SELECTED SCHOOL STAKEHOLDERS' PERCEPTIONS ON GIRLS' ACADEMIC ABILITIES AND THEIR INFLUENCE ON ACADEMIC SELF-CONCEPT AND PERFORMANCE OF THE GIRL-CHILD: A CASE OF PRIMARY SCHOOL PUPILS OF BONDO DISTRICT - KENYA

By

Richard Ayoo Ogeda

A Thesis Submitted to the Graduate School in Partial Fulfillment of the Requirements for the Award of Master of Education Degree in Guidance and Counselling of Egerton University

EGERTON UNIVERSITY

OCTOBER, 2008

DECLARATION AND RECOMMENDATION

DECLARATION

This thesis is my original work and has not been presented for a diploma or a degree in any other university.

Signed _____ Date: 9/10/08

RICHARD AYOO OGEDA

Reg. No. EM16/01084/03

RECOMMENDATION

This thesis has been submitted for examination with our approval as University Supervisors.

Signed _____ Date: 9/10/2008

DR. M. C. CHEPCHIENG

Signed _____ Date: 13/10/2008

DR. B. E. E. OMULEMA

COPYRIGHT

ACKNOWLEDGEMENTS

My most heartfelt gratitude goes first to my supervisors, Dr. Micah C. Chepchieng and Dr. B. E. E. Omulema. Their critical guidance at all the levels in the preparation of this thesis was quite invaluable. I am also greatly indebted to my loving parents, especially my father Jecton Ogeda, whose virtue in life is to achieve despite life's obstacles. This virtue has been my energizer throughout this study.

My very deep appreciation also goes to my two great friends Tom Abuto and Erick Wara. They were great friends by the meaning, and the support and encouragement they offered me at different stages of this study cannot go without mentioning. To colleagues like Pastor Odhiambo, Pastor Obong'o, Pastor Obilla, Osano and other colleagues whose names I have not mentioned, thank you for the faith we had in one another and the support we offered each other during our coursework. My respected lecturers in the Department of Psychology, Counselling and Educational Foundations should also receive God's blessings for their noble contributions to the world of academia.

My very special thanks are also directed to the heads of the primary schools of Bondo district where I collected my data. Together with their teachers who were part of the study population, may God's blessings be upon you abundantly. The students and parents who participated in this study also deserve accolades. My thanks also go to a special friend whom I can only refer to as Arbella 'Nyar Bwaja', whose all manner of support throughout the writing of this thesis cannot go without mention.

To all who contributed in one way or another to the success of my study, their efforts were not in vain, and I am heavily indebted to them. Abundant thanks to all of them.

DEDICATION

To my wife, Rose, and children Tracy, Louisa and Viola. You missed me so much during my studies.

ABSTRACT

Every year when examination results are released, there is hue and cry about the general poor performance of girls in national examinations. However, it can be observed that some girls perform very well in examinations, even better than many boys, implying that girls are not necessarily less capable academically. This study sought to explore if the perceptions of teachers, parents and boy counterparts, and even the girls themselves, about the academic abilities of the girls have an influence on the academic performance of the girls. The *expost facto* research design was used in this study. The study was conducted in Bondo district, Kenya. The population in this study was standard eight pupils, their class teachers and their parents. The researcher collected data from 10 schools in 2 divisions of the district, sampled purposively, from where 125 pupils (71 boys and 54 girls) were drawn by stratified sampling, and 11 teachers and 54 parents through purposive and snowball sampling respectively. Data was collected by means of questionnaires. The Statistical Package for Social Sciences (SPSS) 11.5 for Windows was employed in the entry, analysis and interpretation of data. The analytical tools used were the T-test, Pearson's correlation, and Chi-square test, all done at $\alpha = 0.05$. Findings revealed various forms of relationships: the Independent t-test revealed that there is a difference in the mean academic self-concept between girls and boys, whereby boys are more positive about their academic abilities than girls. Chi-square test revealed that teachers perceive girls academic abilities negatively. Pearson's correlation revealed a positive correlation between parents' perception of girls' academic abilities and the girls' academic self-concept, which was however not statistically significant. There was a positive correlation between parents' perception of girls' academic self-concept and the girls' academic performance, and a weak correlation between academic self-concept and academic performance. Chi-square test was also used to test if there is a relationship between the parents' socio-economic status and the academic self-concept of girls, and no relationship was revealed. In the light of these findings, the researcher recommended that parents, teachers and pupils should be helped to change the way they perceive girls' academic abilities, probably through counseling practices.

TABLE OF CONTENTS

Pages

DECLARATION AND RECOMMENDATION ii
COPYRIGHT iii
ACKNOWLEDGEMENTS iv
DEDICATION v
ABSTRACT vi
TABLE OF CONTENTS vii
LIST OF TABLES x
LIST OF FIGURES xii
LIST OF ABBREVIATIONS xiii

CHAPTER ONE: INTRODUCTION 1
1.1 Background Information 1
1.2 Statement of the Problem 4
1.3 Purpose of the Study 4
1.4 Objectives of the Study 5
1.5 Research Hypotheses 5
1.6 Significance of the Study 5
1.7 The Scope and Limitations of the Study 6
1.8 Assumptions of the Study 6
1.9 Definition of terms 7

CHAPTER TWO: LITERATURE REVIEW 8
2.1 Introduction 8
2.2 Importance of the Significant others in Learning 8
2.3 Children's Interaction with Parents 10
2.4 Children's Interaction with Learning, Play and Leisure materials 12
2.5 Girls' Interaction with Teachers 13
2.6 Girls' Academic Abilities and Career choices 14
2.7 Influence of School Infrastructures and Cultures 15

2.8 The Socio-economic Importance of Educating Girls 16
2.9 Theoretical Framework 19
2.9.1 Psychoanalytic Theory 19
2.9.2 Social Learning Theory 19
2.9.3 Cognitive Development Theory 20

CHAPTER THREE: RESEARCH METHODOLOGY 22
3.1 Introduction 22
3.2 Research Design 22
3.3 Location of the Study 22
3.4 Population of Study 26
3.5 Sampling procedure and Sample size 26
3.6 Instrumentation 28
3.6.1 Validation of the Instruments 29
3.6.2 Reliability of the Instruments 29
3.7 Data Collection Procedure 29
3.8 Data Analysis 31

CHAPTER FOUR: RESULTS AND DISCUSSION 33
4.1 Introduction 33
4.2 Perception of girls and boys about their academic abilities 33
4.3 Teachers' perception of girls' academic abilities 39
4.4 Influence of Parental Perception of Girls' Academic abilities on Girls' Academic Self-concept and Performance 42
4.5 Influence of Parental Socio-economic Status on the Academic Self-concept of the Girls 50
4.5.1 Influence of Parental Income on Academic Self-concept of the Girls 50
4.5.2 Influence of Parental Occupation on Academic Self-concept of the Girls 51
4.5.3 Influence of Parental Level of Education on Academic Self-concept of the Girls 53

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS 55
5.1 Introduction 55
5.2 Summary of the Findings 55
5.3 Conclusions 56
5.4 Recommendations 56
5.5 Suggestions for Further Research 57

REFERENCES 58
APPENDICES 62
Appendix 1: Questionnaire For Pupils 62
Appendix 2: Questionaire For Parent \ Guardian 65
Appendix 3: Questionnaire For Teachers 68
Appendix 4: Girls' Performance Tracking Profoma 70
Appendix 5: Research Permit 71

LIST OF TABLES

Page

Table 1: Enrollment Trends by Class and Gender in Bondo District 2

Table 2: KCPE Performance in Bondo District by Gender Between 2002 and 2004 3

Table 3: The Educational Divisions and Zones, Number of Schools and Standard 8 Enrollment in Bondo District 25

Table 4: Accessible Population for the Study 26

Table 5: Sample Sizes for Each Category of Participants 28

Table 6: Returned Questionnaires from Respondents 30

Table 7: Summary of Data Analysis 32

Table 8: Percent Positive Responses to Self-concept Items 34

Table 9: Group Statistics of Pupils' Mean Academic Self-concept 35

Table 10: Independent Sample t-test of Means of Girls' and Boys' Academic Self-concept 35

Table 11: Pupils' Frequency of Asking Questions in Class 37

Table 12: 38

Table 13: Frequencies and Percentages of Responses by Teachers on Girls' Academic Ability Items 40

Table 14: Frequencies of Responses by Teachers on Girls' Academic Ability Items 41

Table 15: Chi-square Test of Teachers' Mean Perception about Girls' Academic Abilities 41

Table 16: Parents'/Guardians' Rating of their Daughters' Performance Compared to their Sons' Performance 43

Table 17: Items and Responses Used to Calculate Mean Parental Perception of Girls' Academic Abilities 45

Table 18: Group Statistics of Parents' Mean Perception of Girls' Academic Abilities 46

Table 19: Independent Sample T-Test of Means of Male and Female Parents'/Guardians' Perception about Girls' Academic Abilities 46

Table 20: Pearson's Correlation of Parental Perception about Girls' Academic Abilities and the Girls' Academic Self-concept 47

Table 21: Pearson's Correlation of Parental Perception of Girls' Academic Abilities and the Girls' Academic Performance 48

Table 22: Pearson's Correlation of Girls' Academic Self-concept and Academic Performance 49

LIST OF FIGURES

Page

gure 1: Impact of girls' education on social and national development 18

gure 2: Perception of selected school stakeholders on girls' academic abilities..... 21

gure 3: Location of Bondo District in Kenya 23

gure 4: Map of Bondo District showing the Divisions. 24

LIST OF ABBREVIATIONS

ANOVA Analysis of Variance

ASAL Arid and Semi Arid Localities

DEO District Education Officer

EFA Education For All

FAWE Federation of African Women Educationists

GER Gross Enrollment Rate

GHC Geography, History and Civics

IQ Intelligence Quotient

KCPE Kenya Certificate of Primary Education

MDG Millennium Development Goals

MYWO Maendeleo Ya Wanawake Organization

MOEST Ministry of Education Science and Technology

PTA Parents' Teachers' Association

SPSS Statistical Package for Social Sciences

UN United Nations

UNESCO United Nations Education scientific Cultural Organization

UNICEF United Nations International Children's Education Fund

CHAPTER ONE: INTRODUCTION

Background Information

concern for gender equality in education provision continues to be a priority item in the development agenda. This is because of the negative and far reaching implications that disparities, reflected through biases, stereotypes and discriminatory practices have for opment interventions (Muito, 2004). Holmes (2004) contends that there is no tool for opment more effective than the education of girls. According to this author, there is no policy better than girls' education that is likely to raise economic productivity, lower infant maternal mortality, improve nutrition and promote health, including helping to prevent the of HIV/AIDS. Furthermore, the education of girls and women correlate highly with fertility, better child health and nutrition and better quality of life for the family (UNICEF,

EF (2004) observes that eliminating gender disparity in primary and secondary education essential step toward education for all children, and will be the first test of the Millennium opment Goals, agreed to by all the United Nations Member States in 2000. This ation, however, further observes that worldwide, 121 million primary-school-age children l denied schooling, more than half of them being girls. In the same context, according to s (2004), girls are often kept out of school and put to work at home, in factories or in the A UNICEF report reveals that in regions in Kenya where literacy and general education re low, the corresponding rate of female literacy is even lower and enrolment levels for nd to be low across the entire school spectrum (UNICEF, 1989). The Ministry of on Science and Technology (2004), however contends that nationally, Kenya has d gender parity in participation at the primary school level with a Gross Enrollment Rate for boys and 103.7 for girls, but still observes that these figures hide regional disparities. summarizes enrollment trends along the primary schooling spectrum in Bondo district:

Enrollment Trends by Class and Gender in Bondo District

Gender	Enrollment by class								
	Std 1	Std 2	Std 3	Std 4	Std 5	Std 6	Std 7	Std 8	Total
Boys	5590	5333	4863	4538	4339	4011	4095	3068	35837
Girls	5594	4855	4545	4411	3762	3933	3891	2354	33345
Total	**11184**	**10188**	**9408**	**8949**	**8101**	**7944**	**7986**	**5419**	**69182**

Source: DEO's statistics office, Bondo (May, 2005

Table 1 reveals that in the early years of schooling, there is equity in enrollment, but the trends change with time. Seemingly, more girls drop out of school than boys.

Besides enrolment, examination results have also shown that girls' performance at KCPE is much lower than that of boys, particularly in Bondo district. Academic performance of an individual can be attributed to a number of factors. Clarke-Stewart (1977) identifies factors like emotional state of the individual, age, cultural and religious values of the community, economic resources and the school environment among other factors. UNICEF (2003) identifies perceptions of other people about girls as major hindrance to their participation and performance at school. According to Muito (2004), schools help to reflect the values held by society, and it is at school where girls are likely to lose their self esteem and the desire to set higher goals for themselves. This author suggests that it is also at school where girls learn that their opinions are sometimes less valued than those of their male peers, and also to mistrust others as they are often sexually harassed and abused by teachers and their male peers.

According to United Nations (2005), in the decade since Beijing, tangible progress has been seen on many fronts including the education of girls, and today more girls are enrolled in primary education. However, the Report of the Commission of Inquiry into the Education System of Kenya (1999), affirms that even though gender disparities in enrolment at primary school have been nearly wiped out in most districts in Kenya, poorer academic performance and drop out

[illegible] of girls at primary school remains a major concern as it hampers the participation of girls at the secondary schooling level and even at higher levels of education and training. Negative academic self-concept among girls could be a contributing factor to this trend. In Bondo district of Nyanza province, Kenya, KCPE results over the last three years show a clear discrepancy between the performance of girls and boys as shown in Table 2.

Table 2:

KCPE Performance in Bondo District by Gender Between 2002 and 2004

	Year	Boys		Girls	
		Number	Percentage	Number	Percentage
Over 400	2004	17	0.6	6	0.2
	2003	20	0.7	0	0
	2002	22	0.8	6	0.3
350 – 399	2004	153	5.0	52	2.2
	2003	144	5.0	40	1.9
	2002	163	6.2	42	2.1
300 – 349	2004	688	22.3	284	12.3
	2003	594	20.8	221	10.6
	2002	557	21.2	228	11.5
250 – 299	2004	1065	34.6	691	29.9
	2003	927	32.5	626	29.9
	2002	791	30.1	619	31.2
200 – 249	2004	821	26.7	838	36.2
	2003	794	27.8	731	34.9
	2002	733	27.9	649	32.7
Less than 200	2004	335	10.9	442	19.1
	2003	376	13.2	475	22.7
	2002	363	13.8	441	22.2

Source: DEO's statistics office, Bondo (May 2005)

according to statistics in Table 2, there is a general poor performance of girls at KCPE in Bondo district. However, noting that there are some girls who score marks above 400, the implication is that girls are not necessarily less capable academically compared to boys. A possible reason for the performance discrepancy could be influence of the perception of the school stakeholders on the two sexes, which may in turn influence the academic self-concept of the girls. A systematic study needs to be conducted to investigate this possibility.

Statement of the Problem

The Report of the Commission of Inquiry into the Education System of Kenya (1999) observed that the greatest challenge facing this nation is that of ensuring access to basic education for all, ensuring equity in education and eliminating all existing disparities, with particular reference to education of girls. Several strides have been made by the Kenya Government towards achieving gender parity in education as outlined in the Millennium Development Goals (MDGs), most significantly the introduction of Free Primary Education (FPE) in 2003 which has seen the Gross Enrolment Rates (GER) of girls rise to 102% (Republic of Kenya, 2006).

However, examination results however still show that girls' performance at KCPE is much lower than that of boys across most districts in Kenya, Bondo district included. In contrast, some girls perform comparatively well, scoring higher marks than most boys. A possible cause for this discrepancy in performance needs to be investigated, and could possibly be the perception of the school stakeholders on the academic abilities of the girls, which may probably influence their academic self-concept, and consequently their academic performance. There is therefore need for a systematic empirical study to investigate the cause of this performance discrepancy.

Purpose of the Study

The purpose of this study was to investigate the perception of selected school stakeholders on girls' academic abilities and its influence on the academic self-concept of the girl-child.

Objectives of the Study

Study was guided by the following specific objectives: -

To determine if a difference exists between the perception of girls and that of boys, about their academic abilities.

To investigate teachers' perception of girls' academic abilities.

To determine if parental perception of girls' academic abilities influences girls' academic self-concept and performance.

To determine if socio-economic status of the parents influences the academic self-concept of the girls.

Research Hypotheses

following hypotheses were tested in the study:

There is no statistically significant difference between girls' perception and boys' perception of their academic abilities.

There is no statistically significant negativity in teachers' perceptions of girls' academic abilities.

There is no statistically significant relationship between parental perception of girls' academic abilities and the girls' academic self-concept and performance.

There is no statistically significant relationship between parents' socio-economic status and the academic self-concept of the girls.

Significance of the Study

study aimed at finding out the influence of perception of selected school stakeholders on academic abilities and its influence on the academic self-concept of the girl-child. It was ed that the results of this study would shed light to all stakeholders in education, including parents, teachers, administrators and politicians on the appropriate measures they should create an enabling environment, including their perceptions of girls, at home and at to enhance academic performance for the girl-child. This should be able to narrow the gap in academic performance between girls and boys. Where possible, the results of the uld form a basis for counselling of pupils, parents and teachers, highlighting the material chological provisions that could maximize academic performance of girls. It was also

expected that the Ministry of Education would use the findings of this research as a basis for developing and strengthening counselling programs in primary schools.

1.7 The Scope and Limitations of the Study

The study involved a sample of standard eight pupils of primary schools in Bondo District, their class teachers and parents. Standard eight was chosen because the pupils are mature enough intellectually to respond to the items of the questionnaire, and are also likely to be already concerned about their academic performance. Data was also obtained from records in the schools about performance of girls at internal examinations and at national examinations, by means of a specially designed proforma which was filled in by the class teachers.

1.8 Assumptions of the Study

Considering that the data for this study was collected from a sample, and with the limitations outlined in 1.7, the researcher operated within the precincts of the following assumptions:

i) That the pupils, parents and teachers covered in this study were a reasonable representation of the pupils, parents and teachers in the Bondo district.

ii) That the opinions sourced from the respondents were their accurate perception.

iii) That the academic self-concept is just but one of the factors that influence girls' academic performance.

iv) That the intervening variables, did not affect the academic self-concept and performance of the girls.

v) That the respondents gave their honest responses to the questionnaire items.

...n of terms

The researcher has operationally used the following terms in this research:

...demic ability: This refers to the maximum marks that a pupil can attain in the internal and external examination.

...demic performance: This refers the actual marks that a pupil attains in the internal and external examination.

...demic self-concept: Refers to the way the pupil perceives his or her academic ability and performance.

...tural roles: Those tasks assigned to boys and girls according to societal norms, values and expectations.

...der roles: Societal expectations about appropriate behaviour for boys and girls.

...l-child: Refers to the girls who are in the primary school.

...ence: This is the presumed effect that an independent variable may have on the dependent variable.

...ption: This refers to the thoughts and feelings of others about the academic abilities of girls.

...logical state: Set state of the mind for performing a particular activity.

...ted School stakeholders: These are the teachers, parents or guardians and other pupils, including the girls themselves.

...lization: The process through which individuals learn what society considers as appropriate behaviour.

...-economic status: In this study, socio-economic status was used mean the level of education, income and type of occupation of the parents or guardians.

...type: Those beliefs and expectations about members of groups, held on the basis of their membership in those groups.

CHAPTER TWO: LITERATURE REVIEW

Introduction

is chapter presents a review of related literature on the influence of perception of stakeholders girls' academic abilities. The researcher has reviewed literature about the importance of the ificant others in learning; children's interaction with parents; children's interaction with ning, play and leisure materials; girls' interaction with teachers; girls' academic abilities and er choices; the influence of school infrastructures and cultures; and, the socio-economic rtance of girls' education. The theoretical framework guiding the study is also presented.

Importance of the Significant others in Learning

ologists argue that the expectations we have of males and females are not based on any al, biological difference between them, but are the results of different upbringing in ent cultures (Oakley, 1972). Moore (1972) asserts that differences in behavior of the ent sexes are not a result of the physical differences but they are learned. A child therefore societal behaviour expectations and behaves in the way they are brought up.

demic performance of an individual can be attributed to a number of factors. Clarke-Stewart identifies factors like emotional state of the individual, age, cultural and religious values e community, economic resources and the school environment among others. Among the ous factors that would possibly influence the academic performance of the child, the tance of the environment where the child grows and studies cannot be under-estimated, and ludes the perception of others (Hohn, 1995). Hohn (1995) further affirms that cognitive opment of a child can be enhanced or deterred by a number of environmental or tional factors. The environmental factors here would include the home and the school m. According to Garcia, Torrence, Skelton and Andrade (1999), the home situation es for example lack of or presence of play materials, daily routines, interaction with , family structure and the socio-economic status of parents. Sindabi (1992), reporting Sue contends that the way an individual thinks, feels and acts in the decision making process e way life events and experiences are defined and perceived, are all a function of the dual's environmental surrounding, including the people they interact with and their ions and attitudes.

According to Sherman and Wood (1982), before a newborn baby leaves the delivery room in some maternity hospitals, a bracelet with its family name is put around its wrist. If a girl, it is pink and if a boy it is blue. Similarly in many African cultures, there are various gender related allusions, for example, among the Luo, baby girls are kept in the house for three days after birth while boys for four days. These different coloured bracelets and cultural ullurations symbolize the importance that the society place on sex differences, and this branding is the first act in sex role socialization process that will result in adult men and women being almost as different as we think they "naturally" are. The social learning process varies from society to society, though children will pretty grow up as they are expected to. The child internalizes the society's standards, and behaviour at odds with expectations is considered deviant (Sherman & Wood, 1982).

According to McCandless (1967), sex typing is imitative or modeling behaviour. The little boy, with or without thinking much about it, practices ways of behaving that he has learnt, are characteristic of men; while the little girl does things that she has learnt typify women. According to this author, many subtle and obvious pressures are placed on children to produce such differences, accompanied with a pattern of rewards and punishments administered by parents, teachers, elder siblings and playmates. Within the home, children also differentiate the roles of father and mother, which lead to the adoption of specific sex roles. According to Birren, Woods and Williams (1984), a large proportion of sex differences in behavior may be related to this early role learning. These roles learned in the home are modified as children interact with other people informally and formally in the school system.

Garcia, et al. (1999) argue that a well-rounded family and stable environment is most likely to give a child a positive future and influence. A positive influence will in turn spark a child to become a positive and prosperous student. Bernstein, Alison, Roy and Wickens (1997) assert that cognitive development in children is profoundly delayed if they are raised in environments where they are deprived of the everyday sights, sounds and feelings provided by conversation and loving interaction from family members, by pictures, objects and books, even by television and radio. In their opinion, children subjected to the deprivation of such magnitude show

impairment in intellectual development. Research has also shown that children's development is promoted when parents read and talk to them, encourage and help them explore and actively teach them (Bernstein, et al. 1997).

(1980) observes that the world of toys and games offers girls a far more restricted range of roles than it does boys and the roles offered girls are essentially passive and home-oriented. According to Lobban (1974), boys are nearly always dominant, and the male characters have a much greater range of activities, more toys and more pets. There are more adult male roles shown in reading materials where male characters teach small boys many new skills while female characters teach small girls a restricted range of new skills. In essence, boys therefore get with more exposure than girls, and this seem to impact on their academic performance by influencing their cognitive development. Lobban (1975) also indicated that the boys are shown spending time watching adult men who are not their relatives performing their occupational roles and tasks, while girls only watch their mothers who are often only taking care of the house and children.

Children's Interaction with Parents

the child's early years, the family is the most important socializing agency. In the family, the child interacts mostly with the parents who are the caretakers. It is during this time that a child is given the values of the family, which often are extensions of the societal values (Njeuma, 1993). many African societies, the expectations of parents for their daughters are not as high as those their sons. Birren, et al. (1984) observe that boys are handled more roughly than girls and parents indicate more concern about their daughters' physical well being. Boys are physically punished more and are given more direction than girls. Such parental behaviour seems to encourage adventure and independence in boys, eventually reflecting in their academic performance.

According to Njeuma (1993), education is not considered to be as crucial for girls, as it is for boys. This author asserts that until a girl is married, her natal family wants her unpaid labour in the future and in the home. If school attendance interferes with this significant contribution to the household economy, girls will drop out of school and when a choice has to be made for

economic reasons, between educating a son or a daughter, preference is given to the son. The Report of The Commission of Inquiry into the Education System of Kenya (1999) even reports instances when a girl may be sent to work in order to raise fee for the education of her brother.

The way parents interact with their children on matters involving academics depends on the level of education of the parents (Sindabi, 1992). Datta (1984) contends that if the head of the family is educated, for example, the children are likely to receive some encouragement, guidance and active help in academic work. Phillips (1990) further observes that students who come to school knowing that their parents want and expect them to learn are more teachable and often score highly. According to this author, children who are under severe emotional stress at home and who come to school insufficiently rested are not ready to learn and in effect perform poorly in academics.

Weiner (1972) observe that parents sometimes even doubt the compatibility of femininity and academic performance of their daughters. Such parents often show their special pride for the intellectual achievements of their sons and take little interest or pleasure in their daughters' educational plans and accomplishments. This considerable negative reinforcement experienced by able girls dulls their academic enthusiasm and results in underachievement. In the same context, Sherman and Wood (1982), reporting a study of nursery school children found that parents valued malleability, cooperativeness, and willingness to take directions, but disapproved of inquisitiveness, assertiveness and quarrelsomeness in girls. In boys, independence, assertiveness and inquisitiveness were valued; timidity and fearfulness disapproved. Weiner (1972) contends that the idea that males are naturally brave, independent and resourceful while females are timid and dependent tends to be a self-fulfilling prophecy. Parents base their child rearing practices on this idea, giving boys more independence at an earlier age than girls. Authors of a study of childhood behaviour hypothesize that in the first year or two, parents reinforce those behaviours they consider sex-role appropriate, and the child learns these sex-role behaviours independent of any internal motives (Weiner, 1972).

Sherman and Wood (1982), even report one study of parents' reactions to their newborn infants in which girl babies were described significantly differently from boy babies even though there

actually no sex difference in other physical characteristics. These studies indicate that to a siderable extent, people see what they expect to see in a girl or a boy, even if real differences not exist. Children learn these behavioural trends from their parents and hence develop sex-ed stereotypes of each other.

ney (1971) as reported by Birren, et al. (1984), studied a number of children who were ally ambiguous at birth and were raised either as boys or girls by their parents. In this study found that the children reared as boys considered themselves male and adopted masculine aviour patterns while those reared as girls behaved in a more feminine manner. According to study, regardless of the genetic sex of children, they identified themselves with and assumed ex-role of the gender they had been assigned. The study concluded that somehow children ive information from the environment that leads them to pattern their behavior. Such nmental information include parental teaching and shaping of behaviour and imitation of s who typify behavioural sex differences.

Children's Interaction with Learning, Play and Leisure materials

ann (1977) and Sharpe (1976), looking at comics aimed at children and adolescents, argue the comics for small children carry the following "message": females are concerned about ing things and people clean; females provide food and drink; females tidy up after males; les help people and do good turns; and, females are nurses, while males are doctors. mont (1980), reporting an American study, observes that girls have dolls, passive games and and crafts in their rooms while boys rooms had trucks, bricks, toy firearms and equipment ctive sports. Sherman and Wood (1982) observe that boys and girls are given different toys a very early age. According to them, boys' toys are more varied and more likely to mage activities outside the house, and have a higher competency eliciting value. These rs contend that as early as nursery school, children are strongly encouraged to play with opriate" toys and girls are more severely reprimanded for noisy and boisterous behavior. Boys are allowed, and often encouraged to be aggressive. These, and other examples are a estation to the kind of discrepancies we find in leisure and play materials of children.

1978), studying what children chose to play with in school and at home, found out that who played with bricks, trucks and climbing apparatus were better at the problem tasks involving visual spatial reasoning. In contrast, children who played with dolls and ping materials were better at fine motor tasks. According to Serbin (1978), among the the two sets of abilities were not totally sex specific, although it was predominantly o played with the bricks, trucks and climbing apparatus, and primarily girls who played keeping tasks. School learning and teaching materials are also full of images and texts women and girls in stereotypical roles that impact negatively upon girls' self esteem and ce (Muito, 2004). This author observes that such graphic images often portray girls and s observers in the learning process whereas the boys and the men are shown in action. e, girls get the information that they are not the same as boys.

s' Interaction with Teachers

g to Sherman and Wood (1982), sociologists argue that teachers spend more time with concentrate their efforts on them than on girls. In co-educational classes, teachers have nd to spend two thirds of their time on the boys in class (Feldman, 1994; Sherman & 982; Moore, 1987). According to Moore (1987), it has been found that teachers, like have different expectations of behaviour for boys and girls, that boys are expected to be sterous, girls to be quieter and more obedient. According to this kind of perception, girls ted to be less inquisitive, and therefore to ask few questions even in class.

and Wood (1982) report a study in which teachers questioned admitted that they ly behaved differently towards boys and girls. According to these authors, teachers to direct more supportive remarks to girls and more critical ones to boys, and were ly to regard creative behaviour in boys than girls. This kind of attitude is likely to s believe that one does best by being conformist, and that creativity is a reserve for the hin (1978) observes that boys even got different kinds of classroom interaction from boys get more detailed step-by-step instruction in how to solve a problem. According n (1993), the stereotyping in teaching methods and the attitudes of teachers towards s the achievement of girls. In this way, girls come to accept certain fields of study as inine and thus more suitable for them, while some fields are masculine and are for

(2004) observes that another major issue is the composition of teachers, especially in the schools in the rural ASAL areas. According to this author, majority of the teachers in are males and therefore girls lack female role models. The author further asserts that these male teachers bring to the classroom the social cultural stereotypes, and the self- prophesies that boys are naturally superior to girls and perform better than girls in the environment. The situation is worse when the teachers adhere to traditional belief that a woman or girl should not challenge male authority in any way, including performing better.

(2004) further observes that teachers do not often come into the classrooms as gender- personalities. This author contends that teachers are likely to have internalized a gender ideology through years of socialization in both informal and formal settings. It patriarchal worldview that impact on the hidden curriculum in the classroom, ensuring that differentiated practices, procedures and processes occur at classroom level even where friendly policies and curricula exist.

Girls' Academic Abilities and Career choices

is some evidence that the intellectual abilities of girls and boys are slightly different, girls superior in the use of language, and in early adolescence, boys develop greater ability in matics (Oakley, 1972). According to Feldman (1994), even though there seem to be no ences between males and females in their overall IQ scores, learning, memory, problem and concept formation tasks, current evidence suggest that males are predominant in matical skills, and that performance of females generally decline along the schooling . However, Oakley (1972) observes that even if such differences seem natural, gists argue that the more important influences on educational attainment of boys and girls social ones, those that are learned in the socialization process. According to Muito (2004) -educational classrooms, girls tend to reserve their comments and remain silent, which wrongly interpret as being a result of low ability or laziness.

(1972) argues that during the late high school and college years, scholastic excellence career-mindedness are considered masculine characteristics rather than feminine teristics among many groups. The girl who values her studies above her social life,

especially when she is preparing to enter such predominantly masculine fields as engineering, law and medicine may find her femininity called in question by her family and friends. According to Birren, et al. (1984), young women have a tendency to fear success, and normally predict bad outcomes for women who have been assertive and have achieved. This author observes that even some female teachers disapprove of aggressive females in elementary school, and this message apparently carries negative feelings about female achievement.

Preoccupations about marriage on the part of women and girls may also sometimes limit their educational attainment and determine the type of studies they undertake (Njeuma 1993). According to this author, although African women sometimes feel that education improves their chances of getting a "better" husband and therefore of living a more comfortable life, they are also wary of being too educated, or of entering fields of study that might limit their choice of a husband. Moore (1987) observes that girls learn that they are not expected to look for a career, and that their main role is to be a wife and mother. According to Feldman (1994), although today many women are entering the workforce, they are still seen as suited for traditionally female jobs such as secretaries, nurses, book-keepers, cashiers and other female dominated professions that feature low pay and low status. Girls, therefore, actually choose to do these sorts of jobs and choose to see themselves as mothers-to-be. The result is that they regard school as relatively unimportant.

2.7 Influence of School Infrastructures and Cultures

Skelton (1978) observes that schools segregate sexes in many ways including the playgrounds, arrangement of names in the registers and even subject choices. Such segregation constantly reminds children that they are either male or female and continue to perpetuate their sex stereotypes of each other. According to Muito, (2004) school infrastructures and cultures are often not gender responsive and score poorly when it comes to meeting the needs of adolescent girls. This author observes that desk designs which require girls to lift their legs in order to access the seating position form, the seating arrangements where girls are often located between boys, and the culture that pupils must stand when responding to the teachers' questions, fail to appreciate that girls going through menstruation may find these requirements barriers to participation in the learning process. Such conditions make girls opt to miss school during

menstruation, which in turn lead to poor performance. This author while reporting studies done by Federation of African Women Educationists in Kenya (FAWEK), together with reports by UNICEF, suggests that some girls are missing, on average, classes amounting to three to four days each month due to reasons associated with menstruation, and the reactions of peers and teachers as reinforced by the available school infrastructures.

The chores assigned to girls in school, such as cooking for teachers, fetching water and cleaning classrooms often rob girls valuable learning hours, as sometimes they are even withdrawn from class to perform these chores while classes are going on (Muito, 2004). According to this author, it is amazing to see that girls are more often taken out of class to entertain school guests in song and dance, and serving food as it is assumed that this is a role they should naturally perform. Usually it would take these girls long hours to practice the songs and dance, further missing out on school learning hours. According to Maendeleo ya Wanawake Organization (1999), in most developing countries, girls do not receive the same educational opportunities as boys. Even when given the opportunity to be educated, the girls typically face considerable barriers to the completion of their studies. For example, while virtually all girls in Kenya are initially enrolled in primary school, approximately 65% of them drop out before completing Standard 8.

The Socio-economic Importance of Educating Girls

Psacharopoulos (1974) observes that communities require to see quantifiable and desirable social and economic outcomes of girls' education before they are finally convinced that investment in girls' education is justifiable. However, according to Holmes (2004), there is no tool for development more effective than the education of girls, and no other policy is as likely to raise economic productivity, lower infant and maternal mortality, improve nutrition and promote health, including helping to prevent the spread of HIV/AIDS. According to the Report of The National Committee on Educational Objectives and Policies (1976), about half of the human resources available for national development consist of women, and furthermore, women in a developing country like Kenya are directly responsible for most of the productive activities, especially in agriculture and general family and community welfare.

rding to the Report of The Commission of Inquiry into the Education System of Kenya 9), the socio-economic benefits that the Nation derives from the education of girls include ntegrational effects of a mother's education on her children, on infant mortality and dity, family health and nutrition and her own economic productivity. This report nizes that the mother is the first teacher of the child and her own education impacts on early hood care, development and education. The impact of a girl's education towards social and al development can be summarized as in figure 1.

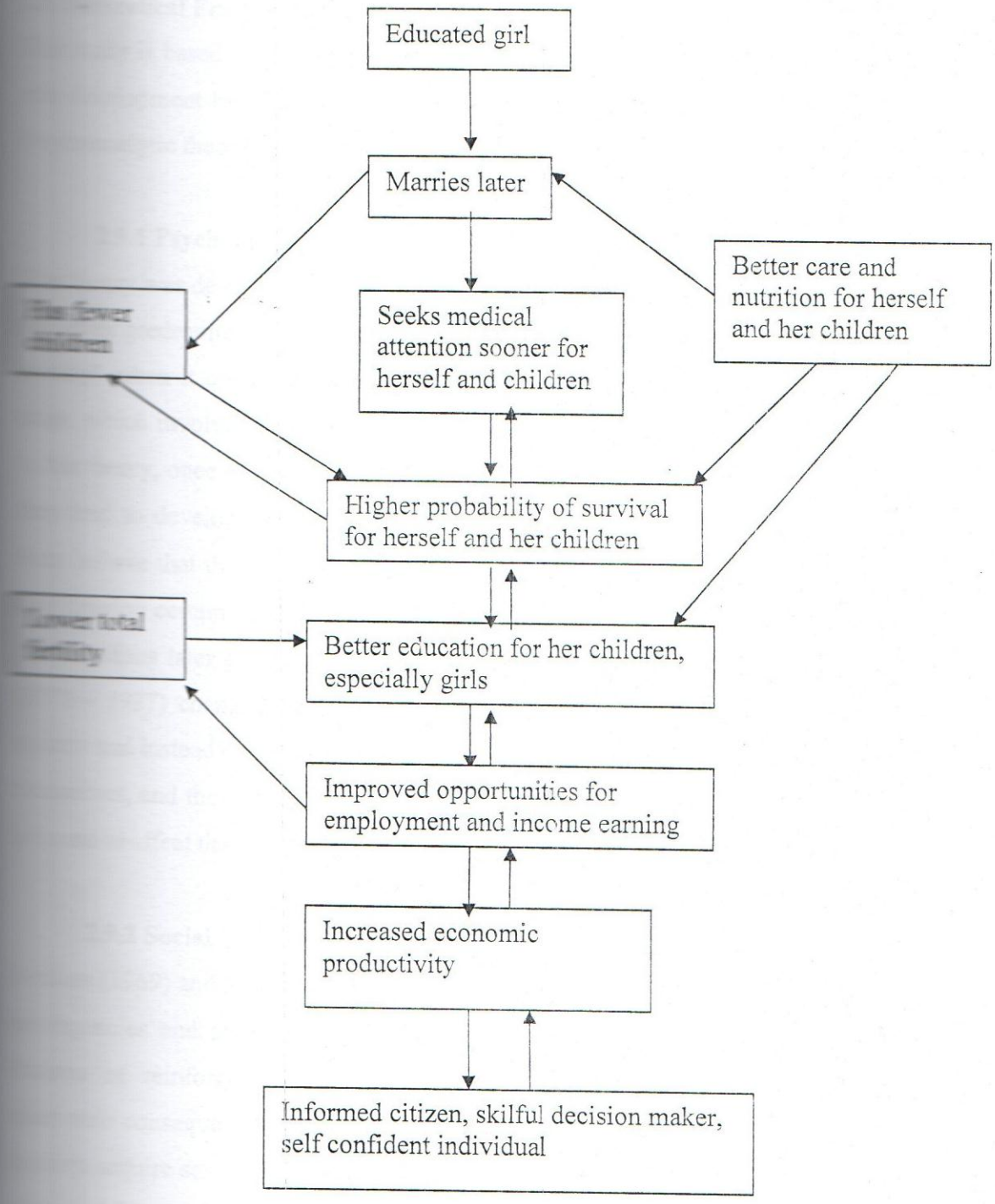


Figure 1: Impact of girls' education on social and national development

Source: Adapted from the Report of The Commission of Inquiry into the Education System of Kenya (1999)

heoretical Framework

study is based on the theories of sex-role development. Psychologists have explained sex-levelopment based on three theories according to Birren, et al. (1984). These theories are nanalytic theory, Social learning theory, and Cognitive development theory.

2.9.1 Psychoanalytic Theory

heory was developed by Sigmund Freud. According to Freud, physical differences between es predestine them to have radically different personality configurations. "Anatomy is y" when it comes to sex roles. This destiny is learned and accepted during the phallic which involves the resolution of the Oedipal complex or the Electra complex. According heory, once girls identify their biological sex and learn the sex roles that go along with it, nd to develop certain unique personality configurations that, among other things, make elieve that they are less endowed in certain activities, including schoolwork. In this way, evelop certain sex role stereotypes that modify their activities, both in school and at home. eudians later emphasized the role of cultural influences on behaviour of girls, and Adler – 1937) changed Freud's idea of "penis envy" in women to a theory that women fear s and instead envy men's status and power (Feldman, 1994). The perception of girls about ves, and those of other people about girls seem to be shaped in this line of thought. This d to affect the academic performance of girls.

2.9.2 Social Learning Theory

n (1969) and Mischel (1970) in Birren, et al. (1984) emphasized the significance of social encies and external environmental influences as the main shapers of gender identity. s of reinforcement, verbal instruction, the behaviors of models, and the publicly ble consequences of the models' behaviors (vicarious learning) are means through which acquire sex role identification. Sex differences are learned, and once this learning takes child's identification is formed.

al learning approach emphasizes the flexibility of sex-role behavior and the potential for g sex-role stereotypes. If the environment is constantly shaping behavior, the alterations nvironment can lead to alterations in attitudes and behavior of males and females.

According to this theory, the behavior of girls is modified by what they see and hear in their surrounding. This includes the reactions of others towards them, depicting the perception and attitudes of other people towards them. Such reactions, perception and attitudes of others reinforce the already learnt sex-role stereotypes and this is bound to affect their academic performance

2.9.3 Cognitive Development Theory

Kohlberg (1966, 1969), on the basis of Piaget's cognitive theory has explained sex role development as a cognitive phenomenon. Cognitive development theorists see the organizing force as being the interactions between an individual and the environment. A child's general cognitive level shapes his/her social responses, and sex role development progresses through a series of stages, beginning with the formation of a sex-typed identity, (rather than culminating in it as postulated by psychoanalytical and social-learning theories). According to this theory, the cognitive processes of an individual depend on how they perceive the environment. The way a girl thinks about herself would therefore depend on how she perceives her surrounding. It follows that if what she sees depicts her as inferior, she will develop a negative self-concept, thereby interfering with her academic performance.

According to Sandra (1987) as quoted by Feldman (1994), socialization produces a gender schema, that cognitive framework that organizes and guides a child's understanding of information relevant to gender. On the basis of what their schemas are regarding what is or is not appropriate for being a male or female, children begin to behave in ways that reflect society's gender roles. Beliefs and attitudes are learned from the people with whom we live and associate, and because they are learned, they can be changed (Myers & Myers, 1992). Further, this author contends that our beliefs, attitudes and values were formed through the various groups we were exposed to, who socialized us. In this way, we develop goals, aspirations, values and standards depending on our reference groups and role models. It can therefore be inferred that girls perceive themselves and develop those attitudes and beliefs that they consider befitting their group and this seem to affect their academic endeavors. Figure 2 summarizes the interaction of variables that may determine the academic self-concept and performance of girls in a conceptual framework:

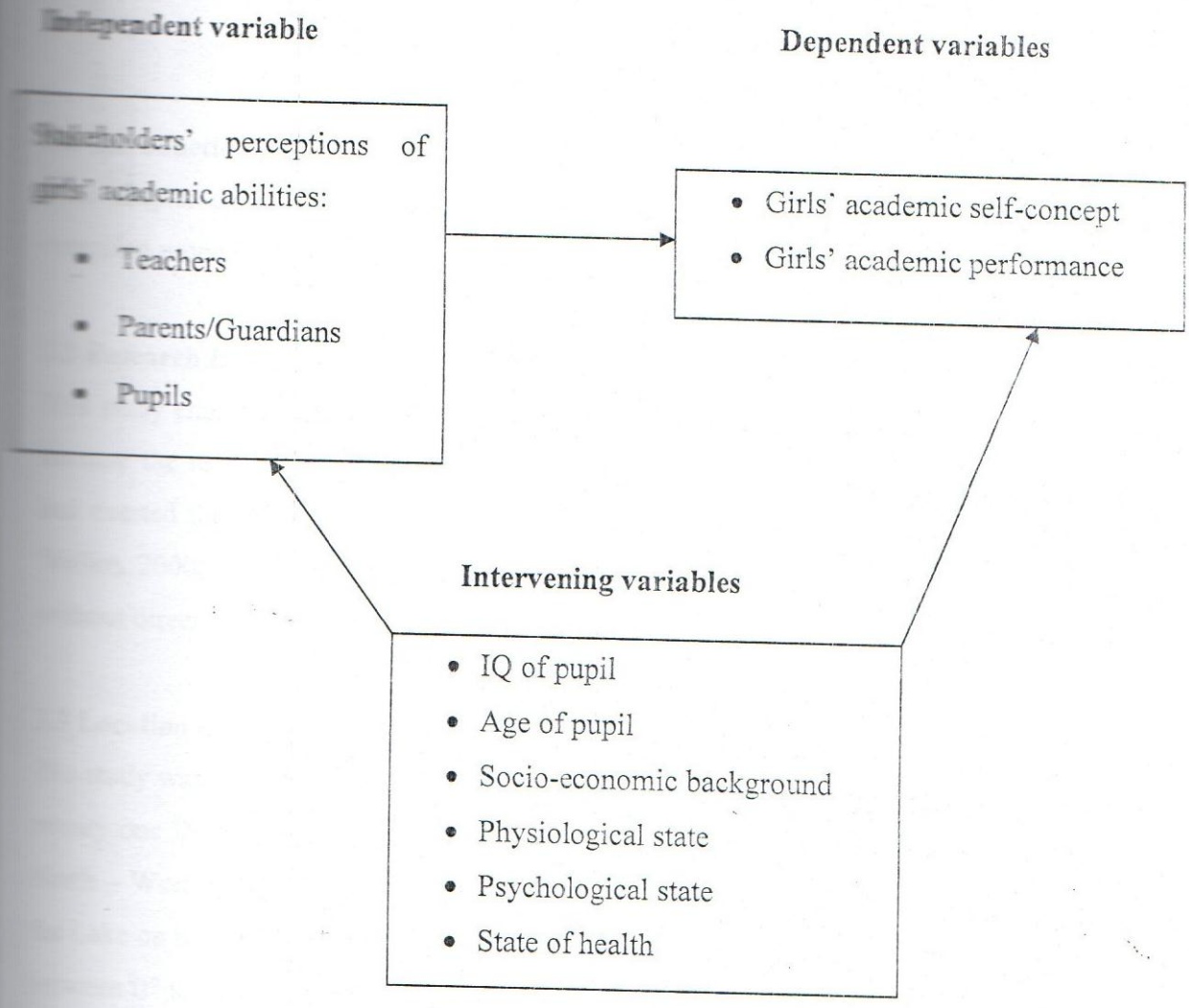


Figure 2: Perception of selected school stakeholders on girls' academic abilities

In this study, the researcher investigated the influence of the independent variables, which included the perceptions of parents, teachers and other pupils, on the academic abilities of the girl-child, on the dependent variables, which are the girls' academic self-concept and their academic performance. There were also intervening variables that may have affected the perception of teachers, parents and pupils, about the academic ability of the girl child, and which may have in turn influenced the academic self-concept of girls, but these were not being investigated in this study.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter deals with the research design, location of the study, population of the study, sampling procedures and sample size, instrumentation, data collection and data analysis.

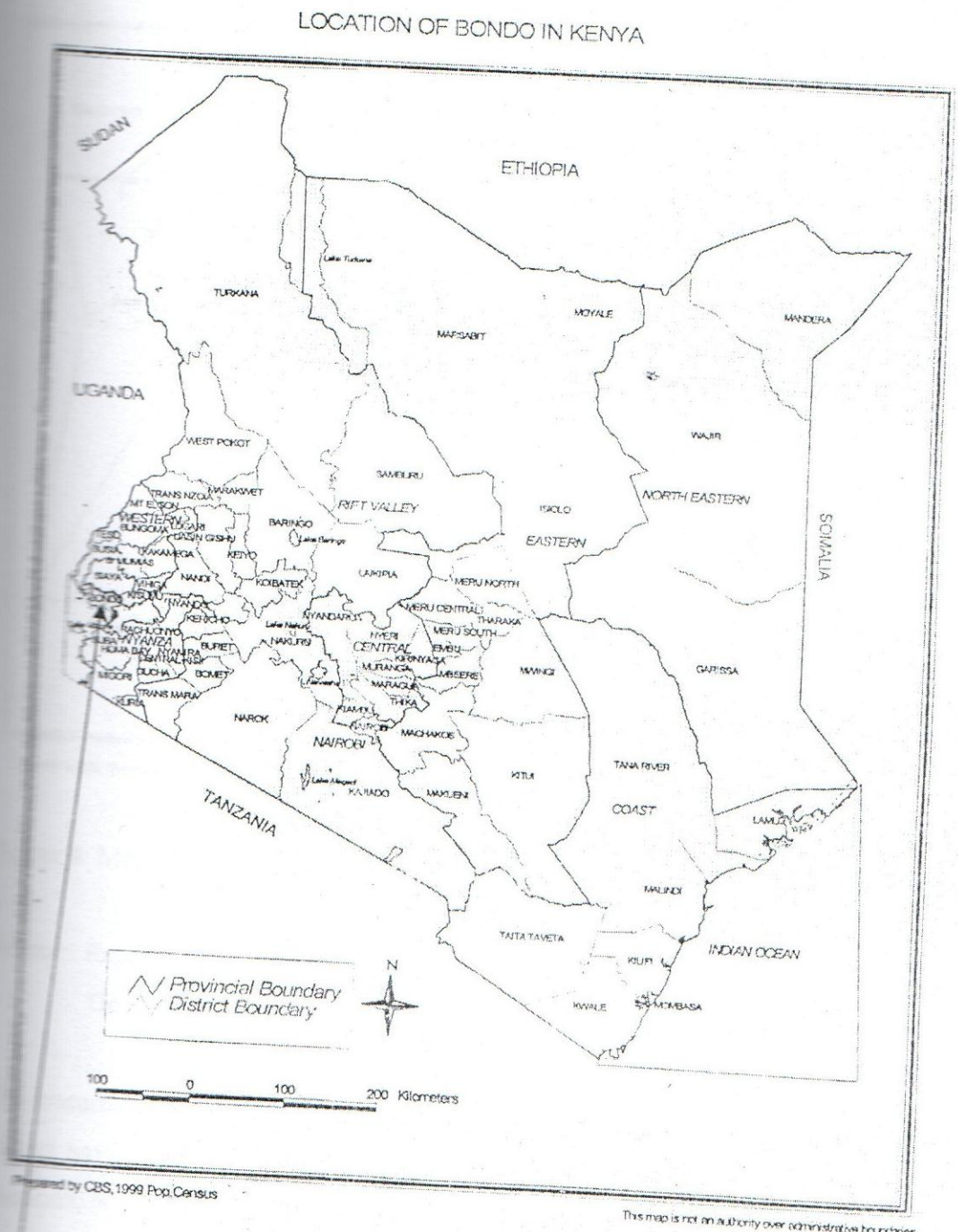
3.2 Research Design

This study employed the *ex post facto* research design. This design was found to be appropriate because the researcher sought to investigate the effects of the independent variables after they had exerted their presumed effect on the dependent variables (Gall & Borg, 1996; Fraenkel & Wallen, 2000). In this design, inferences about the relationships among the variables were made without direct intervention of the independent variables (Kerlinger, 2000).

3.3 Location of the Study

The study was located in Bondo district of Nyanza province, Kenya. Bondo District is one of the twenty one Districts that make up Nyanza province. It borders Siaya and Busia Districts to the North – West, Kisumu District to the East and Rachuonyo, Homa-Bay and Suba Districts across the Lake on the South – East and South, to the West lies the Republic of Uganda. The district lies between 0° to 30° south of the Equator and Longitude 30° to 34° east. It covers an area of 1972 km² of which 972 km² is land surface and 1000 Km² is covered by Lake Victoria.

The District is divided into five divisions: Madiany, Maranda, Nyang'oma, Rarieda and Usigu, which are further divided into 13 education zones. There are 235 primary schools with a total population of 69,182 pupils in the district. Figure 3 and Figure 4 show the location of Bondo district in the Republic of Kenya.



Bondo District

Figure 3: Location of Bondo District in Kenya

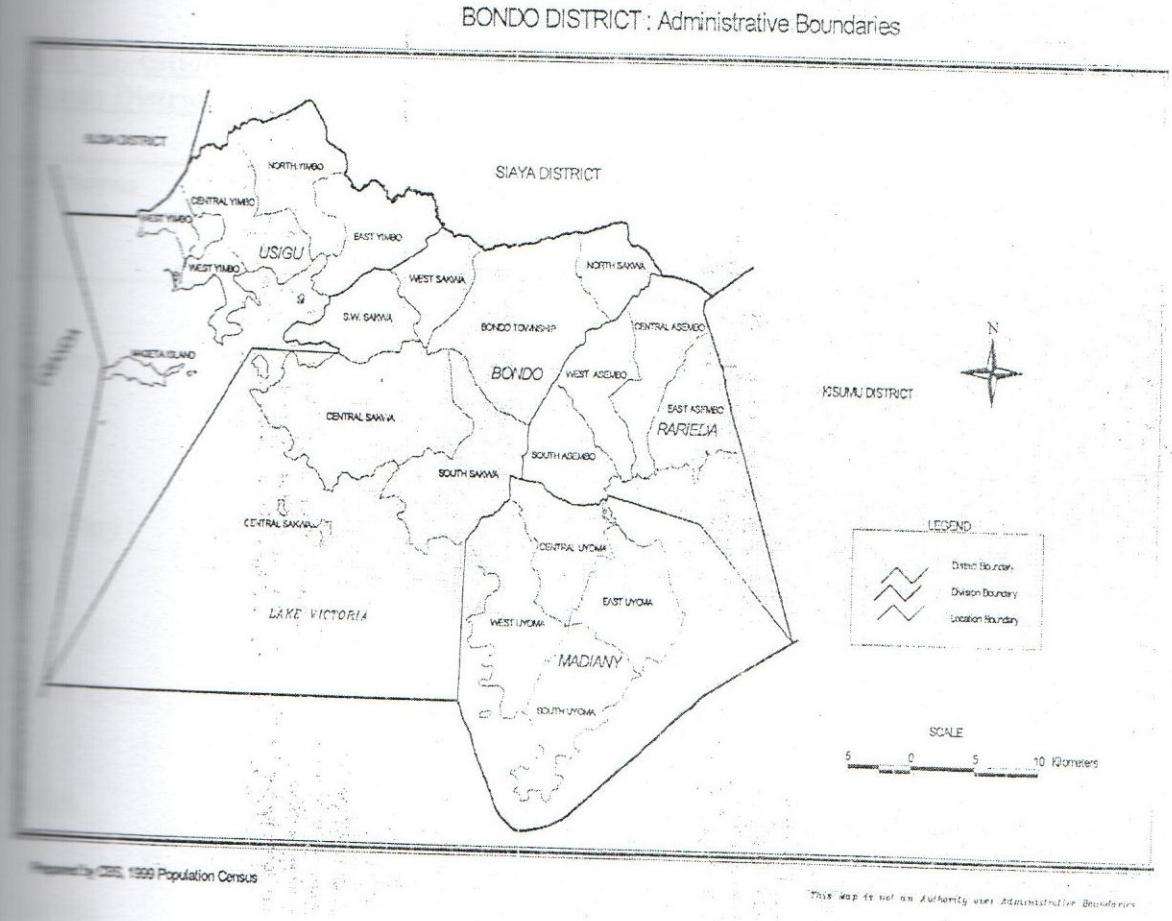


Figure 4: Map of Bondo District showing the Divisions.

Source: Republic of Kenya (Gok) (2001), *1999 Population and Housing Census,* (Nairobi: Government Printer).

The researcher chose Bondo district for this study because of the extensive familiarity with the district having worked here for a long period of time. The district is divided into 5 divisions; Maranda, Nyan'goma, Usigu, Rarieda and Madiany. The divisions are further divided into a total of 13 educational zones. Table 3 summarizes the divisions and the zones in Bondo district, and the number of schools and standard 8 enrollments in the district, according to returns at the Bondo D.E.O's statistics office of May 2005.

Table 3:

The Educational Divisions and Zones, Number of Schools and Standard 8 Enrollment in Bondo District

Divisions	Zones	Number of Schools	Std 8 enrollment		
			Boys	Girls	Total
Maranda	Bar-Kowino	18	316	220	536
	Maranda	17	222	189	411
	Aila	17	174	144	318
Madiany	Manyuanda	18	202	162	364
	Ndigwa	15	184	74	258
	Owimbi	18	266	211	477
Nyang'oma	Amoyo	20	238	176	414
	Nango	22	218	177	395
Usigu	Usenge	18	255	203	458
	Nyamonye	17	243	164	407
Rarieda	Mahaya	20	284	236	520
	Nyayiera	21	308	248	556
	Nyilima	14	222	159	381
Total		**235**	**3132**	**2290**	**5422**

Source: Bondo D.E.O's statistics office (May, 2005)

The researcher selected Maranda and Rarieda divisions, which were the most populous in the district, then proceeded to select Bar-Kowino and Nyayiera zones, which were the most populous from Maranda and Rarieda divisions respectively. Data was then collected from schools sampled from the zones.

3.4 Po ion of Study

The tion of study comprised pupils in primary schools in Bondo district, Kenya. Pupils fr ard eight were chosen for this study because their maturity and level of education ght to enable them to understand the questionnaire items and respond to them. The guardians, and teachers were also involved in the study, in order for their perceptions vay they interact with the pupils could be investigated in the study. The accessible n for this study was 624 boys and 468 girls, totaling to 1092 pupils, and 39 schools om Bar-kowino and Nyayiera zones. Table 4 shows the accessible population for the

4:

sible Population for the Study

	Number of Schools	Std 8 Enrollment	
		Boys	Girls
Kowino	18	316	220
yiera	21	308	248
tal	39	624	468

3.5 Sampling procedure and Sample size

According to Mugenda and Mugenda (1999), the sample size depends upon the purpose of the study and the nature of the population under investigation. However, they affirm that the general rule in sample size determination is to use the largest possible sample. Therefore, to arrive at a final representative sample size, the researcher used multistage sampling procedures to sample 2 divisions from the 5 divisions of the district, given that the population was homogenous (Cohen & Manion, 1994; Nkpa, 1997). The researcher purposively selected Maranda and Rarieda divisions which were the most populous as shown in Table 3. Similarly, the researcher purposively selected Bar-Kowino zone and Nyayiera zone which were the most populous from Maranda and Rarieda divisions respectively. The researcher thus had an accessible population of 624 boys and 468 girls, totaling to 1092 pupils from 39 schools as shown in Table 4.

This accessible population (1092) is less than 10,000, and according to Mugenda and Mugenda (1999), when the accessible population is less than 10,000, the following formula recommended by Fisher et al (1983) is used to arrive at an appropriate sample size:

$$n_f = \frac{n}{(1+n)/N}$$

where: n_f = final sample estimate

n = 384 (based on a sample size for a population more than 10,000)

N = population

Using this formula, the researcher arrived at a sample size of 135 pupils. Hence out of the 135 pupils, the researcher used stratified sampling procedure to sample 58 girls and 77 boys to participate in the study. The researcher purposively sampled five schools from each of the two sampled zones, giving a total of 10 schools. The researcher then sampled the 77 boys and 58 girls from the 10 sampled schools using stratified sampling procedures. Sampling of teachers and parents was purposive. All the standard eight class teachers of the participating schools participated in the research, which gave a total of 11 teachers as one school had two standard eight streams and produced two teachers. Similarly, all the parents of the sampled girls were purposively selected for the research therefore a total of 58 parents were sampled for the research. The total sample size to used in this research was therefore 189. Table 5 summarizes the sample sizes for each of the categories of participants who participated in this study.

Table 5:

Sample Sizes for Each Category of Participants

Zone	School	Sampled Pupils		Sampled Parents/Guardians	Sampled Teachers
		Boys	Girls		
Bar-Kowino	Bar-Kowino	6	5	5	1
	Nyawita	6	5	5	1
	Bar-Muofu	5	3	3	1
	Dunya	8	4	4	1
	Bondo Township	19	16	16	2
Nyayiera	Saradidi	7	6	6	1
	Ramba	7	5	5	1
	Kaminogedo	5	4	4	1
	Memba	6	4	4	1
	Kamalumbe	8	6	6	1
	Total	77	58	58	11

3.6 Instrumentation

Questionnaires were used to collect data in this study. The questionnaires comprised of open-ended and closed-ended questions. Likert scales were developed and used to test the way teachers, parents, boys and girls themselves perceived girls' academic abilities, and also the self-concept of the girls. The questionnaire for parents sought to gather information on their perceptions about their daughters' academic and career abilities, and their general involvement and concern about their daughters' education while that for the pupils sought to gather information about the perceptions about themselves in relation to school related work and academic abilities. The questionnaire for teachers sought to gather information on their perceptions about the academic and career abilities of girls and the general involvement of the girls in academic tasks. The academic performances of the girls were obtained from the internal

examination results of the previous three (3) terms. The class teachers were given a special profoma where they filled in the results of the girls which were involved in the study.

3.6.1 Validation of the Instruments

The questionnaires used in the study were developed by the researcher in line with the research objectives. The questionnaire items were examined and moderated by the supervisors and other research experts in the Faculty of Education and Community studies of Egerton University. This helped in ensuring the content validity and the construct validity of the items. Validity of the instruments were further improved during piloting, as the pilot respondents were asked to make comments that helped the researcher reframe the questionnaire items, making them more appropriate and understandable to the level of the respondents(Kathuri & Pals, 1993).

3.6.2 Reliability of the Instruments

The researcher carried out a piloting to determine the reliability of the questionnaires. A pilot study was carried out in one school which had similar characteristics as the study schools, from Nyilima zone which was not involved in the actual study. Ten standard eight pupils were randomly selected from the pilot school and given the questionnaires which they responded to, and their comments used to modify the questionnaire items. The Cronbach alpha was used to estimate the reliability of the instrument and realized a reliability coefficient of 0.85. This was found to be significant when viewed against the set α of 0.70 proposed by Fraenkel and Wallen (2000), and was therefore acceptable.

3.7 Data Collection Procedure

In order to carry out the research, the researcher sought permission from the Ministry of Education Science and Technology. Once permission was obtained, the researcher proceeded to the schools and sought permission from the head-teachers in order to access the teachers and pupils.

The researcher visited the selected schools and personally administered the questionnaires. With the assistance of the class teachers, the researcher accessed the sampled pupils and administered the pupils' questionnaire to the selected pupils. The pupils were issued with the questionnaires

and given time to read and ask for clarification where they did not understand what was required of them. The pupils were allowed to go home with the questionnaires which were then collected the next day when the pupils came to school. The parents were tracked down through their daughters, whereby the class teachers invited the parents whose daughters were participated in the study to the schools. The questionnaires were then administered to the parents with the help of the standard eight class teachers. The parents who had difficulty in understanding some of the questionnaire items were helped by way of clarification. The parents responded to the questionnaires which were then collected on the spot. The questionnaires for teachers were given out to the class teachers of standard eight, which they filled and returned to the researcher on the spot. The academic performance of the girls was obtained from the internal examination results of the previous three (3) terms. The class teachers were given a special profoma which they filled in the results. Table 6 shows the returned questionnaires from the respondents, and therefore from which actual data was collected.

Table 6:

Returned Questionnaires from Respondents

Zone	School	Returned questionnaires			
		Boys	Girls	Parents/Guardians	Teachers
Bar-Kowino	Bar-Kowino	4	3	3	1
	Nyawita	5	5	5	1
	Bar-Muofu	5	3	3	1
	Dunya	8	4	4	1
	Bondo Township	19	15	15	1
Nyayiera	Saradidi	5	6	6	1
	Ramba	7	5	5	1
	Kaminogedo	5	3	3	1
	Memba	5	4	4	1
	Kamalumbe	8	6	6	1
	Total	71	54	54	10

3.8 Data Analysis

The data generated from this study was both quantitative and qualitative. Descriptive and inferential statistics were used to analyze the data. The data was organized into frequencies, percentages, means, and standard deviations for analysis. Pearson's correlation, t-tests and Chi-Square test were used to analyze the data. The Statistical Package for Social Science (SPSS) tool was employed in data analysis. Table 7 summarizes the hypotheses and the data analysis tools that were used.

Table 7:

Summary of Data Analysis

Hypothesis	Independent Variable	Dependent Variable	Method of Data Analysis
Ho_1: There is no statistically significant difference between girls' perception and boys' perception of their academic abilities.	Gender of the pupils	Academic abilities	T-test
Ho_2: There is no statistically significant negativity in teachers' perceptions of girls' academic abilities.	Negativity in teachers' perception	Girls' academic abilities	Chi square
Ho_3: There is no statistically significant relationship between parental perception of girls' academic abilities and the girls' academic self-concept and performance.	Parental perception of girls' academic abilities	Girls' academic self-concept and performance	Pearson's correlation
Ho_4: There is no statistically significant relationship between parents' socio-economic status and the girls' academic self-concept.	Parents' socio-economic status	Girls' academic self-concept	Chi-square

with the responses ranging from "Strongly Disagree"(SD) with a score of 1 to "Strongly agree" (SA) with a score of 5. Further, the responses were categorized such that (SA) and (A) would mean the respondent feels positive about self, while (D) and (SD) would imply that the respondent feels negative about self. Table 8 shows the percentage positive responses to the self-concept items by gender of the pupils.

Table 8:

Percent Positive Responses to Self-concept Items

Questionnaire item	%Positive responses	
	Boys (%)	Girls (%)
I am capable of getting good grades (marks) in school	100	24.07
I am clever enough to put up with schoolwork	88.7	42.59
I am happy with my ability in academic work at school	74.6	61.1
I feel good about my academic work at school	77.5	35.18
I am able to get the results I would like at school	69.01	29.62
I feel good about the assignment marks I get at school	69.01	42.59
I am proud of my performance at school	74.6	64.81
I am satisfied with my academic work at school	84.5	75.93
I am happy with the academic work I do at school	80.28	55.56
I get very good results at school	63.38	24.07
I enjoy my studies	80.28	33.33
I feel as good as the other people in my class	83.09	81.48
I have a very good relationship with teachers at school	94.37	68.52
I feel good in my class	78.87	20.37
I know I can pass exams at school	90.14	44.44

It can be observed that in all the items, boys recorded higher percentages in their positive responses to the items. This implies a general positive feeling by the boys about their academic abilities compared to the girls. It is only in the item "I feel as good as the other people in my

class" where girls recorded a percentage close to that of boys, recording 81.48% compared to the boys' percentage of 83.09%. It could be that the girls do not really mind performing and feeling as they do in school.

The mean score from the pupils' responses to the self-concept items was calculated for each pupil and used to calculate the mean academic self-concept for each gender of the pupils. The summarized data is as shown in Table 9.

Table 9:

Group Statistics of Pupils' Mean Academic Self-concept

Gender		N	Mean	Std. Deviation
Mean	Girls	54	3.2933	.49968
	Boys	71	4.0961	.44286

This analysis shows that there is a difference between the academic self-concept between girls and boys, with the boys' mean academic self-concept being 4.0961 while the girls' mean academic self-concept is 3.2933. The researcher further subjected the means to an independent t-test at 95% level of confidence to establish the significance of the difference. The results of the t-test are as shown in Table 10.

Table 10:

Independent Sample t-test of Means of Girls' and Boys' Academic Self-concept

Variable	t-test for equality of means				
	t	df	Sig (2-tailed)	Mean difference	Std. Error difference
Mean	-9.495	123	.000	-.80272	.08454

The results of the test reveal a p- value (0.000) < 0.05. The conclusion is therefore that the means of the two groups are statistically significant, and therefore there exists a difference in the academic self-concept between girls and boys. This test reveals that boys have a significantly higher academic self-concept compared to girls. Probably this presents the reason why boys tend to perform better than girls in examinations, as they seem to be more confident about their academic work and therefore have a stronger achievement motivation compared to the girls. This finding agrees with what Eccles (2003) proposed, that confidence in one's ability would likely improve engagement in tasks, thereby leading to high performance in the task. Marsh et al. (2003) however argues that there is substantial evidence that prior academic achievement is a strong determinant of academic self-concept. This author proposes a reciprocal model of self-concept whereby prior self-concept affects subsequent achievement, and prior achievement also affecting subsequent self-concept.

This argument by Marsh et al. (2003) supports what was earlier proposed by Helmke and van Aken (1995) that during elementary school, self-concept is mainly a consequence of cumulative achievement related failures and successes. According to these authors, success builds a strong positive self concept, while failures would result in declining self-concept. It would thus be paramount for teachers to work towards building self-concepts of the children by giving tasks within their abilities so that they experience successes in these tasks.

The pupils' confidence in class was of interest to the researcher, and it was also an important variable for measuring the academic self-concept of the pupils. In order to establish the pupils' confidence in class, the pupils were asked if they ask questions in class and how often they do so. The responses were such that only one girl out of 54 girls, forming 1.9%, said she does not ask questions in class, the remaining 53 out of 54 girls, forming 98.1% do ask questions in class. Similarly, only one out of 71 boys, forming 1.4%, said he does not answer questions in class, the remaining 70 out of 71 boys, forming 98.6% do ask questions in class. These results reveal a similarity in the percentage of boys and girls who ask questions in class, possibly because teachers encourage them to do so. However, when the pupils were asked how often they do ask questions in class, the results are as shown in Table 11.

Table 11:

Pupils' Frequency of Asking Questions in Class

Frequency of asking questions	Boys		Girls	
	Frequency	Percent	Frequency	Percent
At least every lesson	41	57.8	25	46.3
At least every day	25	35.2	26	48.1
At least once a week	2	2.8	0	0
Rarely	3	4.2	3	5.6
Total	**71**	**100**	**54**	**100**

Going by these figures it is evident that a higher percentage of boys ask questions in class compared to girls. It can therefore be concluded that boys are more active and confident in the classroom compared to the girls, and therefore that boys are more confident in their learning activities than the girls.

Academic expectations are another important aspect that could determine a pupil's motivation to academic work. The researcher sought to determine the academic expectations of the pupils by asking them how they expect to performance at KCPE. Their responses are as shown in Table 12.

Table 12:

Pupils' Performance Expectations in KCPE

Expected marks in KCPE	*Boys*		*Girls*	
	Frequency	Percent	Frequency	Percent
More than 400	45	63.3	7	13.0
350 to 400	17	23.9	24	44.4
300 to 349	7	9.9	21	38.9
Less than 300	2	2.8	2	3.7
Total	**71**	**100**	**54**	**100**

The results in Table 12 reveal that a majority of both girls and boys expect to score at least 350 marks out of the maximum 500 marks in KCPE. However it can be observed that 87% of the boys expect to obtain marks over 350, compared to less than 57% of the girls who expect to obtain marks over 350. This is a clear indication that boys do have a higher expectation about their academic achievements compared to the girls. As pointed out by Muito (2004) this higher expectation seemingly makes boys work harder due to a stronger motivation to achieve according to expectations. There is also a possibility that this difference arises because of the difference in the ways in which girls and boys are socialized. Socio-cultural influences usually put more pressure on boys to achieve, and thus they strive to fulfill this societal expectation. This is unlike the girls whom are not usually subjected to such pressures.

An analysis was also made on some of the individual responses, for example, on the item "I am capable of getting good marks in school", 45 out of 71 boys "Strongly Agreed", while none of the 54 girls strongly agreed to it. Similarly, 26 boys out of 71, and only 13 girls out of 54 "Agreed" that they are capable of getting good marks in school. If these responses are combined on the lower and upper bound responses, all the 71 boys are on the upper bound, ("Strongly Agree" and "Agree"), while only 13 girls responded at upper bound. Contrastingly, on the lower bound responses, ("Disagree" and "Strongly Disagree"), there was no boy out of the 71, while there were 19 out of 54 girls. Interestingly, 22 girls were "Undecided", meaning they are not sure

if they are capable of getting good marks in school. A similar trend is observed in the "I know I can pass exams at school" item, and many other items that sought to find out the perception of the pupils about their academic abilities.

4.3 Teachers' perception of girls' academic abilities

The second objective was to investigate if there is any negativity in teachers' perception of girls' academic abilities. Ten teachers drawn from ten schools participated in the study. The teachers involved in the study were class teachers of standard eight in their various schools.

Fifteen items specifically structured to measure teachers' perception of girls' academic abilities were included in the questionnaire for teachers. The items were structured in the negative, and scaled from "Strongly Disagree" to "Strongly Agree" with a scores ranging from 5 to 1 respectively. Since the items were negatively structured, it follows that responses within "Strongly Agree" and "Agree" imply a negative perception towards the girl pupil by the teacher. Conversely, responses within the range of "Disagree" and "Strongly Disagree" imply a positive perception by the teacher. The results of the teachers' responses to the questionnaire items, organized into frequencies and percentages are summarized in Table 13.

Table 13:

Frequencies and Percentages of Responses by Teachers on Girls' Academic Ability Items

Questionnaire item	Frequencies of responses				
	SD	D	U	A	SA
Girls are less capable academically	2	6	2	0	0
Girls need more support than boys in school	0	1	2	3	4
Girls require more supervision than boys	0	1	0	6	3
It is not feminine for girls to ask many questions	0	1	1	2	6
It is not so bad for girls to fail in school	0	0	0	1	9
Girls are less confident in academic work	0	1	0	4	5
Girls cannot perform well in maths and science	1	1	0	3	5
Girls need more encouragement	3	4	0	2	1
Girls require more guidance in school than boys	0	1	1	5	3
Girls are not hardworking in academics	1	3	1	5	0
Girls are not as clever as boys	1	5	2	2	0
Girls are not so interested in school work	0	2	1	3	4
Girls are more interested in non academic issues	0	4	0	3	3
Girls are a weaker sex	2	1	0	3	4
Girls are inferior to boys	1	0	0	2	7
Total frequencies	**11**	**31**	**10**	**44**	**54**

The responses of the teachers were further analyzed using the Chi-square to draw conclusions about how the teachers perceive girls academic abilities. The analysis first summarized the categories of responses by item in frequencies from "SA" (1) to "SD" (5) as summarized in Table 14.

Table 14:

Frequencies of Responses by Teachers on Girls' Academic Ability Items

Valid cases	Responses			
	Category	Observed N	Expected N	Residual
1	1.00(SA)	54	30.0	24.0
2	2.00(A)	44	30.0	14.0
3	3.00(U)	10	30.0	-20.0
4	4.00(D)	31	30.0	1.0
5	5.00(SD)	11	30.0	-19.0
Total		**150**	**150.0**	**0**

The responses were subjected to Chi-square test and the results were as in Table 15.

Table 15:

Chi-square Test of Teachers' Mean Perception about Girls' Academic Abilities

Test	χ^2 Value	df	Contingency Coefficient
Chi-Square	51.133	4	.000
N of Valid Cases	5		

From the results of the analysis, the χ^2 value of 51.133; df = 4 with a contingency coefficient of 0.000 is significant at $p = 0.05$. Since $p < 0.05$, we reject the null hypothesis and conclude that teachers perceive girls' academic abilities negatively.

This trend may be explained culturally, in the sense that the way people are socialized greatly affects their attitudes and perceptions, and this seem to apply to the way teachers perceive girl

pupils and even boy pupils. Muito (2004) is of the opinion that the cultures and attitudes displayed towards the girl-child finds its way to the school where they are perpetuated by the teachers. Clearly these responses could have come out of a comparison of the girls' academic abilities and the boys' academic abilities in class. Importantly, it should be pointed out that such perceptions would be reflected in the way the teachers behave towards the girls even as they interact in the teaching-learning situations. When the girls realize where the teachers place them in terms of their abilities, they would mostly give up, lose motivation, and continue to perform poorly, which in turn make teachers to look down upon them, thus a vicious circle.

4.4 Influence of Parental Perception of Girls' Academic abilities on Girls' Academic Self-concept and Performance.

The third objective was to determine if parental perception of girls' academic abilities influences girls' academic self-concept and performance. To be able to do this, the researcher serialised the questionnaires for parents, and those for their daughters for the purpose of matching the data obtained from the parents with the data obtained from their daughters. Performance of the pupils was obtained from the examination results of the internal examinations over the last three terms. These results were obtained from the records in the school. A profoma was structured where the class teachers filled in the individual girl pupil's performance (See appendix 4). The mean performance was then calculated from the results of the last three terms.

The researcher designed a wide range of items in the questionnaire for parents, which were used to measure the mean perception of parents or guardians about the girls' academic abilities. The questionnaire contained various items that were used to view the parents'/guardians' general perception of the girl-child, and a range of items in a Likert scale that was used to measure the mean perception of the parents based on their responses. The general questions asked which could be used to view the way parents/guardians perceive the academic abilities of their daughters included questions about their comparison of sons' and daughters' performance in school, their view of their daughters' performance in school, and whether they expect their daughters to join secondary school.

In trying to find out if parents consider the performance of their daughters as different from their sons, the researcher asked the question, "How do you compare your sons' performance with your daughters' performance in school?" There were 51 parents/guardians who responded to this item. Their responses to this item are as summarized in Table 16:

Table 16:

Parents'/Guardians' Rating of their Daughters' Performance Compared to their Sons' Performance

Parents' Responses	Frequency	Percent	Cumulative percent
Daughters perform worse	30	55.6	55.6
Performance same	16	29.6	85.2
Daughters perform better	5	9.2	94.4
Undecided	3	5.6	100
Total	**54**	**100**	**100**

These results reveal that a majority of the parents/guardians consider that their daughters perform worse than their sons. This may possibly be translated in the general view that girls perform worse than boys in school. It is possible that this is just an attitude developed culturally leading to the belief that girls cannot perform as well as boys in school. Since it is possible that the girls are also socialized with the very people who hold such attitudes and beliefs, they develop the same attitudes and beliefs which in turn influence their motivation and hence performance in school. While all the parents/guardians who participated in the research agreed that they look at their daughters' reports every time they close school. However, when they were asked how the daughters perform academically, 24 out of the 54 parents accounting for 44.4% find their daughters' performance as average while only 2 parents (3.7%) find their daughters' performance below average. There were however 10 parents (18.5%) who found their daughters' performance very good and 18 parents (33.3%) who thought that their daughters' performance is good.

This distribution of parents' views about their daughters' performance in school further confirms that parents do not rate their daughters' performance so highly, as a majority of the parents view them as only average. Further, the parents were asked if they expect their daughters to join secondary school. While responding to this item, 45 out of the 54 parents expect their daughters to join secondary school, which represents 83.3% and only 9 parents (16.7%) felt that their daughters will not join secondary school, mainly citing lack of fees. While this seemingly contradicts the parents' general perception about girls' academic abilities, it points to the fact that a majority of parents who participated in this study recognized the importance of girl-child education. However, of the 9 parents who thought that their daughters will not join secondary school, 2 parents said there is no need for girls to go to secondary school, and only one parent said that the daughter is not clever enough to proceed with education. These findings disagree with observations by Njeuma (1993) that many parents usually consider education of girls as less valuable compared to the education of boys.

In order to measure the general perception of parents about the girls' academic abilities, a range of items organized in a Likert format was developed and used as a tool to calculate the parental perception of girls' academic abilities. Table 17 shows the items, which were used to calculate the mean parental perception of girls' academic abilities and the distribution of the responses by parents.

Table 17:

Items and Responses Used to Calculate Mean Parental Perception of Girls' Academic Abilities

Statement	Frequencies of responses				
	SD	D	U	A	SA
Girls are not as clever as boys	29	14	4	5	2
If parents have little money, girls should leave school so that their brothers can be educated	32	16	2	3	1
Girls' education is not as important as boys' education	34	13	1	5	0
Girls can still succeed in life even without education	19	13	12	9	1
It is not so bad for girls to fail in school	27	23	2	2	0
Girls are not so interested in school work	25	12	5	11	1
There is no need to educate girls up to secondary school	40	11	1	2	0
Girls are more interested in non-academic issues like looking good	18	14	4	9	9
Girls are generally a weaker sex	14	11	6	17	6
Girls are generally inferior to boys	20	12	7	13	2
Total frequencies	**258**	**139**	**44**	**76**	**22**
Frequencies as percentage	**47.9**	**25.8**	**8.1**	**14.1**	**4.1**

The questionnaire statements were negatively oriented with respect to perception about the girl-child. The scoring was therefore done such that "Strongly Disagree" reflects a positive perception, and therefore scores the maximum score of 5, while "Strongly Agree" reflects a negative perception and scores the least score of 1. The frequencies of the responses to these items were scored, and then organized as percentages. It can be observed that 73.7% of the parents had their responses to the statement in the negative ("Strongly disagree" and "Disagree), implying that parents are positive in the way they perceive girls academic abilities. However only 18.2% of the parents were gave positive responses to the items, while 8.1% had responses in the undecided. The mean perceptions were also calculated and summarised for analysis as in

Table 18. The means were used as a measure of the parents' perception about girls' academic abilities.

Table 18:

Group Statistics of Parents' Mean Perception of Girls' Academic Abilities

Gender	N	Mean	Std. Deviation
Fathers	36	4.11	.767
Mothers	18	4.02	.753

The summarized data in Table 18 indicate that there is a slight difference in the parents'/guardians' mean perception about girls' academic abilities. In order to establish the significance of the difference, the means were subjected to independent sample t-tests, and the results are presented in Table 19.

Table 19:

Independent Sample T-Test of Means of Male and Female Parents'/Guardians' Perception about Girls' Academic Abilities

Variable	t-test for equality of means				
	t	df	Sig (2-tailed)	Mean difference	Std. Error difference
Mean	.379	52	.707	.083	.220

The results of the test reveal a p- value (0.707) > 0.05. The conclusion is therefore that the means of the two groups are not statistically significant, and therefore there is no difference in the mean perception of the academic abilities of the girls by the male parents and female parents. From the data presented in Table 19, it may be generally construed that the parents consider the girls' academic abilities highly, as the means for both male and female parents were above 4.0 out of a maximum of 5.0.

The data was further subjected to Pearson's correlation test to establish the relationship between parents'/guardians' perception about girls' academic abilities and the academic self-concept of the girls. The parents'/guardians' perception about girls' academic abilities was tested against the academic self-concept of their daughters and against the academic performance of their daughters separately. In order to compare these perceptions with the academic self-concept of the girls, and also the academic performance of the girls, the scoring was done for individual parents/guardians, so that their mean perceptions would be calculated and matched with the academic self-concept and academic performance of their daughters to facilitate correlation analysis. Table 20 summarizes the results of Pearson's correlation of parental perception against the academic self-concept of the girls.

Table 20:

Pearson's Correlation of Parental Perception about Girls' Academic Abilities and the Girls' Academic Self-concept

Variable	Mean parents perception of girls' academic abilities	Mean academic self-concept of girls
Mean parents' perception of girls' academic abilities	1	.238
	-	.083
N	54	54
Mean academic self-concept of girls	.238	1
	.083	-
N	54	54

The results of this test reveal a positive correlation of 0.238, which is two tailed, with a p-value of 0.083, tested at $\alpha = 0.05$. Since the p-value (0.083) > 0.05, this relationship is not significant, and therefore we fail to reject the null hypothesis and conclude that there is no significant

relationship between parental perception of girls' academic abilities, and the girls' academic self-concept. The relationship observed is therefore too weak to be considered as significant.

The researcher also used Pearson's correlation to test the relationship between parents' perception of girls' academic abilities and the girls' academic performance. The results of the test are as shown in Table 21.

Table 21:

Pearson's Correlation of Parental Perception of Girls' Academic Abilities and the Girls' Academic Performance

Variable	Mean parents perception of girls' academic abilities	Academic performance of girls
Mean parents' perception of girls' academic abilities	1	.601**
	-	.000
N	54	54
Academic performance of girls	.601**	1
	.000	-
N	54	54

**. Correlation is significant at the 0.05 level (2-tailed).

The Pearson's correlation test $\alpha = 0.05$ revealed a strong positive correlation of 0.601, which is two-tailed, with a p-value of 0.000. Since $p(0.000) < 0.05$, this test reveals a significant relationship, and we therefore reject the null hypothesis and conclude that there is statistically significant relationship between parental perception about girls' academic abilities and girls' academic performance. This implies that if a parent has a negative perception of the daughter's academic ability, then the daughter is likely to perform poorly academically. Being a two-tailed test, in the same way, a parent who has a positive perception of the daughter will have the daughter performing well academically. There is the likelihood that the girl-child gains the

knowledge of what the parents think of her in her day-to-day interaction with the parent, and in a way, this affects the amount of effort she is likely to put in her academic endeavours. However, since there was no initial strong link between the parents' perception about the abilities of the girl and the academic self-concept of the girl, it is possible that this link between perception and academic performance is a backward one, in the sense that the attitude of the parent develops after the girl performs well or poorly in school.

The researcher further sought to establish if a relationship exists between the girls' academic self-concept and their academic performance. In order to do this, the researcher subjected the mean academic performance of the girls, and their mean self-concept to Pearson's correlation test. The results are summarized in Table 22.

Table 22:

Pearson's Correlation of Girls' Academic Self-concept and Academic Performance

Variable	Mean academic self-concept of girls	Academic performance of girls
Mean academic self-concept of girls	1	.107
	-	.442
N	54	54
Academic performance of girls	.107	1
	.442	-
N	54	54

The results of this test reveal a very weak positive relationship between academic self-concept and academic performance of girls, which is statistically insignificant. Pearson's correlation test at $\alpha = 0.05$, 2-tailed, yielded a p-value of $0.442 > 0.05$, which makes us fail to reject the null hypothesis and conclude that there is statistically no significant relationship between girls' academic self-concept and their academic performance. It is possible that even when a girl feels capable, she may still end up performing poorly due so some other factors such as panic or fear of exams. Further research could be done in this area to ascertain such a possibility.

4.5 Influence of Parental Socio-economic Status on the Academic Self-concept of the Girls

The fourth objective was to determine if socio-economic status of the parents influences the academic self-concept of the girls. The researcher used parents' level of education, income and type of occupation as indicators of socio-economic status in this study. In the questionnaire for parents, there were items requiring the parents to indicate their level of education, their approximate monthly income and their occupation. Each of these indicators was then analyzed using the Chi-square test, against the academic self-concept of their daughters to establish if a relationship exists.

4.5.1 Influence of Parental Income on Academic Self-concept of the Girls

The parents were asked to indicate their approximate monthly income. The range of responses to this item was categorized into three categories; below 10,000 shillings, 10,000 to 15,000 shillings and above 15,000 shillings. The distributions of the parents' incomes were first analyzed against the mean academic self-concept of their daughters, and the results were as in Table 23.

Table 23:

Parents' Incomes against their Daughters' Mean Academic Self-concepts

Academic self-concept of daughter	Parent's monthly income in Shillings			Total
	<10000	10001-15000	>15000	
≤2.53	1	4	2	7
2.54 - 3.03	0	4	4	8
3.04 - 3.53	6	10	5	21
3.54 - 4.03	2	3	9	14
4.04+	2	2	0	4
Total	**11**	**23**	**20**	**54**

The results in the table reveal no trend in the distribution of the mean academic self-concept of the girls among the incomes of the parents. It can be observed that in the category of parents with low income (less than 10,000 shillings), there are daughters with a range of academic self-concepts ranging from below 2.53 to 4.04. A similar trend is observable in the middle income category (10,001 to 15,000 shillings) and the upper income category (more than 15,000 shillings). This implies that there is no specific relationship between these mean academic self-concept figures with the income figures. However, to confirm this trend, the figures were subjected to a Chi-square test, and the results of the test are as shown in Table 24.

Table 24:

Chi-square Test of the Relationship between Parents' Income and Girls' Academic Self-concept

Test	Value	df	Contingency coefficient
Chi-Square	12.307	8	.138
N of Valid Cases	54		

The results of this test reveal a p-value of 12.307 with a contingency coefficient of 0.138. Since $p > 0.05$, we conclude that there is no significant relationship between the income of the parents and the academic self concept of their daughters. The low contingency coefficient further reveals lack of association between the parents' income and the academic self-concept of their daughters.

4.5.2 Influence of Parental Occupation on Academic Self-concept of the Girls

The parents were asked to indicate their occupation. The responses included a wide range of occupations which were categorized into four groups: unskilled menial, business, skilled non-professional, and, professional. The results in the table reveal no trend in the distribution of the mean academic self-concept of the girls among the occupations of the parents. It can be observed that in the category of unskilled-menial group there are daughters with a wide range of mean academic self-concepts, as is in the other categories of occupations, business, skilled non-professional and professional. The analysis of the distribution of the occupations among the

parents and the corresponding mean academic self-concepts of their daughters is summarized in the Table 25.

Table 25:

The Parents' Occupations against the Mean Academic Self-concepts of their Daughters

Academic self-concept	Parents'/Guardians' occupation				Total
	Unskilled manual	Business	Skilled non professional	Professional	
≤2.47	0	1	0	0	1
2.48 - 2.97	3	4	2	5	14
2.98 - 3.47	4	8	1	8	21
3.48 - 3.97	2	3	2	6	13
3.98+	1	1	0	3	5
Total	**10**	**17**	**5**	**22**	**54**

The data was also subjected to Chi-square test in order to establish the significance, and the results were as shown in the Table 26.

Table 26:

Chi-square Test of the Relationship between Parents Occupation and Academic Self-concept of their Daughters

Test	Value	df	Contingency coefficient
Chi-Square	5.651	12	.933
N of Valid Cases	54		

The results of this test reveal a p-value of 5.651 with a contingency coefficient of 0.933. Since $p > 0.05$, we therefore fail to reject the null hypothesis and conclude that there is no significant relationship between the occupation of the parents and the academic self-concept of their

daughters. The low contingency coefficient obtained in the test indicates lack of association between parents' occupation and academic self-concept of the daughters.

4.5.3 Influence of Parental Level of Education on Academic Self-concept of the Girls

The parents were asked to indicate their level of education. The range of responses to this item was categorized into three categories; Primary and below, Secondary and above secondary. The distributions of the parents' levels of education were first analyzed against the mean academic self-concept of their daughters, and the results were as in Table 27.

Table 27:

The Parents' Level of Education against their Daughters' Mean Academic Self-concept

Academic self-concept of daughter	Education level of parent			Total
	Primary and below	Secondary	Above secondary	
≤ 2.47	0	1	0	1
2.48 - 2.97	4	6	4	14
2.98 - 3.47	8	8	5	21
3.48 - 3.97	5	3	5	13
3.98+	2	2	1	5
Total	**19**	**20**	**15**	**54**

The results in the table reveal no trend in the distribution of the mean academic self-concept of the girls among the education levels of the parents. It can be observed that there are 19 parents in the low academic level category (Primary and below), and their daughters fall in varied groups of academic self-concept. This also applies to the moderate education level category (Secondary) where there were 20 parents and the high education level category (above secondary) where

there were 15 parents. This data was subjected to Chi-square test and the results were as in Table 28.

Table 28:

Chi-square test of the Relationship between Parents' Level of Education and Girls' Academic Self-concept

Test	Value	df	Contingency coefficient
Chi-Square	3.593	8	.892
N of Valid Cases	54		

The results of this test reveal a p-value of 3.593 with a contingency coefficient of 0.892. Since $p > 0.05$ we fail to reject the null hypothesis and conclude that there is no significant relationship between education level of the parents and the academic self-concept of their daughters. The low contingency coefficient further confirms that there is no association between the parents' level of education and their daughters' academic self-concept.

The findings about the influence of parents' socio-economic status on the academic performance of girls supports the findings of a study by Chepchieng' and Kiboss (2004) in Baringo district. The researchers found no significant relationship between investigated socio-economic parameters of the parents'/guardians and their daughters' academic performance, yet academic performance seem to have a strong link with academic self-concept as pointed out by Eccles (2003).

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the study findings, the conclusions that can be drawn from them, and the recommendations that the researcher can make in view of the ways in which parents, teachers and pupils perceive girls' academic abilities, and also the academic self-concept and performance of the girl children.

5.2 Summary of the Findings

The following is the summary of the main findings of this study:

i) A difference exists between the way girls and boys perceive their academic abilities. Boys were found to be more confident in learning activities and have higher examination performance expectations compared to girls.

ii) Girls were also found to have a lower academic self-concept compared to boys. When tested using the t-test, the difference was found to be significant, thus the conclusion that girls have a lower academic self-concept compared to boys.

iii) Teachers perceive girls' academic abilities and performance negatively. The χ^2 test at $\alpha = 0.05$ revealed a significant negativity in the way teachers perceive girls' academic abilities.

iv) There is a significant relationship between parental perception of girls' academic abilities and the academic performance of the girls. Pearson's correlation test at $\alpha = 0.05$ revealed a relationship. Further, Pearson's correlation test at $\alpha = 0.05$ revealed lack of a significant relationship between girls' academic self-concept and the academic performance even though calculated means indicated some weak relationship. A test of the relationship between parental perception of the girls' academic abilities and the academic self-concept of the girls also revealed no significant relationship.

v) There is no statistically significant relationship between parents' socio-economic status and the academic perception of the girls. Tests carried out to investigate the relationship between parents' income, occupation and education level, and the academic self concept of the girls revealed no significant relationship.

5.3 Conclusions

This study has obtained information that proves that the perception of various stakeholders on the academic abilities have influence in the academic self-concept, and therefore the academic performance of the girl-child. The stakeholders in this study were teachers, parents and the pupils themselves.

In the wake of the findings of this study, it is evident that there are aspects of the perceptions of parents, teachers and pupils with regard to the academic abilities of the girls, which influence the academic self-concept and performance of the girls. The girls themselves were found to have a negative self-concept and view their abilities rather lowly, and this is bound to affect their academic performance.

Teachers were also found to still view the abilities of girls negatively, and this might influence the way they handle the girl-children even as they interact with them. This is likely to affect the academic performance of the girls. The parents were also found to consider the academic abilities of the girls as low and this was found to correlate with the academic performance of the girls. The perception of the parents towards girls' academic abilities therefore clearly affects the girls' academic self-concept and performance

5.4 Recommendations

Based on the findings made during this study, the following recommendations can be made:

i) Girl pupils should be helped to change their perceptions about their academic abilities as a way of improving their academic self-concept. This could be done by schools having professional counsellors whose duty it would be to handle pupils'

psychological issues, with more attention to the issues that affect the academic achievement of girls.

ii) Parents should be helped to change the way they perceive girls' academic abilities. The parents should be encouraged to be positive with the girls and even encourage them in their academic endevours. This may improve the academic self-concept of the girls and further improve their academic performance.

iii) The teachers need to help girls build positive self-concept, probably by giving them tasks within their abilities. This might subsequently improve their academic performance.

5.5 Suggestions for Further Research

The researcher proposes further research in the following areas:

i) This research study could be replicated in other districts in order to establish any consistencies or variations in the findings.

ii) A similar research should be conducted with respect to boys, i.e to establish if perception of various stakeholders influences boys' academic self-concept and performance.

REFERENCES

Aduda, D., (2004). "Top 100 Candidates by Province", Daily Nation. (December 29th, 2004). Nairobi.

Bernstein, D., Alison, C., Roy, J. E., and Wickens, D. C., (1997). Psychology, Annotated Instructors' Edition. New York: Houghton Miffin Company.

Birren, J. E., Woods, A. M., and Williams, M. V. (1984). Developmental Psychology: A Lifespan Approach. New York: Houghton Miffin.

Braman, O., (1977). Comics. In J. King and M. Stott (eds). Is this Your Life? London: Virago

Chepchieng, M. C., (1996). A Study of Family Socio-economic Background and Sex as factors Influencing Secondary School Pupils' Academic Performance in Kabartonjo Division of Baringo District. An Unpublished Masters Thesis. Moi University, Eldoret

Chepchieng, M. C., and Kiboss, J. K., (2004). Influence of Socio-economic Status and Gender on Students' Academic Performance. Journal of Education and Human Resources, 2(2). Egerton University.

Clerke-Stewart, A., (1977). Child Care in the Family; A Review of Research and Some Propositions for Policy. New York: Academic Press.

Cohen, L. & Manion, L., (1994). Research Methods in Education (4th Ed.) London: Routledge

Datta, A., (1984). Education and Society: A Sociology of African Education. London: Macmillan

Delamont, S., (1980). Sex Roles and the School; Contemporary Sociology of the School. New York: Methuen and Company.

Eccles, J. S., (2003). Family and School Influences on Student Motivation and School Achievement: Presentation at Swiss Educational Society Meeting, Bern, Switzerland. [on line]. SES. Available: http://www.rgcd.isr.umich.edu

Feldman, R. S., (1994). Essentials of Understanding Psychology. New York: McGrawHill.

Fontana, M. (1995). Psychology for Teachers. London: Macmillan Press.

Fraenkel, J. R. & Wallen, N. E., (2000). How to Design and Evaluate Research in Education. San Francisco: McGrawHill.

Garcia, C., Torrence, D., Skelton, D., & Andrade, A., (1999). Parental Involvement in Education and its Effects on Student Academic Performance. San Bernardino: California State University.

Helmke, K. G., and van Aken, M. A. G., (1995). The Causal Ordering of Academic Achievement and Self Concept of Ability During Elementary School: A Longitudinal Study. Journal of Educational Psychology (87); 202 – 210

Hohn, R. (1995). Classroom Learning and Teaching. New York: Longman Publishers.

Holmes, J., (2004). "Saving girls is World's Top Agenda". Daily Nation (December 17th 2004) Nairobi.

Kathuri, N. J., and Pals, D. A. (1993). Introduction to Educational Research. Njoro: Egerton University

Kerlinger, F.N., (2000). Foundations of Behavioral Research. (5th Ed.) New Delhi: Holt, Rinehart and Winston, Inc.

King, J. Stott, M. (eds.) (1977) Is This Your Life? London: Virago

Lobban, G., (1974). Presentation of Sex Roles in British Reading Schemes. Forum 16(2); 57 – 61

Lobban, G., (1975). Sex Roles in Reading Schemes. Educational Review 27 (3); 202 – 210

Maendeleo Ya Wanawake Organization, (1999). Reducing Reproductive Health Barriers to Primary School Completion Among Kenyan Girls. [on line]. MYWO. Available: http://www.pcs.aed.org [2005, August 4th]

Marsh, W. H., Guay, F., and Boivin, M., (2003). Academic Self Concept and Academic Achievement: Developmental Perspectives in their Causal Ordering. Journal of Educational Psychology 95 (1); 124 - 136

McCandless, B. R., (1967). Children: Behaviour and Development. Illinois: Emony University

Moore, S., (1987). Sociology Alive. London: Stanley Thornes.

MOEST, (2004). Development of Education in Kenya. [on line]. UNESCO. Available: http://www.ibe.unesco.org [2005, August 4th]

Mugenda, O.M., and Mugenda, A.B., (1999). Research methods. Quantitative and Qualitative approaches. Nairobi: Acts press

Muito, M., (2004, February 2). Gender Equality in the Classroom. 'Reflections on Practice'. [online]. FAWE. Available:http://www.fawe.org [2005, March 10]

Myers, G.E., and Myers, M.T., (1992). The Dynamics of Human Communication: A Laboratory Approach. (6th Ed.) New York: McGrawHill.

Njeuma, D.L., (1993). Factors that Contribute to Low Education Levels of Women in Africa. In Conway, J. K. & Bourque S. C., (eds) (1993). The Politics of Women Education: Perspectives from Asia, Africa and Latin America. Michigan.

Nkpa, N., (1997). Educational Research for Modern Scholars. Enugu, Nigeria: Fourth Dimension
Oakley, A., (1972). Sex, Gender and Society. London: M T Smith.

Phillips, B. N., (1990). School Psychology at a Turning Point: Enduring A Brighter Future for the Profession. San Francisco: Jossey-Bass Publishers.

Republic of Kenya, (2006). Ministry of Education Strategic Plan 2006 - 2011. Nairobi: Government Printer.

Republic of Kenya, (2001), 1999 Population and Housing Census. Nairobi: Government Printer.

Republic of Kenya, (1999). Totally Integrated Quality Education and Training. Report of The Commission of Inquiry into the Education system of Kenya. Nairobi: Government Printer.

Republic of Kenya, (1976). Report of The National Committee on Educational Objectives and Policies. Nairobi: Government printer.

Serbin, L. A., (1978). Teachers, Peers and Play Preferences. In B. Sprung (ed) Perspectives on Non-Sexist Early Childhood Education. New York: Teachers College Press.

Sharpe, S. (1976). Just Like a Girl. Harmadsworth: Penguin

Sherman, J. H., and Wood, L. J., (1982). Sociology: Traditional and Radical Perspectives. London: Harper & Row.

Sindabi, A. M., (1992). An Analysis of the Guidance and Counselling Program in Selected Kenyan Secondary Schools. An unpublished Doctoral Thesis. Falls Church, Virginia

Sprung, B., (ed) (1978). Perspectives on Non-Sexist Early Childhood Education. New York: Teachers College Press.

Stacey, J. (ed) (1974). And Jill Came Tumbling After. New York: Dell

UNICEF, (2004). UNICEF urges: No more broken promises on girls' education: New Strategy Presented to Accelerate Education for All in Countries Where Progress is Lagging. [on line]. UNICEF. Available: http://www.unicef.org [2005, August 4th]

UNICEF, (2003). Girls' Education in Kenya. [on line]. UNICEF. Available: http://www.unicef.org [2005, August 4th]

UNICEF, (1989). Situation Analysis of Children and Women in Kenya. Nairobi: UNICEF.

United Nations, (2005). Press release, WOM/1498. Gender Equality Past 2005: Building a More Secure Future'. [on line]. UN. Available: http://www.un.org [2005, August 4th]

Waugh, R. F., (1999). A Multi-Faceted, Hierachical Model of Self-Concept: A Paper Presented at the Australian Association for Research in Education Conference held in Melbourne, Australia. [on line]. AARE. Available: http://www.aare.edu [2005, October 2nd]

Weiner, I. B., (1972). Readings in Child Development. New York: John Wiley.

APPENDIX 1: QUESTIONNAIRE FOR PUPILS

Dear Pupil,

The following questions are part of a study to be carried out by the researcher. Read the instructions below carefully before answering the questions. Thank you for cooperating.

General Instructions

Please answer all the questions in this questionnaire as honestly as you can. All the information given will be treated confidentially and are only for purposes of research.

SECTION A

This section requires the very basic information about you. All the information given will be held in confidence. Please don't indicate your name anywhere on this questionnaire.

1. Age _____ Gender: _____ (Boy or Girl)
2. a) Marks obtained last term _____ out of _____
   b) Marks obtained the previous term _____ out of _____

SECTION B

The following questions seek information about your studies. Please answer each question as honestly as you can.

1. Does any of your parents/guardians look at your reports every time you close school? Yes [ ] No [ ]
2. Do your parents/guardian sometimes encourage you to study while at home? Yes [ ] No [ ]

3a) How many marks do you expect to score when you sit for KCPE?

Over 400 marks [ ] Over 350 marks [ ] Over 300 marks [ ] Less than 300 marks [ ]

b) Do you expect to join secondary school? Yes [ ] No [ ]

c) Do your parents tell you that you should join secondary school? Yes [ ] No [ ]

4. Generally would you say your parents/guardians are interested in your studies? Yes [ ] No [ ]

5 a) Do you sometimes ask questions in class? Yes [ ] No [ ]

b) If yes, how often do you ask questions in class?

Every lesson [ ] At least everyday [ ] At least once a week [ ] Rarely [ ]

6. Do you sometimes attempt to answer teachers' questions in class? Yes [ ] No [ ]
7. Do you sometimes get extra academic help from your teachers outside class hours? Yes [ ] No [ ]
8. Do you think teachers like boys more than girls in your class? Yes [ ] No [ ]
9. How much do you agree or disagree with the following statements about girls? Choose from the choices: Strongly agree (SA), Agree (A), Undecided (U), Disagree (D) strongly disagree (SD) (Tick the appropriate box)

STATEMENT	SD	D	U	A	SA
Girls are not as clever as boys	☐	☐	☐	☐	☐
If parents have little money, girls should leave school so that their brothers can be educated	☐	☐	☐	☐	☐
Girls' education is not as important as boys' education	☐	☐	☐	☐	☐
Girls can still succeed in life even without education	☐	☐	☐	☐	☐
It is not so bad for girls to fail in school	☐	☐	☐	☐	☐
Girls are not so interested in school work	☐	☐	☐	☐	☐
There is no need to educate girls up to secondary school	☐	☐	☐	☐	☐
Girls are more interested in non-academic issues like looking good	☐	☐	☐	☐	☐
Girls are generally a weaker sex	☐	☐	☐	☐	☐
Girls are generally inferior to boys	☐	☐	☐	☐	☐

10. In the following statements choose from the choices strongly agree (SA), Agree (A), Undecided (U), Disagree (D) and Strongly Disagree (SD), depending on how you feel about the statements.

	SD	D	U	A	SA
I am capable of getting good grades (marks) in school	☐	☐	☐	☐	☐
I am clever enough to put up with schoolwork	☐	☐	☐	☐	☐
I am happy with my ability in academic work at school	☐	☐	☐	☐	☐
I feel good about my academic work at school	☐	☐	☐	☐	☐
I am able to get the results I would like at school	☐	☐	☐	☐	☐
I feel good about the assignment marks I get at school	☐	☐	☐	☐	☐
I am proud of my performance at school	☐	☐	☐	☐	☐
I am satisfied with my academic work at school	☐	☐	☐	☐	☐
I am happy with the academic work I do at school	☐	☐	☐	☐	☐
I get very good results at school	☐	☐	☐	☐	☐
I enjoy my studies	☐	☐	☐	☐	☐
I feel as good as the other people in my class	☐	☐	☐	☐	☐
I have a very good relationship with teachers at school	☐	☐	☐	☐	☐
I feel good in my class	☐	☐	☐	☐	☐
I know I can pass exams at school	☐	☐	☐	☐	☐

APPENDIX 2: QUESTIONAIRE FOR PARENT \ GUARDIAN

Dear Parent/Guardian,

The following questions are part of a study to be carried out by the researcher. Kindly answer the questions as honestly as possible. All the information given will be treated confidentially and are only for purposes of research.

1. How are you related to the child?

   Father [ ] Mother [ ] Guardian [ ]

2. Your age

   Less than 30yrs [ ] 30-39 [ ] 40-49 [ ] 50-59 [ ] Over 60 yrs [ ]

3. Please indicate your occupation_____

4. Please indicate your level of education _____

5. Choose from the following choices where your approximate monthly income falls.

   Below Sh.10,000 [ ] Between Sh. 10,001 – Sh.150,000 [ ] Above Sh. 15,000

6. How many children do you have? _____

   No. of boys _____ No. of girls _____

7a) Do you look at your daughter's report every time she closes school?

   Yes [ ] No [ ]

b) How do you rate your daughters' performance in school?

   Very good [ ] Good [ ] Average [ ] Below average [ ]

8 a) If you also have sons, do you look at his / their report when he/they close school?

Yes [ ] No [ ]

b) How do you compare your sons' performance and your daughters' performance in school?

Better than daughters' [ ] Worse than daughters' [ ] same [ ]

9 a) Do you have any daughter in secondary school? Yes [ ] No [ ]

b) If no, which of the following reasons apply?

She was not clever enough to continue with school ☐

There was no need for her to continue with school ☐

I did not have fees for her ☐

She helps us with domestic chores ☐

She became pregnant ☐

10 a) Has any of your daughters dropped out of school before completing standard eight? Yes [ ] No [ ]

b) If yes, which of the following reasons could have lead to her dropping out of school?

She was not clever enough to continue with school ☐

There was no need for her to continue with school ☐

It is not necessary for girls to go to school ☐

She helps us with domestic chores ☐

She became pregnant ☐

11. How much do you agree or disagree with the following statements about girls? Choose from the choices: Strongly agree (SA), Agree (A), Undecided (U), Disagree (D) strongly disagree (SD) (Tick the appropriate box)

STATEMENT	SD	D	U	A	SA
Girls are not as clever as boys	☐	☐	☐	☐	☐
If parents have little money, girls should leave school so that their brothers can be educated	☐	☐	☐	☐	☐
Girls' education is not as important as boys' education	☐	☐	☐	☐	☐
Girls can still succeed in life even without education	☐	☐	☐	☐	☐
It is not so bad for girls to fail in school	☐	☐	☐	☐	☐
Girls are not so interested in school work	☐	☐	☐	☐	☐
There is no need to educate girls up to secondary school	☐	☐	☐	☐	☐
Girls are more interested in non-academic issues like looking good	☐	☐	☐	☐	☐
Girls are generally a weaker sex	☐	☐	☐	☐	☐
Girls are generally inferior to boys	☐	☐	☐	☐	☐

APPENDIX 3: QUESTIONNAIRE FOR TEACHERS

Dear Sir/Madam,

The following questions are meant to make the researcher get some information about pupils in your class. Please answer all the questions as honestly and sincerely as you can. Any information derived from these questions is purely for research purposes and will be treated confidentially.

1. Your gender: Male [ ] Female [ ]

2. Your age: Below 30yrs [ ] 30 – 35yrs [ ] 36 – 40yrs [ ] above 40yrs [ ]

3. Subjects taught: Science [ ] Maths [ ] Language [ ] GHC [ ] Social Studies [ ]

4. In last term's examination, how many girls were in the following quartiles in your class? Top 25%____ Top 50%____ Top 75% _____ Last 25%_____

5. Generally, how do you classify the performance of girls compared to that of boys

   a) In the subjects you teach?

      Girls perform better [ ] Girls perform worse [ ] There is no difference [ ]

   b) In your class?

      Girls perform better [ ] Girls perform worse [ ] There is no difference [ ]

6. In your own assessment, do girls participate as actively as boys in your class/subject?

   Class: Yes [ ] No [ ]

   Subject: Yes [ ] No [ ]

8. In your opinion, do you think you give more attention to boys or girls in your classes? More attention to boys [ ]

   More attention to girls [ ]

   Equal attention to boys and girls [ ]

9. In your class, which group of students impresses you most?

Boys [ ] Girls [ ] Both boys and girls [ ]

10. How much do you agree or disagree with the following statements about girls? Choose from the choices: Strongly agree (SA), Agree (A), Undecided (U), Disagree (D), Strongly Disagree (SD). (Tick the appropriate box)

STATEMENT	SD	D	U	A	SA
Girls are less capable academically	☐	☐	☐	☐	☐
Girls need more support than boys to do well in school	☐	☐	☐	☐	☐
Girls require more supervision than boys to achieve well in school	☐	☐	☐	☐	☐
It is not feminine for girls to ask many questions in class	☐	☐	☐	☐	☐
It is not so bad for girls to fail in school	☐	☐	☐	☐	☐
Girls are less confident in academic work	☐	☐	☐	☐	☐
Girls cannot perform well in sciences and maths	☐	☐	☐	☐	☐
Girls need more encouragement in order to do well in academics	☐	☐	☐	☐	☐
Girls require more guidance in school than boys	☐	☐	☐	☐	☐
Girls are generally not hard working in academics	☐	☐	☐	☐	☐
Girls are not as clever as boys	☐	☐	☐	☐	☐
Girls are not so interested in school work	☐	☐	☐	☐	☐
Girls are more interested in non-academic issues like looking good	☐	☐	☐	☐	☐
Girls are generally a weaker sex	☐	☐	☐	☐	☐
Girls are generally inferior to boys	☐	☐	☐	☐	☐

APPENDIX 4: GIRLS' PERFORMANCE TRACKING PROFOMA

Dear Class teacher,

The researcher would like to get a record of the performance of the girls' involved in this study in the internal examinations over the last three terms. Kindly fill in the marks attained by the girls according to the serial numbers on their questionnaires.

Pupils' Questionnaire serial number	Marks last term		Marks term III 2005		Marks term II 2005	
	Marks scored	Out of	Marks scored	Out of	Marks scored	Out of

APPENDIX 5: RESEARCH PERMIT

MINISTRY OF SCIENCE & TECHNOLOGY

Telegrams: SCIENCE TEC", Nairobi

Fax No.
Telephone: 318581
When replying please quote

REPUBLIC OF KENYA

JOGOO HOUSE
HARAMBEE AVENUE
P. O. Box 9598-00200
NAIROBI
KENYA

MOST 13/001/37C 92/2

1st March 2007

Ogeda Richard Ayoo
Egerton University
P.O. Box 536
NJORO

Dear Sir

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on, ***'Selected School Stake Holders Perception of Girls Academic Abilities and its Influence on Academic Self Concept and Performance of the Girl Child : A Case of Primary School Pupils, Bondo District'I***

This is to you have been authorized to carry out research in Primary Schools in Bondo District for a period ending 30th March 2007.

You are advised to report to the District Commissioner and District Education Officer Bondo District before embarking on your research project.

On completion of your research, you are expected to submit two copies of your research report to this office.

Yours faithfully

B. O. ADEWA
FOR: PERMANENT SECRETARY

For PERMANENT SECRETARY
MINISTRY OF EDUCATION
SCIENCE AND TECHNOLOGY

Copy to:

The District Commissioner
Bondo District

The District Education Officer
Bondo District