

UNIVERSITY FOR DEVELOPMENT STUDIES

THE IMPACT OF HEAD PORTERAGE ON THE EDUCATION OF BASIC SCHOOL GIRLS IN THE TAMALE METROPOLIS OF THE NORTHERN REGION OF GHANA

UNIVERSITY FOR DEVELOPMENT STUDIES



NAZIFAH ISSAH

2018

**THE IMPACT OF HEAD PORTERAGE ON THE EDUCATION OF BASIC
SCHOOL GIRLS IN THE TAMALE METROPOLIS OF THE NORTHERN
REGION OF GHANA**

NAZIFAH ISSAH

UDS/MDE/0014/14

**THESIS SUBMITTED TO THE DEPARTMENT OF DEVELOPMENT
EDUCATION, FACULTY OF EDUCATION, UNIVERSITY FOR
DEVELOPMENT STUDIES IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE AWARD OF MASTER OF PHILOSOPHY IN
DEVELOPMENT EDUCATION STUDIES**

FEBRUARY 2018



DECLARATION

STUDENT

I hereby declare that this thesis is the result of my own original work and any information incorporated here is duly acknowledged by way of reference. No part of it has been presented for another degree in the University or elsewhere.

Name: Nazifah Issah ID No.: UDS/MDE/0014/14

Candidate's Signature..... Date.....

SUPERVISOR

I hereby declare that the preparation and presentation of this thesis was supervised by me in accordance with the guidelines on supervision of thesis laid down by the University for Development Studies. I hereby approve the submission of this thesis for the award of Master of Philosophy in Development Education Studies.

Name: DR. SULEMANA ADAMS ACHANZO

Supervisor's Signature..... Date.....



ABSTRACT

Child Head Portage (“Kayaye”) is a growing concern to stakeholders in education and this has necessitated the need to study its impact on girls’ education in the Tamale Metropolis. The study was guided by four objectives namely; to identify the kind of girl child engaged in head portage, to find out the reasons or causes of girl child head in portage, to explore the effects of head portage on the education of girl child porters and to determine ways by which girl child portage could be addressed in the study area. The study employed both quantitative and qualitative research strategies or approaches where questionnaires were administered to 120 head porters of basic school-going age and interviews with key stakeholders in the study area. The study found that the majority of girls engaged in head portage were between 11-14 years. Most of them came from the Northern and the Upper East Regions. The study also revealed that household sizes, occupations of parents and conditions of public basic schools significantly influenced girls engagement in head portage. The study further found that the head porters were punctual and regular in school and the phenomenon had insignificant impact on school attendance but academic performances of the girls involved. The study found that job creation and good parenting could be effective in addressing the phenomenon in the Tamale Metropolis. Government of Ghana needs to address the challenges of the fCUBE programme in the Tamale Metropolis to ease the financial burden of parents. Increase in job opportunities in the Metropolis would improve the financial conditions of parents, thereby reducing the reliance on girl child to supplement family income.



DEDICATION

To my children, Kasi, Wunnam, Saha and Dawuni



ACKNOWLEDGEMENT

I am profoundly grateful to Dr Sulemana Adams Achanso, my supervisor, whose unyielding desire for excellence and invaluable commentary are the outcome of the work. I must add, however that all errors and inaccuracies that might be found in the work are entirely mine. The work would not have been successful without the cooperation of several organisations in the Tamale Metropolitan area that provided me with a wealth of information. I am accordingly grateful to School for Life, Regional Advisory Information and Network System (RAINS), Northern Sector Action on Awareness Creation (NORSAAC), the Department of Social Welfare, Community Development and the Tamale Metropolitan directorate of the Ghana Education Service. I also owe thanks to the many kayayes operating in the Tamale metropolitan area who despite the drudgery of the trade they ply accepted to be interviewed and offered honest answers to me during the data collection stages of this work.

I also appreciate the support of Ms Fareedat Mohammed and her colleagues at University for the Development Studies who worked as field volunteers and administered the questionnaire during the data collection stages of this work. Finally, I will express my gratitude to my family for their patience and understanding all throughout my study at the University for Development Studies. I am particularly thankful to Mr Abdul-Baki Abdulai, my husband who has patiently read the proof of this work and made important corrections and suggestions.



Table of Contents	Page
DECLARATION.....	i
ABSTRACT.....	ii
DEDICATION	iii
ACKNOWLEDGEMENT.....	iv
TABLE OF CONTENTS.....	v
CHAPTER ONE.....	1
1.1 Introduction.....	1
1.2 The Background of the Study.....	1
1.3 Problem Statement.....	5
1.4 The Aim and Objectives of the Study.....	7
1.5 Research Questions.....	7
1.6 Significance of the Study.....	8
1.7 Scope of the Study.....	9
1.8 Organisation of the Study Report.....	10
CHAPTER TWO	12
LITERATURE REVIEW	12
2.1 Introduction.....	12
2.2 The Concept of Head Porterage.....	12
2.3 Theoretical Framework of Child Head Porterage.....	14
2.3.1 Household Decision-Making Theory.....	14



Table of Contents	Page
2.3.2 Quantity-quality Tradeoff Theory.....	16
2.3.3 The Theory of Capital Market Failure.....	17
2.4 Causes of Child Head Porterage.....	20
2.4.1 Household Characteristics.....	20
2.4.2 Community Characteristics.....	22
2.4.3 Children Characteristics.....	22
2.4.4 Poverty.....	23
2.4.5 Illiteracy and Ignorance.....	25
2.4.6 Population Growth and Large Family Size.....	25
2.4.7 Traditional and Cultural Factors.....	26
2.5 Basic Education.....	27
2.5.1 Policies to Increase Access to Basic Education.....	28
2.5.1.1 Policies at International Level.....	28
2.5.1.2 National Policies (Ghana)	31
2.5.1.3 Local Policies (Northern Region, Ghana)	33
2.5.2 The Impact of Policies on Basic School Enrolment in Ghana.....	33
2.6 Effects of Head Porterage on Girl Child Educational Development.....	35
2.7 Conceptual Review.....	38
2.8 Summary of Literature Review.....	40
CHAPTER THREE	43
METHODOLOGY.....	43



Table of Contents	Page
3.1 Introduction.....	43
3.2 Research Strategy.....	43
3.3 Study Design.....	46
3.4 The Study Population.....	48
3.5 Sampling Techniques.....	49
3.6 Data Collection Instruments.....	50
3.6.1 Questionnaire Administration.....	50
3.6.2 Interview.....	53
3.6.3 Observation.....	54
3.7 Model Specification.....	55
3.8 Validity and Reliability.....	57
3.9 Limitations of the study.....	58
3.10 Data Analysis.....	59
3.10.1 Correlation Analysis	60
3.10.2 Multicollinearity Test	61
3.11 Ethical Consideration	62
3.11.1 Informed Consent	63
3.11.2 Respect Privacy	63
3.11.3 Confidentiality and Anonymity	64
3.11.4 Protection	64



Table of Contents	Page
3.12 Conclusion.....	65
CHAPTER FOUR	67
DATA PRESENTATION AND ANALYSIS.....	67
4.1 Introduction.....	67
4.2 girls engagement in Head Porterage.....	67
4.3 Reasons for girls engagement in Head Porterage.....	75
4.3.1 Household and Parent Characteristics and girls engagement in Head Porterage	75
4.3.2 Community and School Characteristics and girls engagement in Head Porterage.....	81
4.4 Effects of Head Porterage on Educational Development of Girl Porters	85
4.4.1 Descriptive Statistics	85
4.4.2 Impact Analysis	90
4.5 Solutions to girls engagement in Head Porterage.....	99
4.6 Conclusion.....	104
CHAPTER FIVE	105
SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS.....	105
5.1 Introduction.....	105
5.2 Summary of Major Findings.....	105
5.2.1 Girls Engaged in Head Porterage in the Tamale Metropolis.....	106
5.2.2 Reasons of Girl Child Head Porterage in the Tamale Metropolis.....	106



Table of Contents

Page

5.2.3	Effects of Head Porterage on the Educational Development of Girl Child Porters in the Tamale Metropolis	108
5.2.4	Ways of Addressing Girl Child Porterage in the Tamale Metropolis.....	109
5.3	Conclusions.....	109
5.4	Recommendations.....	111
5.5	Suggestions for Future Studies.....	115
	REFERENCES.....	116
	APPENDICES.....	130
	Appendix 1.....	116
	Questionnaire for Girl Child Head Porters.....	130
	Appendix 2.....	134
	Interview Guide for Ghana Education Service-Tamale Metropolis.....	134
	Appendix 3.....	136
	Interview Guide for other selected organisations.....	136



CHAPTER ONE

INTRODUCTION

1.1 Introduction

Head portorage (also known as “kayaye”) is commonly prevalent in the urban centres of the southern parts of Ghana and mostly involves migrants from the northern parts of Ghana. The phenomenon is now prevalent in Northern Ghana, particularly in the Tamale Metropolis, which involves young girls of school-going age. This is what has motivated this study which seeks to assess the impact of the phenomenon on the education of girls in basic schools in the Metropolis.

This chapter analyses the background of the study, the statement of the problem, the research aims and objectives, the research questions, the significance of the study and outline of the study report.

1.2 The Background of the Study

Formal education is the process of acquiring knowledge and skills in a well-structured environment. In Ghana, formal education is categorized into Basic Education, which is made up of Kindergarten, Primary School and Junior High Schools; Second Cycle Education, which constitutes Senior High Schools, Technical and Vocational Schools; and Tertiary Education, which comprises Universities, Colleges (such as Colleges of Education and Nursing, etc.) and Polytechnics (Ministry of Education, 2013, Achanso, 2014a).





Basic education takes about eleven years from four years to eleven years in the life of a child in Ghana (GES, 2014, Achanso, 2014a). Basic education is the minimum period of schooling needed for a Ghanaian child to acquire basic knowledge and skills in literacy, numeracy and creativity to solve basic life problems, ranging from health to social issues (Ministry of Education, 2013). It has, therefore, been acknowledged as a very important stage of schooling in every individual's life and for national development (Atuahene, 2013). Generally, education equips the individual with knowledge and skills for self and societal development.

The importance of Basic Education has been acknowledged by the Universal Declaration of Human Rights. Education is a human right and shall be free, at least at the basic levels. Basic education shall be compulsory (Universal Declaration of Human Rights, Article 26). This suggests that every government, including the Government of Ghana, has the responsibility to ensure that every child attends school. The Government of Ghana in response to this call, has designed and implemented many educational policies aimed at ensuring that all children of school-going age attend school. Some prominent policies in this regard include the free Compulsory Universal Basic Education (fCUBE) [Ghana Education Service, 2005], the Capitation Grant and the School Feeding Programme. These policy interventions have improved access to Basic Education as Gross Primary School Enrolment Rate increased from 90.36% in 2005 to 106.85% in 2014 while the Net Primary School Enrolment Rate increased from 66.51% in 2005 to 88.88% in 2014 (UNESCO, 2015).

Although basic school enrolment rate in Ghana as demonstrated above has been increasing over the years, the phenomenon of head portorage (a form of child labour) is



far from over. UNICEF conceives child labour in three forms, including unpaid work within the family, work within the family but outside home and work outside the family but not street children (James, Jenks & Prout. 1998). The International Labour Organization (ILO) regards child labour as agricultural labourers, domestic labourers, street labourers and factory labourers with wages. In terms of ages, ILO categorises the ages of children for the purpose of child labour as “children between 5-11 years at work in economic activities or children between 12-14 years at work in economic activities minus those in light works and children between 15-17 years in hazardous work and other worst forms of child labour” (ILO, 2002 p. 19). Child labour takes various forms and 22% of working children are in the service sector as head porters (ILO, 2002).

In Ghana, head porters are engaged in economic activities, such as hawking on streets, assisting market women in trading, fetching water, carrying goods and other things to earn a living, etc. Head porters previously migrated from the three northern regions, namely, the Northern Region, the Upper West Region and the Upper East Region, to the southern parts of Ghana, particularly, Accra and Kumasi to engage in menial jobs. Consequently, Participatory Poverty and Vulnerability Assessment (PPVA)[2011] was of the opinion that head porters have been the most commonly sighted north-south migrants in the bigger cities of Ghana and that the head portage phenomenon has been the direct result of Ghana’s internal migration, as a result of decades of economic deprivation in the North. The head porters have been given different names in different parts of Ghana. They are referred to as “paa-o-paa” in Kumasi and “Kayaye” in Accra (Yeboah, 2008; Yeboah & Appiah-Yeboah, 2009).



This trend of head portage movement is changing gradually as many head porters are now seen in commercial centres of the three Northern Regions. This has attracted some growing concern as many stakeholders are talking about it. Traditional authorities, teachers, parents, local government authorities and non-governmental organisations in the northern parts of Ghana have noted the rising number of girls in head portage in the Tamale Metropolis.

A number of reasons have been given for the increasing number of girls in the activity and notable among them is poverty. Basu and Van (1998) argue that the major cause of girls as head porters is family poverty while Galli (2001) emphasises that the contributions of children are sometimes inevitable as children are made to work when parents' incomes are not sufficient. Aside family poverty, socio-cultural factors also account for phenomenon of girls in head portage. Large poor households have more children in head portage than small households since parents of large households force their children to work because they cannot meet the demands of the households (Ahamd, 2012). Children who have lost their parents are forced to work to support themselves and their siblings (Vandenberg, 2007). Tauson (2009) notes that the culture of a society causes girls to sometimes engage in head portage, especially when work is culturally perceived as training given to children to become responsible and hard working adults.

It should be noted that head portage has adverse effects on the girl child's educational development. Though previous studies on the impact of head portage on girl child school attendance have given mixed findings, it is important to state that head portage has had adverse impact on academic achievement of girls in school. Patrinos and Psacharopoulos (1997) have confirmed in their study that head portage reduced school attendance and

increased grade repetition. Head portorage is found to decrease children's reading competence (Akabayashi & Psacharopoulos, 1999) and Heady (2003) concludes that children of school-going age in head portorage have reduced educational attainment in Ghana.

1.3 Problem Statement

Children head portorage ("Kayaye") is a growing concern to stakeholders in education, that is, children rights activists, civil society organisations, governmental organisations and many individuals in Ghana. The Ghana Education Service (2014) indicates that "Kayayes" who are mainly young girls, can be seen in almost all the cities, such as Kumasi, Accra and in recent times Tamale, carrying items on their heads. These young girls are not engaging in external household chores as part of domestic training and upbringing but child labour and this raises some concern that needs attention (Ansah, 2013).

An estimated 20% of children in Ghana between 15 years and 17 years are engaged in "kayaye" (GES, 2010) and, as a result, do not attend school. The Ghana Education Service (2010) notes that 72% of primary school children, aged 6-11 years were enrolled in basic schools, suggesting that as many as 28% of children between 6-11 years were not enrolled in school as at 2010. This situation is a serious issue, especially in northern Ghana, which is characterised with low basic school enrolment. The three Northern Regions account for 20% of the out-of-school population between 6-11 years in Ghana (Ministry of Education, Science and Sport, 2002). Basic schools in the Tamale Metropolis consistently perform abysmally as the schools were placed 60th, 69th, 88th, 91st,



89th, 98th and 103rd in 2004, 2005, 2006, 2007, 2008, 2009 and the 2010 Basic Certificate Examinations respectively (Kuyini, 2011). The situation has taken gender dimension as fewer girls are enrolled than boys. In 2010, the enrolment figure for females in primary schools in the Northern Region was 40.6% against 59.4% for boys (GES, 2010).

This growing concern has necessitated the need to study the impact of head portorage on girls' education and this has motivated this study. The outcome of previous empirical studies on the issue has been inconclusive as studies have given mixed findings. A study by Ravallion and Wodon (2000) on the impact of head portorage on school enrolment in Bangladesh concluded that child portorage and school enrolment are not mutually exclusive. In Ghana, similar study by Boozer and Suri (2001) found that head portorage decreases school attendance by 0.38 hours. This study confirmed earlier studies that head portorage reduces school attendance (Psacharopoulos, 1997). Assaad, Levison, and Zibani (2001) investigated the effects of head portorage on school enrolment in Egypt and found that child work is negatively associated with school enrolment and the girl head portagers suffered stronger detrimental effect than boys head portagers.

These mixed findings raise the issues of cultural and geographical dimensions and differences. Every country and geographic area has unique characteristics which distinguish the country from other countries or a given geographical area from others. Hence, studies of this nature should be specific and geographically oriented in order to appreciate the impact of head portorage on young girls' educational development such as school attendance and academic performance. Moreover, many scholars have argued that the true impact of head portorage should not just be on school enrolment or attendance but also on school outcome, measured by performance. For example, Gunnarsson,



Orazem & Sanchez (2004) argue that children who are into child work can still enrol in school and even attend school by sacrificing their leisure time, but child work still harms the children. Kayaye reduces the time spent on studies, makes a child too tired and dull in class to make best use of time spent in school (Orazem & Gunnarsson, 2004).

The concern on geographical setting of a study and appropriate measurement of outcome of head portorage has motivated this study to actually determine the impact of head portorage on educational development of girls in basic education in the Tamale Metropolis of the Northern Region of Ghana.

1.4 The Aim and Objectives of the Study

The aim of this study was to explore the impact of head portorage on the education of girls head porters in basic schools in the Tamale Metropolis.

The objectives of the study were:

1. To identify the kind of girls engaged in head portorage in the Metropolis.
2. To find out the reasons or causes of girls engagement in head portorage in the Metropolis.
3. To explore the effects of head portorage on the education of girls engaged in head portorage in the Metropolis.
4. To determine ways by which the girls' head portorage could be addressed in the Metropolis.



1.5 Research Questions

The main research question of the study was what impact did head portorage have on the education of girls head porters in basic schools in the Tamale Metropolis?

The specific research questions were:

1. What were the characteristics of girls engaged in head portorage in the Metropolis?
2. What were the reasons or causes of the engagement of girls in head portorage in the Metropolis?
3. What was the effects of head portorage on the education of girl porters in the Metropolis?
4. How could the phenomenon of girl head portorage be addressed in the Metropolis?

1.6 Significance of the Study

This study will provide up-to-date and evidence-based recommendations to stakeholders in education on the relative importance of the key reasons (financial consideration, parents' education, school characteristics and family condition) for girls in head portorage in the Tamale Metropolis. This is important in addressing the problems of the girls in head portorage in the Region since it would assist stakeholders in education such as Tamale Metropolitan Assembly, Ghana Education Service and non-governmental organisations in education in the Region to know the effective policies and strategic framework for addressing the problem of girls in head portorage in the region.

Head portorage can only been seen as obstacle to educational development of a girl child when its impacts are scientifically investigated. This is what this current study sought to





do. Previous studies measured educational development with school enrolment or school attendance but that did not help to attach sense of urgency to addressing the problem of girl child into head portorage due to their mixed findings. This study did not only look at school attendance but also academic performance of girl child and these would help educational policy makers in the Region to appreciate the issue of girl child in head portorage and the need to urgently intervene to address it.

It is possible that children who are into head portorage do not know the dangers in the “so-called business” and the parents who encourage their wards to go into “kayaye” may not be aware of the dangers they are exposing their wards to. The study would help girls and parents of these girls to be fully aware of the dangers associated with head portorage in the Tamale Metropolis. This would help reduce girl child head portorage, since girls in head portorage would then be able to make informed decision with regards to becoming “kayaye” or concentrating on schooling.

This study would further add to our knowledge on the girls in head portorage and its impact on school attendance and academic performance of these girls. This would motivate other researchers and academicians to do further studies on the issue in other geographical areas in Ghana for full view on the subject matter.

1.7 Scope of the Study

This study was carried out in the Tamale Metropolis of the Northern Region of Ghana. The choice of the study area was justified by the emerging phenomenon of increasing head portorage and relatively low educational achievement in basic schools in the Tamale Metropolis. The study focused on girls of basic school-going age who are into head



portage and how it impacts on their educational development. The study measured educational development with regard to school attendance and academic performance. School attendance was preferred to school enrolment because at the time of the study almost all the young girls into head portage in the study areas were enrolled in school. Therefore, punctuality and regularity at school were the issues that mattered most than enrolment. This informed the study to focus on school attendance and academic performance of young girls into head portage in the Tamale Metropolis.

1.8 Organisation of the Study Report

This study, report or thesis is organised into five chapters. Chapter One was the introduction and it covered background to the study, statement of the problem, research objectives and hypotheses, justification of the study, scope of the study, definition of key terms and brief methodology.

Chapter Two was the literature review. The study reviewed both theoretical and empirical literature on girl head porters (“Kayaye”). The study specifically reviewed the concept of head portage in Ghana, girls into head portage, reasons for girls engagement in “Kayaye”, concept of girl child education, impact of head portage on girl child education.

Chapter Three was the methodology and profile of the study area. The methodology captured research design, target population, sample size determination, sampling techniques, data collection instruments, piloting of research instruments, data analysis techniques and ethical consideration. Under profile of study area, the study reviewed

geographical location with map for the study area, education with emphasis on girl child education and economic activities in the Tamale Metropolis.

Chapter Four dealt with data presentation and discussions. The chapter was sub-headed as characteristics of the respondents, reasons for girls engagement in head portorage, challenges facing girls who are into head portorage, impact of head portorage on girl child school attendance and academic performance.

Chapter Five which was the last chapter focused on summary of findings, conclusions, recommendations for Ghana Education Service and Tamale Metropolitan assembly (both representing Government of Ghana), parents and the girl child. The chapter also covered suggestions for future research into girls in head portorage.



CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter explores literature on the key issues in relation to the subject of this study which include the concept of Head Portorage, Basic Education and the effects of Head Portorage on education (school attendance and academic performance) of the head porters who are mostly girls of school-going age. The chapter also explores the theoretical underpinning of the study which is the theoretical relationship between Head Portorage and its impact on its victims.

2.2 The Concept of Head Portorage

In Ghana, people, particularly women, are often seen carrying loads on their heads. This is mostly seen in rural communities where farming is the dominant occupation. Head portorage has now become a commercial activity. Commercial head portorage was introduced into Ghana by male migrants from Mali, one of the Sahelian countries of West Africa (Twumasi-Ankrah, 1995). Head portorage was masculine in nature with male domination, a job which was mainly seen in Mali until 1969.

Commercial head portorage became well known in Ghana after 1969, engaged in by female migrants from northern Ghana to southern cities like Kumasi and Accra (Kwankye, Anarfi, Tagoe, & Castaldo 2009). Participatory Poverty and Vulnerability Assessment (PPVA) (2011), was of the opinion that head portorage has been the most commonly sighted north-south migrants in the biggest cities of Ghana and that the head





porterage phenomenon has been the direct result of Ghana's internal migration as a result of decades of economic deprivation in the North. Awumbila et al. (2009) share similar view and add further that the north-south migratory stream has been the unprecedented growing phenomenon of female migrant porters in Ghana's commercial cities of Accra, Kumasi and Takoradi. More so, increase in vehicular traffic congestion in the cities such as Accra seemed to cause slowdown of hand-pushed truck business in the 1980's. The hand-pushed trucks were meant to aid movement of goods from shops to lorry stations or to other shops. The slow hand-pushed trucks business gave way for head porterage which is less affected by vehicular traffic congestion in the cities.

Head porterage has been given different names in Ghana, including "paa-o-paa" in Kumasi; "kayayoo or kayaye" in Accra (Yeboah & Appiah –Yeboah, 2009). This trend of head porterage movement is changing gradually as now many head porters are seen in commercial centres of the three Northern Regions of Ghana. This has attracted a growing concern as many stakeholders are talking about it. Traditional authorities, teachers, parents, Tamale Metropolitan Assembly and non-governmental organizations in the northern part of Ghana seem to have noted the rising number of girls in head porterage in the Tamale Metropolis.

There is no concrete statistics on the number of head porters, especially child head porters in Ghana. A more recent study by the People's Dialogue and Ghana Federation of Urban Poor (PDGFUP) in 2011 puts the number of kayaye at approximately 15,000. The Ghana Child Labour Survey undertaken by the Ghana Statistical Service in 2003 provides a better dimension of kayaye. The results showed that, out of an estimated 6.36 million children aged 15-17 years, 2.47 million (half of rural children and one-fifth of urban

children) were engaged in paid economic activity. About two-thirds of children (68.7%) did not work, of which 80.5 percent were at school full-time, while an estimated 1.59 million were combining schooling with work. Nearly 20% of children (about 1.27 million) were engaged in activities classified as child labour (GSS, 2003), indicating that a good number of children, particularly girls of school-going age are into head portorage in Ghana.

2.3 Theoretical Review

The theories that explain girls engagement are supply side theories. The most popular ones are household decision-making theory, quantity-quality trade-off theory and capital market failure theory.

2.3.1 Household Decision-Making Theory

This theory was propounded by Becker (1981) and state household acts to maximize utility, which is a function of the number of children, the schooling per child, the leisure time per child, the leisure of the parents, and a composite consumption goods. These goods are produced using a composite commodity purchased in the market place and the time of household members. Becker (1981) noted that the inputs for production of goods include family assets such as land, labour supplied by mother and father and labour supplied by girls (that is child labour). Therefore, the household earn income in two ways, namely by selling the goods produced by the household or by the mother or children or both working as wage earners. The father (husband) allocate time between labour work and leisure, mother allocate time among market work, child bearing and household

chores while the children allocate time among market work, education (schooling), leisure and household chores. From the above Becker (1981) noted the following;

- i. An increase in the father's wage from market work raises household income and if child education is a normal good to the family, then girl child education increases. However, if girl child education is an inferior good to the family, then girl child education decreases. Becker however noted that girl child education tend to be a normal good; hence increase in father's market wage is expected to increase girl child education.
- ii. An increase in the mother's wage increases the opportunity cost of each birth, thereby lowering the optimal family size. To the extent that child quality is a substitute for child quantity, the fall in the optimal family size will raise investment in education; thereby leading to increase girl child education. However, to the extent that the mother's work in the home is a substitute for child work in the home, child leisure and education may decline when the mother's wage rises. Finally, the rise in the mother's wage raises the demand for all normal goods; hence girl child education increases since it is a normal good.
- iii. An increase in the child's wage works through head portorage affects their education.

Becker (1981) indicated that increase in wage from child work such as head portorage increases the opportunity cost of schooling; hence girl child education or school attendance falls. Moreover, increase in child market wage increases the return to each birth, thereby encouraging larger family size leading to fall in girl child education.





From the Becker's (1981) theory of household decision, mother and fathers' income are critical to girl child education in every society including Tamale Metropolis in the Northern Ghana. The theory noted that if market works for mother and father are limited or unavailable or if wages from market works for mother and father are inadequate, child market work increase, leading to a fall in girls' school enrollment, attendance and achievement.

2.3.2 Quantity-quality Tradeoff Theory

Quantity-quality trade off theory is similar to Becker's (1981) household-decision making theory but the former assumes imperfect while the later assumes perfect markets. Rosenzweig and Evanson (1977) noted that quantity-quality tradeoff is a by-product of the impact of the mother's wage on the number of children. Therefore mothers' wage plays critical roles in girl child education than father's wage. The theory noted that increase in the mother's wage raises the opportunity cost of raising children, leading to a fall in girl births and lower family size. Smaller family size implies quality of life for the child . Therefore, from the quantity-quality trade-off theory, child quantity and quality are substitutes. Child quantity here implies higher family size and quality here implies improvement in lives of children. One of the things identified by Rosenzweig and Evanson (1977) that improves quality of lives of children now and future is education; hence the trade-off can be seen as trade-off between family size and child's education.

Investment in child quality varies across children. Ejernæs and Pörtner (2002) identify three different possible explanations, associated with variation in child quality but most important factor among them is household budget constraint. Even if parents would like

to equalize educational expenditures across children, they may not do so if they lack access to capital markets or lack funds or if they do not realize the value of borrowing against future income. Cigno and Rosati (2000) noted that families that are liquidity constrained cannot spend the return on their investment in their children until the children have entered the labour force. Once the oldest children in the family begin working, the household budget constraint is relaxed, permitting more investment in the human capital of younger siblings. A mother who reduces hours of market work as the number of children in the family rises, in order to increase the maternal time spent with each child, also lowers family income. The negative impact on household income may create an incentive to withdraw older children from school and send them to work. In other words, a family can use income of their older children to reallocate the mother's time from periods in which her family is small toward those periods in which her family is large. Thus, once again, we might expect to observe a first-born to begin work earlier than subsequent children when family is financially constraint.

From the theory, larger families' increases family financial commitment and household expenditure, leading to low quality of children, especially family income does not increase to commensurate the increase in birth of the family. Therefore, larger family size, according to the theory makes the families poorer, leading to child work as family income supplement and lower education for the girl child.

2.3.3 The Theory of Capital Market Failure

The theory suggests that child work arises when families are credit-constrained (Laitner, 1997). When parents expect family income to be rising over time, then they may find it



optimal to borrow against the future so as to smooth consumption across time (Brown, Alan and Robert, 2002). That is, it is optimal for savings to be negative when children are young. However, if parents do not have access to credit markets, then they have to rely on internal assets (*ibid*). In the child-work case, parents borrow from the future by putting their children to work rather than investing in human capital that will make their children more productive in the future. Such a strategy, while optimal for the family in this constrained situation, is not efficient because the present discounted value of another hour of schooling is greater than the return to another hour of work (*ibid*).

The three theories above emphasize poverty as a cause of girls engagement in head portorage. From the theories, poor families put their children in child work more often than families in a better economic situation. Increase of the household income is one reason but it is also a safety strategy to even out the risk of losing economic income, for example with the loss of an adult income earner or a failed harvest. ILO (2008) indicates that child work commonly may represent around 20 per cent of the household income, and as poor families spend the majority of its income on food, consequently the children's incomes are crucial. In many households not all income is equally allocated to meet basic needs. Income earned by the mother of the household is more likely to be available for the family than income earned by the father. Children's earnings given to mothers may therefore be more important for the family than the earnings gained by the father (Rana & Das, 2014). Children most often are aware of their importance to family income; hence willing to engage in child labour such as head portorage (ILO, 2008).

The theories also emphasise child work as a contribution to the family incomes. In many cases children work simply for the reason that they are told to, some voluntary and some



against their will. Most children work because the family need help both with contributing to the family income and help with unpaid household work. As children often value themselves as a part of the family unit, most children say that it is plausible to contribute to the household, especially when the family survival depends upon it (Boyden, Ling & Myers, 1998).

However, despite the general acceptance of poverty theories, there exist disagreements about to what degree poverty is fundamental to child head portorage. The relationship between child head portorage and poverty is varied, vague and indirect (Boyden, Ling and Myers., 1998). If poverty would be the only determinant, the same patterns of child head portorage would be found over the world, but they are not. In rich countries it is often the opposite; children from high-income families are more likely to work (Das, 2015). The explanation is that children from wealthier families have more work opportunities and are less exposed to ethnic and racial discrimination. However, in the developing countries such as Ghana, children from poor families are more likely to work than children from rich families. It is obvious that poverty theory alone does not explain child head portorage in the Tamale Metropolis.

In view of this, other theories such as inadequate family decision-making or relationships theory has been developed. Child labour can be seen to represent errors either in families' view of reality or in their strategic thinking about how to best deal with that reality. An example is the idea that most parents who let their children work instead of being in school are ignorant of the importance of education (Rana & Das, 2014). If those parents would have knowledge what a great outcome education can give, they would have tried to keep their children in school. The family dynamics explanation often blames these



moral judgements: child head portorage can be a consequence of a breakdown in family values in which they do not fulfill their protective function. A breakdown in values is, for example, when parents force their children into head portorage with the purpose of material benefit. This theory also claims that child head portorage can be a result of ignorant and irresponsible parents (*ibid*).

2.4. Causes of Child Head Portorage

The causes of girl child head portorage in Ghana could be analysed in terms of household characteristics, child characteristics, community characteristics and poverty.

2.4.1. Household Characteristics

Parental preferences determine the value that households place on returns to education and current consumption (Oduro, 2000, Achanso, 2014a). Households who value current consumption over returns to education would engage their children in head portorage (Basu & Van, 1998). The labour market determines the returns to schooling and the market wage for paid work (head portorage) but time spent on head portorage depends on household characteristics (Huebler, 2008). Therefore, parents who engage in head portorage see it as a great employment opportunity for their children and encourage them to do so. This notion has been validated by empirical works by Burra (1995) in India. Parental preferences theory is also founded on social and cultural norms.

Household income determines school attendance. Poor families are more likely to engage their children in head portorage than wealthier families (Rosenzweig & Evenson, 1977). According to Becker (1965), as well as Rosenzweig and Evenson (1977), parents expect



immediate economic contribution from children due to financial needs. Therefore, schooling, child paid work and poverty have been referred to as “triangular circle”, suggesting that poor children are likely to engage in head portorage and they are less likely to attend school, resulting in a pervasive cycle of poverty (Grimsrud & Stokke, 1997).

The size of the family determines child head portorage (Boyden, Ling & Myers, 1998). The value parents place on a child depends on the number of children the parents have. Larger households have greater demand for services like household chores that cannot be supplied by the market and the child’s time in larger household have greater value than smaller households (*ibid*). Larger households are also more likely to be poorer and marginal utility of consumption tends to be higher in these households. This has the potency of taking children out of school to engage paid work (head portorage). Large household size stretches household income and can put undue pressure on older siblings to either drop out from school or engage in head portorage or combines the two (Ahamd, 2012; Boyden & Myers, 1998). It is, therefore, expected in this study that the children from larger household should engage in head portorage than children from smaller households in the Tamale Metropolis.

Another area is sex composition of household. Boys and girls compete for scarce household’s resources. Therefore, allocation of household’s scarce resources to boys’ education or girls’ education depends on the returns of educational investment. If a household gets higher returns from investment in boys’ education than that from girls, much of the scarce resources would be allocated to boys’ education than that of girls. This preposition is justified in many African cultures where boys are much favoured in

educational investment than girls; where boys are sent to school and girls remain in the kitchen.

2.4.2 Community Characteristics

These characteristics include access to school and quality of educational institutions which affect returns to educational investment (Huebler, 2008). Poor access to school and lower quality of education lead to lower returns to educational investment. However, improvement in quality of education increases returns to education through higher market wage for the more educated (Card, 1999).

The place of residence of a child affects the child's school attendance and child work (School for Life, 2007). For example, the three Northern Regions of Ghana—Northern, Upper East and Upper West Regions—have lowest school enrolment in Ghana (*ibid*). This is because children in rural communities are mostly from poor communities, and have parents with little or no formal education. In Ghana, the northern regions are mostly rural with agricultural activities as the main occupation (*ibid*). Thus, poor socio-economic situation makes it difficult sometimes for children in such regions to attend school regularly.

2.4.3 Children Characteristics

Allocation of a child's time is affected by their characteristics, such as the sex and age of the child (Huebler, 2008). Older children are more productive than younger children and they are more likely to earn higher market wages. This suggests that, for an older child, the return to paid work is higher than return to education and they are less likely to attend





school. The gender of a child determines the kind of paid work they can engage in (Mamadou, 2009). Head portorage is more feminine, hence the girl child is most often seen engaging in the practice. This has been noted by Yeboah and Appiah-Yeboah (2009) who state that head portorage is a term used to describe female head porter in Accra and other parts of Ghana.

2.4.4 Poverty

Poverty has also been recognized as the major root cause of girl child head portorage generally (Bhat & Rather, 2009). Family income and child work are inversely related (Word Bank, 1998). The higher the income level or per capita income of families, the lower the number of children from such families that are often engaged in head portorage or child work. Fallon and Tzannatos (1998) notes that about 30-60 percent of children in countries with per capita income of about \$500 or less are into child labour of which head portorage is a part but the number decreased considerable in countries with higher per capita income. The Bank further notes that developed countries like UK, US, Germany and Italy have less number of children engaged in any form of child labour.

Parents bear the responsibility of educating their wards and this goes with money. Some poor parents see their children as family assets and co-contributors to family income. Therefore, poverty is the main reason for which parents allow their children of school-going age to engage in head portorage. It is obvious that poor parents cannot foot all the educational expenses of their children hence some even force their female children into head portorage. Rena (2009) shows that in countries where poverty is high child labour is high. The author adds that high poverty in India, China, Bangladesh, Pakistan, Sri Lanka,

Papua New Guinea, Ethiopia, Uganda, Mozambique, Malawi, Sudan and Chad has resulted in high child labour in those countries.

The ILO (2008) indicates that child labour accounts for about 20% of family income and income through child work are important in poor homes. It is believed that mother's income is more likely to be spent on family's needs than father's income. So a child's income given to mothers may be more important in meeting family's needs than father's income (Oduro, 2000 Achanso, 2014a). The family is, therefore, aware of the crucial support of children and this is eminent when family income is below the poverty line. A survey by Boyden, Ling and Myers (1998) in Brazil showed that children lived and worked in street because they felt the need to help their families. The survey further noted that greater proportion of their incomes through head portorage was given to their mothers at the end of every week.

Children are made to work due to instability of family incomes. Poor families cannot provide stable incomes to sustain family provisions and children are made to work to support them (Rena, 2004). In times of decrease in family incomes, children are made to work for family's survival and family income smoothening. Therefore, for poor households, child head portorage is seen as a more rational thing to do, especially in Africa (Anker & Melkas, 1995). Rena (2007) emphasises that child head portorage does not replace adult work or parents work but complements to smoothening household incomes.

Rena (2009, p. 2) indicates that "although poverty dictates the need for some children to make an economic contribution to their family, it cannot justify placing the children in



hard labour that jeopardizes their lives, safety, physical or psychological development”. This suggests that there is no justification for children engaging in head portorage. It must be noted that, from the poverty theory, the best way to solve girl child head portorage in Ghana is tackling poverty (Akarro & Mtweve, 2011).

2.4.5 Illiteracy and Ignorance

Many woes of society are blamed on illiteracy and ignorance. Ghana in particular is regarded as a developing country partly due to her high rate of illiteracy and ignorance (Sullivan, Steven & Sheffrin, 2003); hence increase in girl child head porters. Illiterate and ignorant parents push their girl child into head portorage (Shuklav & Ali, 2006). Parents often measure the future of their children by their own standard so illiterate parents see nothing wrong with pushing their children into head portorage (*ibid*). Empirical studies have indicated significant relationship between illiteracy and head portorage (*ibid*). These studies note that parents of children into head portorage are either total illiterates or partial illiterates (*ibid*). Most illiterate and ignorant parents have little or no interest in educating their children or encouraging their children to school, especially when prospects of schooling are somehow uncertain (Draft Declaration and Agenda for Action of the National Consultation and Child Labour, 1997).

2.4.6 Population Growth and Large Family Size

Population growth is considered theoretically and empirically as a factor influencing girl child head portorage. The larger family size of poor households deepens poverty so such parents cannot provide the basic needs of their children, forcing them into becoming head porters as a way of earning a living (Bajapai, 2003).





Some parents may oblige their children to work because they are not able to manage the demands of a large size family. It must be emphasized that there is gender and age dynamics in family size. The girl child is more likely to become a head porter than the boy child and girls mostly sacrifice their education to work to support their siblings (Ahamd, 2012). Ahamd (2012) also notes that older sibling work more often to support their younger ones. A study by Okpukpara, Paul, Fidelis, and Chukwuone (2006) found that, in Nigeria, younger children are more likely to go to school than older children and more boys attend school than girls.

2.4.7 Traditional and Cultural Factors

Some parents believe that children are required to work to support them even when they (the children) are in school. Another traditional and cultural belief is that children are to preserve family arts and crafts. This belief makes some parents put their children in a job or family work for them to earn some income to support family incomes. It is also believed that a child works to equip themselves with skills to enable them make a living by the skills acquired when they grow up. Tauson (2009) notes that parents mostly want their children to engage in head portorage because they believe it helps them to learn work skills, to learn to be hard working.

Bajapai (2003) has debunked the traditional and cultural reasons for head portorage, especially in relation to skills acquisition. According to the author, head portorage does not give children any meaningful skills but rather abuses them. Bajapai (2003) further indicates that exposure of children to the scorching sun, dust, fumes and other hazards affect their health, shortening their life span. Bajapai (2003) found in his study that about

95% of head porters or child labourers do not continue on the same job when they become adults. This finding suggests that the skill acquisition argument does not hold and needs to be rejected.

2.5 Basic Education

The Ghana Education [GES] (2014) defines Basic Education as the minimum period of schooling needed to acquire basic literacy, numeracy and problem solving skills, as well as skills for creativity and healthy living. In Ghana, Basic Education comprises primary education (first stage of basic education) and lower secondary education (second stage) [GES, 2014].

In Ghana, Basic Education entails 11 years of schooling (GES, 2014, Achanso, 2014a) and comprises Kindergarten (KG), Primary School and Junior High School. Kindergarten takes two years from age four to six (GES, 2014, Achanso, 2014a). Subjects studied at Kindergarten include Physical Development (Physical Education), Creativity (Drawing and Writing), Language and Literacy (Language Development), Mathematics (Number Works), Environmental Studies, Movement and Drama (Music and Dance) (GES, 2014). Ghana had 13,304 public and 5,972 private Kindergartens in the 2012-2013 academic year.

Primary Education takes six years, that is, from age six to eleven. Subjects studied in primary school are English Language, Ghanaian Language and Ghanaian Culture, Information and Communication Technology (ICT), Mathematics, Environmental Studies, Social Studies, French, General Science, Pre-vocational Skills and Pre-technical Skills, Religious and Moral Education, and Physical Education (example, Music and



Dance). Primary School education does not give any certificate to pupils upon completion (Ministry of Education, 2013). The number of primary schools in Ghana was 14,112 public schools and 5,742 private schools in 2012-2013 academic year (Ministry of Education, 2013).

Junior High School (JHS) graduates are awarded certificate (Basic Education Certificate) upon completion. Subjects taught at Junior High School include English Language, Ghanaian Language and Culture, Social Studies, Integrated Science, Mathematics, Basic, Design and Technology, Information and Communication Technology, French (optional), Religious and Moral Education. The number of public JHS increased from 8,336 in 2011-2012 academic year to 8,818 in 2012-2013 academic year while the number of private JHS increased from 242 to 293 over the same period (Ministry of Education, 2013).

2.5.1 Policies to Increase Access to Basic Education

This section reviews policies to end or reduce child work to increase access to basic education in Ghana. It starts from policies at international level, national level and local level.

2.5.1.1 Policies at International Level

It must be emphasised that head portorage is a form of child labour and any international convention on child labour is applicable to head portorage. This study reviews two main agencies, including the International Labour Organization (ILO) and the United Nations International Children's Emergency Fund (UNICEF) that are working to end all forms of child labour, including children into head portorage.



The ILO supports governments on policy formulation and implementation of programmes to increase access to basic education as a way of reducing child labour (Sakurai, 2005). The ILO also directly undertakes programmes like vocational training of children and indirect programmes like equipping government officials with skills to enable them enact policies and interventions to fight against child work (*ibid*). The ILO began legislation to protect children from work in 1919 and the legislation was named Minimum Age Convention No. 5 (*ibid*). The Minimum Age Convention No. 5 indicated that child work below 14 years is illegal (ILO, 2002). Other labour conventions related to Industry (1919, 1937), Maritime Work (1920, 1936), Agriculture (1921), Trimmers and Stokers (1921), Non-Industrial Employment (1932), Fishing (1959), Underground Work (1965) were also adopted (ILO, 2002). Another convention in this regard is the 1930 Forced Labour Convention 29 and the 1957 Abolition of Forced Labour Convention 105. Other important conventions regulating child labour were adopted in 1973 and 1999.

The Convention No. 138 revised the terms set forth in the earlier conventions and consolidated "principles that had been gradually established in various earlier instruments" (ILO, 1996, p.24). Thus, it is considered as a replacement of previous conventions concerning child labour. The main aim of this convention is to set the minimum age for which someone can be employed to work. The Convention No. 138 has Basic Education at heart. This is because it enjoins all signatory countries to enact policies and programmes to abolish child labour in all economic activities, both paid work and non-paid work. The convention set the minimum work age relative to Free, Compulsory, Universal Basic Education, stating that "the minimum age for admission to

employment shall not be less than the age of completion of compulsory schooling and in any case, shall not be less than 15 years" (Article 3 of C 138, 1973, paragraph 1).

Another Convention of the ILO that matters to basic education is the ILO Convention 182, adopted in 1999. The United Nations established the UN Convention on the Right of the Child (CRC) in 1989 (Child Right Information Network, 2008). All nations, including Ghana, have signed this convention, except few countries. The CRC contains 54 articles which are internationally accepted and include civil, political, economic, social and cultural rights. This Convention enjoins governments to make basic education free and compulsory in all signatory countries and encourages the development of secondary education, Senior High School and Technical/Vocational Education. The CRC has five provisions in particular on child labour. A child is defined by the CRC as a person below the age of eighteen (Article 1). The five provisions on child labour under CRC are:

- i. Article 19: Children need protection from violence and exploitation
- ii. Article 28: Children need protection from sexual exploitation and abuse.
- iii. Article 32: Every child should be protected from work exploitation and from hazardous jobs which hinder children's education, or harm their health and development.
- iv. Article 34: Mentions all children have the right to access primary education and
- v. Article 36: A child has right to be protected from all forms of exploitation

Aside above conventions, the United Nations adopted the Millennium Development Goals (MDGs) that were to be achieved by 2015.



The MDGs and the CRC are aimed at reducing child labour, such as head portering through the fight against poverty and free universal basic education. For example, the promotion of gender equality seems to decrease discrimination against girl child's education, making many young girls to enrol in school in Ghana.

2.5.1.2 National Policies (Ghana)

The Government of Ghana has been committed to increasing access to Basic Education. As a result, many educational reforms and policies have been undertaken with the aim of making Basic Education affordable and accessible, thereby helping to achieve the MDG 2 which seeks to achieve universal primary education. The organisation of secondary education system in 1980s began very important key policies in Basic Education in Ghana. The reform brought to bear the need to increase access to Basic Education and the shortening of pre-university education period from seventeen years to twelve years and to make education cost-effective (Ghana Education Service, 2014). The Junior Secondary School structure was put in place on a nationwide basis. Now, pupils spend six years in primary school and three years in Junior High School, putting together nine years of basic education, excluding kindergarten (Ghana Education Service, 2014).

The Government of Ghana began free, Compulsory, Universal, Basic Education programme (fCUBE) with the main aim of increasing access to basic education (Ghana Education Service, 2005). The Government of Ghana introduced the Capitation Grant as a buffer to fCUBE (Osei-Fosu, 2011). The government in partnership with the World Bank piloted the abolishing of all fees charged by basic schools and the provision of grants in 40 deprived districts in Ghana in 2004 (Akyeampong, 2011). The success of the



pilot led to the adoption of the Capitation Grant Programme nationwide in 2005 (Akyeampong, 2011). Schools are not permitted to charge any fees to parents..

Despite the implementation of the Capitation Grant in Basic Education, many basic schools still charge levies like maintenance levy, cultural and sporting activities levies (United Nations Children’s Fund (UNICEF, 2013). This has deterred most poor families from sending their children, particularly girls, to school (UNICEF, 2013).

Achieving gender parity in education is dear to the hearts of all successive governments in Ghana. In 1997, the Girls’ Education Unit was instituted as part of the Basic Education Division of the Ghana Education Service to coordinate all educational activities related to girls (GES, 2014). The government through the Ghana Education Service appointed Regional and District Girls’ Education Officers to coordinate and improve girls’ access to Basic Education across the country.

In order to get all children of basic school-going age into school and ensure they stay in school, the Government of Ghana launched a programme called the “School Feeding Programme” in 2005 (H. G. S. F., 2011). The Ghana School Feeding Programme (GSFP) is an initiative of the Comprehensive African Agriculture Development Programme (CAADP) Pillar III of the New Partnership for Africa’s Development (NEPAD)[H. G. S. F., 2011]. GSFP is included in Ghana’s effort to achieve the Millennium Development Goal (MDG) on hunger, poverty and primary education (H. G. S. F., 2011). The GSFP is aimed primarily at providing basic school children in poor communities of Ghana with one hot nutritious meal per day, using locally produced food stuffs.



2.5.1.3 Local Policies (Northern Region, Ghana)

Aside the above government policies on basic education, the Northern Region in particular has benefited from complementary education programmes like the School for Life (SfL) Complementary Basic Education programme (CREATE, 2010). School for Life has been in Northern Region since 1995 supporting the government's efforts to provide affordable and accessible basic education in the Region (CREATE, 2010). The School for Life programme, funded by DANIDA, targets deprived rural children who are unable to attend school due to socio-economic reasons (CREATE, 2010, p. 1). Due to the successes of the programme, it is now receiving funding from the USAID and IBIS and has succeeded in enrolling children and transitioning them into formal schools.

According to CREATE (2010), the Government of Ghana has expressed the desire to adopt the School for Life initiative to provide primary education to underserved communities in the Northern region.

2.5.2 The Impact of Policies on Basic School Enrolment in Ghana

The end result of the above policies and other policies and international conventions is to increase Basic School enrolment. However, not all children of Basic School-going age are in school due to socio-cultural and economic reasons, forcing children into head portering instead of schooling. According to UNESCO Institute for Statistics (UIS) Factsheet (June, 2013), about 126 million primary and lower secondary aged children are out-of-school, accounting for 9% of all primary school-going aged children missing out on education. Fallon and Tzannatos (1998) indicates that 94% out-of-school children of primary school-going age are in the developing countries. Specifically, sub-Saharan



Africa accounts for 40% while South Asia accounts for 35%. This has confirmed that about of 50% of the out-of-school children of primary school-going age are in Sub-Saharan Africa (Global March against Child Labour, 2014).

In Ghana, basic school enrolment has increased over the past years due to the implementation of various policies and interventions as indicated in the previous section. For example, gross educational enrolment for Kindergarten increased from 99.4% in the 2011/2012 academic year to 113.8% in the 2012/2013 academic year while the net educational enrolment for the same level increased from 64.2% in the 2011/2012 to 74.8% in the 2012/2013 academic year (National Development Planning Commission, 2014). Results from the 2011 Multiple Indicator Cluster Survey (MICS) shows that 38% of pre-school attendance is children aged six years and over, meaning they are over the appropriate age for Kindergarten (UNICEF, 2013a). According to UNICEF (2013a), the number of out-of-school children in Ghana aged six years to eleven years decreased by 46% between the period of 2006 and 2011. The National Development Planning Commission. (2014) reveals that net enrolment for JHS increased from 46.2% in the 2011/2012 academic year to 47.8% in the 2012/2013 academic years.

The three Northern Regions of Ghana account for up to 20% of the out-of-the national out-of-school population (School for Life, 2007). The Northern Region accounts for 10.6%, Upper East Region accounts for 5.4% and Upper West Region accounts for 3.36% (School for Life, 2007). The School for Life report further shows that as of the 2005/2006 academic year, the Northern Region had an out of school population of 132,678 at the primary level (6-11 years of age) which accounted for 11.78% of the total out of school population in Ghana. Many children in the Northern Region are unable to



complete primary 6 and JHS 3 as compared to children from the southern part of Ghana (School for Life, 2007).

According to the Ministry of Gender, Children and Social Protection (2015), Ghana has made progress towards gender equality in basic school enrolment. In its National Gender Policy, 2015, the Ministry notes that the Ghana MDG report (2013) indicates that, gender parity in schools in Ghana is closest to being achieved at the primary level, where the net enrolment rate in 2011 was 84.04% for girls and 83.77% for boys. The ratio of female to male secondary enrolment stood at 89.9, which is comparable with other lower middle income countries globally. UNICEF (2013a) confirms this by indicating that Ghana has achieved success in gender goals in basic education.

According to Joseph and Wodon (2012), access to basic infrastructure and better school facilities tends to have larger beneficial impacts on girls than on boys, and that illiteracy at the household level tends to hurt girls more than boys. It is, therefore, not surprising that, in Ghana, more girls are out of school than boys, making girls resorting to head portorage as a source of hope.

2.6 Effects of Head Portorage on Girl Child Education

This section reviews empirical literature on effects of head portorage on the educational development of its victims. The effects of head portorage on educational development could be assessed on primary school enrolment, completion and academic achievement. Previously, empirical studies focused on only enrolment but later it was realized that achievement is also important (Assaad et al., 2001, Ravallion & Wodon, 2000, Boozer & Suri, 2001).





Assaad et al. (2001) conducted a study in Egypt on the effects of child work on primary school enrolment. They used household survey data from Egypt labour market study (ELMS-1998) with the question: “does child work reduce school attendance rates”? The study revealed that both boys’ and girls’ work is negatively associated with primary school enrolment. Their study found stronger negative effect on girls than boys because of additional household chores performed by girls. Hence, in Egypt, young girls start working earlier than young boys.

Sedlacek, Suzanne, Nadeem and Masaru (2005) study in Latin American countries on the effect of child work on enrolment and achievement revealed important outcomes relevant for this study. They found that child work like head portorage negatively affected school enrolment in Latin American countries and had negative effect on pupils’ educational achievements. The study also looked at the effects of child work on grade repetition. It found that working children were significantly less likely to achieve higher grade than non-working children as the working children were in the lower grade while the non-working children were in the higher grade.

Similarly, Sanchez, Orazem and Gunnarsson (2005) explored the effects of child labour on mathematics and language achievement test scores in the 3rd and 4th grades at primary schools in Latin America. The study considered academic performance in mathematics and language with data from 13 Latin American countries and concluded that child work led to deterioration of academic performance in those subjects. The study added that child work is never complementary or neutral to academics performance.



Another study by Guarcello (2005) looked at the effects of child work on academic achievements in developing countries, including Brazil, Kenya, Lebanon, Sri Lanka and Turkey. The study found that child work decreased the retention rate and increased dropout rates. The study further found that child work does not significantly affect actual learning outcomes. The actual learning outcome used in the study was test score and the outcome was a deviation from other findings. Rosati and Rossi (2001) conducted a similar study in two different countries, that is, Pakistan and Nicaragua. The study used national household data from the two countries with the data from Pakistan indicating that child work negatively reduced retention rate and school outcomes. Data from Nicaragua indicated that additional hour worked by children significantly reduced grade repetition and concluded that additional hour worked significantly increased the probability of a child failing in school. The data from the two countries, therefore, conclude that child work significantly reduces enrolment, retention and achievement.

Similar studies on child work have been done in Ghana. UNICEF (2013a) for instance, shows that child work adversely affects pupils' learning achievement in Mathematics and English Language in Ghana. The outcome of UNICEF's study has been confirmed by Heady (2003) study that children working in Ghana spend about an average of one hour less in school.

From the above theoretical and empirical reviews on the effect of child work on the educational development of its victims (girl child head porters), this study sought to test the following hypotheses:



1. Girl child head portorage significantly decreases basic school attendance of its victims in the Tamale Metropolis of the Northern Region of Ghana.
2. Girl child head portorage does not significantly decreases basic school attendance of its victims in the Tamale Metropolis of the Northern Region of Ghana.
3. Girl child head portorage significantly decreases academic performance of its victims in the Tamale Metropolis of the Northern Region of Ghana.
4. Girl child head portorage does not significantly decreases academic performance of its victims in the Tamale Metropolis of the Northern Region of Ghana.

2.7 Conceptual Review

The theories and empirical literature have shown that allocation of a child's time between schooling and work is influenced by household resource constraints. Basu and Van (1998) argue that parents' decision to allow their children into paid work (head portorage) or send them to school depends on availability of household income. Hence, households with lower income are more likely to allow or even force their children into head portorage and vice versa. This raises the issue of poverty and has been theoretically confirmed as a major contributor to child head portorage. Bhalotra and Tzannatos (2003) add that, apart from resource constraint, incentive to work influences parents decision to allow children to engage in paid work. They emphasize that parents may allow their children into head portorage when net returns to education is lower than net returns to head portorage.

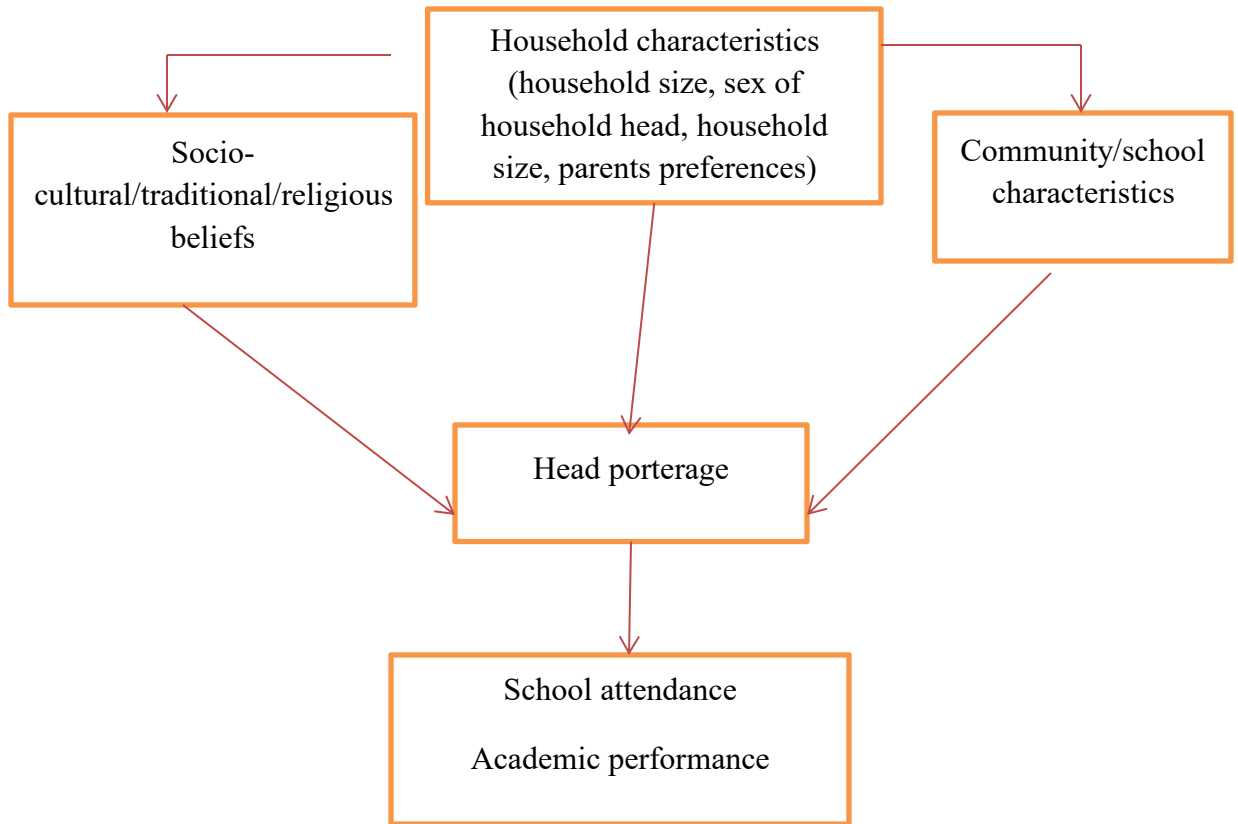
In the work of Huebler (2008), parents' decision to engage their children into head portorage or send them to school is influenced by many factors, including household

characteristics, children characteristics, community characteristics, school characteristics, parents' characteristics, institutional framework and socio-cultural factors. Children characteristics include age and sex; household characteristics include household size, sex of household head, age of household head; community characteristics involve geographic region of the community and being urban or rural. School characteristics are school facilities, distance to school and cost of education, while institutional framework includes laws on child work and child right.

The present study conceptualized girls engagement in head portorage and their education as provided in Figure 2.1. The Figure specifies all the variables that were used in the study.

Figure 2.1: Conceptual Review of the Relationship between Head Portorage and Educational Achievement





Source: Researcher's Own Construct (2016)

From Figure 2.1, it could be seen that girl child head portorage is influenced by three main factors, including community and school characteristics, household characteristics, and parents characteristics. Thus, head portorage negatively influences school attendance and academic performance. This is because time needed for schooling and learning is used or partly used for head portorage (kayaye). Student work adds to the stress of academic work and even if a child can be in school after work, the child will not have quality time for learning due to excessive stress.

2.8 Summary of Literature Review

The chapter reviewed literature related to head portorage and its impact on educational achievement particularly school enrolment and academic performance. The review of





literature was guided by four main objectives; namely to discover characteristics of girls engaged in head portering, reasons for their engagement in head portering, impact of head portering on school enrolment and academic performance and how girls engagement in head portering has been addressed.

The analysis in this chapter indicates that head portering used to be as a result of North-South Migration and mostly seen in Accra and Kumasi. It is now prevalent in the Northern Region of Ghana, particularly in the Tamale Metropolis. The head porters are not only adult but also children of Basic School-going age.

The Government of Ghana in an attempt to end child labour as whole and child head portering in particular has implemented many policies, such as the fCUBE, the Capitation Grant and the School Feeding Programme. The Northern Region in particular has benefited from other interventions like the Complementary Basic Education programme (CBE) by School for Life. There have also been many international conventions like the ILO Conventions 138 and 182 which aim at ending child labour and encouraging universal Basic Education.

Despite these policies, interventions and conventions, many girls of Basic School-going age are still into head portering. Many authors have indicated that the greatest cause of this phenomenon is poverty. Other causes include large family size, single parenting, illiterate and ignorant parents, poor state of community, lack of accessible basic school, high population growth, lack of employment after completing school and having parent (s) as head porters.

The concern on the girl child in head portorage has been raised and received much attention because of its adverse impact on girl child educational development. Empirical studies have validated the claim that girl child head portorage adversely affects their school enrolment, attendance and most importantly academic achievement.



CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter discusses the research methodological tools employed to conduct this study. These include the research strategy or approach or tradition, the research design, the research methods or tools used for data collection, the sampling techniques and data analytical tools.

3.2. Research Strategy

This study adopted both the qualitative and the quantitative research strategies for data collection and analysis. Qualitative research is a type of research whereby a researcher mostly makes knowledge claims on the basis of constructivist (Creswell, 2003). According to Creswell (2003), constructivist perspectives include varieties of individual experiences, meanings that are socially and historically constructed and advocacy or participatory perspectives. Qualitative research design uses strategies such as narratives, phenomenologies, ethnographies and case studies (Creswell, 2003).

The qualitative research strategy does not rely on, but can involve numerical measurement (Grix, 2004). The strategy revolves around case-studies and social context but not variables and testing of hypotheses. This is because the strategy uses flexible methods of data collection instruments like participant observation and interviewing, documentary analysis or ethnographic study to gather data (Ragin, 1994). The data gathered through these instruments are not structured to permit coding and testing of



hypothesis. They rather provide interpretation to socio-cultural issues within specific period of time, leading to formulation of theories (Grix, 2004).

Creswell (2003) noted that researcher adopt data collection instrument that allow respondents to express their views on issues. With reference to Creswell (2003), this study employed observation and interviews to collect data from key stakeholders in child education in the Tamale Metropolis. This is because the nature of the study allows for the use of multiple data collection instruments. For example, pictures of girl head porters were needed as evidence of the existence of girl porters in the study area. Views of key stakeholders (state institutions and Non-Governmental Organizations) are essential to provide stakeholders perspectives on the existence, effects and the way forward of ending girl child head portage in the Tamale Metropolis.

As indicated earlier, this study also employed the quantitative research strategy for data collection and analysis. Quantitative research strategy is whereby a researcher uses post positivist claims to develop knowledge and collect data on predetermined instrument that yield statistical data (Creswell, 2003). Quantitative research is a kind of research that explain occurrences by collecting numerical data that are analysed using mathematical methods (Creswell, 2003)

Quantitative strategy relies on numerical measurement, where hypotheses are tested with statistical models (Grix, 2004). It involves structured approaches where explanations are formulated into relationship between variables. In this study, the main variables were girl head porters, school attendance and academic performance and with the quantitative



strategy, the relationships between these variables were tested, using Pearson Correlation Coefficient.

According to Miller and Brewer (2003), the strategy is good for testing theories, identifying patterns and making predictions. It is, therefore, a more scientific method of investigation because scientific investigations aim at solving particular problems or testing theories and making predictions so between the qualitative and quantitative strategies, the latter best fulfils these aims. The main goal of the strategy is to “find as small a set of variables as possible which explains as much as possible and the broader philosophical thinking which informs the approach is that, to know something, one must establish general sets of relationships which are robust across as many instances or cases as possible” (Miller & Brewer, 2003, p.193). It has an advantage of leading to generalization of outcomes (Miller & Brewer, 2003; Grix, 2004).

The usage of quantitative strategy this way justifies its employment in this study. The study aimed at establishing the effects of girl head porters on basic school attendance and academic performance. Providing explanations alone through the qualitative strategy would not be enough to determine the effect. To do so effectively, one must test the relationship between variables to establish whether or not the variables have significant positive or negative relationships. This can only be determined through the quantitative strategy like Pearson Correlation Matrix.

Both approaches have been criticized. Grix (2004) notes that the qualitative research strategy is non-representative and its results cannot be generalized beyond the target population. This undermines the validity of results which is critical in any research, both





social and scientific. It is also criticized as lacking objectivity since there is more possibility to use personal views than evidence from the field. It is, therefore, open to bias and manipulations, whether consciously or unconsciously (Bryman, 2004).

The quantitative strategy on the other hand is criticized as confined to statement of relationships as causal statements and this affect the understanding of the issue under investigation (Silverman, 2000). Grix (2004) indicates that over dependence of the strategy leads to the neglect of social and cultural aspects of issues under study. Grix (2004) further notes that the strategy is difficult to use in the case of behavioural phenomena.

The weaknesses of both strategies make their combination appropriate in a study like this as that enriches it (Grix, 2004). Is for this reason that Denzin (1989) notes that combining the strategies ensures triangulation. Triangulation is a situation whereby more than one research tool is employed (Sarantakos, 2005). It helps validate results and addresses all dimensions of phenomena. Thus, the criticisms, notwithstanding, the mixed strategy of social investigation is fast becoming popular among researchers (Bryman, 2004).

3.3 Study Design

The selection of which method to employ in any research is dependent upon the nature of the research problem (Morgan & Smircich, 1980). The Case Study design was adopted for this study since it is useful in investigating a contemporary phenomenon (Frankfort-Nachmias & Nachmias, 1996). The contemporary phenomenon under investigation in this study was “assessment of the effect of head portorage on the education of basic school girls in the Tamale Metropolis”. According to Yin (2009), the case study design

offers an opportunity to gather data from various sources. For this reason, the study selected girls of basic school-going age, NGOs in education and child protection and Ghana Education Service.

Bromley (1990) suggests that a case study is a systematic inquiry into an event or a set of related events which is useful for describing and explaining the phenomenon of interest. In the midst of these discussions, Anderson (1993) views case studies as being concerned with how and why things happen, allowing the investigation of contextual realities and the differences between what was planned and what actually occurred. Case study is not intended as a study of the entire organisation (Noor, 2008) but intended to focus on a particular issue, feature or unit of analysis. Therefore, this study only focused on head portorage and educational development (school attendance and academic performance) of basic school girls. More importantly, this study is limited to Tamale Metropolis which represents a unit of Ghana.

The case study design, an explanatory design makes it easy to ask and seek answers for ‘how’, ‘when’ and ‘why’ certain things occur. In view of this the study sought to seek answers from stakeholders in child education in the study area why children of basic school-going age engage in head portorage and how this menace could be solved.

Zucker (2001) noted that case study design is useful for in-depth and carefully planned study of real issues and this also informs its choice. This is because; head portorage is real but new phenomena in Tamale Metropolis and this study happens to a first in its kind, hence carefully planned and in-depth study is required.



3.4 The Study Population

Sidhu (2003) defines population in research as group of items or units (for example, people) having common characteristics that are of interest to a study. The study population was female basic school students who were engaged in head portorage in the Tamale Metropolis. According to the 2010 Population and Housing Census (PHC), the Tamale metropolis had 24,862 girls between 5-14 years but there was no specific data on the number of girls into head portorage. Due to lack of statistics on the number of head portorage in the Tamale Metropolis, the study focused on 120 girl child head porters (see Table 3.1).

Other respondents who were key stakeholders in child education and child protection in the Metropolis included the Ghana Education Service, local and international organisations (see Table 3.1). The sample size for each category is given in Table 3.1.

Table 3.1: Sample Population

Respondents	Number
Girls of basic school-going age	120
School for Life Programme	1 Key Informant
Ghana Education Service, Tamale Metropolis	1 Key Informant
RAINS	1 Key Informant
Community Development Unit	1 Key Informant
NORSAAC	1 Key Informant

Source: Author's Own Construct (2016)



3.5 Sampling Techniques

The study employed two main sampling techniques, including the purposive and random sampling techniques. Purposive sampling helps to sample informants with a specific type of knowledge or skill regarding the issue under investigation (Li, Long, Liu, Lee, Guo, Li & Liu. 2006, Prance 2004, Vargas & van Andel, 2010). Random sampling is a sampling technique in which each member of the target population has equal probability of being chosen. Yates, Moore and Starnes (2008) noted that simple random sampling is where individuals are chosen randomly and entirely by chance, such that each individual has equal probability of being chosen at any stage during the sampling process.

The Tamale Metropolis was purposively selected for the study. As indicated already, Kayaye in Ghana had been prevalent in many urban centres like Accra and Kumasi through North-South migration, with the northern regions devoid of the phenomena. However, the trend has been gradually changing with the Tamale Metropolis becoming a centre for girl head porters, hence the choice of the Metropolis for this study. The Metropolis, therefore, presented a new study area for head portage and its related social issues. Within the Metropolis, the study purposively selected key market centres where the girl head porters were mostly found. The markets were the largest in the Metropolis and included Tamale Central Market and Aboabo Market. Purposive sampling was used to identify population of the study (girl child porters, NGOs and Government institution) as illustrated in Table 3.1

After identifying the girl head porters, the simple random sampling technique was used to select the samples for questionnaire administration. To satisfy the principles of simple



random sampling, the names of the sampled porters were written down to ensure that every girl head porter had one chance of filling in a questionnaire. This method was important since questionnaire administration took more than one day in each market centre. The questionnaire administration did not also take place at the same day and time at the two markets; hence it was possible for a head porter to cross to the other market. The possibility of a head porter crossing to the other market and filling in questionnaire again presented possibility of administering questionnaire twice to one respondent. Therefore, to meet the principle of simple random sampling without replacement, names of already contacted girl head porters were written down for future references but the names were not used for further analysis or discussions in the study.

3.6 Data Collection Instruments

The study adopted three data collection instruments, including questionnaire administration, interview and observation.

3.6.1 Questionnaire Administration

Questionnaire is mostly used in research due to its advantages over other instruments. Questionnaire helps to gather data quickly at a cheaper administration cost (Bryman, 2004). This is because the researcher does not necessarily need to be present for respondents to provide their responses or the questions have predetermined responses from which respondents choose responses. Parfitt (2005) notes that questionnaire helps to gather standardized information for the same variable(s) from every respondent. This study employed questionnaire also because it helps to gather standardized information for the same variable(s) from every respondent.



In view of the advantages of questionnaire administration, it was used to gather data from girl head porters who were the main respondents in this study since the study was about them for which reason they had a large sample size as noted in Table 3.1. This instrument helped to gather data to cover aspects of objectives 1, 2, 3 and 4 of the study. These included the causes of girls head portage; effects of head portage on school attendance and academic performance of girl head porters; and solutions to girls head portage in the Tamale Metropolis.

Among the three types of questionnaire (structured, semi-structured and unstructured questionnaire), the study employed the semi-structured questionnaire where the questions were both open-ended and closed-ended. The questionnaire was divided into four parts: Part A, Part B, Part C and Part D. Part A was about the causes of girls head portage and factors considered in this study were household characteristics, parents' characteristics and community characteristics. Household characteristics had two variables (household size, sex of household head), parents' characteristics had four items (e.g. Parents' education and occupation). Community characteristics had six items with five-Likert Scale responses, ranging from strongly disagree (1) to strongly agree (5). Part B was about school attendance and academic performance of girls head porters with ten items. The questions under Part B were mainly in the form of Likert Scale with few open-ended questions. Part C was about girls engagement in head portage and had five items, all close –ended questions. Part D focused on solutions to end girls engagement in head portage in the Tamale Metropolis and all the questions under this section were in the form of Likert Scale (the detailed questionnaire is at appendix 1).



Close-ended questions require respondents to make choices from alternative responses but open-ended ones allow them to express their own view on questions. Therefore, the open-ended questions offered the respondents the opportunity to give clarity to answers chosen from close-ended questions, allowing the researcher to obtain detailed information to issues under investigation.

Two Field Assistants were employed to help in the questionnaire administration. The Field Assistants were trained to understand the purpose of the study, actual meaning of the questions and how to handle the questionnaires. To avoid waste of time and energy, the respondents were encouraged to fill in the questionnaires in the presence of Field Assistants. The purpose of this was to ensure high response rate and to assist respondents who could not read or write to fill in their questionnaires. In most cases when questionnaires are left with respondents, the response rate is low since some do not return them. More so, not all respondents could read or write and even some had never been to school, hence there was the need for Field Assistants to guide them to fill in their questionnaires. Situation, where a respondent could not speak English, discussion was held in Dagbani which is a common local dialect of the respondents but the responses were recorded in English. Filling in questionnaire in the presence of Filed Assistants helped to overcome the two main limitations of using questionnaire, namely inability to ascertain whether or not a respondent filled in the questionnaire himself and low response rate (Bryman, 2004).

Though the questionnaire administration was time consuming, at the end of the questionnaire administration, 120 girl head porters (65 from the Central Market and 55 from the Aboabo Market) clearly and completely filled in the questionnaires.

3.6.2 Interview

Interviewing is a method of data collection in research where an interviewer asks questions while an interviewee responds directly. This instrument allows respondents to express their views, beliefs, practices and concerns (Freebody, 2003). Interviewing has a number of advantages over other data collection instruments like questionnaire administration and observation. Interviewing offers the opportunity for both interviewee and interviewer to seek for clarification. Interviewing makes it possible to check on the reliability of responses by asking the same question differently and at different stages of the interview (Freebody, 2003).

This study used interview to collect data from a number of stakeholders in education in the Tamale Metropolis. The institutions considered for interviews were Ghana Education Service, Tamale Metropolis; School for Life, Tamale; RAINS, Tamale; Community Development Unit, Tamale and NORSAAC, Tamale (see Appendix 2-6 for detailed interview guides).

The study was guided by Bryman's (2004) advice on the use of interviewing in data collection. The advice included developing interview guides, avoiding double barrelled questions, identification of possible interview themes, identification of respondents, selecting mode of recording interview, seeking permission for interview and selecting interview time.

The study officially sought permission from the key stakeholders named above to inform them of the study and to request interview with them. The permission was sought with a letter of introduction from the Faculty of Education, University for Development Studies.





The date of interview for each institution was scheduled and a day before each interview, the researcher made a call to remind each institution of their meetings and to confirm if they would be able to grant her the interview. All confirmed their preparedness for the meeting.

The interview with each institution lasted for not more than one hour. The participants were informed the purpose of the interview and the extent of their engagement. The researcher explained to the participants that the interview was for the purpose of research only and they were assured of strict confidentiality. Upon the consent of interviewees, the researcher recorded the interviews with her mobile phone. This was to facilitate the free flow of interview and to avoid time wasting. The interviews were conducted by the researcher and she thanked the interviewees and their respective institutions for their cooperation.

The interview questions centred on factors that push girls of basic school-going age into head portage, how this affect school attendance and academic performance, challenges of enforcing fCUBE and international regulation on child labour and strategies to solve this problem. The detailed interview guide is attached to the work (see Appendix 2).

3.6.3 Observation

This instrument was used to gather empirical evidence on girls head porters in the Tamale Metropolis. Filed observation was grouped into participant observation and unobtrusive observation on the basis of the degree of the researcher's participation (Miller & Brewer, 2003). Unobtrusive participation involved directly visiting the two market centres (Tamale Central Market and Aboabo Market) in Tamale Metropolis to observe girls of

basic school-going age who were into head portorage. In the course of the field observation, photographs were taken of girl head porters with load on their heads and girl head porters having relaxation at various places within the market centres.

It must be stated that part of the observation was participant observation when I contracted one girl head porter to carry my load after shopping at the Tamale Central Market. I repeated the same participant observation at Aboabo Market. The purpose of this was to find out how much the porters charged, challenges they went through with load on their heads and their feeling about the act. The girl head porters were unaware of my observation in both cases.

The field observation helped me to gain-first-hand knowledge of the girl head portorage situation in the Tamale Metropolis. The field observations were employed to compare the data gathered through questionnaire administration and interviews.

3.7 Model Specification

As part of quantitative analysis, this study performed regression analysis. Regression models are models that estimate impact of a variable or set of variables on another variable. Regression models can either be simple regression model or multiple regression model and multiple regression models are used when several explanatory variables predict a variable (Dependent Variable). This study estimated the impact of head portorage on school enrolment and academic performance with separate multiple regression models.

The general form of regression model is shown in equation 1.



$$Y = \alpha_1 + \alpha_2 X + \epsilon \dots \dots \dots EQN 1$$

On the basis of equation 1 above, this study specifies the models as follows;

$$SCHATT = \alpha_0 + \alpha_1 GEHP + \alpha_2 PerSchXC + \alpha_3 HSH + \alpha_4 OCM + \alpha_5 OCF + \alpha_6 LAR + \alpha_7 EDUM + \alpha_8 EDUF + \epsilon \dots \dots \dots Model 2$$

$$ACPF = \alpha_0 + \alpha_1 GEHP + \alpha_2 PerSchXC + \alpha_3 HSH + \alpha_4 OCM + \alpha_5 OCF + \alpha_6 LAR + \alpha_7 EDUM + \alpha_8 EDUF + \epsilon \dots \dots \dots Model 2$$

Where

SCHATT= school attendance of the respondent. All the respondents were enrolled in basic school, so the problem was not whether enrolled or not but the extent to which they attend school.

GEHP= girls engagement in head portorage (average number of days engaged in head portorage per term)

ACPF= Academic performance (average score of pupils at end of terminal examinations conducted by their respective schools. The scores were obtained from three key subjects, namely Mathematics, English Language and Science).

PerSchXC= average perception of respondents on conditions of public basic schools in the study area, measured using Likert scale ranging from 1 to 5.

HSH= household head (1 being a father and 0 otherwise).

OCM= occupation of mother (included Not employed, Head porter/track pusher, Trader and Farmer where not employed is the controlled variable)

Professional

OCF= occupation of the father (included Not employed, Head porter/track pusher, Trader and Farmer where not employed is the controlled variable)



LAR= living arrangement of the child (staying with biological parents coded as 1 and otherwise coded as 0)

EDUM: the educational level of mother (it has three categories, namely no formal education, basic education and secondary education, no formal education was the controlled variable).

EDUF: the educational level of father (it has three categories, namely no formal education, basic education and secondary education, no formal education was the controlled variable).

$\epsilon_{1...3}$ = Stochastic term (include all omitted variables that can influence the dependent variables).

Before estimation of the models, correlation analysis was performed with Pearson's Correlation Coefficient and multicollinearity test with Variance Inflation Factor (VIF) and tolerance.

3.8 Validity and Reliability

Validity is when a research instrument measures what it is intended to measure while reliability is the consistency of research instruments providing results (Blumberg, Cooper, and Schindler (2005). Validity and reliability are vital in any research such as this current research work (Blumberg et al 2005). To ensure validity of research instruments, they were shown to my supervisor for which all necessary corrections were made.

Moreover, the researcher pre-tested the research instrument in Sisala District in the Northern Region. The questionnaire was pre-tested on five girl child porters while the interview guide was pre-tested on the Director of Education of the District. After the pre-



test, the researcher made further changes in both the questionnaire and the interview guide.

Based on these processes, questionnaire and interview guide are deemed reliable and valid for further analysis.

3.9 Limitations of the Study

The principal strength of the analysis of this study is that, it is based on data that emanated from the core stakeholders (for example Education Service and School for Life) in girl child education. The girl child head porters whom the study was about were active participants.

The study, however, had a number of limitations. The major limitation of the study was the busy schedule of some Coordinators of NGOs in the district to give detailed opinion on the state of girl child head portage and its effects on basic school enrolment and academic performance. Another limitation was financial constraint on the part of the researcher to cover more districts in the Northern Region. The study covered Tamale Metropolis, making the study a case study.

Despite these limitations, the study was able to obtain data from all categories of stakeholders in the girl child education. In circumstances where key informant was busy or out of reach, their immediate subordinates were made to represent them. Therefore, data emanated from reliable sources or persons.



3.10 Data Analysis

The quantitative data collected with questionnaire administration were cleansed after which they were coded and entered into the Statistical Package for the Social Sciences (SPSS) version 16.0. Regarding the data cleansing, incomplete, incorrect, inaccurate and irrelevant information were removed. Descriptive statistics were performed, namely frequency and percentage distribution of child characteristics, household characteristics, school and community characteristics. Weighted Average (WA) and Standard Deviations were performed as part of descriptive statistics for Likert Scale statements. The decision rule for Likert Scale Statistic is given in Table 3.2.

Table 3.2: Decision Rule for Likert Scale Responses

WA range	Likert Scale	Decision rule
1.00-1.49	Strongly disagree	disagreement
1.50-2.49	Disagree	Disagreement
2.50-3.49	Neutral	Disagreement
3.50-4.49	Agree	Agreement
4.50-5.00	Strongly agree	Agreement

Source: Researcher (2016)

Content analysis was used to analyse the interview data. The researcher makes direct quotation from the interview data to describe the opinion of Key Informant of the study.





The researcher also summarizes some of the responses of the Key Informant to describe the state of girl child head portage in the Tamale Metropolis. Specifically, the responses of the Key Informant on reasons of children's engagement in head portage, its effect on school attendance and academic performance and solutions to the menace were listed or itemized to support or otherwise of the responses of the respondents of questionnaire. Data from field observation were analysed using them as plates to provide pictorial evidence on the existence of girl child head portage in the Tamale Metropolis.

Moreover, the study performed two different multiple regression analysis, one for impact of head portage on school attendance and other for impact of head portage on academic performance. Before estimation of the models, correlation analysis and multicollinearity test were performed.

3.10.1 Correlation Analysis

Correlation is another way of assessing the relationship between variables. To be more precise, it measures the extent of correspondence between the ordering of two random variables. There is a large amount of resemblance between regression and correlation but for their methods of interpretation of the relationship. For example, a scatter diagram is of tremendous help when trying to describe the type of relationship existing between two variables.

Though, there are several methods of computing correlation coefficient, this study used Pearson's correlation coefficient, to express the strength of the relationship. This coefficient is generally used when variables are of quantitative nature, that is, ratio or interval scale variables. The value of coefficient always lies between -1 and 1 inclusive.



If Y increases when X increases, we say that there is positive or direct correlation between them. However, if Y decreases when X increases (or vice versa), then we say that they are negatively or inversely correlated. The extreme values of coefficient, that is, when coefficient = ± 1 , indicate that there is perfect (positive or negative) correlation between X and Y. However, if coefficient is 0, then there is no or zero correlation.

3.10.2 Multicollinearity Test

One of the problems in regression estimation is multicollinearity. Multicollinearity is a situation whereby two independent variables in a regression model are serially correlated, such that one independent variable predicts another independent variable in the same regression model (Frost, 2018). The presence of multicollinearity affects coefficient of individual variables but not regression model as a whole. It is therefore to have the whole regression model to be statistically significant but individual variables having insignificant coefficient (*ibid*). This happens in the presence of multicollinearity.

In the presence of multicollinearity, the estimate of one variable's impact on the dependent variable while controlling for the others tends to be less precise than if predictors were uncorrelated with one another. The usual interpretation of a regression coefficient is that it provides an estimate of the effect of a one unit change in an independent variable, holding the other variables constant (*ibid*). If a predictor variable is highly correlated with another predictor variable, in the given data set, then we have a set of observations for which two predictor variables have a particular linear stochastic relationship and this presents multicollinearity problem.

For this reason the study first tested for multicollinearity with Tolerance or Variance Inflation Factor (VIF).

$$\text{Tolerance} = 1 - R^2$$

$$\text{VIF} = 1 / \text{Tolerance}$$

According to O'Brien (2007), VIF for independent variables less than 3 with tolerance level above 0.4 indicate no multicollinearity problem.

3.11 Ethical Consideration

Ethical issues are very important when conducting research with children. Ethical research aims to protect the rights of children and young people involved in the research. It also reassures parents and advocates of children's welfare and safety that research conducted with children is designed in their best interests (Kwaku, 2013). Ethical research involving children ensures the following: not harming the children either emotionally, physically or mentally; protecting children from violence, abuse and exploitation; agreeing on interventions; not putting children at risk; not exploiting adult; ensuring confidentiality and seeking consent from children (Graham, Powell, Taylor, Anderson, & Fitzgerald, 2013). Cozby (2001) noted that ethical considerations are inevitable when planning, conducting and evaluating research.

In view of the importance of ethical consideration in research with children, the following were observed with upmost care: informed consent, privacy, confidentiality and protection.



3.11.1 Informed Consent

It is important to emphasize that participant of the research should know the research aims, research methods and processes, research topics, the usage of data to be collected and extent of their participation in the research work (Graham et al, 2013)..

The study therefore informed all participants the purpose of the study, the extent to which the data would be used, the research methods and processes and extent of their participation. The disclosure of this information to the participants influenced their participation; hence they willingly participated in the study.

3.11.2 Respect Privacy

United Nations Conventions on the Rights of the Child (UNCRC) notes that children have right to privacy. Article 16 of UNCRC states “No child shall be subjected to arbitrary or unlawful interference with his or her *privacy*, family, or correspondence, or to unlawful attacks on his or her honour and reputation” (Unicef, 1989).

The study fully achieved the privacy of all the interviewees since the interviews were done in their offices where no one was there except the interviewer and the interviewee. However, it was difficult to achieve respect for privacy of kayayas involved in the study because of the setting where the questionnaire administration was done. The questionnaire administration took place in the market centres where many people were trading; hence it was difficult to ensure privacy of the children (“kayayas”).

The questionnaire administration to the girls took place at market centres in order to debunk the perception of people that the researcher was exploiting the girls. Moreover,



the girls were more easily accessible at those places. It was difficult conducting administration of questionnaire to the kayaye respondents because many people were gathered together at the place for business activities; hence there was possibility for other people to hear the conversation between the interviewer and the interviewee.

3.11.3 Confidentiality and Anonymity

Confidentiality means that data must be stored where it cannot be read by anyone other than the person. Details of raw data, participants and location must never be revealed to the media. Therefore, publication of any information about the participants should be consented to by the participants before publication; else it renders the publication unethical (Graham et al, 2013).

Anonymity is where the names of the participants are not disclosed to any third party. The study ensured anonymity by not collecting names at all during the data collection exercise. The study used “key informant” to represent a specific interviewee. Moreover, throughout the process of data collection, study assured participants that the information given would be confidential and none of it would be disclosed to the media or anyone who is not connected and related to the research.

3.11.4 Protection

In every research, the interest of respondents is paramount and must therefore be guaranteed in order to minimize economic and social deprivations. The perception that children are vulnerable and that interaction between researcher and child involves power relations creates an obligation on adults to ensure children do not suffer harm when





participating in research. Head portering business, though a form of child labour for my respondents (young girls), it is the occupation from which they earn their livelihood. They earn most of their incomes during the market days. In order to safeguard the livelihood of the respondents, the questionnaire administration to the young girls was mostly done on the non-market days which were more or less leisure times for the respondents; hence the study did not deny them of their livelihood.

3.12 Conclusion

The methods employed in the study are suitable for this study because it probes into causes and effects of girls into head portering. The study of this nature needs triangulation, hence the need for the use of two research strategies (qualitative and quantitative methods), multiple data collection tools (questionnaire, interview and field observation) and multiple respondents (girl head porters, parents, NGOs, GES).

The study used Mean and Standard Deviations and frequencies and percentages for descriptive statistics via the data from questionnaire. However, interview data were analysed through content analysis. Data from field observations were analysed using plates.

The study among the regression models adopted Ordinary Least Square (OLS) model to estimate the determinants of girl child engagement in head portering in the Tamale Metropolis. Correlation analyses were performed to show how head portering and school enrolment and head portering and academic performance are related.

The methods employed in this study would help answer all the research objectives stated in Chapter One.



CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This chapter presents and discusses the data collected from the field through questionnaire administration, interview and observation. The data was collected from 120 girls of basic school-going age in the Tamale Metropolis and some key stakeholders in education in the region.

The presentation of the data is in accordance with the research objectives. Thus, the presentation and discussion are done in relation to girls engaged in head porterage, causes of girls engagement in head porterage, the effects of head porterage on education of girls engaged in head porterage and solutions to girls engagement in the phenomena.

The chapter ends with a summary of the discussion.

4.2 girls engagement in Head Porterage

This section addresses objective one of the study which is “to identify the kind girl children engaged in head porterage in the Tamale Metropolis”. It focuses on the age category of girls engaged in head porterage, the period they engaged in the activity and who influenced them into the act. The responses on each of the items are given in Table 4.1.



Table 4.1: girls engagement in Head Portorage

Items	Categories	F	%
Age (Years) [N=12]	<11	20	16.7
	11-14	61	50.8
	15-18	39	32.5
When do you engage in head portorage? (N=120)	Only weekdays	12	10.0
	Only weekends	45	37.5
	All days	63	52.5
At what time are you engaged in head portorage? (N=75)	During school hours	31	41.3
	After school hour	44	58.7
Are you pushed into head portorage? (N=120)	Yes	95	79.2
	No	25	20.8
Who is pushing you? (N=95)	Parents	60	63.2
	Relatives	13	13.7
	Friends	22	23.2

Source: Field Data (2016)



Table 4.1 shows that none of the respondents was below 8 years and above 18 years. All of them were between the ages of 8 years and 18 years. Indeed, majority of them were between 8 years and 14 years (that is summation of below 11 years and 11-14 years age groups) (67.5%) and the remaining (32.5%) were between 15-18 years. This situation was confirmed by a key informant at the Tamale Metro Education Service Directorate in an interview with the researcher as follows:

“The unit is aware of this situation; girls in kayaye have become new phenomena in this area. Some do not attend school at all...others come to school late because of this act while others leave class for kayaye”.
The girls are young; as young as 7 years and are to be in basic schools”
(Key Informant, Ghana Education Service, Tamale).

The Key Informant in School for Life in an interview disclosed the following:

“I personally encountered a young girl in this act. I was surprised and called her and began to ask her questions about her name, age..... She disclosed to my surprise, I am 6 years old. My sister, this is how bad the situation is. If 6 years old girls are into head portorage, you can agree with me this is bad and we must work to stop it”

Personal observation at the Tamale Central and Aboabo Markets further confirmed young girls of basic school-going ages that were into kayaye in the Tamale Metropolis (see Pictures 1 and 2).



Picture 1: Young Girls in Kayaye at Aboabo Market, Tamale Metropolis



Picture 2: Young Girls in Kayaye at Tamale Central Market, Tamale Metropolis

The findings are consistent with a study by GSS (2005) that kayaye is a common feature in the urban and commercial centres. It involves girls and few adults, carrying heavy



loads for clients for charge fees (GSS, 2005). Salome (2010) in her thesis entitled “the role of education in the training of Kayaye, a study in Techiman Market” submitted to Graduate School of Kwame Nkrumah University of Science and Technology identified young girls less than 18 years (8 years-17 years) that were into kayaye at the Techiman Market.

From Table 4.1, out of 120 respondents who engaged in head portorage, 12 (10.0%), 45 (37.5%) and 63 (52.5%) engaged in the act during weekdays, weekends and all days respectively. Out of those who engaged in head portorage during the weekdays, 41.3% did so during school hours and 58.7% after school hours. This suggests that more girls engage in head portorage outside school hours (3.00pm-6.00pm) and weekends. It was revealed that Tamale Metropolis had no fixed market day and market days rotate from a day to another day. It was further disclosed in an interview that:

“Some pupils do not go to school and are in the market centres transacting one business or others. Some engage in kayaye for money, some follow their mothers to carry loads for money, especially when there is a market day at both Aboabo and Central Markets. Kayaye business booms at this special day.” (Key Informant, School for Life, Tamale).

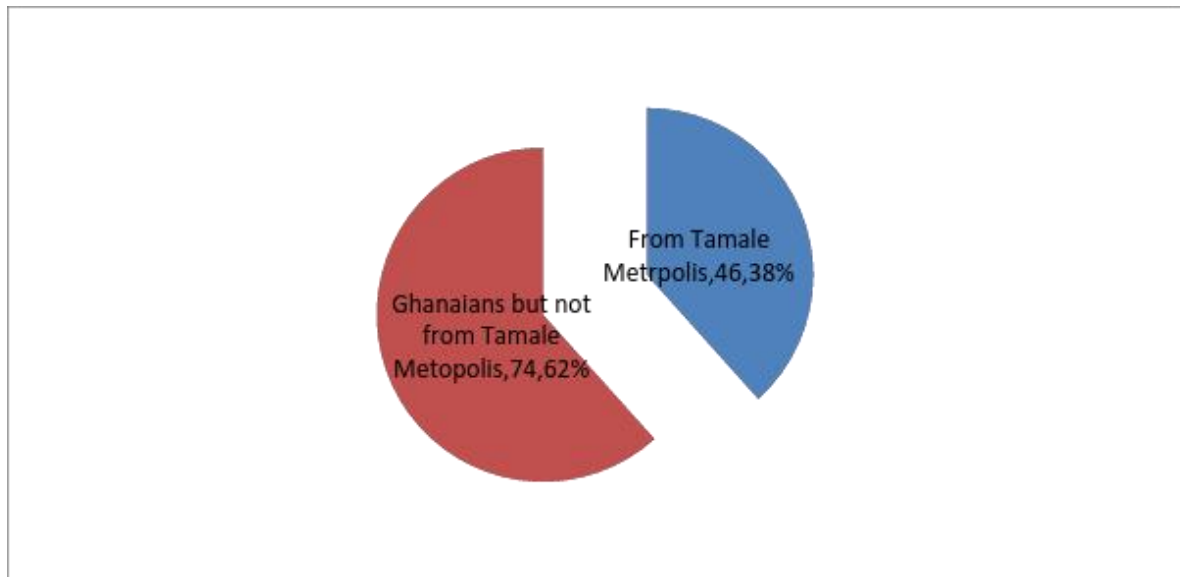
Table 4.1 shows whether or not the head porters are pushed into head portorage. The responses indicates that 95 (79.2%) are pushed into head portorage whilst the remaining 25 (20.8%) voluntarily engaged in the act. The respondents pushed into the act indicated that parents (63.2%), relatives (13.7%) and friends (23.2%) pushed them into it. This is consistent with findings of Salome (2010) that some parents instigate their young girls



into kayaye just because these parents are poor and single parents and incomes from their children are deemed important family income supplement. These parents are themselves kayaye and see nothing wrong with their children assisting them in their income earning activities (Salome, 2010).

The study further sought to know from the kayaye respondents where they came from. The rationale was to reveal whether or not the kayaye were immigrants and if so where they migrated from. The responses are summarized in Figure 4.1. The Figure shows that 74 (62%) of the respondents (kayaye) were Ghanaians but born and bred outside Tamale Metropolis while the remaining 46 (38.0%) were born and bred in Tamale Metropolis.

Figure 4.1: The Origin (Hometowns) of the Respondents



Source: Field Data (2016)

This study further revealed specific regions and districts of these girl head porters immigrants (see Table 4.2).

Table 4.2: Home Towns of Young Girl Immigrants in the Tamale Metropolis

Northern Region			Upper East Region
Kunyavia	Malshagu	Zogbeli	Navrongo
Changnaayili	Nachimba	Zujung	Bolgatanga
Yong	Garzegu	Naprisi	Paga
Fuo	Tuwa	Yungdakpkemyili	
Sagnarigu	Saabongida	Tuunayili,	
Dungu	Gurugu	Lungbinsi,	
Tishigu	Nyohini	Nalerigu,	
Kunyevila	Shigu	Walewale	
Kanuili	Tangpin	Tolon.	
Tuunaayili	Kukuo	Bilpela	
Vittin			

Source: Field Data (2016)

The findings of this study is consistent with the notion that kayaye mainly due to migration (Nabila, 1985; Opere, 2003; Anarfi & Kwankye, 2005; Awumbila et al, 2008). These people migrate with the notion of getting a good job but end up with none; hence see kayaye as an alternative income earning activity. These immigrant women come along with their children or give birth in their new found destination (Anarfi & Kwankye, 2005) who in turn becomes kayaye.



4.3 Reasons for girls engagement in Head Porterage

The second objective of the study was “*to find out the reasons or causes of girl child head porterage in the Tamale Metropolis*” The literature review identified factors responsible for girls engagement in head porterage but this study focused mostly on household and school characteristics.

4.3.1 Household and Parent Characteristics and girls engagement in Head Porterage

The study identified key household and parent characteristics that influenced girls engagement in head porterage and girls into head porterage were asked to respond as shown in Table 4.3. This study relates these characteristics to girls engagement to head porterage using Pearson’s Chi Square Test. The hypotheses tested included the following (only alternative hypotheses were formulated);

1. H_0 : Household size and girls’ head porterage engagement are statistically independent
 H_1 : Household size and girls’ head porterage engagement are statistically dependent.
2. H_0 : Sex of household head and girls’ head porterage engagement are statistically independent
 H_1 : Sex of household head and girls’ head porterage engagement are statistically dependent.
3. H_0 : Living arrangement of girls and girls’ head porterage engagement are statistically independent.



H₁: Living arrangement of girls and girls' head portorage engagement are statistically dependent.

4. H₀: Educational level of parents or guardians and girls' head portorage engagement are statistically dependent

H₁: Educational level of parents or guardians and girls' head portorage engagement are statistically dependent.

5. H₀: Occupation of parents or guardians and girls' head portorage engagement are statistically independent.

H₁: Occupation of parents or guardians and girls' head portorage engagement are statistically dependent.



Table 4.3: Household and Parent Characteristics of Girls into Head Portage in the Study Area (N=120)-Chi Square Test

Characteristics	Categories	F		%		P-value
Household sizes	2-4	14		12.5		0.023
	5-7	55		45.8		
	8-10	19		15.8		
	Above 10	31		25.8		
Sex of household head	Male	106		88.3		0.539
	Female	14		11.7		
Living with both parents	Yes	87		72.5		0.001
	No	33		27.5		
		Mother (N=114)		Father (N=103)		
		F	%	F	%	
Biological Parents	Alive	114	95.0	103	85.8	0.000
	Dead	6	5.0	17	14.2	
Education level of biological parents/guardians	No formal education	59	51.8	42	40.8	0.104
	Basic Education	32	28.1	34	33.0	
	Secondary Education	23	20.1	27	26.2	
Occupation of biological parents/guardians	Not employed	31	27.2	20	19.4	0.007
	Head porter/track pusher	19	16.7	8	7.8	
	Trader	51	44.7	21	20.4	
	Farmer	6	5.3	34	33.0	
	Professional	7	6.1	20	19.4	

Source: Field Data (2016)

Table 4.3 shows that out of 120 girls into head portage, 14 (12.5%) had household size of 2-4 while the remaining 55 (45.8%), 19 (15.8%) and 31 (25.8%) had household size





to be 5-7 member, 8-10 members and above 10 members respectively. This result shows that majority of the respondents had larger (more than 3 children) household size. From the Chi square test, household size significantly influences girls engagement in kayaye in the Tamale Metropolis ($p=0.023$). Therefore, the study rejects the null hypothesis in favour of alternative hypothesis that household size and girls' head portorage engagement are statistically dependent.

The household size and its influence on girls engagement in kayaye was confirmed in a an interview with GES, Tamale as follows;

“Families are large in this metropolis. Some couples have children around ten. The reason is polygamy among the Muslim community where men can marry more than one woman and even those married to one wife give birth too many children. The situation is worrying, making many parents unable to take good care of their children. I believe the large family size is making them poorer, making them use their children to work to supplement their incomes” (Key Informant, Ghana Education Service, Tamale).

The respondent from Regional Advisory, Information and Network System (RAINS), Tamale has this to say;

“My unit has observed large family size in this metropolis and this is worse in the rural districts in the region. These people are found of given birth to many people because, I believe they do not practice family planning and practice polygamy as well. The only problem I have is they

are not able to take care of these innocent children and also push them into child labour. Go to various market centres and you will be surprised to see young girls as head porters. This is the problem!” (Key Informant, RAINS, Tamale).

The value parents place on a child depends on the number of children the parents have. Larger households have greater demand of services like household chores that cannot be supplied by the market and the child's time in larger household have greater value than smaller households (Osment, 2014). Larger households are also more likely to be poorer and marginal utility of consumption tends to be higher in these households. This has the potency of taking children out of school to paid work (head portage) (Osment, 2014).

From Table 4.3, 106 (88.3%) of the kayaye had household heads to be male while the remaining (11.7%) had household heads to be female. Some females are household heads in the study area due to divorce, separation of marriage and death of male spouse. However, sex of household head and girls engagement in head portage are statically independent ($p=0.539$).

Another important item under household characteristics is living arrangement of children. It was observed in the study area that majority (72.5%) of the girls interviewed lived with their biological parents while 33 (27.5%) lived with people who were not their biological parents. These girls were living with grandmothers, step mothers and aunts. An interview with RAINS, Tamale explained the above as follows;

“.....though practice of fostering is not as common as before, I think it persists in the region. A man or a woman gives birth and the child is given



to a relative for upbringing. They see this practice of strengthening family ties, even though this practice has not been helpful to these children, especially the young girls. Some are abused by their relative” (Key Informant, RAIN, Tamale).

From Table 4.3, 114 (95.0%) had their biological mothers alive at the time of data collection whereas 6 (5.0%) had their biological mothers dead at that time. Table 4.3 further shows that 103 (85.8%) girls interviewed had their biological fathers alive and the remaining 17 (14.2%) had their biological fathers dead at the time of data collection. Table 4.3 shows the educational level and occupation of parents alive at the time of study. From Table 4.3, out of 114 mothers alive, 59 (51.8%), 32 (28.1%) and 23 (20.1%) had no formal education, basic education and secondary education respectively. Fathers alive had no formal education (40.8%), basic education (33.0%) and secondary education (26.2%). With regards to occupation, mothers were not employed (27.2%), head porters (16.7%), traders (44.7%), farmers (5.3%) and professionals (6.1%) and fathers were not employed (19.4%), track pushers (7.8%), traders (20.4%), farmers (33.0%) and professionals (19.4%). Table 4.3 shows that occupation of parents and girls engagement in head portage are statically dependent in the Tamale Metropolis ($P=0.007$). However, education level of parents or guardians and girls engagement in head portage were statistically independent ($p=0.104$).

During an interview with Community Development Unit, Tamale, it was disclosed as follows:



“Farming is the major occupation of people of Northern Ghana. Northern Ghana has one farming season, and this is due to climatic condition and lack of irrigation system in the regions. Others are into petty trading like selling of pepper, tomatoes, garden eggs, fish, maize and head portorage. These petty traders and head porters are mostly women. The nature of occupation will definitely make majority of the people poor and this is why the northern part of Ghana is noted as poorest in the country.yes, I think occupation of parents have some sort of influence on their children. In this area, some parents drag their children into the work they do. Farmers go to farms with their children and head porters go to the market centres, especially on market days with their children because they think they can help them to make more money on the market days. (Key Informant, Community Development, Tamale).

This clearly suggests that parent head porters push their children into head portorage in the Tamale Metropolis. This is supported by Parsons and Goldin (1989) and Burra (1995) that parent(s) who engage in head portorage see head portorage as great employment opportunity for their children and encourage them to do so.

4.3.2 Community and School Characteristics and girls engagement in Head Portorage

Other factors that influence girls engagement in head portorage are school factors. These factors were revealed from the literature review in chapter two and include access to school, conditions of the school and availability of school. A Likert scale from 1(strongly



disagree) to 5 (strongly agree) was used to examine the girls' perceptions of these factors. Strongly disagree was ranged 1.0-1.49, disagree ranged 1.50-2.49, undecided ranged 2.50-3.49, agree ranged 3.50-4.49 while strongly agree ranged 4.50-5.0. A high weighted average (3.50-5.0) implies respondents' agreement to statement related to school characteristics while low weighted average (1.0-3.49) implies the respondents' disagreement to statement related to school characteristics. The responses are summarized in Table 4.4.

Table 4.4 shows that none of the respondents strongly disagreed to the statement "public basic school is accessible in my community" and the responses ranged from "disagree" to "strongly agree". The descriptive statistic shows that majority of the respondents agreed that public basic schools in the Tamale Metropolis are accessible (WA=4.5417; Std Dev=0.64685).

Another factor under school characteristics related to the study is conditions of public basic schools. These include the type of school building, roofing condition, Information Communication Technology (ICT) availability in the schools, availability of places of convenient and others. Teachers are imperative in educational development and their quantities in the schools are considered. The respondents agreed that public schools are made up of blocks (WA=4.2583; Std Dev.=1.06507), but expressed disagreement that public school blocks do not leak (3.4917; Std Dev.=1.49507) and public school have computer laboratories (WA=2.2417; Std Dev.=1.37807).

From Table 4.4, respondents expressed disagreement that public schools have enough teachers (WA=3.3333; Std Dev. =1.09493). However, the standard deviation figure

revealed that some of the respondents agreed to the statements but those who indicated disagreement outweighed those who expressed agreement.

The study relates general school condition to frequency of girls engagement of head portorage in the Tamale Metropolis. The frequency was measured as the days within which they engage in head portorage (see Table 1 above, row three), where weekends (coded as 1), weekdays (coded as 2) and all days (coded as 3). The hypothesis is stated as follows:

H₀: General school conditions and girls engagement in head portorage are statistically independent.

H₁: General school characteristics and girls engagement in head portorage are statistically dependent.

From Table 4.4, the chi square test show that girls into head portorage is significantly influenced by general conditions of public basic schools in the metropolis ($\chi^2=34.817$; $p=0.008$). Therefore, null hypothesis is rejected in favour of alternative hypothesis that general school characteristics and girls engagement in head portorage are statistically dependent. This indicates that the better the general conditions of public basic schools, the more girls of basic school-going age leave head portorage to attend schools. Thus, leakage of school roofs, inadequate trained teachers and lack of computer laboratory in public schools (see Table 4.4) explains why these girls are not interested to stay in school but rather engage in head portorage.

An interview with the key informant of NORSAAC supports this;



“You know the school environment counts a lot in encouraging especially girls to go to school, a school without facilities like urinal and changing rooms for girls are not conducive especially during their menstruation”
(Key Informant, NORSAAC, Tamale).

Table 4.4: Perception on Community/School Characteristics (N=120)

Statement	Minimum	Maximum	Weighted Average	Std. deviation
Public basic school is accessible in my community	2	5	4.5417	0.64685
The school is made of blocks	1	5	4.2583	1.06507
The school block does not leak	1	5	3.4917	1.49507
The School has enough teachers	1	5	3.3333	1.09493
There is computer laboratory	1	5	2.2417	1.37807
I am happy to be in the school	1	5	3.7417	1.40525
General school condition is good	2	5	3.6014	1.0052
N=120; $\chi^2=34.817$; p=0.008				

Source: Field Data (2016)

Key informant of School for Life in an interview on the subject matter disclosed as:

“It has come to our attention that some classrooms of public basic schools especially in rural communities do not have permanent trained teachers and pupils of different classes or stages have to combine to be taught by a teacher. It is common to see say class two and class three pupils combined





as one class and taught by a teacher”, he added. I am aware that ICT is a core subject in basic schools but public basic schools here do not have computer laboratory. I do not know how our pupils are learning the so called ICT in school. I think this is a challenge to teaching and learning of ICT in our schools”.

“To encourage young girls to be punctual and regular in school, public schools should be a second home for them where they are well handled but not maltreated. Bad facilities and maltreatment pushed these innocent girls into socially unacceptable act like head portorage” (Key Informant, School for Life).

4.4 Effects of Head Portorage on Educational Development of Girl Porters

This section addresses objective three of the study which sought to *“explore the effects of head portorage on the education of girl child porters in the Tamale Metropolis”*. The section is divided into two parts, namely description of perceptions of respondents and statistical analysis where regression estimations were performed to estimate the effects of head portorage on education of girl porters.

4.4.1 Descriptive Statistics

This study descriptively reported the effects of head portorage on school attendance and attitudes towards learning in Table 4.5. A Likert scale from 1 (strongly disagree) to 5 (strongly agree) was used to examine the effects of head portorage on educational development of girl porters in the Tamale Metropolis. Under this section, high weighted average score (3.50-5.0) meant respondents as a whole expressed agreement to a given

statement while a low weighted average (1-3.49) meant respondents as a whole expressed disagreement to a given statement. The study divided educational development into two aspects, namely basic school attendance and attitude towards learning.

Table 4.5 shows that respondents (girl head porters) agreed that they attend school on time (WA=3.5000; Std Dev=1.34526), they go to school every day (WA=3.8860; Std Dev=1.26742) and stay in school until closing (WA=4.0702; Std Dev=1.13449). The responses to these three key elements of school attendance suggest that school attendance is high among girls into head portage in Tamale Metropolis. However, the values of standard deviation for all the statements indicate that not all girls into head portage took school attendance seriously. Some strongly disagreed that they go to school on time, every day and stay in school until closing (See Table 4.5, the minimum values).

However, data on attitude towards learning among girl head porters revealed quite different results. The girl head porters expressed disagreement to all the four statements under attitude towards learning. They disagreed that they are active in class rooms (WA=3.0614; Std Dev=1.30544), contribute to class discussions (WA=2.9649; Std Dev=1.29622), learning at home (WA=3.4298; Std Dev=1.27584) and doing all assignment given by teachers (WA=3.3246; Std Dev=1.41105).



Table 4.5: Effects of Head Porterage on School Attendance and Attitudes towards Learning

Extent of School Attendance	Statement	Minimum	Maximum	Weighted Average	Std. dev.
	I go to school on time	1	5	3.5000	1.34526
	I stay in school until it closes	1	5	4.0702	1.13449
	I go to school every school day	1	5	3.8860	1.26742
Attitude towards learning	I am active in class rooms	1	5	3.0614	1.30544
	I contribute to class discussions	1	5	2.9649	1.29622
	I learn at home	1	5	3.4298	1.27584
	I do all assignments	1	5	3.3246	1.41105

Source: Field Data (2016)

The study analysed descriptively the academic performance of students in the English Language, Mathematics and Science on average terms for the academic year 2015/2016. The scores were grouped based on the Grading System of West African Examination Council as shown in Table 4.6. The result in the Table 4.6 shows that out of 120



respondents, 114 passed and six failed English Language; 77 passed and 43 failed Mathematics and 107 passed and 13 failed Science.

Table 4.6: Academic Performance of Respondents

Grades	Score	English Language	Mathematics	Science
A ₁	80-100	3	0	7
B ₂	75-79	4	0	13
B ₃	70-74	11	7	25
C ₄	65-69	52	27	26
C ₅	60-64	21	12	19
C ₆	55-59	23	31	17
D ₇	50-45	6	9	5
E ₈	45-49	0	23	7
F ₉	below 44	0	11	1
Total		120	120	120

Source: Responses from Kayayes for 2015/2016 Academic Year

Relating the academic performances to engagement in head portorage revealed the results as shown in Table 4.7. Table 4.7 shows the respondents engaged in head portorage during only weekends performed better in English Language, Mathematics and Science than those engaged in Head portorage during weekdays and all the days. For example of the three respondents who scored between 80-100% in English Language, all were into head portorage during weekends only. Also, of the seven respondents who scored 70-74% in Mathematics all were into head portorage during weekends only. In Science, out of seven respondents who scored 80-100%, six were into head portorage during weekends only whiles one was engaged in head portorage during weekdays.



Moreover, those engaged in head portorage during weekdays performed better in the selected subjects than those engaged in head portorage all the days. Therefore, academic performances of the respondents were significantly associated with the extent to which respondents were engaged in head portorage in the study area (refer to Chi-square for each subject in Table 4.7).

Table 4.7: Chi-square test for association between Academic Performance and Extent of Girl's Engagement in Head Portorage

Score	English Language			Mathematics			Science		
	Only weekdays	Only weekends	All days	Only weekdays	Only weekend	All days	Only weekdays	Only weekends	All days
80-100	0	3	0	0	0	0	1	6	0
75-79	1	3	0	0	0	0	2	10	1
70-74	0	5	6	0	7	0	1	24	0
65-69	5	33	14	8	19	0	5	5	16
60-64	4	1	16	1	8	3	3	0	16
55-59	2	0	21	2	11	18	0	0	17
50-54	0	0	6	1	0	8	0	0	5
45-49	0	0	0	0	0	23	0	0	7
Below 44	0	0	0	0	0	11	0	0	1
Total	12	45	63	12	45	63	12	45	63
χ^2	24.0214			57.0278			63.7219		
P-value	0.000			0.000			0.000		

Source: Terminal Reports of the Respondents, 2015/2016 Academic Year

4.4.2 Impact Analysis

The study performed preliminary tests such as correlation test using Pearson Correlation Coefficient (see Table 8) and Multicollinearity test using tolerance and Variance Inflation Factor test (VIF) (see Table 9).

Table 4.8 shows that engagement in head portorage and school attendance is negatively related. As girl child spend more hours in head portorage business, her school attendance decrease and vice versa. However, the relationship is weak ($r = -0.047$) not statistically significant. Moreover, the relationship between engagement in head portorage and academic performance of respondents is negative and significant. Therefore, one expects academic performance of pupils to fall as they engage in head portorage. The relationship between other independent variable and school attendance or academic performance could be referred from Table 4.8.



Table 4.8: Pearson’s Correlation Coefficient Matrix

	SCHATT	ACPF	GEHP	PerSchXC	HSH	OCM	OCF	LAR	EDUM	EDUF
SCHATT	1.000	.027**	-.047	.418**	-.015	.067	.116	-.023	.265**	.020
ACPF		1.000	-.323*	.579**	.040	-.039	.047	.036	-.041	.019
GEHP			1.000	-.016	.275*	-.126	-.003	-.011	.226*	-.267**
PerSchXC				1.000	.068	.043	.017	-.153	.360	.007
HSH					1.000	.095	.212*	-.154	-.076	.047
OCM						1.000	.299**	-.029	.092	.099
OCF							1.000	-.112	.034	.174
LAR								1.000	-.109	.014
EDUM									1.000	.630**
EDUF										1.000

**Source: Field Data (2016): **Correlation is significant at 0.01 level (2-tailed);
*Correlation is significant at 0.05% level (2-tailed)**

After identifying the relationship between each independent variable and school attendance and academic performance, the study tested for possible multicollinearity and the results are produced in Table 4.9.

The collinearity test in Table 9 shows that the VIF for the independent variables were below three and tolerance level above 0.4 and this indicates that multicollinearity that exist among the independent variables are acceptably very low, hence there is no problem of multicollnearity.

Table 4.9: Tolerance Level and Vector Inflation Factor

Variables	tolerance Level	Vector Inflation Factor
GEHP	0.626	1.597
PerSchXC	0.841	1.85
HSH	0.737	1.357
OCM: Head porterage	0.767	1.303
Trading	0.579	1.727
Farming	0.558	1.794
Professional work	0.726	1.377
OCF: Truck pusher	0.651	1.536
Trading	0.402	2.745
Farming	0.401	2.745
Professional work	0.511	1.955
EDUM: Basic education	0.596	1.677
Secondary educ.	0.642	1.557
EDUF: Basic education	0.665	1.504
Secondary educ.	0.540	1.852
LAR	0.743	1.346

Source: Field Data (2016)



The process statistically test the effects of head portorage on girls' school attendance and academic performance with the following hypotheses:

1. H_0 : Head portorage does not significantly influence school attendance among girls into head portorage in the Tamale Metropolis.
 H_1 : Head portorage significantly influences school attendance among girls into head portorage in the Tamale Metropolis.
2. H_0 : Head portorage does not significantly influence academic performance among girls into head portorage in the Tamale Metropolis.
 H_1 : Head portorage significantly influences academic performance among girls into head portorage in the Tamale Metropolis.

The estimated results of effects of head portorage engagement on school attendance are given in Table 4.10. From Table 4.10, girls engagement in head portorage reduced their attendance by 0.007 but the reduction was not statistically significant. Therefore, this study accepts the null hypothesis that head portorage does not significantly influence school attendance among girls into head portorage in the Tamale Metropolis.

Table 4.10 further shows that educational levels of parents matter in school attendance of young girls in the Tamale Metropolis. Girls from homes where both parents had secondary education significantly attend school more than girls from homes where both parents had no formal education. However, in terms of rate of school attendance, as between children from homes where both parents had only basic education and those from homes where both parents had no formal education, there was no difference statistically.

Another factor important to school attendance of girls is school conditions. School conditions significantly improved girls' attendance in school. As school conditions or infrastructure improves attendance increases by 0.277 but as school conditions deteriorate girls' school attendance falls.

The adjusted R-square value shows that the independent variables together explain 36.9% of the variation in the school attendance. This means that other variables, such as income level of parents (not included in the model) accounted for 63.1% of the variation in the model. Those equally important variables were omitted from the model because of lack of data. The entire model estimated is statistically fit (F-stat= 15.092; p-value=0.000) for predictions and forecasting of school attendance of girls engaged in head portorage.



Table 4.10: Results of Regression Estimation for Impact of Head Portelage on School Attendance

Variables	Coeff.	Std Err	t-stats	p-value
GEHP	-0.007	0.122	-0.057	0.955
PerSchXC	0.277	0.077	3.895	0.000
HSH: Male	-0.159	0.225	-0.707	0.481
OCM: Head portelage	-0.888	0.553	-1.606	0.111
Trading	-0.146	0.167	-0.873	0.385
Farming	0.473	0.354	1.333	0.185
Professional work	-0.245	0.311	-0.790	0.431
OCF: Truck pusher	0.259	0.308	0.839	0.403
Trading	0.287	0.262	1.097	0.275
Farming	0.338	0.208	1.625	0.107
Professional work	0.419	0.233	1.799	0.075
EDUM: Basic education	0.981	0.496	1.978	0.051
Secondary educ.	0.903	0.225	4.015	0.000
EDUF: Basic education	0.417	0.272	1.536	0.128
Secondary educ.	0.657	0.213	3.086	0.003
LAR: biological parents	-0.055	0.155	-0.358	0.721
N	120			
Adj. R ²	0.369			
F-stats	15.092			
Pp-value	0.000			

Source: Field Data (2016) **Significant at 5%: Dependent Variable=School Attendance*





The study further estimated the effects of girls engagement in head portorage on their academic performance and the results are summarized in Table 4.11. Table 4.11 shows that girls engagement in head portorage significantly decreased their academic performance. An hour spent on head portorage reduces their academic performance by 2.098 units. Moreover, from Table 4.11, school condition significantly improved academic performance of the respondents. As girl child perceives her school as best in terms of infrastructure and teaching, her academic performance significantly improves by 4.652.

Table 4.11 further reveals interesting results in terms of level of education of fathers and mothers. Results in Table 4.11 shows that the level of fathers' education did not matter in the academic performance of their young girls. However, mothers' level of education did matter. Young girls from homes where mothers had secondary education significantly had higher academic performance than girls whose mother had no formal education. Young girls whose mother had basic education and those whose mothers had no formal education statistically had the same level of academic performance.

The adjusted R-square value shows that the independent variables together explain 45.8% of the variation in the academic performance of girls engaged in head portorage. This means that other variables such as income level of parents not included in the model accounted for 54.2% of the variation in the model. The entire model estimated is statistically fit (F-stat= 23.106; p-value=0.000) for predictions and forecasting on academic performance of girls engaged in head portorage.

Table 4.11: Results of Regression Estimation for Impact of Head Portelage on Academic Performance

Variables	Coeff.	Std Err	t-stats	p-value
GEHP	-2.098	0.634	3.309	0.000
PerSchXC	4.652	0.664	7.007	0.000
HSH	-1.001	2.097	-0.477	0.634
OCM: Head portelage	-1.485	5.155	-0.288	0.774
Trading	-1.430	1.557	-0.919	0.360
Farming	1.921	3.303	0.582	0.562
Professional work	-3.196	2.894	-0.105	0.272
OCF: Truck pusher	3.516	2.873	1.224	0.224
Trading	-2.250	2.438	-0.923	0.358
Farming	0.604	1.938	0.312	0.756
Professional work	1.561	2.169	0.720	0.463
EDUM: Basic education	-1.248	2.097	-0.595	0.553
Secondary educ.	9.736	4.621	2.107	0.039
EDUF: Basic education	-0.326	1.986	-0.164	0.870
Secondary educ.	2.699	2.532	1.066	0.289
LAR	3.084	1.442	2.139	0.035
Constant	60.800	6.830	8.917	0.000
N	120			
Adj. R ²	0.458			
F-stats	23.106			
p-value	0.000			

Source: Field Data (2016), Significant Level: 5%; Dependent Variable=academic performance



The researcher conducted interview with key stakeholder in education in the study area to confirm or otherwise the results of quantitative analysis. The interview disclosed the following:

“BECE performances of our pupils have been dwindling nowadays. This has not been so...I think this kayaye issue has a role to play in the decreasing performance of our schools. Kayaye business take our pupils time, the time to come and stay in schools are spent in the market centres, mostly during market days and they do not come to school. Some come to school late but already tired to concentrate and learn” (Key Informant, GES, Tamale).

“I am aware about five girls who are into kayaye, they go to school all right but I always see them sleeping or inactive. I think this kayaye thing makes them work hard and come to class tired. You give them homework and come to class the next day without any attempt to do it. I think coming to class is not enough but they need to concentrate and learn but kayaye is not helping them at all” (Key Informant, School for Life).

These two statements above confirm that head portorage may not necessarily reduce attendance but it reduces academic performance. This finding is consistent with previous studies. Sanchez, Orazem and Gunnarsson (2005) explored the effects of child labour on mathematics and english language achievement test scores in the 3rd and 4th grades at primary schools in Latin America. The study considered academic performance in mathematics and language with data from 13 Latin American countries. The study



concluded that child work led to deterioration of academic performance in those subjects. Their study concluded that child work would never be complementary or neutral to academic performance. UNICEF (2013a) and Heady (2003) in Ghana indicated that child work significantly reduces pupils' learning achievement in Mathematics and English Language.

The outcome on school attendance however contradicts with previous studies like Sedlacek et al. (2005) and Assaad et al. (2001) that child work significantly reduces school attendance.

4.5 Solutions to girls engagement in Head Porterage

The fourth objective of the study was *“to determine ways by which girl child porterage could be addressed in the Tamale Metropolis”*. The study addressed this objective by gathering data from girls into head porterage, key informants at GES, School for Life, RAINS, Community Development, NORSAAC and Social Welfare Department. .

The data gathered from girls into head porterage is summarized in Table 4.12. A Likert scale from 1 (strongly disagree) to 5 (strongly agree) was used to examine effective solution to girls engagement in head porterage. The higher the weighted average, the more effective the proposed solution addresses the problem of girls in head porterage in the Tamale Metropolis. From Table 4.12, job acquisition after schooling (JHS or SHS) is the most effective solution to end girls engagement in head porterage (WA=4.6333). This suggests that pupils in the Tamale Metropolis consider the prospects of education as compared to working now. If the girls in this study area are assured and convinced of getting decent jobs after JHS or SHS, kayaye will not be an option and they will spend all

their days and time in school to acquire the necessary knowledge and skills to meet the needs of available.

Second effective solution to girls engagement in head portorage is good parenting where parents are educated not to force their girl child into head portorage. This approach coupled with poverty reduction strategy among women is most effective (see Table 4.12). This is because given financial support to parents towards girl child education was the third effective (WA=4.5000) school after parenting deciding not to ask children to engage in head portorage (WA=4.6250).

Next effective solution is provision of good schools at advantage places within the Metropolis (WA=4.2250). The girls describe good schools as follows:

- i. School which does not leak when it rains
- ii. School with computer laboratory like international schools in the area
- iii. Schools where pupils have chairs and desks to sit on and write on respectively
- iv. Schools where teachers show love to pupils even when pupils have offended them
- v. Schools where teachers have well-furnished staff common room and teachers do not teach under trees



Table 4.12: **Solution to End Girl’s Engagement in Head Porterage in the Tamale Metropolis**

Statement	Minimum	Maximum	Weighted Average	Std dev
If I am given money for schooling	1	5	4.5000	0.94380
If good school is built in my community	1	5	4.2250	1.18437
If teachers are posted to my school	1	5	3.8333	1.36790
If my parents will not ask me to engage in head porterage	1	5	4.6250	0.79982
If I can get decent job after schooling	1	5	4.6333	0.85929
If my friends stop being head porters	1	5	3.1250	1.83139

Source: Field Data (2016)

The study further solicited views on best ways to end girls engagement in head portage in the Tamale Metropolis from Key Informant indicated in Chapter Three of this Study. According to Key Informant, School for Life, the following could best address the situation:

- i. Restructuring of the society (i.e. family, religious bodies, and government).
- ii. Proper parenting whereby parents become more responsible to provide the basic needs of the girl child.



iii. Responsible community

During an interview with Key Informant at RAINS, the Key Informant disclosed the following as the best possible ways to address the problem of girls engagement in head portorage

- i. There is the need to strengthen civic organisation activities to sensitise the whole society on dangers of Kayaye.
- ii. There is the need to economically empower women in particular through livelihood programmes

A Key Informant at GES in an interview noted that the problem of girls engagement in head portorage can be addressed through:

- i. Sensitization of pupils and parents on importance of education, retention and completion of school and provision of child's needs to make them comfortable in school.

The Key Informant in Community Development advocated for the following:

- ii. Investment in agricultural sector as an income generating activity to economically empower parents to provide basic needs of children
- iii. Providing skills development for academically weak and dropout girls in areas such as tailoring, hair addressing. However, dropout girls who are academically good must be sent back to school.

The Key Informant at Social Welfare in an interview noted that preventive measures are best possible strategy in addressing girls engagement in head portorage. He outlined the following as the best prevention measures:



- i. Effective and efficient working of state institutions
- ii. Children in street should be spent back to school
- iii. Skills development and apprenticeship for dropout girls
- iv. Instituting state-sponsored social intervention programmes like the Livelihood Empowerment and Against Poverty (LEAP).

Suggestions by a key informant at NORSAAC include the following;

- i. Working with communities (traditional leaders, religious bodies) to enact laws to protect the interest of the girl-child
- ii. Government should expand support for girls
- iii. Environment should be friendly for girls to stay in school
- iv. Give livelihood support to young women
- v. Apprenticeship (e.g. tailoring and hairdressing)
- vi. Work with stakeholders in education to sensitize people on the importance of female education and the dangers of child marriage

Critical look at the suggestions by all the Key Informants revealed the following as measures to address girls engagement in head portorage:

- i. Livelihood programmes to economically empower parents to enable them to provide basic needs of girl child.
- ii. Sensitization of all stakeholders, particular girls of basic school-going age and parents on the dangers of head portorage, the need for schooling and staying in school until completion.
- iii. Improving school conditions through provision of adequate teaching and learning materials, trained teachers and facilities.



4.6 Conclusion

This chapter descriptively and statistically addressed objectives of this study. The study established that girls of basic school-going age were into head portorage in the Tamale Metropolis. The study further established that most of the girls who were engaged in head portorage were immigrants from Northern Region and Upper East Region. The study also revealed some reasons for girls engagement in head portorage as parents' engagement into head portorage and living arrangement of girls. Poor school conditions such as inadequate trained teachers, leaking of school roofs and convenient place of "change" (i.e. toilet and urinal) pushed girls into head portorage.

The study further established some minimal effects of girls engagement in head portorage on school attendance but some significant effect on academic achievement of these girls. This raises concern for policy makers to intervene to remedy the situation. Some solutions have been outlined by the stakeholders which if effectively implemented could help curb the phenomenon.



CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

As indicated already, this study examines the impact of head portorage on the educational development of girls in basic schools in the Tamale Metropolis of the Northern Region of Ghana. The study had four objectives as follows:

- a. To identify girl children engaged in head portorage in the Metropolis
- b. To find out the reasons or causes of girl child head portorage in the Metropolis.
- c. To explore the impact of head portorage on the educational development of girl child porters in the Metropolis.
- d. To determine ways by which girl child portorage could be addressed in the Metropolis.

This chapter summarizes major findings in relation to each of the objectives, provides a conclusion for the study and suggests recommendations to reduce head portorage among girls of basic school-going age and to improve the academic performance of girls in basic schools in the Tamale Metropolis.

5.2 Summary of Major Findings

The findings of the study have been divided into four sub-sections on the basis of the research objectives.





5.2.1 Girls Engaged in Head Porterage in the Tamale Metropolis

The study found that the ages of girls engaged in head porterage were the 8-18 years and majority (67.5%) were between 11-14 years. The Tamale Metropolitan Education Service Directorate was aware of the situation but little was done by the institution to curb the canker. The girls engaged in head porterage during the weekdays (10.0%), weekend (37.5%) and throughout the week (52.5%). It was further revealed that the girls took undue advantage of market days to engage in head porterage instead of attending school.

The girls engaged in head porterage were Ghanaians born and bred outside Tamale Metropolis (62%) while the remaining (38.0%) were born and bred in Tamale Metropolis. Most of them came from Northern Region and Upper East Regions.

5.2.1 Reasons of Girl Child Head Porterage in the Tamale Metropolis

Several reasons accounted for girls engagement in head porterage in the Tamale Metropolis. This study revealed that household size explained girls engagement in head porterage. The girls into head porterage had household sizes of 2-4 (12.5%), 5-7 (45.8%), 8-10 (15.8%) and above 10 (25.8%). Girls from larger household were more likely to engage in head porterage than girls from smaller household. The interviews with Key Informants confirmed that household sizes in the Tamale Metropolis were large with some couples having more ten household sizes due to polygamy since the community is Muslim dominated.

The study found that majority of the girls had household heads being males (88.3%) but girls engagement in head porterage was not influenced by sex of household heads. The



study further showed that majority (72.5%) of the kayaye lived with their biological parents while 27.5% lived with other relatives. It was revealed in an interview with Key Informants that fostering is a common practice in the Metropolis. Majority of the kayaye had their biological mothers (95.0%) and fathers (85.8%) alive at the time of the study and those with biological parents alive were less likely to engage in kayaye.

It was found in the study that majority of the biological mothers (51.8%) and fathers (40.8%) of the kayaye had no formal education. The study however found that girls engagement in head portorage did not depend on educational attainments of biological parents of the girls.

The study revealed that the biological mothers were not employed (27.2%), head porters (16.7%), traders (44.7%), farmers (5.3%) and professionals (6.1%) and fathers were not employed (19.4%), track pushers (7.8%), traders (20.4%), farmers (33.0%) and professionals (19.4%). The study revealed that girls engagement in head portorage significantly depended on occupations of biological parents. An interviewed with Key Informants disclosed that farming was the major occupation of people of Northern Ghana but the region has only one farming season, making majority of the poor, so most of the parents pushed their girl child into kayaye for them to supplement family incomes.

The study showed that majority of the respondents agreed that public basic schools were accessible, made up of blocks. They however noted that public school blocks leaked and public schools had no computer laboratories. The study revealed that conditions of public schools significantly influenced girls engagement in head portorage in the Tamale Metropolis. Most young girls stayed out of school and engaged in kayaye because of poor

conditions of public schools in the metropolis. A Key Informant noted that *“school environment counts a lot in encouraging especially girls to go to school, a school without facilities like urinal and changing rooms for girls are not conducive especially during their menstruation, hence some stay out of school during their menstrual period”*

5.2.2 Effects of Head Porterage on the Educational Development of Girl Child Porters in the Tamale Metropolis

The study found that the head porters attended schools on time and every day and they stayed in school until closing. The study also revealed that girls engagement in head porterage had insignificant impact on basic school attendance among girls in the Metropolis.

The study however revealed that the head porters were in inactive in class as they did not contribute to class discussions, did not learn at home and did not do assignments given them. There was therefore a significant negative relationship between girls’ head porterage engagement and academic performance. The study revealed that if a girl engaged in head porterage in an hour, her academic performance reduced by 2.5% every term. An interview with the GES and School for Life confirmed that BECE performances of pupils had been dwindling and that was partly due to girls engagement in head porterage in the Metropolis.



5.2.4 Ways of Addressing Girl Child Porterage in the Tamale Metropolis

The study found that job creation and employment after schooling (JHS or SHS) were the most effective ways of addressing girls engagement in head porterage in the metropolis. Second effective solution found was good parenting where parents are educated not to force their girl child into head porterage. Thirdly, provision of good schools at advantage places within the Metropolis and finally creation of livelihood programmes to economically empower parents to position them provide basic needs of girl child help to reduce girls engagement in head porterage in the metropolis.

Key Informants of all the institutions selected suggested that sensitization of all stakeholders, particular girls of basic school-going age and parents on the dangers of head porterage, the need for schooling and staying in school until completion as a way of addressing the canker. They further noted that improving school conditions through provision of adequate teaching and learning materials, trained teachers and facilities could reduce girls engagement in head porterage in the Metropolis.

5.3 Conclusions

This study examined the impact of head porterage on the education of girls in basic schools in the Tamale Metropolis of the Northern Region of Ghana. The study was guided by four specific objectives. Girl child head porterage appears to be very prevalent in Ghana, particularly in the Tamale Metropolis and various factors ranging from child characteristics to poor parenting account for the practice. This study found that majority of girls engaged in head porterage fell between 11-14 years in the Tamale Metropolis. Poverty is noted as the main cause of girls engagement in head porterage in developing



countries such as Ghana. This is because poor children contribute to household income. These children tend to work more consequently they are not regular in school.

Besides poverty, there are other causes such as conditions of public schools. In situations where the girl child has no access to public schools or the available public schools are in bad conditions, school attendance becomes a challenge leading to low enrolment of girl child in schools. Lack of places of convenience, such as urinal and toilet facilities and other facilities, such as playing ground and computer laboratory contribute to increase in girls engagement in head portorage with a resultant fall in academic performance in the Tamale Metropolis.

girls engagement in head portorage results in inactiveness in classrooms, low contributions to class discussions among girls and inability to do assignment given by teachers. This leads to poor academic performance among girls of basic school-going age. Post and Pong (2000) noted that child work negatively affects primary school attendance and pupils' academic achievement in Chile, Mexico and Peru. Guarcello (2005) noted that child work decreased the retention rate and increased dropout rates in Brazil, Kenya, Lebanon, Sri Lanka and Turkey.

Ghana has ratified all the important instruments concerning the issue, the ILO Conventions No. 138 and No. 182, CRC. The 1992 constitution of Ghana makes basic school free and compulsory and the government has introduced school feeding programme among other, but some good number of girls of basic school-going age are still at homes, engaged in head portorage. This therefore thwarts the efforts of government and its stakeholders of achieving universal educational coverage.





To curb girls engagement into head portorage to improve academic performance among girls of basic school-going age, this study suggests that employment for girls after schooling should be of most priority of stakeholders. Good parenting where parents are educated not to force their girl child into head portorage and provision of good public schools at advantage places within the Metropolis would help encourage more girls to attend schools to improve educational development among them.

5.4 Recommendations

The recommendations of the study are as follows;

- i. Awareness creation among child head potters. The study recommends that there should be awareness creation among girl child head potters on future consequences of portorage. Creating awareness for children on the short term benefits and the long term dangers of girls engagement in head portorage can help minimize the menace. Child head potters should be made to understand that monetary gains they make out of head portorage cannot be compared to future gains from schooling. School now can make them realize their potential and make them responsible, respected and employable persons in future which far outweigh the little monetary gains from head portorage. The awareness creation can be done through public education in the Tamale Metropolis. This could be done through the electronic media and also by the various District Assemblies through the Information Services Department.

It must be emphasised that though the target group are child head potters, the awareness creation should not ignore the parents since some force their children



into head portorage. The parents must be made to know the benefits of investing in their wards' education and the dangers involve in pushing their children into head portorage. When both children and parents are adequately aware of the dangers of engagement in head portorage, it would help to effectively minimize the menace. The awareness creation should be continuous process to help better re-orient both the current and next generation of children and the parents to see child head portorage as a menace but not an economic activity for children.

- ii. Government of Ghana and its stakeholder should enforce fCUBE policy in the Tamale Metropolis. Under the current educational policy of Ghana (for example, fCUBE) every child of school-going age should be in school. Unfortunately, this is not the case in Tamale Metropolis, the study area. Children avoid school to engage in head portorage with the consent of some parents. The study recommends that the government of Ghana through Ministry of Education and District Assemblies in the Tamale Metropolis as a matter of urgency should rigorously implement fCUBE. Every girl child should be in school and this can be convenient and enforceable when public schools are accessible and free. Basic education in Ghana is free and parents have no excuse of financial challenge for not enrolling and ensuring that children always go to school. Therefore, "putting children into head portorage" should be an offence punishable by law to discourage girl child head portorage.

Moreover, compulsory basic education can be achieved when distance is not a problem to accessibility to public basic schools and when those schools have the necessary teaching and learning facilities. Therefore, this study encourages the

government of Ghana and NGOs to support the building of public basic schools in communities that do not currently have them. This would ensure that distance as a barrier to accessibility to public basic school become a thing of the past.

- iii. The Government of Ghana should embark on massive job creation in the Tamale Metropolis. Poverty was the main cause of girls engagement in head portorage in the Tamale Metropolis. Parents out of poverty forced their children into head portorage so that incomes earned by the children through head portorage could serve as supplement to parents for provision of both food items for the homes; and provision of school items to aid learning. The poverty in the study areas was not as a result of laziness on the part of the parents but lack of jobs. This study therefore recommends massive job creation in the Tamale Metropolis as a remedy for child head portorage in the area. The Government policy of one-district-one factory and one-village-one-dam should take off without delay and Tamale Metropolis should be given its fair share. This will create more jobs in the area to reduce the need for contribution of children to support family incomes. Job creation should go with the need of prioritizing child education and financial management to ensure that parents channel reasonable proportion of incomes earned to their children education. Financial management is important since it would help inculcate into parents the culture of savings and investment which ensures consistent availability funds for future provisions like food items, clothing and shelter and funds for children education.
- iv. Government of Ghana through Ministry of Education and Ghana Education Service should improve conditions of public basic schools in the Tamale



Metropolis. This is because pupils' school attendance depends partly on school conditions. Therefore Government of Ghana should improve on the conditions of public basic schools in the Tamale Metropolis. The schools should be provided with computer laboratory and other modern teaching and learning facilities to attract and retain young girls in schools. When pupils have access to and use computers for learning, it increases their confidence level and enthusiasm to attend school because of the desire to explore the computers. Aside computers, schools should be provided with playing grounds and sporting items to promote sports in the public basic schools in the Tamale Metropolis. Sports and athletics add excitement and fun to learning, making school environment a happy place to be since there is a saying that "all work and no play makes jack a dull boy and all play and no work, makes jack a lazy boy". Sporting activities like football, volley ball, basketball among others and athletics help especially academically weak pupils to be happy with schooling and also to help develop their talents for future gains.

Another facility that is of great importance is place of convenience (example urinal and toilet). These places are important to ladies, especially during their menstrual periods. Therefore, when public basic schools lack either urinal or toilet for girls, the girls prefer staying at home during their menstrual periods than school. This act encourages truancy, leading to school dropout and consequently engagement in head portorage. Therefore, this study recommends provisions of urinals and toilet facilities in all public basic schools in the Tamale Metropolis to help reduce girls engagement in head portorage.

5.5 Suggestions for Future Studies

The study suggests the following for future studies;

1. Future studies should consider larger scope by looking more than one metropolis.
This would help in generalization of the results.
2. Future studies should focus on other forms of child work which constitute child labour in Ghana and their effects on educational development.



REFERENCES

- Ahmad, A. (2012). Poverty, Education and Child Labour in Aligarh City-India. Study Home Com Sci. pp. 165-172.
- Akabayashi, H & Psacharopoulos, G. (1999). “The Trade-off between Child Labour and Human Capital Formation: a Tanzanian case study”, *The Journal of Development Studies*. Vol. 35, No. 5 (June), pp. 120-140.
- Akarro, R. R. J. & Mtwewe, N.A. (2011). Poverty and its association with child labour in Njombe District in Tanzania: The case of Igima Ward. *Journal of Social Science*. 3(3): 199-206.
- Akyeampong, K. (2011). Revising Free Compulsory Universal Basic Education (FCUBE) in Ghana. *Comparative Education* 45(2), pp. 175.
- Anarfi, J.K. & Kwankye, S. (2003). The costs and benefits of children’s independent migration from northern to southern Ghana, Paper Presented at *International Conference on Childhoods: Children and Youth in Emerging and Transforming Societies*, Oslo, 29 June–3July.
- Anderson, P.F. (1993). On method in consumer research: A critical relativist perspective. *Journal of Consumer Research*, vol. 13, pp. 155-177.
- Anker, R. & Melkas, H. (1995). *Economic Incentives for Children and Families Intended to Eliminate or Reduce Child Labour*. Geneva: ILO.
- Annual Operating Report (AOR) Surface Materials Lease Page.
- Assaad, R., Levison, D., & Zibani, N. (2001). The Effect of Child Work on School Enrolment in Egypt. In *Forum Newsletter*, Vol. 8. No. 2. P.24.





- Atuahene, S. (2013). Effective Leadership- An IT Perspective, *Online Journal of Distance Learning Administration*, 2 (2):1
- Awumbila, M. (2007). 'Illegal Migration of West Africans to the West: Ghana Case Study'. Report Prepared for Open Society Initiative of West Africa (OSIWA), Dakar, Senegal
- Awumbila, M., Manuh, T., Quartey, P., Tagoe, C.A. & Bosiakoh, T.A. (2005). Migration Country Paper (Ghana), Centre for Migration Studies, University Of Ghana, Ghana.
- Bajapai P.C. (2003). Serum Vitamin B 12 in infantile tremor Syndrome, *Indian J Medical Research*, 56: 1398-1405.
- Basu, K. & Van, P.H. (1998). The Economics of Child Labor, *American Economic Review*, 88, 412-427.
- Becker, G. S. (1965). "A Theory of the Allocation of Time". *The economic Journal*, 75(299) 493 517.
- Becker, G. S. (1981). *A Treatise on the Family*. Cambridge: Harvard University Press.
- Bhat, B.A & Rather, T.A. (2009). *Child labour in the handicrafts home industry in Kashmir: A sociological study*, Int NGO J,4 (9). 391-400
- Bhalotra, S., & Tzannatos, Z. (2003, September). "Child Labor:What Have We Learnt?" World Bank Social Protection Discussion Paper No. 0317. Retrieved November 8, 2018, from <http://documents.worldbank.org/curated/en/313801468779990389/Child-labor-what-have-we-learnt>



- Blumberg, B., Cooper, D. R., & Schindler, P. S. (2005). *Business Research Methods*. Berkshire: McGrawHill Education
- Boozer, M.A. & Suri, T. K. (2001). *Child Labor and Schooling Decisions in Ghana*. Yale University, Mimeo.
- Boyden, J.Ling, M, & Myers, T. (1998). *A Time for Play and A Time for School -the Results of a Survey of Practitioners, Advocates and Other Experts on Childhood and Children's Work-*. Stockholm: RäddaBarnen, Save the Children Sweden.
- Bromley, D. B. (1990). Academic contributions to psychological counselling. Discourse analysis and the formulation of case-reports. *Counselling Psychology Quarterly*, 4(1), 75-89.
- Brown, D. K., Alan V. D. and Robert M. S. (2002), *The Determinants of Child Labor: Theory and Evidence*, RSIE Discussion Paper, No. 486, University of Michigan.
- Bryman, A. (2004). *Social Research Methods* (2nd Edition). Oxford, Oxford University Press
- Burra, N. (1995). *Born to Work: Child Labor in India*. New Delhi: Oxford University Press.
- Card, D. (1999). The Causal Effect of Education on Earnings, in Ashenfelter O. and Card D. (Eds.). *Handbook of Labor Economics*, New York, North-Holland.
- Child Right Information Network (2008). *Convention on Right of Child*. Retrieved on 21st June, 2016
- Cigno, A. & Rosati, F. C. (2000). Why do Indian Children Work, and is it Bad for Them?, Discussion Paper no. 115. Bonn: IZA, February.



- Cozby, P. C. (2001). *Measurement Concepts. Methods in Behavioral Research* (7th Ed.) California Mayfield Publishing Company.
- CREATE (2010). “Fosterage and Education Access among the Dagomba of savelugu-Nation, Ghana”. Create Ghana Policy Brief 4.
- Creswell, J. (2003). *Advanced mixed methods research designs*. In A.Tashakkori & C.Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (pp. 209–240). Thousand Oaks, CA: Sage.
- Das, R. (2015). “The Worst Form of Child Workers in the Brick Fields--the Mistreatment to Society and Nation”--A Case Study on Khejuri CD Blocks of Purba Medinipur District in West Bengal. *International Journal of Advanced Research, Volume 3, Issue 2*,
- Denzin, N. K. (1989). *The Research Act. A Theoretical Introduction to Sociological Methods* (3rd Ed). New Jersey, Prentice Hall
- Draft Declaration and Agenda for Action of the National Consultation and Child Labour, Delhi, 4-5 August, 1997
- Ejernæs, M. & Pörtner, C. C. (2002). *Birth Order and the Intrahousehold Allocation of Time and Education*. University of Copenhagen, May.
- Fallon, P. & Tzannatos, Z. (1998). *Child Labor: Issues and Directions for the World Bank*. (17418). Retrieved from website The World Bank:
www.documents.worldbank.org/curated/en/822881468764092813/child-labor-issues-and-directions-for-the-world-bank
- Frankfort-Nachmias C, Nachmias D (1996) *Research methods in the social sciences*, 5th edn. St. Martin Press, Inc., London

- Freebody, P. (2003). *Qualitative Research in Education: Interaction and Practice*. London, Sage Press
- Frost, J. (n.d.) "Multicollinearity in Regression Analysis: Problems, Detection, And Solutions". Statistics By Jim. Retrieved November 8, 2018, from <http://statisticsbyjim.com/regression/multicollinearity-in-regression-analysis/>
- Galli R. (2001). *The Economic Impact of Child Labour, International Labour Organization. International institute for Labour Studies*, Published by CH1211 Geneva 22 (Switzerland)
- GES (2010). *The Challenges of Gender and Education in Northern Ghana*. Accra. Ghana: Ministry of Education.
- Ghana Education Service (GES) (2004). The development of Education, National report of Ghana (PDF). UNESCO-IBE.p. 2. Retrieved 13 June 2014
- Ghana Education Service (GES) (2005). *The development of Education, National report of Ghana* (PDF). UNESCO-IBE.p. 2. Retrieved 13 June 2018
- Ghana Education Service (GES) (2010). "The development of Education, National report of Ghana" (PDF). UNESCO-IBE. p. 2. Retrieved 13 January 2016.
- Ghana Education Service (GES) (2014). *The development of Education, National report of Ghana, (PDF)*, UNESCO-IBE. p. 2. Retrieved 13 January 2018.
- Ghana Statistical Service (GSS) (2003). *Quarterly Digest of Statistics*. Accra: GSS.
- Ghana Statistical Service (GSS) *Patterns and Trends of Poverty in Ghana: 1991-2006 Report*. Accra: GSS.
- Ghana Statistical Service (GSS) (2005a). *Population Data Analysis Reports: Socio-economic and Demographic Trends Analysis*. Accra: GSS.





- Global March Against Child Labour (2014). *Policy Paper: Out-of-school Children and Child Labour*. Leidsevaart 124, 2013 HD Haarlem, The NETHERLANDS
- Graham, A., Powell, M., Taylor, N., Anderson, D., & Fitzgerald, R. (2013). Ethical Research Involving Children. Retrieved November 8, 2018, from <https://childethics.com/wp-content/uploads/2013/10/ERIC-compendium-approved-digital-web.pdf>
- Grimsrud, B. & Stokke, L. J. (1997). *Child Labor in Africa: Poverty or Institutional Failures? The Case of Egypt and Zimbabwe*. Oslo: Fafo report 233. Available at: <http://www.fafo.no/pub/rapp/233/233.htm>
- Grix, J. (2004). *The Foundations of Research*. London, Palgrave.
- Guarcello, L. (2005). *Impact of Children's Work on school Attendance and Performance: A Review of School Survey Evidence from Five Countries*. New York, UCW.
- Gunnarsson, V., Orazem, P. F. & Sanchez, M. (2004). Child Labor and School Achievement in Latin America." Working Paper #03023, Iowa State University.
- Heady, C. (2003). The Effect of Child Labor on Learning Achievement. *World Development* 31(2): 385-398.
- H. G. S. F. (2011, December). 2011 Annual Operating Plan. Retrieved November 9, 2018, from www.hgsf-global.org/ghana/images/stories/gsf/2011_AOP.pdf
- Huebler, F. (2008). *Child labour and school attendance: Evidence from MICS and DHS surveys*. Division of Policy and Practice, UNICEF
- ILO (1996). *Economically Active Populations: Estimates and Projections, 1950-2010*. *Bulletin of Labour Statistics*. 1995. Geneva

ILO (2008). *Child Labour Statistics*. Available 2016-05-23 at http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/---stat/documents/meeting_document/wcms_099577.pdf

ILO, IPEC (2002). *Every Child Counts. New Global Estimates on Child Labour*. Geneva: Author.

ILO, IPEC (2002). *Every Child Counts. New Global Estimates on Child Labour*. Geneva: Author.

James, A. et al. (1998). *Theorizing Childhood*. Cambridge: Policy Press.

Joseph, G. & Wooden, Q.T. (2000). *Assessing the Potential Impact on Poverty of Rising Cereals Prices: The Case of Mali*. World Bank Policy Research Working Paper No. 444.

Kuyini, A. B. (2011, January 30). *Opinions*. Retrieved from Ghanaweb: <https://www.ghanaweb.com/GhanaHomePage/NewsArchive/Tamale-Metro-poor-performance-in-the-BECE-Implications-suggested-actions-202163>

Kwaku, E. R.. (2013). Independent Child Migration from Northern Ghana to Techiman Municipality: Perspective of 'Kayayie' (Female Children Head Porters) (Master Thesis, Norwegian University of Science and Technology, Trondheim).

Retrieved from

https://brage.bibsys.no/xmlui/bitstream/handle/11250/663336_fulltext01.pdf?sequence=1

Laitner, J. (1997). Intergenerational and Interhousehold Economic Links.” In Mark R. Rosenzweig and Oded Stark, eds., *Handbook of Population and Family Economics*, vol. 1A. Amsterdam: Elsevier, pp. 189-238



Li, S., Long, C. Liu, F. Lee, S. Guo, Q. Li R. & Liu. Y. 2006. Herbs for medicinal baths among the traditional Yao communities of China. *Journal of Ethnopharmacology* 108:59-67.

Miller, R. & Brewer, J. (2003). *The A-Z of Social Research*. London, Sage

Ministry of Education 2013, pages 9-12; table 46 (p. 78).

Ministry of Education, Science and Sports (2002). *Education Strategic Plan: Vol. 1: Policies, Targets Strategies*. Accra: Ministry of Education

Ministry of Education, Youth and Sports (2004). “White Paper on the Report of Education Reform Review committee”. Ministry of Education, Youth and Sports, Accra.

Ministry of Education (2010). *Education Sector Review (ESR)* Accra, Ghana: Ministry of Education.

Ministry of Gender, Children and Social Protection (2015). *National Gender Policy*. Retrieved from www.mogcsp.gov.gh/?mdocs-file=654 accessed on 14th February 2018

Morgan, G. & Smircich, L. (1980), “The Case of Qualitative Research,” *Academy of Management Review*, Vol. 5, pp. 491-500.

Nabila, J. S. (1985). *Internal Migration and Regional Development in Ghana*, RIPS. Ghana.

National Development Planning Commission. (2014). *The Implementation of the Ghana Shared Growth and Development Agenda (GSGDA), 2010-2013: 2013 Annual Progress Report*. Retrieved from



www.ghana.um.dk/en/~/.../2013%20APR%20Final%20version%20December%2014.pdf

- Noor, K. (2008). Case study: A strategic research methodology. *American Journal of Applied Sciences*, 5(11), 1602-1604.
- Obinna E. & Osita-Oleribe, T (2007). Exploring the causes of child labour. *International NGO Journal 2 (1): 6–9*.
- Oduro, A. D. (2000). *Basic Education in the post*. Accra: Center for Policy Analysis (CEPA)
- Okpukpara, C. B., Paul, C., Fidelis, N. O. U., & Chukwuone, N. (2006). *Child Welfare and Poverty in Nigeria*. A Paper Presented at Poverty Phase 11 Dissemination Workshop in Addis Ababa Ethiopia on 12th to 13th October 2006.
- Opare, J.A. (2003) ‘Kayaye: the women head porters of Southern Ghana’, *The Journal of Social Development in Africa*, Vol. 18, No. 2, pp.33–48.
- Orazem, P. & Gunnarsson, L.V. (2004). Child Labour, School Attendance and Performance: A review. Working Paper No. 04001, Department of Economics, Iowa state University.
- Osei-Fosu, A. K. (2011). Evaluating the Impact of the Capitation grant and the School Feeding programme on enrollment, attendance and retention in schools: The Case of Weweso Circuit. *Journal of science and technology*, 31(1).
- Osment, L. (2014) Child Labour; the Effects on Child, Causes and Remedies to the Revolving Menace. Unpublished Dissertation Submitted to the University of Lund. Sweden





- Osterman, P. (1980). *Getting Started—The Youth Labor Market—*. Cambridge University, UK
- Parfitt, J (2005). Questionnaire design and sampling, in: *Methods in Human Geography*, edited by: Flowerdew, R. and Martin, D., Pearson Education Limited, England, 78–109.
- Parsons, D. O. & Golden, C. (1989). Parental Altruism and Self-interest: Child Labour among Late Nineteenth-century American Families. *Economic Inquiry* 27, No. 4: 637-59.
- Patrinos, H. A. & Psacharopoulos, G. (1997): “Family Size, Schooling and Child Labour in Peru – An Empirical Analysis,” *Journal of Population Economics*, 10:4, pp. 387-405.
- Patton, M. Q. (1990), *Qualitative Evaluation and Research Methods*, 2nd edition, Sage: Newbury Park.
- Participatory Poverty and Vulnerability Assessment. (2011). *Basic Education Beyond the Millennium Development Goals in Ghana*.
- Post, D., & Pong, S. (2000). Employment During Middle School: The Effects on Academic Achievement in the U. S. and Abroad. *Educational Evaluation and Analysis*, vol. 22, No. 3, pp. 273-298. Retrieved November 9, 2018, from <https://www.jstor.org/stable/1164244>
- Prance, G.T. 2004. The uses of *Atuna racemosa* Raf. (Chrysobalanaceae) in Samoa. *Economic Botany* 58:470-475.



- Psacharopoulos, G. (1997): "Child Labour Versus Educational Attainment: Some Evidence from Latin America," *Journal of population Economics*, 10:4, pp.337-286
- Ragin, C. C. (1994). *Constructing Social Research: The Unity and Diversity of Method*. Thousand Oaks, CA, Pine Forge Press.
- Rana, M. and Das A. (2014). Causes and Consequences of Child Work in Brick Field: A Study on the Selected Brick Fields in Char Bhadrasan Under Faridpur District. *IOSR Journal of Business and Management Volume 16, Issue 3. Ver. III*
- Ravallion, M. & Wodon, Q. (2000). Does Child Labour Displace Schooling? Evidence on Behavioral Response to an Enrolment Subsidy. *Economic Journal* 110:C158-C175.
- Rena, R. (2004). *Child Soldier in Armed Conflict*. Sumatera Utara, Indonesia: Kalingga, PusatKajiandanPerlindunganAnak (PKPA)/Center for Study and Child Protection, in collaboration with UNICEF,(September- October), pp.1-2.
- Rena, R. (2007). *Child Rights' Convention and Its Implementation*. Indian Ocean Digest, 22 (1&2):1-11, (January- December).Hyderabad, (India): (CIOS), Osmania University, Hyderabad
- Rena, R. (2009). The Child Labour in Developing Countries: A Challenge to Millennium Development Goals. *Indus Journal of Management & Social Sciences* 3(1): 1-8.
- Robert M. O'Brien. (2007). A Caution Regarding Rules of Thumb for Variance Inflation Factors, *Article in Quality and Quantity* 41(5):673-690.
- Rosati, F. & Rossi, M. (2001). *Children's Working Hours, School Enrolment and Human Capital Accumulation: Evidence from Pakistan and Nicaragua*. New York: UCW



- Rosenzweig M.R. & R. Everson, R. (1977). *Fertility, Schooling, and the Economic Contribution of Children in Rural India: An Economic Analysis*. *Econometrica*, 45: 5.
- Sakurai, R. (2005). *Adolescent Employment in U.S. Agriculture: Does it encourage academic achievement?* Doctorate Dissertation. University Park: Pennsylvania State University.
- Salome O. A. (2010) *The Role of Art Education in the Training of KAYAYE A STUDY IN TECHIMAN MARKET: A Thesis submitted to the school of Graduate Studies, Kwame Nkrumah University of Science and Technology in Partial Fulfilment of the Requirements of the Degree.*
- Sanchez, M.A., Meter, F.O., & Gunnarsson, V. (2005). *The Effect of Child Labor on Mathematics and Language Achievement in Latin America. Social Protection Discussion Paper Series. No. 0516. Washington D.C.: the World Bank.*
- Sarantakos, S. (2005). *Social research* (3rd Ed.) New York: Palgrave Macmillan.
- School for Life. (2007). *The Leap to Literacy and Life Change in Northern Ghana: An Impact Assessment of School for Life (Final Report)*. Retrieved from website Associates for Change: www.associatesforchange.org/research1.html
- Sedlacek, G., Suzanne D., Nadeem I. & Masaru S. (2005). *Child Labor, Schooling, and Poverty in Latin America*. Social Protection Discussion Paper Series No. 0511. Washington, D.C. the World Bank.
- Shukla P.K. & Ali S. (2006). Erratum “Dust Acoustic Solitary Waves in a quantum plasma, *Phys-plasmas* 13, 022313 published by the AIP publishing.



Sidhu, J. (2003). Mission statements: is it time to shelve them?”, *European Management Journal*, Vol. 21 No. 4, pp. 439-46.

Silverman, D. (2000). *Doing Qualitative Research: A Practical Handbook*. London, Sage

Sullivan, A., Steven M. & Sheffrin, M. (2003). *Economics: Principles in Action*. Upper Saddle River, New Jersey 07458: Pearson Prentice Hall. p. 471. ISBN 0-13-063085-3.

Tauson, M. (2009). *Child Labour in Latin America: Poverty as Cause and Effect*. The MIT Press.

UNESCO (2001); *Education for All: Year 2000 Assessment: Glossary [CD-ROM]*, Paris,

UNESCO (2015). *Thinking Education Towards a global common goal*. Published in 2015 by the United Nations Educational, Scientific and Cultural organization 7. Place de fontonay. 75352 Paris 07 SP, France.

UNICEF Annual Report (2014), Ghana.

Unicef (1989). *What Is the UN Convention On Child Rights?* . Retrieved November 8, 2018, from <https://www.unicef.org.uk/what-we-do/un-convention-child-rights>

United Nations Millennium Development Goals website, retrieved 16 June 2016

Vandenberg, J. (2007). *Systems of care and the child family team process*. Parker, co: vroom.

Vargas, M.P.B. & van Andel, T. (2005). The use of hemiepiphytes as craft fibres by indigenous communities in the Colombian Amazon. *Ethnobotany Research and Applications* 3:243-260.

Colombian Amazon. *Ethnobotany Research and Applications* 3:243-260.

- Yates, D.S., Moore, D.S & Starnes, D.S (2008). *The Practice of Statistics, 3rd Ed. Freeman. ISBN 978-0-7167-7309-2.*
- Yeboah, M. A. & Appiah-Yeboah, K. (2009). An Examination of the Cultural and Socio Economic Profiles of Porters in Accra, Ghana. *Nordic Journal of African Studies*, 18(1), 1–21.
- Yeboah, M. A. (2008). Gender and Livelihoods: Mapping the Economic Strategies of Porters in Accra, Ghana. Unpublished PhD Thesis. Department of Geology and Geography, Morgantown, West Virginia.
- Yin, R. K. (2009). *Doing case study research*. 4th ed. Thousand Oaks, CA: Sage.
- Zucker, D. M. (2001). Using case study methodology in nursing research. *The Qualitative Report*, 6(2), Last reviewed June 21, 2006



APPENDICES

Appendix 1

Questionnaire for Girl Child Head Porters

Sir/ Madam,

This study is being conducted to assess: “**The Impact of Head Portage on the Educational Development of Girls in Basic Schools in the Tamale Metropolis of the Northern Region of Ghana**”. Your opinions are highly essential as they will help to determine the reasons or causes of girl child head portage, the impact of head portage on the educational development of girl child porters and ways by which girl child portage could be addressed in the Tamale Metropolis of the Northern Region of Ghana. Whatever you say will be treated confidential, so feel at ease to express your candid opinion. Be assured that your responses will not in any way be linked to your identity. You are kindly requested to answer the questions below by indicating a tick or writing the appropriate answer when needed.

THANK YOU

A: Factors Responsible for Girl Child Head Portage

I. Household Characteristics Data

1. Household Size: A) below 2 [] B) 2-4 [] C) 5-7 [] D) 8-10 [] E) above 10 []
2. Sex of household head: A) Male [] B) Female []





II. Parents Characteristics Data

3. Parents: Mother : A) Alive [] B) Dead []

Father: A) Alive [] B) Dead []

4. Do you live with both parents if they are alive? A) Yes [] B) No []

5. Educational level of parents:

Mother: A) No formal education [] B) Basic Education [] C) Secondary Education []

Father: A) No formal education [] B) Basic Education [] C) Secondary Education []

6. Occupation of parents:

Mother: A) Not Employed [] B) Head porter [] C) Trader []

D) Farmer [] D) Professional [] E) Others []

Father: Not Employed [] B) Truck pusher [] C) Trader []

D) Farmer [] D) Professional [] E) others []

III. Community Characteristics Data

7. Name of your community:

Use the Scale Below to answer the following questions:

1=Strongly Disagree; 2= Disagree; 3=Indifferent; 4= Agree; 5= Strongly Agree

No.	Statement	1	2	3	4	5
8.	There is public basic school in my community					
9.	The school is made of blocks					
10.	The school block does not leak					
11.	The School has enough teachers					
12.	There is computer laboratory					
13.	I am happy to be in the school					

B: School Attendance and Academic Performance

14. Are you enrolled in school? A) Yes [] B) No []

15. If yes, which school do you attend?

If you are enrolled, answer the following questions, using the scale below:

1=Strongly Disagree; 2= Disagree; 3=Indifferent; 4= Agree; 5= Strongly Agree

No.	Statement	1	2	3	4	5
16.	I go to school on time					
17.	I stay in school until it closes					
18.	I go to school every school day					

19. Please indicate your score in the following subjects:

Subjects	2014/2015 academic year, 1 st term score	2014/2015 academic year, 2 nd term score	2014/2015 academic year, 3 rd term score
Mathematics			
English language			
Science			
ICT			

Answer the following questions, using the scale below:

1=Strongly Disagree; 2= Disagree; 3=Indifferent; 4= Agree; 5= Strongly Agree

No.	Statement	1	2	3	4	5
20.	I sleep during classes hours					
21.	I feel weak or tired when in school					
22.	I am unable to learn at home					
23.	I am unable to do assignments					

C: Engagement in Head Porterage

24. How old are you?



25. Are you still a head porter? A) Yes
[] B) No []
26. If yes, when do you engage in it? A)
only week days [] B) only weekends [] C) Any day []
27. Are you being pushed to engage in
head portorage? A) Yes [] B) No []
28. Who is pushing you? A) Parents []
B) Friends [] C) Relatives []
D) Others [], specify

D. Solutions to Girl Child Head Portorage

Use the scale below to answer the following questions on what will make you stop head portorage and go to school.

1=Strongly Disagree; 2= Disagree; 3=Indifferent; 4= Agree; 5= Strongly Agree

No.	Statement	1	2	3	4	5
29.	If I am given money for schooling					
30.	If good school is built in my community					
31.	If teachers are posted to my school					
32.	If my parents will not ask me to engage in head portorage					
33.	If I can get decent job after schooling					
34.	If my friends stop being head porters					

Appendix 2:

Interview Guide for Ghana Education Service-Tamale Metropolis

Sir/ Madam,

This study is being conducted to assess: **“The Impact of Head Portorage on the Educational Development of Girls in Basic Schools in the Tamale Metropolis of the Northern Region of Ghana”**. Your opinions are highly essential as they will help to determine the reasons or causes of girl child head portorage, the impact of head portorage on the educational development of girl child porters and ways by which girl child portorage could be addressed in the Tamale Metropolis of the Northern Region of Ghana. Whatever you say will be treated confidential, so feel at ease to express your candid opinion. Be assured that your responses will not in any way be linked to your identity. You are kindly requested to answer the questions below by indicating a tick or writing the appropriate answer when needed.

THANK YOU

1. What is your status in this organisation?
2. Is there child head portorage in the
Tamale Metropolis?
3. What is the age range of the children
involved?
4. Are all such children from the Tamale
Metropolis?
5. If no, where do they come from?



6. In which day (s) do you often see them actively in the head portorage in this metropolis?
7. In your opinion, what account for increasing number of young girls into head portorage in this metropolis?

Thematic Areas:

- i. Parents factors
 - ii. School factors
 - iii. Child factors
 - iv. Community factors
8. What been the academic performance of girls in public basic schools, now a days? Increasing or decreasing?
9. If academic performance has been decreasing, do you blame it on their engagement in head portorage?
10. If yes why?
11. What do you think can be done to curb child head portorage in the Metropolis?



Appendix 3

Interview Guide for other selected organisations

Sir/ Madam,

This study is being conducted to assess: “**The Impact of Head Portelage on the Educational Development of Girls in Basic Schools in the Tamale Metropolis of the Northern Region of Ghana**”. Your opinions are highly essential as they will help to determine the reasons or causes of girl child head portelage, the impact of head portelage on the educational development of girl child porters and ways by which girl child portelage could be addressed in the Tamale Metropolis of the Northern Region of Ghana. Whatever you say will be treated confidential, so feel at ease to express your candid opinion. Be assured that your responses will not in any way be linked to your identity. You are kindly requested to answer the questions below by indicating a tick or writing the appropriate answer when needed.

THANK YOU

1. What is your status in this organisation?
2. Is there child head portelage in the
Tamale Metropolis?
3. What is the age range of the children
involved?
4. Are all such children from the Tamale
Metropolis?
5. If no, where do they come from?



6. In which day (s) do you often see them actively in the head portorage in this metropolis?
7. In your opinion, what account for increasing number of young girls into head portorage in this metropolis?

Thematic Areas:

- i. Parents factors
 - ii. School factors
 - iii. Child factors
 - v. Community factors
8. What effect does engagement in head portorage have on academic performance of girls in basic schools in the metropolis?
 9. What do you think can be done to curb child head portorage in the Metropolis?

