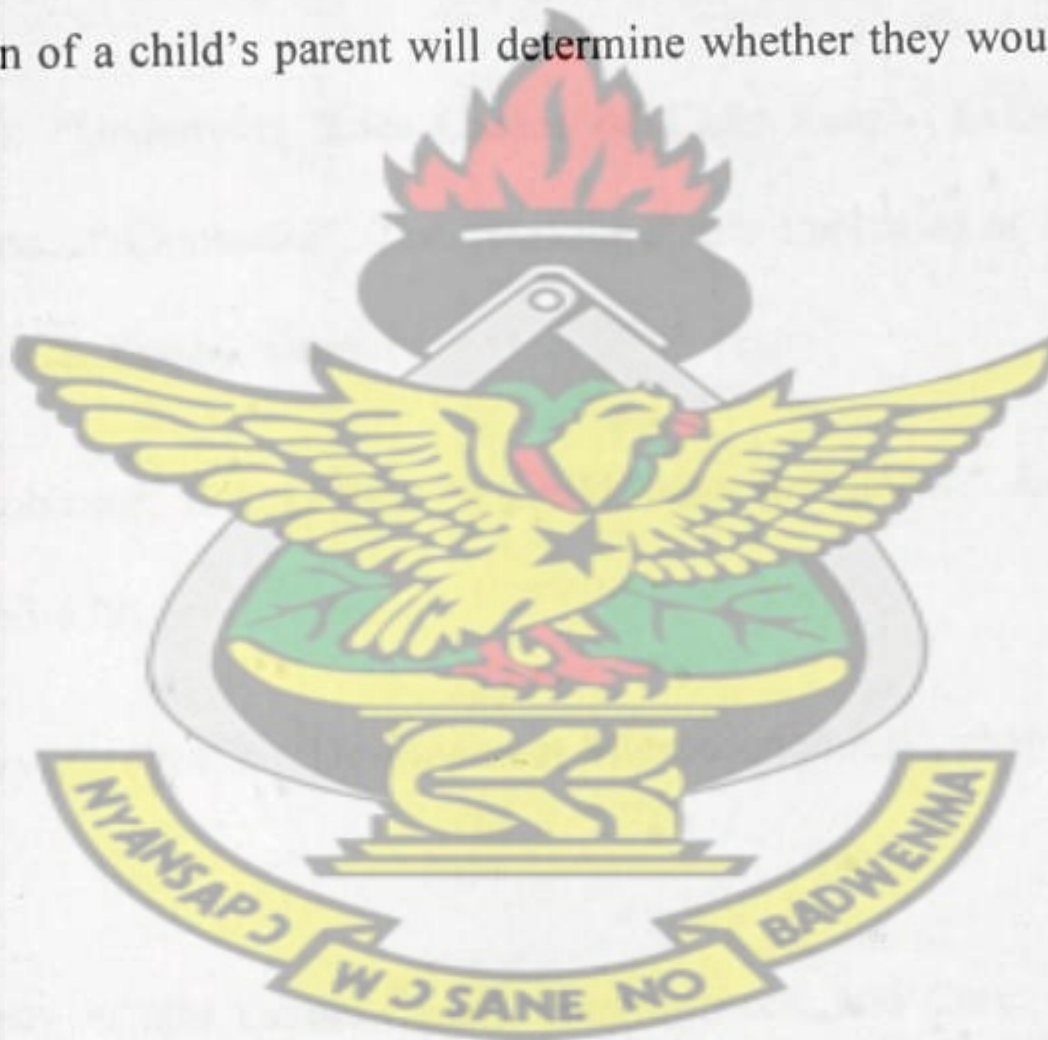
must be embarked upon by stake holders in education and the Government on how education is important in order to encourage uneducated parents to send their children to school.

2. Based on the fact that a large number of siblings of a child highly decreases the probability that the child would go to school, there is the need for numerous campaigns to be organized in the media, churches, mosques and any other social gathering on the need for couples to limit the number of children they will give birth to by adopting measures such as family planning. This when achieved, would help families to use their limited resources to cater for the educational needs of the few children they have given birth to rather than have a lot of children and not be able to cater for their educational needs.
3. The study also would want to recommend that, basic education should be made entirely free for children with poor parents since mother's employment was found to be important and the concepts of school feeding, capitation, free uniforms, etc be deepened to cover all deprived areas. Thus employed mothers will work and get income in order to send their children to school whilst the unemployed mothers who are poor cannot.
4. Finally, the study would want to recommend that measures should be put in place to punish fathers who work and have the means but deliberately or ignorantly refuse to send their children to school for reason's best known to them.

5.4 Recommendation for future study.

This study was challenged in terms of the small sample size used since the logit model adopted is very useful for large samples and this could affect the efficiency and unbiasedness of the results, such that, variables that were expected to be significant were not included.

Also the study is challenged in terms of the non inclusion of factors such as the culture, income and religion of the respondents to find out their impact on basic school enrolment. Thus if these factors were included we would have been able to find out whether the income, culture or the religion of a child's parent will determine whether they would be enrolled in school or not.



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APPENDIX 1: QUESTIONNAIRE

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

DEPARTMENT OF ECONOMICS

This questionnaire is to enable me collect necessary information to complete my M.A. thesis on the topic:

DETERMINANTS OF BASIC SCHOOL ENROLLMENTS IN GHANA: CASE STUDY OF THE KUMASI METROPOLIS AND THE ATWIMA MPONUA DISTRICT

All information provided in this study will be treated as confidential and your anonymity is assured.

A. PUPIL

1. Gender: [] boy [] girl

2. Do you attend school [] yes

[] no

3. Which type of school do you attend? [] public school [] private school

4. Age []

5. What do you want to do in future [] sing [] athletics or play football []

pursue

University/ TTC/NTC/ poly [] others

Specify.....

6. How many siblings do you have []

7. Whom do you live with most of the time? [] father and mother [] father only []

Mother only [] other relations

8. What is your order of birth []

9. How far is the nearest school from your house [] less than 1km [] 1-2km [] 2-

3km [] 3-5km [] 5 or more km

B. FATHER

10. What was the last school completed by your father? [] university []

poly/ NTC/TTC/ A- level []SSSC/ O – level/DBS [] JSS/Middle school []

[] others

Specify.....

11. Presently you father is; ☐ working ☐ not working ☐ retired ☐ other,

Specify.....

12. Occupation: ☐ senior executive ☐ professional ☐ junior executive ☐ trader ☐ clerical worker ☐ technical worker ☐ farmer ☐ others

(specify).....

13. For how long have your father been working? ☐ less than 5 years ☐ 5-10 years ☐ 11 years and above

14. In which sector does your father work? ☐ public ☐ private

15. Religion: ☐ Christian ☐ Muslim ☐ Traditional ☐ other, specify.....

C. MOTHER

16. What was the last school completed by your mother? ☐ university ☐ poly/NTC/TTC/ A-level ☐ SSSC/ O – level/DB ☐ JSS/Middle school ☐ others

(specify).....

.....

17. Presently your mother is; ☐ working ☐ not working ☐ retired ☐

others,

specify.....

18. Occupation: ☐ senior executive ☐ professional ☐ junior executive ☐

☐ trader ☐ clerical worker ☐ technical worker ☐ farmer ☐

others

(specify)

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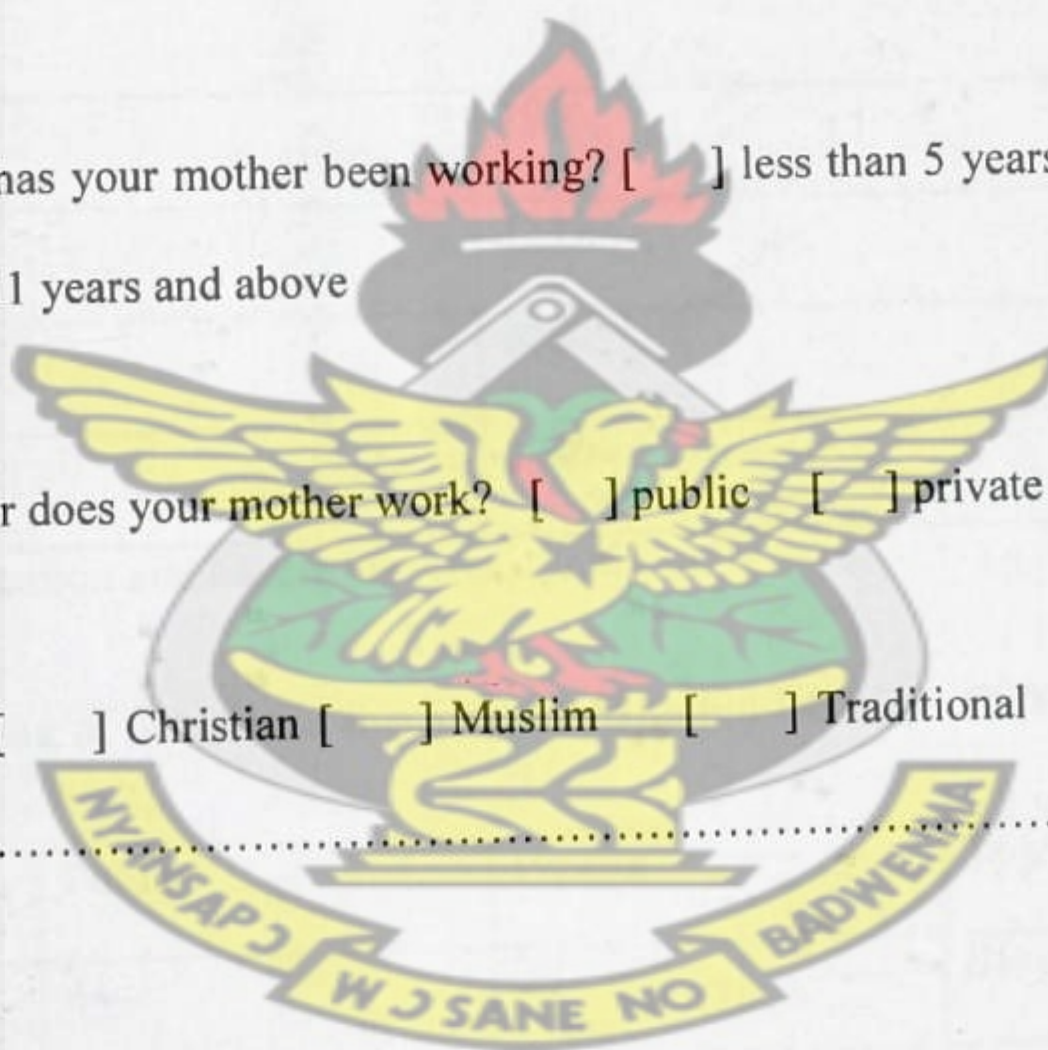
19. For how long has your mother been working? ☐ less than 5 years ☐ 5-10

years ☐ 11 years and above

20. In which sector does your mother work? ☐ public ☐ private

21. Religion: ☐ Christian ☐ Muslim ☐ Traditional ☐ other,

specify.....



APPENDIX 2: Tables and Regression analysis

Table 3.0: Population Distribution of the Atwima Mponua District

GENDER	NUMBER	PERCENTAGE
MALES	55,719	51.48
FEMALES	52,516	48.52
TOTAL	108,235	100

Source: National Population Census, 2000.

Table 3.1: Economic Activities in the Atwima Mponua District

Agriculture	79%
Commerce/Services	15%
Industry	6%
Total	100%

Source: (Marks Publication and Media Services, 2006).

Table 3.2: Distribution of Schools in the Atwima Mponua District – 2004/2005

Level	Public	Private	Total
Pre-School	41	20	61
Primary	95	12	107
J.H.S	47	2	49
S.H.S.	2	0	2
Voc/Technical	0	1	1
Total	185	35	220

Source: Marks Publication and Media Services, 2006).

Table 3.3: Facilities in Schools – Atwima Mponua District

LEVEL	URINAL			TOILET
	Boys	Girls	Staff	For all categories of people
Pre-School	26	29	8	19
Primary	51	56	11	30
J.H.S.	32	29	11	11
Total	109	114	60	60

Source: Marks Publication and Meads Services, 2006.

Table 3.4: Primary School Enrolment in the Atwima Mponua District for 2004/2005

Academic year.

GENDER	NUMBER	PERCENTAGE
Boys	9369	53.78
Girls	8051	46.22
Total	17,420	100

Source: Marks Publication and meads Services, 2006

Table 3.5: Transition to JHS in the Atwima Mponua District in the 2004/2005

Academic Year.

GENDER	NUMBER	PERCENTAGE
Boys	1092	56.1
Girls	853	43.9

Total	1945	100
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Source: marks Publication and Meads Services, 2006.

Table 3.6: Repeaters in the Atwima Mponua District in the 2004/2005 Academic Year

GENDER	PRIMARY	J.H.S.	TOTAL
Boys	624	50	674
Girls	512	31	543
Total	1136	81	1217

Source: Marks Publication and Meads Services, 2006

Table 3.7: School Drop-Outs in the Atwima Mponua District – 2004/2005.

GENDER	PRE-SCHOOL		PRIMARY	
	NO	%	NO	%
Boys	26	46.1	203	52.5
Girls	28	51.9	184	47.5
Total	54	100	387	100

Source: Marks Publication and Meads Services, 2006.

Table 3.8: The Distribution of Pre-Schools in the Kumasi Metropolis.

Level	Public	Private	Total
Pre-	148	459	607

School(2003/2004)			
Pre-School (2006)	155	478	633

Source: Marks Publication and Media Services (2006).

Table 3.9: Pre-School enrolment in the Kumasi Metropolis

Pre-School Enrolment	Pre-School Population	Actual number enrolled in pre-school	Percentage in Pre-School.
(2003/2004)	129,770	36,971	28.5%
(2005/2006)	144,978	58,530	40.4%

Source: Marks Publication and Media Services (2006).

Table 3.10: The Pre-Schools Enrolment among the Private and the Public Schools in the Kumasi Metropolis.

Level	Public	Private	Total
Pre-School(2003/2004)	10032	26939	36971
Pre-School (2006)	17209	41321	58530

Source: Marks Publication and Media Services (2006).

Table 3.11: Primary School Enrolment in the Kumasi Metropolis

Pre-School	Pre-School	Actual number enrolled in pre-school	Percentage in Pre-School.
(2003/2004)	410,939	227179	55.3%

Source: Marks Publication and Media Services (2006)

Table 3.12: Distribution of Trained Teachers in the Kumasi Metropolis

Trained Teachers	Public	Private	Total
Trained Teachers (2003/2004)	313	152	465
Trained Teachers (2005/2006)	400	162	562

Source: Marks Publication and Media Services (2006).

Table 3.13: Distribution of Untrained Teachers in the Kumasi Metropolis

Trained Teachers	Public	Private	Total
Trained Teachers (2003/2004)	828d	13	841
Trained Teachers 92005/2006)	1,121	15	1136

Source: Marks Publication and Media Services (2006).

doyouschoo	Gender		
1	male	female	Total
yes	144	119	263
no	66	71	137
Total	210	190	400

. tabulate Gender typeofschool

	typeofschool		Total
Gender	public sc	private s	
male	75	69	144
female	78	41	119
Total	153	110	263

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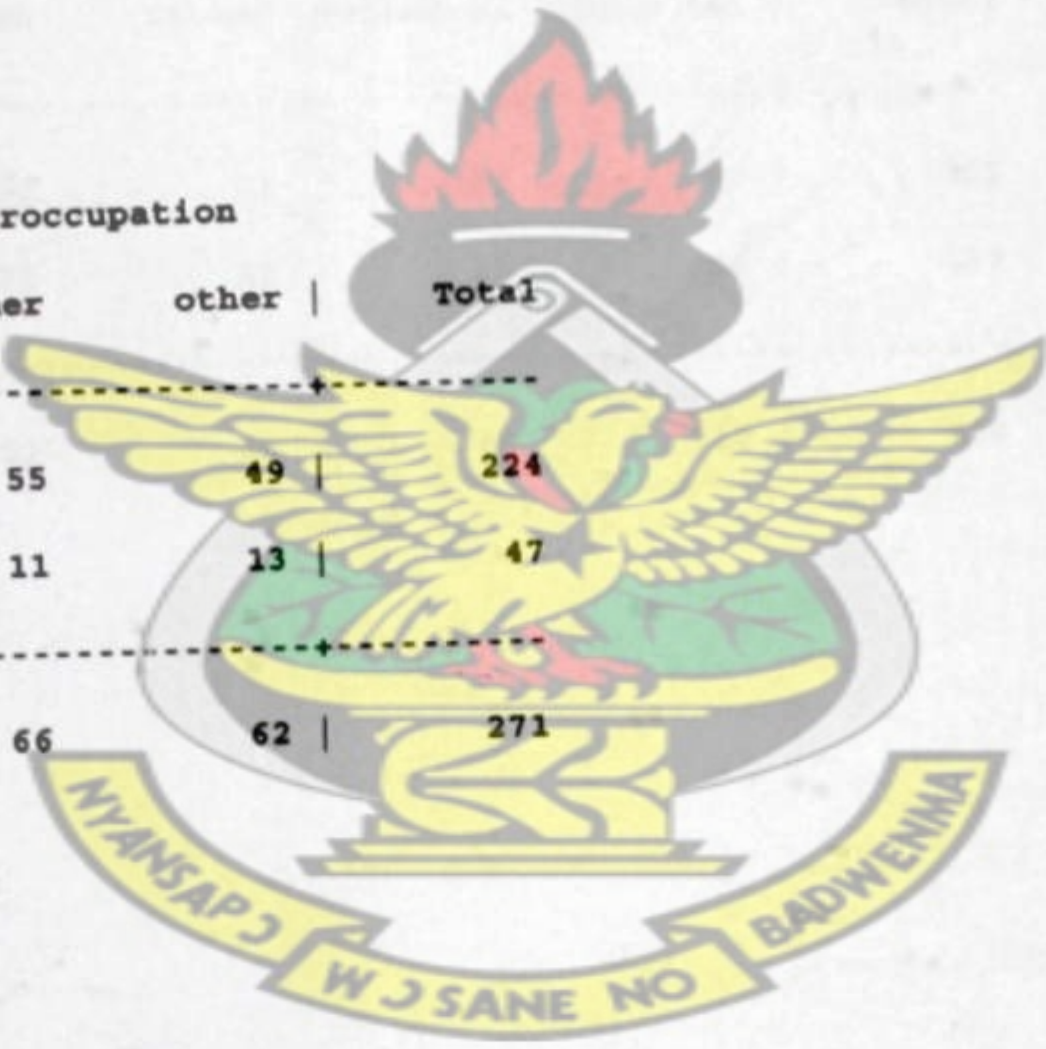
doyouschoo	fatherwor		
1	working	not worki	Total
yes	224	39	263
no	47	90	137
Total	271	129	400

. tabulate doyouchool fatheroccupation

doyouschoo		fatheroccupation					
1		senior ex profesio	junior	trader	clerical	technical	
Total							
-----+-----							
	yes	4	56	8	31	1	20
224							
	no	0	8	2	8	2	3
47							
-----+-----							
	Total	4	64	10	39	3	23
271							

KNUST

doyouschoo		fatheroccupation		
1		farmer	other	Total
-----+-----				
	yes	55	49	224
	no	11	13	47
-----+-----				
	Total	66	62	271

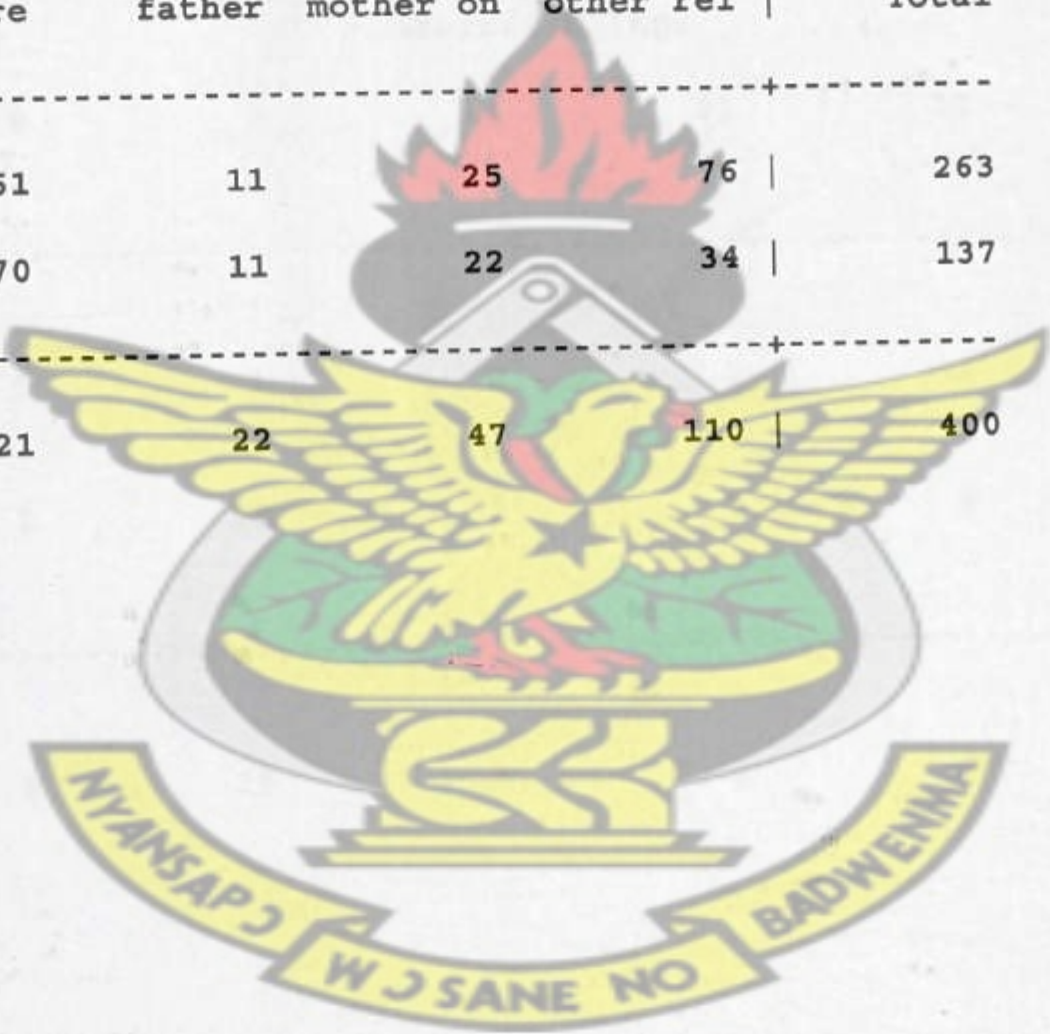


tabulate doyouchool fatheredu

doyouschoo	fatheredu					
1	universit	poly or N	SSS	BASIC	UEDUCATED	Total
yes	73	27	48	93	22	263
no	1	7	12	37	80	137
Total	74	34	60	130	102	400

. tabulate doyouchool livewith

doyouschoo	livewith				
1	both pare	father	mother on	other rel	Total
yes	151	11	25	76	263
no	70	11	22	34	137
Total	221	22	47	110	400

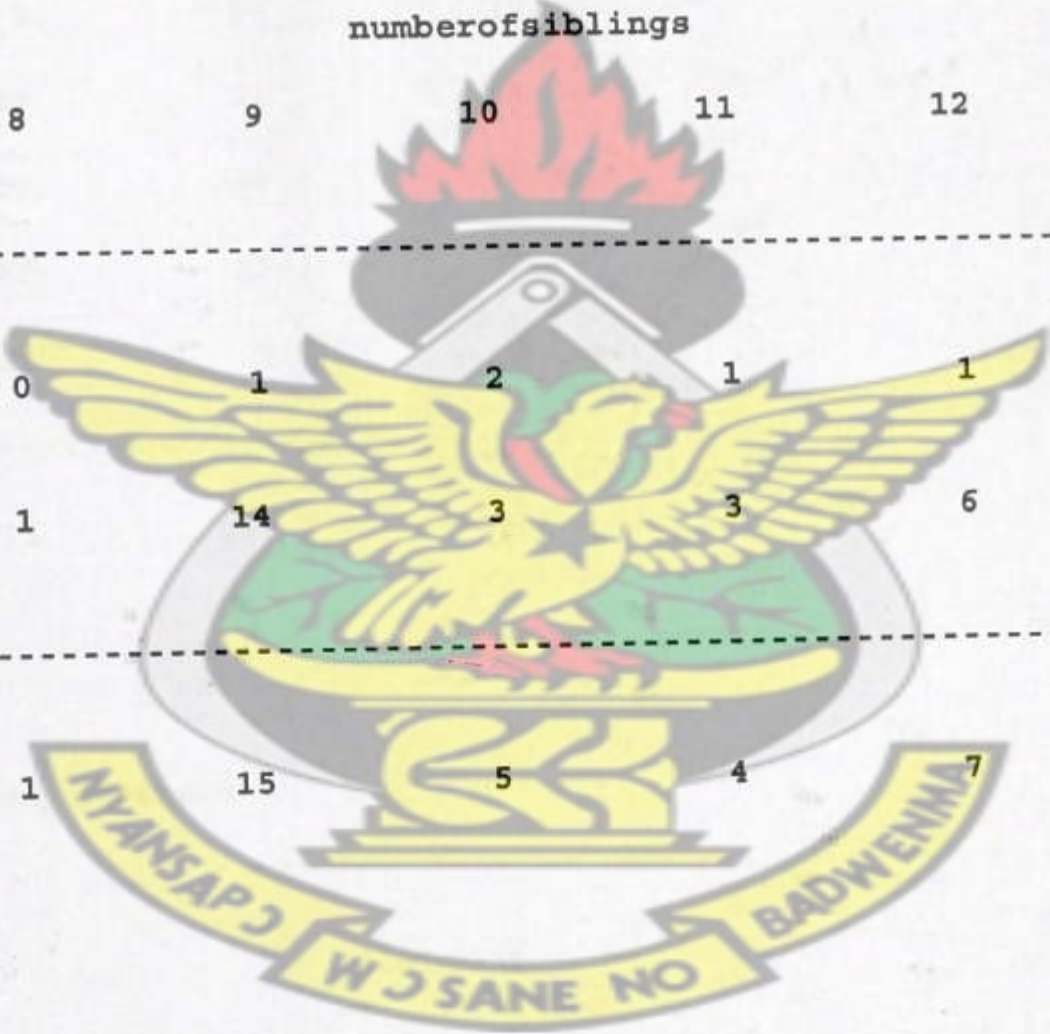


. tabulate doyouchool numberofsiblings

doyouschoo	numberofsiblings					
1	1	2	3	4	5	7
Total						
-----+-----						
yes	14	17	93	64	67	0
263						
no	4	7	24	19	44	6
137						
-----+-----						
Total	18	24	117	83	111	6
400						

KNUST

doyouschoo	numberofsiblings					
1	8	9	10	11	12	14
Total						
-----+-----						
yes	0	1	2	1	1	0
263						
no	1	14	3	3	6	2
137						
-----+-----						
Total	1	15	5	4	7	2
400						



doyouschool	numberofsiblings					Total
1	15	16	17	18	19	

yes	0	1	1	0	1	263
no	1	0	1	1	1	137
Total	1	1	2	1	2	400

. tabulate ambition fatherwor

	fatherwor		
ambition	working	not worki	Total
sing	5	20	25
athletics	36	28	64
university	208	67	275
TTC or NTC	21	11	32
other	1	3	4
Total	271	129	400

. tabulate doyouchool distance

doyouschoo	distance					Total
1	1	2	3	4	5	
yes	141	83	18	19	2	263
no	77	40	13	5	2	137
Total	218	123	31	24	4	400

. tabulate doyouchool faterreligion

doyouschoo	faterreligion				
1	Christian	Muslims	Traditina	other	Total
yes	194	35	33	1	263
no	91	22	23	1	137
Total	285	57	56	2	400

. tabulate typeofschool fatheredu

typeofschool	universit	poly or N	SSS	BASIC	UEDUCATED	Total
public school	36	8	24	68	17	153
private school	37	19	24	25	5	110
Total	73	27	48	93	22	263

. tabulate doyouchool fatheredu

doyouschoo		fatheredu				
1	universit	poly or N	SSS	BASIC	UEDUCATED	Total
yes	73	27	48	93	22	263
no	1	7	12	37	80	137
Total	74	34	60	130	102	400

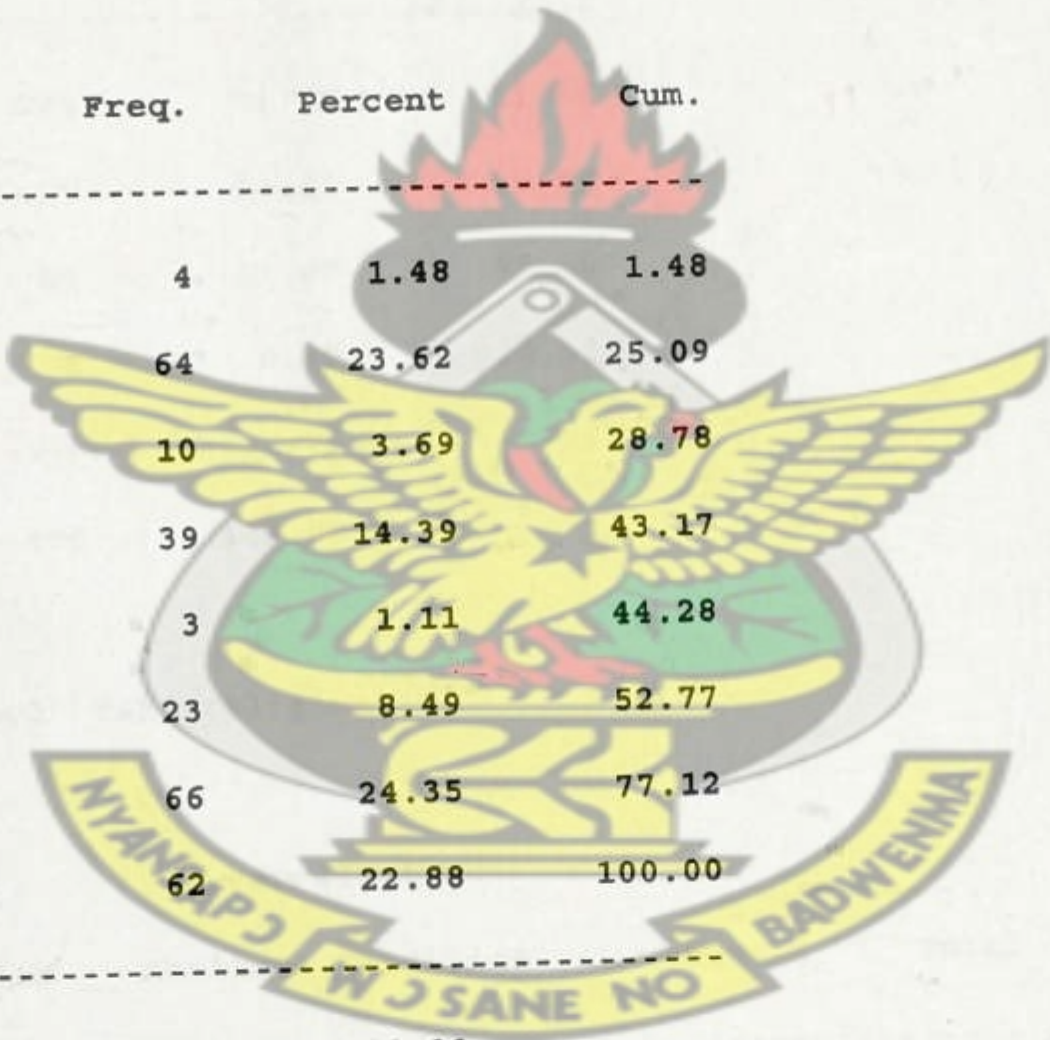
. tabulate doyouchool fatherwor

doyouschoo	fatherwor		
1	working	not worki	Total
yes	224	39	263
no	47	90	137
Total	271	129	400

KNUST

. tabulate fatheroccupation

fatheroccupation	Freq.	Percent	Cum.
senior executive	4	1.48	1.48
profesiionall	64	23.62	25.09
junior	10	3.69	28.78
trader	39	14.39	43.17
clerical	3	1.11	44.28
technical	23	8.49	52.77
farmer	66	24.35	77.12
other	62	22.88	100.00
Total	271	100.00	



. tabulate fathersector

fathersecto			
r	Freq.	Percent	Cum.
-----+			
public	96	35.42	35.42
private	175	64.58	100.00
-----+			
Total	271	100.00	

. tabulate faterreligion

faterreligi			
on	Freq.	Percent	Cum.
-----+			
Christians	285	71.25	71.25
Muslims	57	14.25	85.50
Traditinal	56	14.00	99.50
other	2	0.50	100.00
-----+			
Total	400	100.00	

. tabulate doyouschool faterreligion

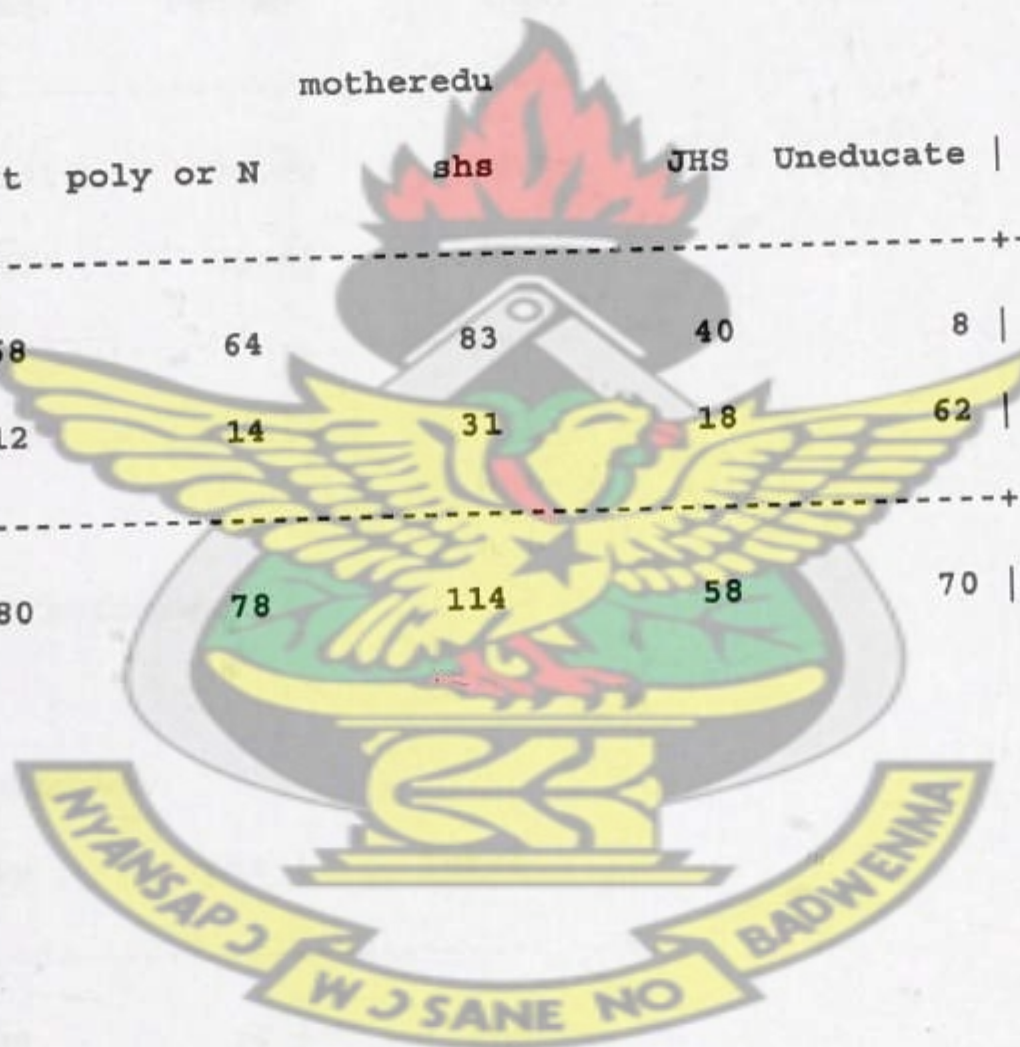
doyouschoo					
1	Christian	Muslims	Traditina	other	Total
-----+					
yes	194	35	33	1	263
no	91	22	23	1	137
-----+					
Total	285	57	56	2	400

. tabulate motheredu

motheredu	Freq.	Percent	Cum.
university	80	20.00	20.00
poly or NTC or TTC	78	19.50	39.50
shs	114	28.50	68.00
JHS	58	14.50	82.50
Uneducated	70	17.50	100.00
Total	400	100.00	

tabulate doyou school motheredu

doyouschoo	motheredu					Total
1	universit	poly or N	shs	JHS	Uneducate	
yes	68	64	83	40	8	263
no	12	14	31	18	62	137
Total	80	78	114	58	70	400



. tabulate motheredu

motheredu	Freq.	Percent	Cum.
university	80	20.00	20.00
poly or NTC or TTC	78	19.50	39.50
shs	114	28.50	68.00
JHS	58	14.50	82.50
Uneducated	70	17.50	100.00
Total	400	100.00	

. tabulate motherwor

motherwor	Freq.	Percent	Cum.
working	282	70.50	70.50
not	118	29.50	100.00
Total	400	100.00	

. tabulate doyouschool motherwor

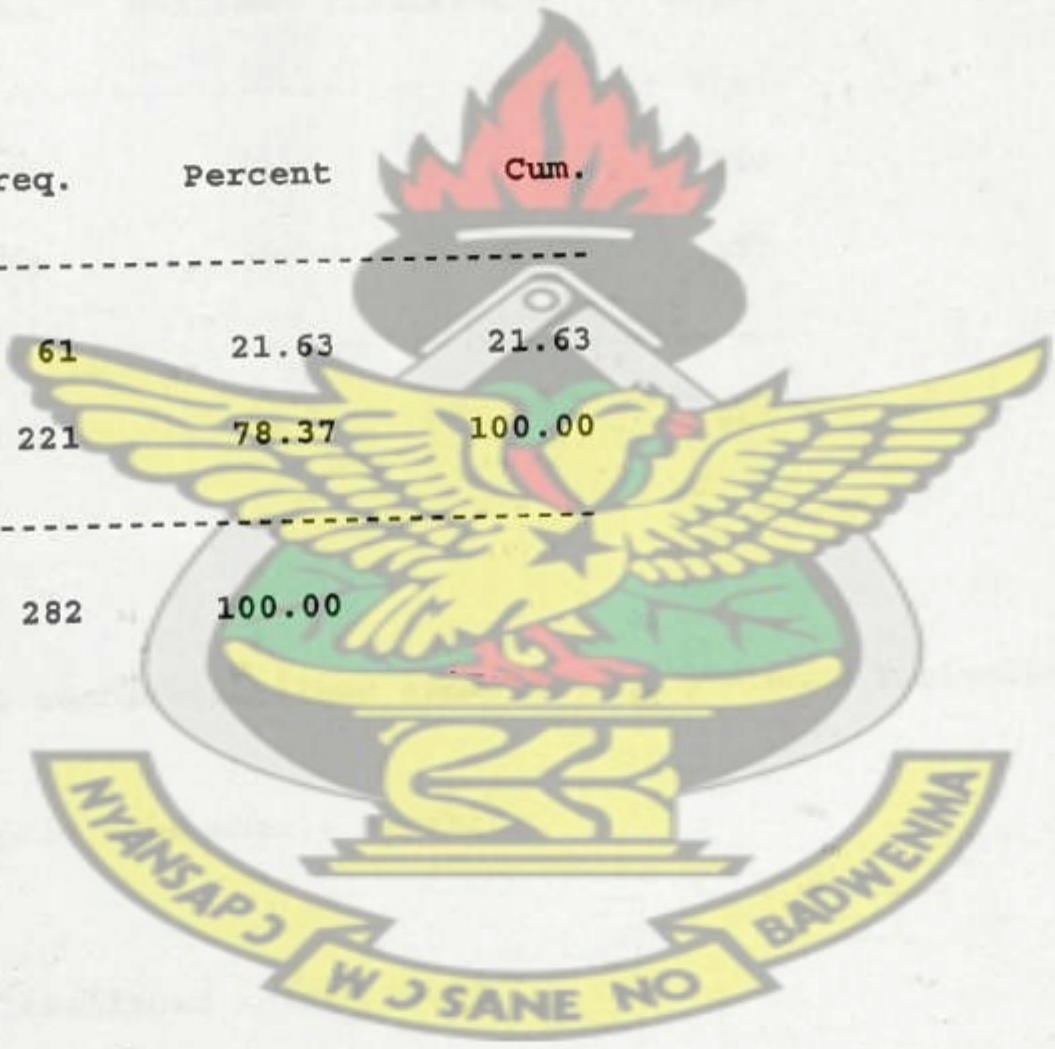
doyouschoo	motherwor		
1	working	not	Total
yes	227	36	263
no	55	82	137
Total	282	118	400

. tabulate motheroccupation

motheroccupa tion	Freq.	Percent	Cum.
senexeco	2	0.71	0.71
professional	33	11.70	12.41
junior execo	4	1.42	13.83
trder	168	59.57	73.40
cllerk	9	3.19	76.60
famaer	58	20.57	97.16
others	8	2.84	100.00
Total	282	100.00	

tabulate mothersec

mothersec	Freq.	Percent	Cum.
pub	61	21.63	21.63
priv	221	78.37	100.00
Total	282	100.00	



tabulate motherreligion

motherrelig			
ion	Freq.	Percent	Cum.
-----+-----			
Christians	332	83.00	83.00
Muslimm	55	13.75	96.75
Traditinal	13	3.25	100.00
-----+-----			
Total	400	100.00	

. tabulate doyouschool motherreligion

doyouschoo	motherreligion			
1	Christian	Muslimm	Traditina	Total
-----+-----				
yes	220	38	5	263
no	112	17	8	137
-----+-----				
Total	332	55	13	400

. logit yes male age numberofsiblings orderofbirth distance funiversity fpoly fsss
fbasic fwork

> ing muniversity mpoly mshs mbasic mworking

Iteration 0: log likelihood = -257.07192

Iteration 1: log likelihood = -149.21491

Iteration 2: log likelihood = -139.9284

Iteration 3: log likelihood = -138.60305

Iteration 4: log likelihood = -138.56517

Iteration 5: log likelihood = -138.56505

Iteration 6: log likelihood = -138.56505

Logistic regression

Number of obs = 400

LR chi2(15) = 237.01

Prob > chi2 = 0.0000

Log likelihood = -138.56505

Pseudo R2 = 0.4610

yes	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
male	.0937488	.3109085	0.30	0.763	-.5156206	.7031182
age	-.0185203	.0666924	-0.28	0.781	-.1492349	.1121944
numberofsi~s	-.25956	.0908727	-2.86	0.004	-.4376672	-.0814529
orderofbirth	.0624316	.1105877	0.56	0.572	-.1543164	.2791795
distance	-.0711892	.1709342	-0.42	0.677	-.406214	.2638356
funiversity	7.129392	1.53997	4.63	0.000	4.111107	10.14768
fpoly	1.570601	.6867356	2.29	0.022	.2246239	2.916578
fsss	1.206058	.5398604	2.23	0.025	.1479511	2.264165
fbasic	1.350162	.43476	3.11	0.002	.4980485	2.202276
fworking	.6940901	.382417	1.82	0.070	-.0554333	1.443614
muniversity	2.451102	.8121685	3.02	0.003	.8592813	4.042923
mpoly	2.332654	.7808702	2.99	0.003	.8021765	3.863131
mshs	1.678577	.7411276	2.26	0.024	.2259931	3.13116
mbasic	2.086298	.7333356	2.84	0.004	.6489865	3.523609
mworking	1.290426	.3878372	3.33	0.001	.5302793	2.050573
_cons	-2.378313	1.07319	-2.22	0.027	-4.481728	-.2748985