

**FACTORS INFLUENCING ACADEMIC PERFORMANCE OF GIRLS IN  
MIXED DAY SECONDARY SCHOOLS IN NJORO SUB-COUNTY NAKURU  
COUNTY, KENYA**

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Requirements of the Award of a Master of Arts Degree in Gender,  
Women and Development Studies of Egerton University**

**EGERTON UNIVERSITY**

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## **DECLARATION AND RECOMMENDATION**

### **Declaration**

This Thesis is my original work and has not been submitted for the conferment of a degree in this or any other university.

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## **DEDICATION**

To my husband Paul Muteti, dear children Meshack Wambua and Shalom Katilo, Mum and family members, friends and colleagues. To Meshach and Shalom, may this work be an inspiration for you to work hard and reach greater heights in academics.

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## ABSTRACT

Trends in academic performance show that girls' performance is low compared to that of boys. This has been reflected in the low number of girls who qualify to join tertiary institutions and later reflected in the job market. The purpose of the study was to investigate factors influencing academic performance of girls in mixed day secondary schools in Njoro Sub-County Nakuru County, Kenya. The poor performance of girls at KCSE level in the Sub-County prompted the study. The study was both quantitative and qualitative and it adopted descriptive survey research design. The study targeted form four girls (900), class teachers (30) and form four parents' representatives (45) in mixed day secondary schools in Njoro Sub County. Purposive sampling was used to select 10 mixed day secondary schools, 10 class teachers and 20 parents. Simple random sampling technique was used to select 200 form four girls making a sample size of 230 respondents. Three questionnaires were used to collect data and were pilot tested in 2 schools in the Sub-County outside the study area. Reliability coefficient was 0.700 for form four girls' questionnaire (GQ), 0.907 for class teachers' questionnaire (TQ) and 0.722 for parents' questionnaire (PQ). Descriptive and inferential statistics were used to analyze the data. The Statistical Package for Social Science (SPSS) aided the data analysis. The results showed that school related factors and parents economic status were the most influencing factors whereas, socio-cultural factors and personal factors were the least factors influencing performance of girls in mixed day secondary school in Njoro Sub-County; Nakuru County, Kenya. The study recommended establishment of boarding facilities for girls in mixed day secondary schools, empowering the parents with income generating activities to support girl-child education, involving the community in curbing negative socio-cultural practices and equipping teachers and parents with skills in guidance and counseling. The findings may be of great help to the Education Policy makers and stakeholders in improving the academic performance of girls in mixed day secondary schools.

## TABLE OF CONTENTS

<b>DECLARATION AND RECOMMENDATION .....</b>	<b>ii</b>
<b>DEDICATION.....</b>	<b>iv</b>
<b>ACKNOWLEDGEMENTS .....</b>	<b>v</b>
<b>ABSTRACT.....</b>	<b>vi</b>
<b>TABLE OF CONTENTS .....</b>	<b>vii</b>
<b>LIST OF TABLES .....</b>	<b>x</b>
<b>LIST OF FIGURES .....</b>	<b>xii</b>
<b>ABBREVIATIONS AND ACRONYMS.....</b>	<b>xiii</b>
<b>CHAPTER ONE: INTRODUCTION .....</b>	<b>1</b>
1.1 Background to the Study.....	1
1.2 Statement of the problem.....	4
1.3 Purpose of the Study .....	5
1.5 Research Questions .....	5
1.6 Significance of the Study .....	6
1.7 Scope of the Study .....	6
1.8 Limitations of the Study.....	6
1.9 Assumptions of the Study .....	7
1.10 Operational Definition of Terms.....	8
<b>CHAPTER TWO: LITERATURE REVIEW.....</b>	<b>10</b>
2.1 Introduction.....	10
2.2 Status of Girl-child Education in Developed Countries .....	10
2.3 Status of Girl-child Education in Sub-Saharan Africa.....	11
2.4 Status of Girl-child Education in Kenya.....	12
2.5 Factors Influencing Academic Performance of Girls in Secondary Schools.....	12
2.5.1 Interactions in School and their Effect on Academic Performance .....	12
2.5.2 Culture and its Influence on Academic Performance among Girls .....	14
2.5.3 Relationship between Parents Economic Status and Academic Performance....	16
2.5.4 Effect of Personal Factors on Academic Performance among Girls .....	17
2.6 Theoretical Framework.....	18
2.7 Conceptual Framework.....	20
<b>CHAPTER THREE: RESEARCH METHODOLOGY .....</b>	<b>22</b>
3.1 Introduction.....	22

3.2 Research Design.....	22
3.3 Location of the Study.....	22
3.4 Target Population.....	23
3.4.1 Accessible Population.....	23
3.5 Sampling Procedure and Sample Size .....	23
3.6 Instrumentation .....	24
3.6.1 Validity of the Instrumentation.....	25
3.6.2 Reliability.....	25
3.7 Data Collection Procedure .....	26
3.7.1 Ethical Considerations .....	26
3.8 Data Analysis .....	26
<b>CHAPTER FOUR: RESULTS AND DISCUSSIONS.....</b>	<b>29</b>
4.1 Introduction.....	29
4.2 Questionnaire Response Rate .....	29
4.3 Demographic Characteristics of the Respondents .....	29
4.4 Number of Students who Scored Grade C+ and Above in the KCSE.....	35
4.5 School Related Factors .....	36
4.5.1 Correlation between School Related Factors and Girls Academic Performance.....	41
4.6 Socio-Cultural Factors .....	42
4.6.1 Correlation between Socio-Cultural Factors and Girls Academic Performance .....	46
4.7 Parents Economic Status.....	47
4.7.1 Correlation between Parents Economic Status and Academic Performance.....	50
4.8 Personal Factors .....	51
4.8.1 Correlation between Personal Factors and Girls Academic Performance .....	54
4.9 Combined Influence of School Related Factors, Socio-Cultural Factors, Parents Economic Status and Personal Factors on Academic Performance.....	55
<b>CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.....</b>	<b>58</b>
5.1 Introduction.....	58
5.2 Summary of the Study .....	58
5.3 Conclusions.....	59
5.4 Recommendations.....	61
5.5 Suggestions for Further Research .....	62



<b>REFERENCES.....</b>	<b>64</b>
APPENDICES .....	70
APPENDIX A: LETTER OF INTRODUCTION SEEKING PERMISSION TO COLLECT DATA .....	70
APPENDIX B: QUESTIONNAIRE FOR THE CLASS TEACHERS .....	71
APPENDIX C: QUESTIONNAIRE FOR FORM FOUR GIRLS .....	75
APPENDIX D: QUESTIONNAIRE FOR PARENTS .....	<b>79</b>
APPENDIX E: LIST OF MIXED DAY SECONDARY SCHOOLS IN NJORO SUB-COUNTY .....	<b>83</b>
APPENDIX F: MAP OF KENYA SHOWING NAKURU COUNTY AND MAP OF .....	<b>84</b>
APPENDIX G: NJORO SUB-COUNTY SECONDARY SCHOOLS ENROLMENT AND STAFFING ESTABLISHMENT 2012-2013 .....	<b>85</b>
APPENDIX H: SUB-COUNTY OVERALL K.C.S.E PERFORMANCE 2009- 2014.....	<b>86</b>
APPENDIX I: RESEARCH PERMIT FROM NATIONAL COUNCIL OF SCIENCE TECHNOLOGY AND INNOVATION .....	<b>87</b>
APPENDIX J: RESEARCH AUTHORIZATION FROM COUNTY DIRECTOR .OF EDUCATION, NAKURU COUNTY .....	89
APPENDIX K: RESEARCH AUTHORIZATION FROM DEPUTY COUNTY COMMISSIONER NJORO SUB COUNTY.....	90

## LIST OF TABLES

Table 1: Percentage of Students who Scored C+ and above in KCSE 2011-2012 Nationally.....	2
Table 2: Percentage of Students who Scored C+ and above in KCSE (2010) in Njoro Sub-county.....	3
Table 3: Accessible Population of Form Four Girls, Form Four Class Teachers and Form Four Parents from Mixed Day Secondary Schools in Njoro Sub- county.....	23
Table 4: Distribution of Sample across Different Cadre of Mixed Day Secondary Schools.....	24
Table 5: Summary of Data Analysis.....	27
Table 6: Form Four Girls Demographic Characteristics.....	30
Table 7: Parent’s Representatives Demographic Characteristics .....	34
Table 8: Number of Students who Scored Grade C+ and above in the KCSE from 2010-2013 .....	35
Table 9: School Related Factors –Form Four Girls.....	37
Table 10: School Related Factors -Class Teachers.....	38
Table 11: School Related Factors- Form Four Parents’ Representatives (PTA).....	40
Table 12: Correlation between School Related Factors and Girls Academic Performance. ....	41
Table 13: Socio-Cultural Factors – Form Four Girls.....	42
Table 14: Socio-Cultural Factors -Class Teachers.....	44
Table 15: Socio-Cultural Factors -Parents.....	45
Table 16:Correlation between Socio-Cultural Factors and Girls Academic Performance .....	46
Table 17: Parents Economic Status Factors- Form Four Girls .....	47
Table 18: Parents Economic Status Factors-Class Teachers .....	48
Table 19: Parents Economic Status Factors-Parents Representatives .....	49
Table 20:Correlation between Parents Economic Status and Girls Academic Performance.....	50
Table 21: Personal Factors- Form Four Girls .....	51
Table 22: Personal factors- Class teachers.....	52
Table 23: Personal Factors- Parents Representatives .....	53

Table 24: Correlation between Personal Factors and Girls Academic Performance...54

Table 25: Results of Multiple regression Analysis Determining the Influence of Selected Factors that Influence Academic Performance of Girls in Mixed Day Secondary Schools in Njoro District.....56

## **LIST OF FIGURES**

Figure 1: Relationship between Variables Subsumed in the Study .....	21
Figure 2: Gender of Form Four Class Teachers.....	31
Figure 3: Period of being a Class Teacher .....	32
Figure 4: Category of Classes in the Schools .....	33
Figure 5: Number of Streams in the Schools .....	33

## ABBREVIATIONS AND ACRONYMS

<b>ASALs</b>	Arid and Semi-arid Lands
<b>CREAW</b>	Centre for Rights Education and Awareness
<b>DEO</b>	District Education Officer
<b>DFID</b>	Department for International Development
<b>EFA</b>	Education for All
<b>FAWE</b>	Forum for African Woman Educationist
<b>FGM</b>	Female Genital Mutilation
<b>FSDE</b>	Free Secondary Day Education
<b>IEBC</b>	Independent Electoral and Boundaries Commission
<b>IEA</b>	Institute of Economic Affairs
<b>KCSE</b>	Kenya Certificate of Secondary Education
<b>KESSP</b>	Kenya Education Sector Support Programme
<b>KNEC</b>	Kenya National Examination Council
<b>MDGs</b>	Millenium Development Goals
<b>MOEST</b>	Ministry of Education Science and Technology
<b>NACOSTI</b>	National Commission for Science, Technology and Innovation
<b>PTA</b>	Parents Teachers Association
<b>SSA</b>	Sub-Saharan Africa
<b>UNESCO</b>	United Nations Educational Scientific and Cultural Organization
<b>UN</b>	United Nations
<b>UPE</b>	Universal Primary Education
<b>USA</b>	United States of America

## **CHAPTER ONE**

### **INTRODUCTION**

This chapter deals with the background to the study, statement of the problem, purpose of the study, objectives, research questions and the significance of the study. It also covers the scope, limitations assumptions and operational definition of terms.

#### **1.1 Background to the Study**

Education is the key agent of transformation towards sustainable development since it increases people's capacity to transform their visions into reality (Mlozi, Kagu, & Nyamba, 2013). Eliza (2010) indicated that educating girls increases women's wages, health productivity and it also enables women in developing countries to gain access to rising job markets, thus making the women the main benefactors. For this reason there is a dire need for gender specific development in order to reduce poverty and women empowerment for which their involvement in decision making and their social transformation are the core ingredients (Abdul, Zainab, & Sirajuddin, 2012).

Female education and training in Africa is generally characterized by poor performance and low achievement levels compared to those of boys (Nyambura, 2012). This is also reflected in Kenya, whereby female students have generally lagged behind their male counterparts in Kenya Certificate of Secondary Education exams (KCSE). A report by Glennerster, Kremer, Mbiti & Takavarasha (2011) on review of the progress, challenges and potential solutions on access and quality education in Kenya indicates that overall student's performance in the KCSE 2008 was poor. According to this report only 25% of students scored C+ on the KCSE, with girls being less likely than boys to score at least a C+. The performance was weakest in Sub-county schools where only 11% of the students scored at least C+, compared to 43% in County schools and 90% in National schools. There were also gender gaps in the performance for Sub-County and private schools, no gender gaps in National schools and few gender gaps in County schools. The difference in performance across these types of schools partly reflects the differences in facilities, availability of teachers and other resources, as well as the different levels of academic preparations of the students admitted to the schools. Nationally, boys have been performing better than girls as reflected in the Table 1.

**Table 1**  
**Percentage of Students who Scored C+ and above in KCSE 2011-2014 Nationally**

Year	KCSE 2011	KCSE 2012	KCSE 2013	KCSE 2014
<b>Boys</b>	18.12	17.59	54.55	59.0
<b>Girls</b>	11.02	11.0	45.45	41.0

Source: Kenya National Examination Council (KNEC) 2013

Table 1 indicates that in 2011, 18% of boys scored C+ and above whereas only 11% of girls scored C+ and above in KCSE examinations. The same trend was repeated in 2012 KCSE examinations. These results indicate poor performance by girls in national examinations. However, in 2013-2014 KCSE results there was an upward trend in performance for both boys and girls. Ngesu, Wachira, Mwelu, & Nyabisi, (2012) argues that poor performance in National exams creates a vicious cycle where poorly educated women are left ill-equipped to obtain well paid jobs and this apparently reduces incentives for parents to invest in girls' education.

According to a research done in Arid and Semi-Arid (ASAL) regions in Kenya by Ngesu *et al.* (2012), girls' poor performance in KCSE seems to stem from a combination of factors. Some of the factors considered by Ngesu include past historical injustices, poor infrastructure, inadequate teachers, and long distances from home to school, cultural practices like Female Genital Mutilation and early marriages, presence of boys in the classroom and lack of role models. A research by Nyatuka (2010) focused on effects of socialization with regard to gender roles on students' academic performance in secondary Schools in Kisii Central Sub-County. Nyatuka (2012) concluded that gender roles and domestic chores contribute to students' low academic achievement. The findings of his research concur with results from a study conducted in Kipkelion and Kericho Sub-Counties by Mburu (2013) which showed that most of the girls in mixed schools did not attain a C+ compared to those from

single sex schools where 31.4% scored C+ and above. These results indicated that achievement of gender equality in academic performance is influenced by family factors, persisting negative socio-cultural practices and attitudes which inhibit balanced achievements, gender stereotyping, classroom interactions among other issues which have not been adequately addressed.

The year 2015 was the period the international community pledged to meet the targets of Education for All (EFA) and the Millenium Development Goals (MDGs). In an effort to close the gender disparity gaps in access, retention, completion, transition rates and performance both nationally and provincially, the Government of Kenya like many Sub-Saharan Africa countries (SSA) introduced Free Secondary Day Education (FSDE) in 2008. However, these disparities continued to be evident. The Ministry of Education therefore, came up with a policy that sought to eliminate all gender disparities in education. According to Wasanga, Ogle, & Wambua (2011), this policy pays special attention to girls and women and emphasizes inclusiveness, affirmative action, mainstreaming and equality in education in Kenya. In spite of these government interventional policies, girl's level of performance remains significantly poor especially in Mixed Day Secondary Schools as observed in Njoro-Sub county KCSE 2010 results indicated in Table 2.

**Table 2**

**Percentage of Students who scored C+ and above in KCSE (2010) in Njoro Sub-county**

	<b>Candidate Population</b>	<b>No. With C+ and above</b>	<b>% with C+ and above</b>	<b>% Below C+</b>
Boys	482	98	20.33	79.67
Girls	309	27	8.74	91.26
Total	791	125	15.80	84.20

Source: Njoro Sub County Education Office

Table 2 shows that only 8.74% of 309 girls in Njoro-Sub-County managed to score C+ and above which is the minimum entry to university, meaning that 91.26% scored below C+ which is far much below average. A look at the Sub-County order of merit



2012 KCSE results shows that Njoro Sub-County was position 110 out of 281 Sub-Counties compared to neighbouring Rongai which was position 49 and Molo Sub-County which was position 64, meaning that the Sub-County is not doing well as compared to the neighbouring Sub-Counties. However, in 2014 KCSE, Njoro Sub-County was position 94 out of 280 Sub-Counties nationally showing an improvement in performance. The Sub-County mean scores indicate a positive deviation from 2009-2014 (Appendix H).

Though there is no shortage of literature on factors influencing academic performance of girls in Secondary Schools, there are only a few studies that have exclusively and intensively dealt with these factors (school related factors, socio-cultural, parent's economic status and personal factors) in public mixed day Secondary Schools in Njoro Sub-County. There was need therefore to carry out a study to investigate the factors influencing the poor academic performance of girls at KCSE level in mixed day Secondary schools in Njoro Sub-County Nakuru County, Kenya.

## **1.2 Statement of the problem**

Education for women is very important since it reduces poverty, brings about women empowerment, increases their wages, improves health and enables them to gain access to rising job markets. The Kenya government has endeavored to enhance the participation and access in education for girls. However, the performance of girls has continued to be low at KCSE level as reflected in 2013 KCSE results whereby among the top 100 candidates nationally only 17 were girls and none was from Njoro Sub-County. Available data shows that in 2010 KCSE results, only 8.74% of 309 girls managed to score C+ and above compared to 20.33% of 482 boys who sat the same exam in Njoro Sub-County, reflecting poor academic performance of girls. Despite the fact that research has been done on factors influencing academic performance in secondary schools in Kenya, little has been done specifically on girls' academic performance in mixed day schools and no such research has been done in Njoro Sub-County. The purpose of this study was therefore to investigate the factors that influence girls' academic performance in Njoro Sub-County.

### **1.3 Purpose of the Study**

The purpose of this study was to investigate the extent to which selected factors influence academic performance of girls in mixed day secondary schools in Njoro Sub- County Nakuru County, Kenya.

### **1.4 Objectives of the Study**

The following objectives guided the study:

- (i) To determine the influence of school related factors on academic performance of girls in mixed day secondary schools.
- (ii) To investigate the influence of socio-cultural factors on academic performance of girls in mixed day secondary schools.
- (iii) To explore the influence of parents economic status on academic performance of girls in mixed day secondary schools.
- (iv) To examine the influence of personal factors on academic performance of girls in mixed day secondary schools.
- (v) To find out the combined effect of school related factors, socio-cultural factors, parents economic status and personal factors on academic performance of girls in mixed day secondary schools.

### **1.5 Research Questions**

The study was based on the following study questions:

- (i) Do school related factors influence academic performance of girls in mixed day secondary schools?
- (ii) Do socio-cultural factors influence academic performance of girls in mixed day secondary schools?
- (iii) Does the parents' economic status influence academic performance of girls in mixed day secondary schools?
- (iv) Do personal factors influence academic performance of girls in mixed day secondary schools?
- (v) Is there a relationship between combined effect of school related factors, socio-cultural factors, parents' economic status and personal factors on academic performance of girls in mixed day secondary schools?

## **1.6 Significance of the Study**

It is hoped that the research findings may provide useful information to the stakeholders (policy makers, school administrators, parents and the community) on the critical factors that could be influencing the poor academic performance of girls in the Sub-County. The findings may help planners in designing more effective strategies to intervene to the problem of poor academic performance of girls in mixed day secondary schools. The information collected will add to the already existing information on the factors influencing academic performance of the girls in mixed day secondary schools and probably prompt other researchers to carry out similar studies in other regions or other levels of education.

## **1.7 Scope of the Study**

The study was confined to public mixed day secondary schools within Njoro Sub-County. The Sub-County has 30 public mixed day secondary schools which consist of students from the local community. The students in these schools experience similar conditions such as commuting from their homes on a daily basis. The study dealt with factors influencing academic performance of girls in mixed day secondary schools. Form four girls were involved in the study because they had spent at least three years in secondary school hence they were in a better position to give reliable information on factors influencing their academic performance. Form four class teachers from the selected schools and parent's representatives participated in the study.

## **1.8 Limitations of the Study**

Due to limited time and funds, sample schools were selected to represent all mixed day secondary schools in the Sub-County. Since the sample comprised only form four girls and not a cross section of all the girls in all forms, this was a limiting factor in the study. The study involved mixed day secondary schools drawn from one Sub-County; hence the sample is therefore not representative of all the mixed day secondary schools in Kenya. School related factors, socio-cultural; parents' economic status and personal factors were selected for the study.

## **1.9 Assumptions of the Study**

The following were the assumptions while conducting the study:

- (i) The respondents were co-operative, honest and trustworthy in giving the information requested of them.
- (ii) The respondents had adequate information pertaining to the factors influencing academic performance of girls in mixed day secondary schools at KCSE level.

## **1.10 Operational Definition of Terms**

The following terms were defined in the context of the study.

### **Access**

Giving opportunities to girls who wish to enroll into the system of education.

### **Academic performance**

Girls overall scores achieved after the assessment of all subjects or the outcome after evaluation of a given examination and for this study KCSE examination.

### **Gender Equity**

This refers to fair treatment of boys and girls in terms of participation in answering questions in class and distribution of duties at home.

### **Gender Disparity**

Differences that arise as a result of differences in gender for example, more boys enrolled compared to girls, more male teachers in secondary schools compared to female teachers and boys performing better than girls at KCSE level.

### **Mixed day School**

A school consisting of both boys and girls, where they report to school every day and go home in the evening. It also refers to a situation where boys and girls learn in the same classrooms.

### **Retention**

This refers students being in a position to remain in school and complete a certain level of education without dropping out, for instance from one to form four.

### **Self-esteem**

The dignity with which an individual views himself or herself. In the study girls look down upon themselves for certain reasons, for example the way girls perceive their ability to perform academically.

### **Self-efficacy**

The determination girls have in doing their school work and the belief they have that they are incapable of accomplishing the work successfully within the given timeframe.

### **Sexual Harassment**

Unpleasant and unwanted sexual demands and insinuations from members of the opposite sex that cause discomfort to the girls. The opposite sex includes teachers,

boys in the same class or school and generally adult males in the community. Indicators of sexual harassment include words, gestures, touching, patting and coerced sexual intercourse.

**Single sex school**

This refers to a school which admits either boys or girls only but not both.

**Transition**

It refers to a situation where students who are enrolled in a school in form one are able to go through the four years course and graduate and join university or a tertiary institution.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter deals with review of literature related to the study. The chapter first covers literature on the status of girl-child education in developed countries, status of girl-child education in Sub-Saharan Africa, and status of girl-child education in Kenya. Literature is then reviewed on the factors influencing academic performance of girls in secondary schools. After this the theoretical framework and conceptual framework of the study are presented.

#### **2.2 Status of Girl-Child Education in Developed Countries**

One of the major challenges facing countries around the world is to equip their young people especially girls to become active citizens and to acquire gainful employment in constantly changing workplace environments. To cope with and respond to changes throughout their lives, equipping them with education is a necessity. According to the Department for International Development (DFID, 2005) report in the United Kingdom, many British girls were directed towards the commercial and technical streams in secondary schools and did not acquire qualifications for higher paying employment. Until the mid 1980's, it was unusual for girls to do well in subjects such as Mathematics and Sciences up to the university level. However, the 1990's saw a sharp rise in girls' performance at school. This was due to a range of factors including families prioritization of their daughters education, a shift in perception of gender linked to the women's movement in the 1960's and 1970's, government policies and promotion of Science and Mathematics for girls. This is according to Department for International Development (DFID, 2005).

In developed countries like United States of America (USA), performance of girls is commendable in Elementary and Secondary schools with gender gaps getting larger in the eighth and twelfth grades with a bias for girls (Achoka *et al* 2013). It is further noted in the Caribbean countries, girls persistently outperformed boys in various levels of schooling within class and national examinations. This is because girls in the developed nations are spared the worst cultural challenges encountered by girls in the

developing world (Namasaka, 2014). These cultural practices include early marriages, family preference to educate boys instead of girls and domestic chores. The developing world therefore has the challenge of overcoming negative culture in order to effectively improve girl-child education. This study therefore sought to establish the influence of cultural practices on girls' academic performance in mixed day secondary schools in Njoro Sub-County.

### **2.3 Status of Girl-child Education in Sub-Saharan Africa**

In May 1961, the United Nation's universal declaration of human rights and UNESCO's educational plans for Africa were announced in a conference held in Addis Ababa, Ethiopia. In this declaration a target was set to achieve 100% universal primary education in Africa by the year 1980(UN, 1961). To meet this target many countries started implementation schemes in the 1970s of the free and compulsory Universal Primary Education (UPE), for example: Kenya, Nigeria, Liberia, Zambia and Tanzania, which were signatories of that declaration, United Nations Plan (UN, 1961). Despite efforts shown by governments in the Sub-Saharan Africa, Kenya being included, girls lag behind in terms of enrollment, retention, participation and performance especially in mixed day secondary schools. Arowoshegba (2011) revealed that parental attitude, economic factors and socio-cultural factors among other factors were militating against the education of the girl-child in Nigeria. The research revealed that in 2005, at the post secondary school level, there were 2.7 million female students against 3.4 million male students. The impact of this discrepancy according to Arowoshegba (2011) has left women vulnerable to poverty, low self esteem, early marriage and other social problems.

Gender disparities in developing countries are often pronounced in secondary, Technical and vocational than in primary education. In South and West Asia, along with Sub-Saharan Africa, girls accounted for 44% of students in secondary education in 2007, but just 27% and 39% respectively in Technical and Vocational education (UNESCO, 2010). Post-primary education is critical for women's economic empowerment especially in developing countries since it has positive effects on health outcomes, lower mortality rates, better nutrition and educational attainment of future generations. From the reviewed literature the influence of school related factors was not sufficiently addressed, the gap in knowledge this study sought to fill.



## **2.4 Status of Girl-child Education in Kenya**

Over the last decade, Kenya has made significant progress in education, achieving gender parity in Primary education enrolment and near parity at secondary level (UNESCO, 2012). In an effort to achieve Education for All (EFA), Kenya set out policies in the session paper No.1 of 2005 and educational Policy and Framework. This also led to the Kenya Educational Sector Support Programme 2005-2010 (KESSP) which has seen a lot of improvement in the provision of Education to the girl-child Education and women. KESSP puts into consideration Affirmative Action in the awarding of bursaries to girls and improving sanitation in schools as recommended in UN Millennium Declaration 2000 (KESSP, 2010).

Kenya like other countries has continued to note success in enrollment figures though there are other problems such as high dropout rates of female students, poor performance and reluctance by female students to enroll in science based courses and poor classroom participation (Ricardo, Kwame, Jo & Frances, 2010). Earlier reports by Kenya National Examination Council (KNEC) showed that girls in mixed schools performed poorly generally in all the subjects compared to those in single sex schools (Nyambura, 2012). According to Nyatuka (2012), it seems that gender issues need to be tackled from different fronts such as the government policy and the ground level (the school and the community) where these gender issues are directly experienced and lived. These gender issues include gender stereotyped roles and gender discrimination among others. It is on this basis that this study sought to investigate the factors at school level and family level that influence academic performance of girls in mixed day secondary schools in Njoro Sub-County.

## **2.5 Factors Influencing Academic Performance of Girls in Secondary Schools**

This section reviews literature on the factors influencing academic performance in secondary schools in African countries.

### **2.5.1 Interactions in School and their Effect on Academic Performance among Girls**

Social classroom interactions contribute a lot to the participation of girls and this may affect their performance. Studies have shown that boys contribute more to classroom

discussions and dominate the hands on activities, such as laboratory work and computer sessions. For instance, Mburu (2013) argues that the presence of boys in the classroom is seen as having a negative effect on girl's academic engagement and performance. Boy and girl relationship could also affect the concentration of girls leading to the girls getting shy when it comes to answering questions in class. A study done by Kassel's & Hannover (2008) found out that, girls from single sex physics classes reported a better physics self-concept of ability than girls from mixed classes. Ferrara (2010) also states that single sex schooling has been found to help adolescents to gain a better self- concept of ability in subjects that are considered inappropriate for their own sex.

Nyambura (2012) put across an argument that from childhood, girls are socialized to be wives, home makers, dependents and secretaries. This propagates gendered thinking and leads girls and their families not to find any good reason for educating girls since it leads to low paid occupations considered traditional for women (Nyaga, 2010, Ngesu *et al*, 2012). Gender streaming practice is still going on in most schools where girls are directed away from mathematics and sciences. This happens mostly in mixed schools where teachers tend to favor boys and discourage girls from taking mathematics and sciences because of the notion that boys perform better in these subjects compared to girls (Mburu, 2013). In a classroom set up, the teachers like giving boys more opportunity to ask and answer questions as compared to girls. This may further discourage the girls from actively participating in educational activities leading to poor performance.

Stereotyped roles and attitudes by teachers and parents affect girls adversely since they spend a lot of time performing roles ascribed to women at the expense of their studies (Nyaga, 2010; Barahona, Pantoja, Penaloza & Rada, 2013). This mostly affects girls in mixed day schools since they go home every day and are charged with those responsibilities by their parents. According to a study by UNESCO (2012), gender insensitive teaching practices as well as shortage of female teachers contribute to poor performance of girls in secondary schools, especially mixed schools. According to the Kenya Education For All (EFA) assessment report draft (2012), the gender parity index for the teaching force in 2010 was 0.85 at primary level and 0.60 at Secondary level indicating a relatively male dominated teaching force especially at

secondary level (UNESCO, 2012). This means girls lack adequate female role models whom they can look upon for moral and emotional support.

Sexual harassment is a big problem to the girls especially when they become sexually active, signified by the physical changes in their bodies. From that perspective, they may be victims of sexual advances. These advances may unfortunately come from boys in the same school or from male teachers and also from adult men in the community (Valerie, Robert, Leanor & Xianglei, 1996). Sexual harassment may be in form of touching, verbal or facial gestures that may disturb the girls and have a drastic effect on the girls education. Many times complaints of sexual harassment of girls are ignored and many girls are scared to report such incidences. This causes them to withdraw from people and sometimes they can skip school if the person harassing them is along the way to school or in the school. This eventually may lead to poor academic performance due to lack of concentration in class (Shirley & Diana, 2009). From the reviewed literature, sexual harassment as one of the school related factors that influence girls academic performance in mixed day secondary schools was unknown, the gap this study sought to fill.

### **2.5.2 Culture and its Influence on Academic Performance among Girls**

In every society there are practices that determine social gender relations. These practices determine the activities done by men and women, boys and girls. According to Chibiko (2012) these cultural practices in some societies require the girl staying out of school temporarily or permanently and interfere with her education. One of the cultural practices that still exist in most communities is female genital mutilation (FGM). A report given by The Centre for Rights Education and Awareness (CREAW) in the article, Health Education and Legal status of women and girls in Kenya revealed that FGM is strongly related to educational levels. From the report women with no education are almost three times more likely to be circumcised than women with some secondary education.

For a long time in Kenya, there was no law protecting the girl-child from hazardous rituals such as FGM, but now the Kenya constitution (2010) outlaws negative cultural practices, and therefore it criminalizes these practices which are punishable by law. Also, the passing of section 29 of Sexual Offences Act no.3 of 2006 prohibits the act

of forcing a person to take part in a sexual act for cultural or religious reasons. This is important in helping to curb harmful cultural practices like early marriages and cultural rights of passage outlawed in section 14 of Children Act no.8 of 2001. Despite the provision of Prohibition of the Female Genital Mutilation Act no. 32 of 2011, reports from grassroots indicate that curbing FGM is one of the biggest challenges since it is rooted in cultural practices of very many ethnic groups who practice it silently, meaning that it affects girls in mixed day secondary schools too.

The traditional belief of a woman as a wife and a mother still prevails in society. The African tradition is explained as one that attaches higher value to a man than a woman whose place is believed to be in the kitchen (Institute of Economic Affairs, 2008). The same patriarchal practices encourage preference to be given to the education of a boy rather than a girl. Even where adequate opportunities are offered to girls, equality is not achieved automatically because girls are many times overburdened with domestic chores, impeding upon their ability to fully concentrate or participate in their studies (Nyatuka, 2012; Adoyo, Yambo, & Onyango, 2012). The involvement of children in domestic chores has for a long time been associated with dismal academic performance, particularly in the developing nations. Girls bear the burden for household responsibilities, including taking care of sick parents and siblings (Chibiko, 2012; Mishra, 2012). The chores that girls do are difficult to combine with study e.g. preparing food, washing and fetching water unlike the boys who are given lighter tasks like looking after cattle. Girls often report to school late in the morning since they have to complete their household chores. This leads to the girls missing school often and may lag behind in syllabus coverage culminating into poor academic performance in school. According to studies done by FAWE, 2003 and World Bank, 2003, Kenya just like other developing countries has children who are involved in domestic chores for the detriment of their education (Nyatuka, 2010).

In some communities, religious and traditional norms dictate that girls are to be married at a certain age. The girls are therefore pulled out of school as soon as they reach maturity to prepare them for marriage (Nyakubega, 2009; MOEST, 2008-2012). Some men do not like highly educated wives who may challenge their authority. When such men, especially the rich, want to marry a girl, the parents prefer to pull her out of school since marriage would also solve some of the family's financial problems

(DFID, 2005). The notion that a girl will get a husband after all who will take care of her after marriage makes some girls not to care so much on their academic performance. From the reviewed literature the extent to which cultural practices influence girls academic performance in mixed day secondary schools is unknown, the gap in knowledge that this study sought to fill.

### **2.5.3 The Relationship between Parents Economic Status and Academic Performance among Girls**

Besides other factors, economic status is one of the most researched and debated factors among educational professionals that contribute towards the academic performance of students. Experts argue that low economic status has negative effects on the academic performance of students since their needs are not met adequately (Juma, 2012; Farooq, Chaudry, Shafiq & Berhanu, 2011). A research done in Pakistan revealed that family stress due to low income influences students' academic performance negatively (Mushtaq & Khan, 2012). Economic status has a significant effect on students' academic performance. It has been noted that economically challenged parents are less able to afford the cost of education and their children do not work hard to reach their fullest potential.

Sifuna and Fatuma (2006) argues that a girls' chance of attending secondary school compared to that of boys' depend largely upon the income of the family. In rural areas socio-cultural patterns combined with relatively poor quality of schooling place girls, their education and development in a disadvantaged and vulnerable position. Large families at times face problems in educating their children. When faced with economic hardship, a great number of parents, even those aware of the importance of girls' education, are forced to educate boys at the expense of girls. In such cases those parents prefer taking their girls to day schools that are cheaper than boarding schools. MOEST (2008-2012) states that the level of poverty is another reason why there is low enrolment of girls in rural and semi-urban areas. Most families are unable to cover the cost of their children's education. Due to this, most families give priority to boy's education when faced with financial constraints (UNESCO, 2012).

Okoko (2012) and Owamo (2012) concluded that a parent's level of education as well as their occupation influence students' perceptions and aspirations. The children of

educated parents aspire for higher levels of education with a view to get good jobs. Those from poor and less educated parents lack motivation and role models from their family and hence end up not achieving much academically especially the girls.

Many parents who are economically challenged are not able to take their daughters to boarding schools due to financial constraints hence they prefer the nearest day school which may be 2 kilometres or so from their homes. This poses a challenge of accessibility to the school by the girls, promoting lateness and truancy, a case similar to that reported by Gibbison & Murthy (2003) in Jamaica, where school location was found to determine school attendance and contributed to irregular school attendance among children. Long distances from school also encourage misbehavior for some girls when they are going back home after school. In addition there is the challenge of insecurity in the evening and early morning hours as they commute to and from school. According to Malenya (2008), residing long distances from school was a challenge to many girls since they were seen to perform poorly in exams. This study therefore sought to investigate if long distances from home to school had an influence on girls' academic performance in mixed day secondary schools.

#### **2.5.4 Effect of Personal Factors on Academic Performance among Girls**

Personal factors may include attributes like self-esteem, self determination, self motivation and perception about oneself. According to Gurian (2012), self-esteem is related to how someone feels about themselves, how confident they feel about their talents and abilities and it becomes too closely tied to physical attributes. In relation to this, girls may tend to feel that they cannot measure up to society standards. This is because of the inferiority complex attributed to the influence of traditional socialization where women are made to accept negative self-fulfilling prophecy, stereotyping and stigmatization that they are members of the weaker sex. This leads to girls feeling worthless since the society may not appreciate their efforts in school and may discourage them from working hard. In mixed day secondary schools girls encounter more challenges in life especially in their personal relationships and studies and react more strongly to these challenges than boys, which account in part for their low achievement in academics (Gurian, 2012).

Self-esteem is a good opinion of one's own character and abilities. According to Okoko (2012), a research done in Western and European cultures established that self-esteem concept, has a significant influence on students' academic performance. Studies have shown that as students advance in years and in class levels, their perception of self concept increases. Earlier studies done on social perception and academic performance in Kenya high school students found out that Kenyan parents and teachers tend to encourage and support males to achieve higher academic goals compared to females(Okoko, 2012). The above studies mainly focused on boarding schools and there was need to analyse if girls in mixed day secondary schools have the same concept or not.

Albert Bandura (1997) defined self-efficacy as “beliefs in ones capabilities to organize and execute the courses of action required to produce given attainments”. He hypothesized that the level of self-efficacy can determine whether a task will be initiated, the amount of effort that will be expected and the level of persistence to complete the task when faced with obstacles and aversive experiences. In the academic setting, many studies have shown that there is a positive and significant correlation between self-efficacy and academic achievements. These studies have shown that regardless of age, gender domains, disciplines and countries, a student with higher sense of self-efficacy will achieve better academic performance (Loo & Cloy, 2013). According to Okoko (2012), there is limited research linking self-esteem and self-efficacy concept and academic performance in the continent of Africa. This study was therefore seeking to investigate how self-esteem and self-efficacy relates to overall academic achievement of girls at KCSE level in mixed day secondary schools in Njoro Sub-County Nakuru County, Kenya.

## **2.6 Theoretical Framework**

This research was based on two theoretical frameworks: Liberal Feminism Theory and Pearson's Gender Relations Theory. Liberal Feminism is rooted in the tradition of 16<sup>th</sup>-17<sup>th</sup> century liberal philosophy, which bases their theory on equality of opportunity (Jaggar, 1983). All persons deserve equal chance to develop their rational capabilities so that they can achieve personhood. They support liberation of women and freeing women from oppressive gender roles which denies women an opportunity to develop themselves and in this case in academic achievement. This theory was

appropriate because girls in mixed day schools are oppressed by Socio-cultural factors among them domestic chores, and are not given equal opportunity to do their studies at home compared to the boys. Also in school, they are not given equal chance to participate in answering questions and manipulating apparatus during class experiments. The theory explains the society falsely belief that women are by nature less intellectually and physically able than men. This false belief excludes women from many opportunities and the true potential of women goes unfulfilled.

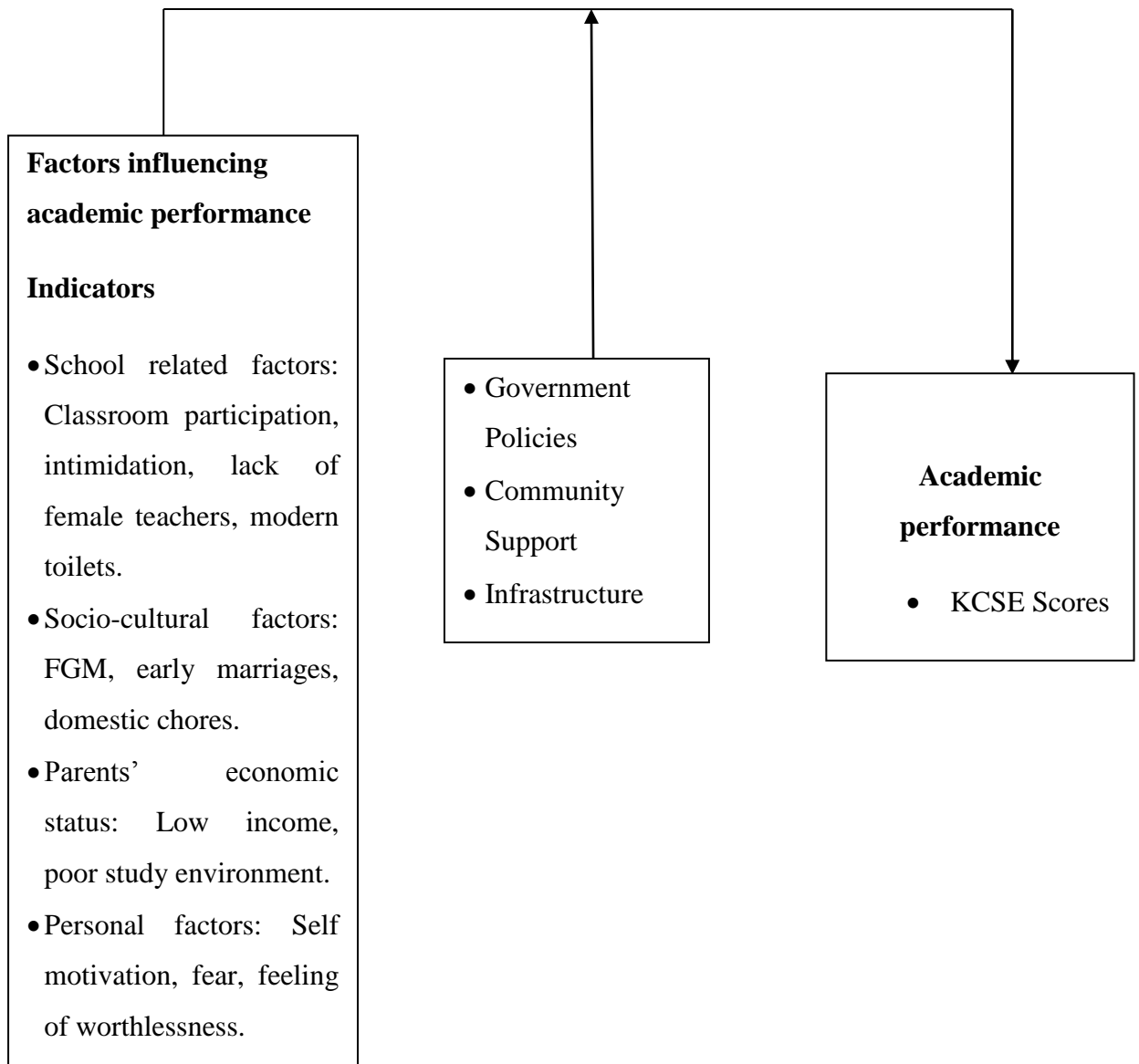
Pearson's Gender Relation Theory was developed by Pearson (1995). It explains how society views all activities that are carried out to be based on social roles and interactions of men and women. The society seems to have full control on the role of men and women and their real contribution to production and reproduction, which turns out to be biased against women. This theory was appropriate because it emphasizes the various social, cultural and economic norms and standards which must be considered for women to take the opportunities to participate in social activities such as education. These cultural and economic norms emphasized in the theory are the factors that affect girls' academic performance in school. Both theories captured almost all the variables under investigation in this study.

Girls should not be discriminated when it comes to payment of fees, household chores and they should be encouraged to choose the subjects of their study depending on their capability (Nyaga, 2012). This will enhance improved academic performance. From the reviewed literature there are cited incidences of oppressive actions. These actions include sexual harassment, deprivation of material and financial support. There are incidences of fathers who prefer to educate boys than girls MOEST (2008-2012), as girls are seen as being educated for benefit of the future husband. It was therefore important to adopt these theories because they advocate for fair treatment of both men and women. They should both be given equal opportunities in access and participation in education. Thus there was need to utilize the theories as the study sought to investigate factors influencing the academic performance of girls in mixed day secondary schools in Njoro Sub-County Nakuru County, Kenya.



## **2.7 Conceptual Framework**

The conceptual framework represented the link between independent variables (school related factors, socio-cultural factors, parents' economic status and personal factors) and dependent variable (academic performance at KCSE level). The conceptual framework showed that if the independent variables were favorable to the girl-child, there would be positive impact on academic performance. On the contrary, if the independent variables were unfavorable to the girl-child there would be negative impact on academic performance. The moderating variables (government policies, community support and infrastructure) can influence the relationship between independent variables and the dependent variable. For instance, if there is adequate support from the government and the community towards girl's education, unfavorable independent variables may be mitigated. On the other hand, lack of educational support from the government and the community may lead to increase of the unfavorable independent variables which may lead to poor academic performance among girls. Similarly, if pre-requisite infrastructures are adequate and of good condition e.g. classrooms and toilets they can influence the academic performance positively.



**Independent variables**

**Moderating variables**

**Dependent variable**

**Figure 1: Relationship between Variables Subsumed in the study**

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter describes the research methods that the researcher used in the study. This included the research design, the location of the study, population sampling procedures, instrumentation, data collection and analysis procedures.

#### **3.2 Research Design**

The study adopted the descriptive survey research design. This design describes the phenomenon and examines actions as they are or as they happen rather than manipulation of variables (Orodho, 2004). The design was chosen because it uses data collected from research questions or hypotheses to answer questions concerning current status of phenomenon (Mugenda & Mugenda, 2003). The design is appropriate in studying the prevalence of a phenomenon, situation, problem or attitude by obtaining the opinion or attitude of respondents regarding a situation at a particular time (Kumar, 2005).

#### **3.3 Location of the Study**

The study was carried out in public mixed day secondary schools within Njoro Sub-County (Appendix E). Njoro Sub County has an area of 713.3 square kilometers and a population of 184,859 people (IEBC, 2009). The Sub County is populated by people from all major ethnic groups in Kenya. The main economic activities are agriculturally based industries including vegetable and milk processing, large-scale wheat and barley farming. Light manufacturing industries such as timber milling and quarrying are also part of the local economy. It has five administrative divisions namely: Njoro, Lare, Kihingo, Mauche and Mau Narok. The Sub-County was chosen for the study because it has students from diverse cultural, ethnic and socio-economic backgrounds and no research on school related, socio-cultural, parents' economic status and personal factors influencing academic performance of girls in mixed day secondary schools had been conducted in the Sub-County and it was important to gain empirical data on these factors. Therefore, the study sought to fill this gap.

### 3.4 Target Population

Target population is defined as all the members of a real or hypothetical set of people, events or objects which a research wishes to generalize the results of the research study (Borg & Gall, 1989). The target population for this study consisted of all form four girls, form four class teachers and form four parents from the mixed day secondary schools in Njoro Sub-County.

#### 3.4.1 Accessible Population

Accessible population is a sample representative of the target population. It is comparable to the target population in the characteristics that appear most relevant to the study (Mugenda & Mugenda, 2003). The accessible population for this study consisted of all the form four girls, form four class teachers and form four girls parents from 30 mixed day secondary schools in Njoro Sub-County. The form four girls, class teachers and form four PTA parents representatives were selected for the study because they were considered to give reliable information on factors influencing their academic performance since they had been in school for the last three years. The accessible population was 900 form four girls, 30 form four class teachers and 45 form four PTA parents' representatives giving a population of 975 respondents. Table 3 shows the summary of the accessible population.

**Table 3**  
**Accessible Population of form four Girls, form four Class Teachers and form four Parents from Mixed Day Secondary Schools in Njoro Sub-county.**

Mixed day secondary school	Form four girls	Class teachers	parents	Total
<b>Total</b>	900	30	45	975

### 3.5 Sampling Procedure and Sample Size

Purposive sampling was used in selecting the mixed day secondary schools in Njoro Sub-County to be included in the study. Out of the 30 mixed day secondary schools, 10 schools and the corresponding 10 form four class teachers were purposively sampled. Those schools that had presented candidates for KCSE exams for at least two years were considered for inclusion in the selected sample during the sampling

process. Purposive sampling is based on the researcher's judgment and preference in selecting the sample units that will provide relevant information or meet the purpose of the study (Mugenda & Mugenda, 2003). Two parents' representatives, a male and a female from each school (a total of 20) were purposively sampled. They were believed to have a wealth of information from their experiences of having daughters in mixed day schools for a period of three years, on factors influencing academic performance of girls in mixed day secondary schools. Simple random sampling was then used to select 200 (20% of 900) form four girls (20 from each school) as Gay(1992) suggests that 20% of the population is a good representation where the population is small.

Form four class registers were used to identify the total number of girls in all the form four classes in each sampled school. The researcher then used that data to write a yes or a no in small pieces of papers. Only 20 papers had a yes the rest were no. The papers were folded and put in a container. The form four girls were gathered in one place and the purpose of the study explained and clarification given that those who pick a yes will participate in filling the questionnaire. Ethical issues were clearly outlined and those who picked a yes were gathered in a class and guided on how to fill the questionnaire. The total sample size was 230 respondents as indicated in Table 4.

**Table 4**  
**Distribution of Sample across Different cadre of Mixed Day Secondary Schools**

<b>Mixed day secondary school</b>	<b>Form four girls</b>	<b>Class teachers</b>	<b>parents</b>	<b>Total</b>
<b>Total</b>	200	10	20	230

### **3.6 Instrumentation**

The researcher used questionnaires which were administered to form four girls, class teachers and parents who were sampled for the study. The structured questionnaire was used to collect information from the sampled mixed day secondary schools in Njoro Sub-County. The questionnaire was presented in two parts. Part 1 was made

of closed ended questions. The questions were seeking factual information such as demographic features. Part 11 aimed at seeking opinions, perceptions and attitudes of the respondents with regard to the variables used in the study. A 5 point Likert scale was used to solicit respondents' perceptions and opinions regarding the selected factors influencing academic performance of girls in mixed day secondary schools. Likert scale consists of a set of items usually in a declarative form. The items are composed of approximately equal number of favorable statements concerning the attitude object. Respondents are asked to respond to each statement in terms of their own degree of agreement or disagreement. Typically they are instructed to select one of the five responses; 5=Strongly agree (SA), 4=Agree (A), 3=Undecided (U), 2=Disagree (D), and 1= Strongly Disagree (SD). The specific responses to the items are combined so that individuals with most favorable attitudes will have the highest scores while individuals with the unfavorable attitudes will have the lowest scores (Likert, 1931).

### **3.6.1 Validity of the Instrumentation**

Validity is the degree to which results obtained from the analysis of the data actually represent the phenomenon under study (Mugenda & Mugenda, 2003). To ensure face and content validity of the research instruments the researcher sought assistance from research experts, experienced graduates and lecturers and their input was included in the final draft of the instruments. This helped the researcher to identify items in the research instrument, which might be ambiguous in eliciting relevant information.

### **3.6.2 Reliability**

A pilot test was conducted to ensure that items in the questionnaire were as understandable as possible, not ambiguous and insufficient. The instrument was pilot tested in two mixed day secondary schools in the Sub-County which did not participate in the actual study. Reliability was calculated using Cronbach's Alpha method to test internal consistency because it involves a single administration of the instrument thus yields greater internal consistency. Cronbach's alpha was chosen in order to establish the degree of consistency and accuracy of items in the questionnaire (Mugenda & Mugenda, 2003). The reliability coefficient for the questionnaire was found to be 0.700 for form four girls (GQ), 0.907 for class teachers (TQ) and 0.722

for parents (PQ) which according to George & Mallery (2003) rule of the thumb is above the threshold of 0.7 and therefore considered good. This means that the instruments were a reliable measure for this research.

### **3.7 Data Collection Procedure**

The researcher obtained an introductory letter from Egerton University to obtain a research permit from the National Commission for Science Technology and Innovation (NACOSTI). After this, the researcher took the permit from NACOSTI to the County Commissioner and County Director of Education, Nakuru County, and then to Deputy County Commissioner, Njoro Sub-County to seek permission to collect data in mixed day secondary Schools in the Sub-County and permission was granted. The researcher then booked an appointment with Principals of the sampled schools to visit and administer the questionnaires. The researcher visited each of the sampled schools and personally administered the questionnaires. The data collection process took approximately two weeks.

#### **3.7.1 Ethical Considerations**

The respondents were made aware of the purpose of the research and the importance of the information required. They were assured of confidentiality and that the information they provide would be used for the intended purpose only. This was guaranteed by ensuring anonymity where the respondents were not required to disclose their identity in the process of filling the questionnaire. Further, the respondents were given freedom to withdraw from participating if they so wished.

### **3.8 Data Analysis**

Data collected from the field was cleaned up for any inconsistencies and data coding was done. Analysis was done using a computer programme, the Statistical Package for Social Sciences (SPSS) version 20. Descriptive statistics were used to explain results of the findings. These include means, frequencies and percentages. In addition, the researcher used inferential statistics namely; correlation analysis and multiple regression analysis so as to determine the relationship between academic performance of girls (dependent variable) and the independent variables (which are

school related factors, social-cultural factors, parents' economic status and personal factors) in the mixed day secondary school.

**Table 5**

**Summary of Data Analysis**

<b>Research Questions</b>	<b>Independent variables</b>	<b>Dependent variable</b>	<b>Statistical methods</b>
Do school related factors influence academic performance of girls in mixed day secondary schools?	<ul style="list-style-type: none"> <li>School related factors</li> </ul>	Academic performance	Percentages Frequencies Pie charts Mean, standard deviation Multiple regression Pearson Correlation
Do socio-cultural factors influence academic performance of girls in mixed day secondary schools?	<ul style="list-style-type: none"> <li>Socio-cultural factors</li> </ul>	Academic performance	Percentages Frequency Pie charts Mean, standard deviation Multiple regression Pearson Correlation
Does the parents' economic status influence academic performance of girls in mixed day secondary schools?	<ul style="list-style-type: none"> <li>Parents economic status</li> </ul>	Academic performance	Percentages Frequency Pie charts Mean, standard deviation Multiple regression



			Pearson Correlation
Do personal factors influence academic performance of girls in mixed day secondary schools?	<ul style="list-style-type: none"> <li>• Personal factors</li> </ul>	Academic performance	Percentages Frequency Pie charts Mean, standard deviation Multiple regression Pearson Correlation
Is there a relationship between combined effect of school related factors, socio-cultural factors, parents' economic status and personal factors on academic performance of girls in mixed day secondary schools?	<ul style="list-style-type: none"> <li>• School related factors</li> <li>• Socio-cultural factors</li> <li>• Parents economic status</li> <li>• Personal factors</li> </ul>	Academic performance	Pie charts Mean, standard deviation Multiple regression Pearson Correlation

## **CHAPTER FOUR**

### **RESULTS AND DISCUSSIONS**

#### **4.1 Introduction**

This chapter presents a discussion of the research findings on the factors influencing academic performance of girls in mixed day secondary schools in Njoro Sub-County Nakuru County, Kenya. The first section of the chapter represents the demographic data of the respondents and section two covers the analysis of the data and findings of the study.

#### **4.2 Questionnaire Response Rate**

Out of the 230 questionnaires, 204 were returned completed and only 26 were not returned translating to 89% response. All the questionnaires to the class teachers were returned at 100%. Questionnaires to the form four girls were returned at 88% and those for the parents were returned at 90%. Therefore the data was reliable and acceptable according to Mugenda & Mugenda (2003) who states that a response rate of 60% is good for a social research.

#### **4.3 Demographic Characteristics of the Respondents**

The study gathered information on the age and the category of class of the form four girls, school's KCSE performance and general performance of the form four. The data is summarized in Table 6.

**Table 6**  
**Form Four Girls Demographic Characteristics**

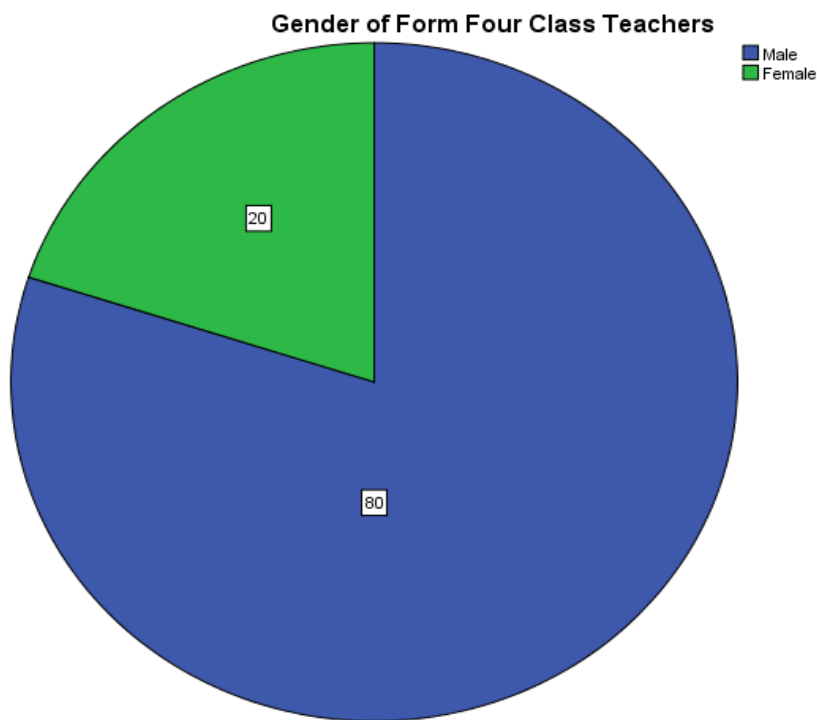
<b>Demographic Characteristics</b>		<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
<b>Girls Age</b>	below 18 yrs.	38	22.2	22.2
	over 18 yrs.	137	77.8	100.0
<b>Category of your class</b>	Girls only	32	18.2	18.2
	Boys and Girls	144	81.8	100.0
<b>performance of your school in KCSE exams</b>	Unsatisfactory	55	31.3	31.3
	Satisfactory	38	21.6	52.8
	Good	61	34.7	87.5
	Very good	14	8.0	95.5
	Excellent	8	4.5	100.0
<b>Rate general school performance</b>	Very good	36	20.5	20.5
	Good	75	42.6	63.1
	Satisfactory	27	15.3	78.4
	Not satisfactory	27	15.3	93.8
	Not sure	11	6.3	100.0
	<b>Total</b>	<b>176</b>	<b>100.0</b>	

Source: Field Data (2015)

The study established that majority of the respondents 77.8% were over 18 years compared to 22.2% who were below 18 years. Secondly, the study established that majority of respondents 81.1% were in boys' and girls' class category compared to 18.2% in girls category classes. Third, majority of the respondents 34.7% rated their school performance in KCSE exams as good, 31.3% unsatisfactory, 21.6% satisfactory, 8.0% very good and 4.5% excellent. Four, majority of the respondents,

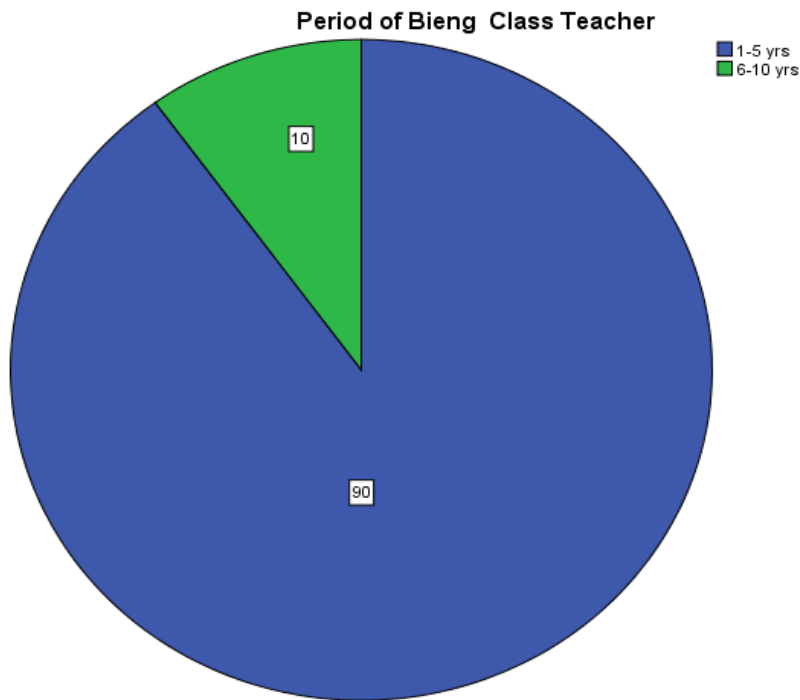
42.6% rated their general school performance as good, 20.5% very good, 15.3% satisfactory, 13.3% not satisfactory and 6.3% not sure.

The researcher sought information on the gender of the form four class teachers, the period they have been class teachers, the category of the classes in their schools and the number of streams. The gender of form four class teachers is shown in Figure 2.



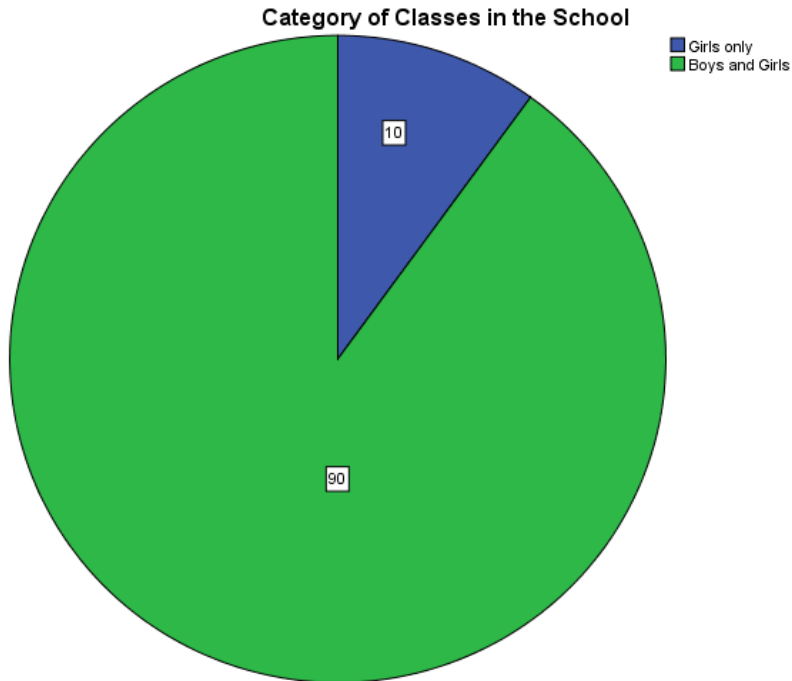
**Figure 2: Gender of form four class teachers**

The study established that majority of the respondents 80% were men compared to 20% who were women. The results indicate shortage of female teachers in the mixed schools in the Sub-County. Girl-child education is likely to be influenced by role models. Lack of female teachers is a great obstacle to girls' academic achievement. These results are in agreement with a report by UNESCO (2012) that indicated a relatively male dominated teaching force in secondary schools. Figure 3 shows the period a teacher has spent as a class teacher.



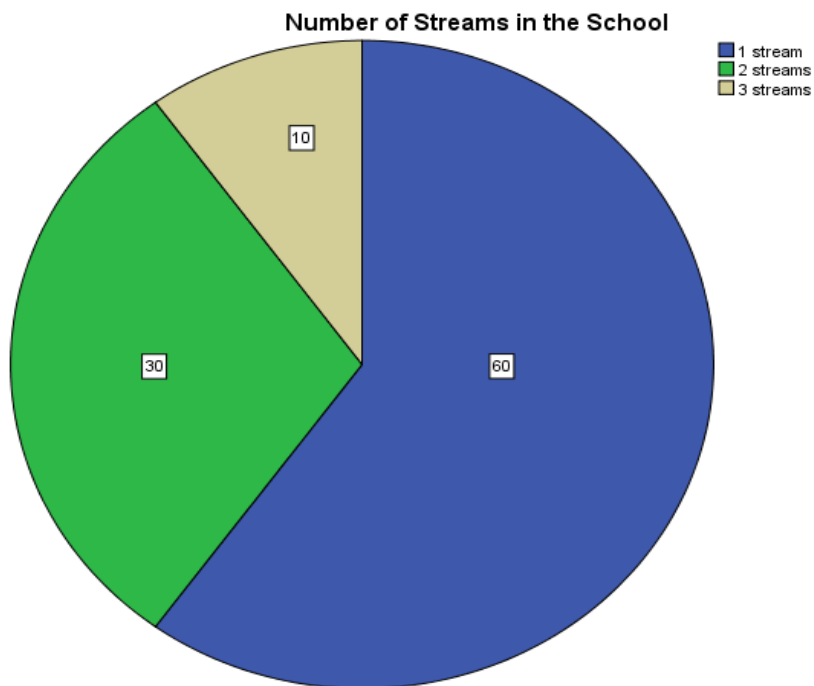
**Figure 3: Period of being a class teacher**

Secondly, the study established that majority of respondents 90% have been class teachers for a period of 1-5yrs and 10% for a period of 6-10 years as class teachers. Long period of being a class teacher makes them understand the girls better and they are better placed to give proper guidance and counseling to the girls in school on issues negatively affecting their academic performance (MOEST, 2001). The study sought to establish the category of classes in the mixed school as indicated in Figure 4.



**Figure 4: Category of classes in the schools**

The study established that 90% of the classes were mixed classes (boys and girls) while 10% were girls classes. The number of streams in each school was as indicated in Figure 5.



**Figure 5: Number of streams in the schools**

Figure 5 shows that majority of the respondents 60% indicated that their schools had 1 stream, 30% had 2 streams and 10% had 3 streams.

The study gathered information from parents' representatives in the Parents Teachers Association (PTA) on their gender and marital status as indicated in Table 7.

**Table 7**  
**Parent's Representatives Demographic Characteristics**

<b>Demographic Characteristics</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
<b>Age</b>	26-30 yrs.	2	11.1
	Over 35 yrs.	16	88.9
<b>Gender</b>	Male	11	61.1
	Female	7	38.9
<b>Marital status</b>	Married	14	77.8
	Single	4	22.2
<b>number of children in the family</b>	1-3	6	33.3
	4-6	8	44.4
	7-9	2	11.1
	Above 9	2	11.1
<b>Period as a parent in this school</b>	1-2 yrs.	6	33.3
	3-4 yrs.	6	33.3
	over 4 yrs.	4	22.2
<b>Total</b>	<b>18</b>	<b>100.0</b>	

Source: Field Data (2015)

The study established that majority of the respondents 88.9% were over 35 years old compared to 11.1% who were below 35 years. Secondly, the study established that 61.1% of the parents were male and 38.9% female. These results show fair representation of both genders in the parents association. Third, the study established that majority 44.4% of the parents had 4-6 children in their families, 33.3% of the parents had 1-3 children, 11.1% of the parents had 7-9 children and 11.1% of the parents had more than 9 children in their families. Finally the study established that majority 33.3% had been parents in the school for a period of 3-4 years and 22.2% for a period of more than 4 years respectively, meaning that they have had their children

in the school for more than four years and have been re-elected in the PTA leadership. Many years in the leadership for parents can make them handle the challenges facing the girls which lead to poor academic performance by addressing the issues during parents' annual general meetings and academic days.

#### 4.4 Number of Students who Scored Grade C+ and Above in the KCSE

The researcher sought to find out the number of students who scored C+ and above in the previous years in the sampled schools. The findings are indicated in Table 8.

**Table 8**  
**Number of Students who Scored grade C+ and above in the KCSE from 2010-2013**

	N	Min	Max	Mean	Std.Dev.
Number of boys who scored grade C+ and above in KCSE exams in the year 2010	8	1	7	4	2.3
Number of boys who scored grade C+ and above in KCSE exams in the year 2011	8	1	7	3	2.1
Number of boys who scored grade C+ and above in KCSE exams in the year 2012	8	1	7	4	2.1
Number of boys who scored grade C+ and above in KCSE exams in the year 2013	8	1	4	3	1.1
Number of girls who scored grade C+ and above in KCSE exams in the year 2010	9	1	7	2	3.0
Number of girls who scored grade C+ and above in KCSE exams in the year 2011	9	1	7	2	2.6
Number of girls who scored grade C+ and above in KCSE exams in the year 2012	9	1	7	3	3.1
Number of girls who scored grade C+ and above in KCSE exams in the year 2013	9	1	7	2	2.0
Valid N (listwise)	8				

Source: Field Data (2015)

The study established that the number of boys who scored grade C+ and above in KCSE exams was higher (indicated by a mean of 4, 3, 4 and 3 for the year 2010, 2011, 2012 and 2013 respectively) compared to the number of girls who scored grade C+ and above in KCSE exams at the same time (indicated by a mean of 2, 2, 3 and 2 for the year 2010, 2011, 2012 and 2013 respectively). These results indicate that the academic performance of boys is better compared to that of girls in national exams in



mixed day secondary schools in Njoro Sub County. These findings can be supported by Juma & Simatwa (2014) who noted that academic achievement of girls in mixed day secondary schools is lower compared to that of boys.

#### **4.5 School Related Factors**

Academic performance is determined by a combination of factors. School related factors are many but for this study a few were selected to determine the extent to which they influence girls' academic performance in mixed day secondary schools in Njoro Sub-County. Descriptive statistical analysis was used to analyze school related factors influencing girls' academic performance. In reference scaling (Likert scale) used in the study design, 1 represented strongly disagree, 2 represented disagree, 3 represented neutral, 4 represented agree and 5 represented strongly agree, therefore strongly disagree (1) was minimum, strongly agree (5) was maximum. The mean was analyzed based on the respondents choices scaled between strongly agree and strongly disagree. The results of the analysis of elements of school related factors from the form four girls are indicated in Table 9.

**Table 9**  
**School Related Factors –Form Four Girls**

<b>Elements of school related factors</b>	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Std. Dev.</b>
My academic performance is influenced by less classroom participation.	176	1	5	4	1.4
My academic performance is influenced by being intimidated by boys in class.	176	1	5	4	1.3
My academic performance is influenced by gender streaming (discouraged from doing math & sciences).	176	1	5	4	4.2
My academic performance is affected by the sitting position in class.	176	1	5	2	1.2
My academic performance is affected by traditional gender stereotyped roles and attitudes by teachers.	176	1	5	4	1.5
My academic performance is affected by discrimination in class by teachers when answering questions.	176	1	5	2	1.5
My academic performance is influenced by lack of female teachers to serve as role models.	175	1	5	4	1.5
My academic performance is affected by sexual harassment by peers in school.	175	1	5	3	1.5
My academic performance is affected by sexual harassment by male teachers.	175	1	5	2	1.4
My academic performance is affected by sexual harassment by adult males in the community.	175	1	5	4	1.6
My academic performance is influenced by lack of modern toilets, water and sanitary pads.	176	1	5	4	1.6
Valid N (listwise)	172				

Source: Field Data (2015)

A mean of 4 represented agree, a mean of 3 represented neutral and a mean of 2 represented disagree. The respondents (form four girls) in the study agreed their academic performance is influenced by less classroom participation, being intimidated

by boys in class, gender streaming (discouraged from doing math & sciences), traditional gender stereotyped roles and attitudes by teachers, lack of female teachers to serve as role models, sexual harassment by adult males in the community and lack of modern toilets, water and sanitary pads in school (response mean of 4). The respondents were not sure (neutral) whether their academic performance was affected by sexual harassment by peers in school (response mean of 3). The respondents disagreed on the fact that their academic performance is affected by the sitting position in class, discrimination in class by teachers when answering questions and sexual harassment by male teachers (response mean of 2). These findings tend to be inconsistent with those of Mburu (2013), who argued that presence of boys in the classroom had a negative effect on girls' academic performance. The researcher sought the opinion of form four class teachers on the influence of school related factors on academic performance of girls in mixed day secondary schools. The results of the analysis are indicated in Table 10.

**Table 10**  
**School Related Factors -Class Teachers**

<b>Elements of School related factors</b>	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Std. Dev.</b>
Girls' academic performance is influenced by less classroom participation.	10	1	5	4	1.0
Girls' academic performance is influenced by intimidation by boys in class.	10	1	4	4	1.2
Girls academic performance is influenced by gender streaming (girls are directed away from math & sciences).	10	1	5	4	1.4
Girls' academic performance is affected by the sitting arrangement in class.	10	2	5	3	1.3
Girls' academic performance is influenced by traditional gender stereotyped roles and attitudes by teachers.	10	1	5	4	1.4
Girls' academic performance is affected by discrimination in class by teachers.	10	2	5	2	0.9
Girls' academic performance is affected by lack of female teachers to serve as role models.	10	1	5	3	1.3

Girls' academic performance is affected by sexual harassment by peers in school.	10	1	4	4	1.0
Girls' academic performance is affected by sexual harassment by male teachers.	10	1	5	2	1.7
Girls' academic performance is affected by sexual harassment by male adults in the community.	10	1	5	4	1.2
Girls' academic performance is influence by lack of modern toilets, water and sanitary pads.	10	1	5	3	1.4
Valid N (listwise)	10				

Source: Field Data (2015)

Based on Likert Scale used in the study mean of 4 represented agree, a mean of 3 represented neutral and a mean of 2 represented disagree. The respondents in the study agreed that girls' academic performance is influenced by less classroom participation, intimidation by boys in class, gender streaming (girls are discouraged from studying mathematics and sciences), traditional gender stereotyped roles and attitudes by teachers, sexual harassment by peers in school and sexual harassment by male adults in the community(response mean of 4).

The respondents were not sure whether girls' academic performance was affected by the sitting arrangement in class, lack of female teachers to serve as role models and lack of modern toilets, water and sanitary pads (response mean of 3). The respondents on the other hand, disagreed that girls' academic performance is affected by discrimination in class by teachers and sexual harassment by male teachers (response mean of 2). The responses from form four parents' representatives (PTA) are presented in Table 11.

**Table 11**  
**School Related Factors- Form Four Parents' Representatives (PTA)**

<b>Elements of school related factors</b>	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Std. Dev.</b>
Girls' academic performance is influenced by less classroom participation.	18	1	4	4	1.1
Girls' academic performance is influenced by intimidation by boys in class.	18	1	5	4	1.2
Girls academic performance is influenced by gender streaming (girls are directed away from math & sciences).	18	1	5	4	1.1
Girls' academic performance is affected by the sitting arrangement in class.	18	2	5	4	1.2
Girls' academic performance is influenced by traditional gender stereotyped roles and attitudes by teachers.	18	1	5	4	1.1
Girls' academic performance is affected by discrimination in class by teachers.	18	2	5	2	0.9
Girls' academic performance is affected by lack of female teachers to serve as role models.	18	1	5	4	1.3
Girls' academic performance is affected by sexual harassment by peers in school.	18	1	5	3	1.3
Girls' academic performance is affected by sexual harassment by male teachers.	18	2	5	2	0.8
Girls' academic performance is affected by sexual harassment by male adults in the community.	18	1	5	4	1.6
Girls' academic performance is influence by lack of modern toilets, water and sanitary pads.	18	1	5	4	1.4
Valid N (listwise)	18				

Source: Field Data (2015)

According to Likert Scale used in the study, mean of 4 represented agreed, a mean of 3 represented neutral and a mean of 2 represented disagreed. The analysis above

showed that the respondents (form four parents' representatives (PTA)) agreed that girls' academic performance was influenced by less classroom participation, intimidation by boys in class, gender streaming (girls are directed away from math & sciences), sitting arrangement in class, traditional gender stereotyped roles and attitudes by teachers, lack of female teachers to serve as role models, sexual harassment by male adults in the community, lack of modern toilets, water and sanitary pads in school (response mean of 4). The respondents were not sure whether girls' academic performance was affected by sexual harassment by peers in school (response mean of 3). The respondents disagreed that girls' academic performance is affected by discrimination in class by teachers and sexual harassment by male teachers (response mean of 2).

#### **4.5.1 Correlation between School Related Factors and Girls Academic Performance**

The first objective of the study was to determine the influence school related factors have on academic performance of girls in mixed day secondary schools. The key elements for school related factors analyzed were; girls classroom participation, gender streaming, traditional gender stereotyped roles and attitudes by teachers, lack of modern toilets, water and sanitary pad, sexual harassment by male adults in the community and peers in school. Pearson Moment Correlation coefficient test was used to establish if there was significant relationship between school related factors and academic performance of girls in mixed day secondary schools. The results were as shown in Table 12.

**Table 12**  
**Correlation between School Related Factors and Girls Academic Performance.**

<b>Correlations</b>	<b>Academic performance (KCSE scores)</b>
Pearson Correlation	0.845**
<b>School related factors combined</b> Sig. (1-tailed)	0.000
N	165

\*\* . Correlation is significant at the 0.05 level (1-tailed).

From Table 12 above, the results revealed that there was a strong significant positive relationship of ( $r = 0.845$ ,  $p < 0.05$ ) between School related factors and girls academic performance. This is because the P-value of 0.000 was less than the set significant level of 0.05 for the analysis. Based on the data, the study concluded that there is a strong influence of school related factors and girls academic performance. This suggests that girls' academic performance will be high in schools that take into consideration the influence of school related factors.

#### 4.6 Socio-Cultural Factors

In every society, there are practices and beliefs that determine social gender relations. These practices determine the activities done by men and women, boys and girls. In some communities, religious and traditional norms dictate that girls are to be married at a certain age. The girls are therefore, pulled out of school as soon as they reach maturity to prepare them for marriage (Nyakubega, 2009, MOEST, 2008-2012). Items related to early marriages, preference of boy child, domestic chores and early pregnancies were included in the questionnaire since in day schools the girls interact with the members of the family and the community frequently and they are likely to be influenced academically by these practices. Descriptive statistics was used to analyze the elements of socio-cultural factors and the results were indicated in Table13.

**Table 13**  
**Socio-Cultural Factors – Form Four Girls**

<b>Elements of Socio-cultural factors</b>	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Std. Dev.</b>
Girls' academic performance is affected by early marriages.	176	1	5	4	1.2
The preference of the boy child influences the self-confidence of girls and this affects the girls' academic performance.	176	1	5	3	1.5
Girls' academic performance is influenced by the belief that men should be more educated than women.	175	1	5	3	1.6

My involvement in domestic chores like cooking and looking after siblings affects my academic performance.	176	1	5	4	1.6
I miss school very often to take care of their siblings and sick relatives.	176	1	5	2	1.5
Girls' academic performance is affected by early pregnancies.	176	1	5	4	1.0
Negative attitude of the local community towards educating girls affects the girls' academic performance.	175	1	5	4	1.4
Cultural practices like female genital mutilation affects girls' academic performance.	175	1	5	4	1.6
Valid N (listwise)	174				

Source: Field Data (2015)

According to Likert Scale used in the study mean of 4 represented agree, a mean of 3 represented neutral and a mean of 2 means disagree. The respondents (from four girls) agreed that girls' academic performance was influenced by early marriages, girls involvement in domestic chores like cooking and looking after siblings, girls' academic performance is affected by early pregnancies, negative attitude of the local community towards educating girls and cultural practices like female genital mutilation affects girls' academic performance(response mean of 4). The respondents were not sure whether the preference of the boy child influences the self-confidence of girls and the belief that men should be more educated than women (response mean of 3). The respondents on the other hand disagreed that they miss school very often to take care of their siblings and sick relatives (response mean of 2). From four class teachers responses on elements of socio-cultural practices were analyzed and the results presented in Table 14.



**Table 14**  
**Socio-Cultural Factors -Class Teachers**

<b>Elements of Socio-cultural factors</b>	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Std. Dev.</b>
Girls' academic performance is influenced by early marriages.	10	1	5	4	1.1
The preference of the boy child influences the self-confidence of girls and this affects the girls' academic performance.	10	2	5	3	1.2
Girls' academic performance is influenced by the belief that men should be more educated than women.	10	1	5	3	1.3
Girls' academic performance is affected by too many domestic chores after school.	10	1	2	4	0.5
Girls' academic performance is affected by absenteeism from school to take care of siblings and sick relatives.	10	1	4	2	1.1
Girls' academic performance is affected by early pregnancies.	10	1	3	4	0.7
Girls' academic performance is affected by the negative attitude of the local community towards education of girls.	10	1	4	4	1.0
Cultural practices like female genital mutilation affects girls' academic performance.	10	1	5	4	1.3
Valid N (listwise)	10				

Source: Field Data (2015)

Based on Likert Scale used in the study, mean of 4 represented agree, a mean of 3 represented not sure and a mean of 2 represented disagree. Respondents (class teachers) in the study agreed that girls' academic performance is influenced by early marriages, too many domestic chores after school, early pregnancies, negative attitude of the local community towards education of girls and cultural practices like female genital mutilation(response of a mean of 4). The respondents were not sure whether the preference of the boy child influences the self-confidence of girls and this affects the girls' academic performance and the belief that men should be more educated than women (response of a mean of 3). The respondents disagreed that girls' academic

performance is affected by absenteeism from school to take care of siblings and sick relatives (response of a mean of 2). The analysis of the parents' responses on the socio-cultural factors was presented in Table 15.

**Table 15**  
**Socio-Cultural Factors -Parents**

<b>Elements of socio-cultural factors</b>	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Std. Dev.</b>
Girls' academic performance is influenced by early marriages.	18	1	4	4	1.0
The preference of the boy child influences the self-confidence of girls and this affects the girls' academic performance.	18	2	5	3	1.1
Girls' academic performance is influenced by the belief that men should be more educated than women.	18	2	5	3	1.2
Girls' academic performance is affected by too many domestic chores after school.	18	1	3	4	0.6
Girls' academic performance is affected by absenteeism from school to take care of siblings and sick relatives.	18	1	5	2	1.1
Girls' academic performance is affected by early pregnancies.	18	1	5	4	1.1
Girls' academic performance is affected by the negative attitude of the local community towards education of girls.	18	2	5	3	1.2
Cultural practices like female genital mutilation affects girls' academic performance.	18	1	5	4	1.1
Valid N (listwise)	18				

Source: Field Data (2015)

The respondents in the study agreed that girls' academic performance is influenced by early marriages, too many domestic chores after school, early pregnancies and cultural practices like Female Genital Mutilation (FGM). The respondents in the study were not sure whether the preference of the boy child influences the self-confidence of girls and this affects the girls' academic performance, the belief that men should be more educated than women and that girls' academic performance is

affected by the negative attitude of the local community towards education of girls. The respondents on the other hand disagreed that girls' academic performance is affected by absenteeism from school to take care of siblings and sick relatives.

#### **4.6.1 Correlation between Socio-Cultural Factors and Girls Academic Performance**

The second objective of the study was to investigate the influence socio-cultural factors have on academic performance of girls in mixed day secondary schools. The key elements for socio-cultural factors analyzed were; early marriages, too many domestic chores after school, and the belief that men should be more educated than women, early pregnancies, girls' absenteeism from school to take care of siblings and sick relatives, cultural practices like female genital mutilation(FGM) and negative attitude of the local community towards education of girls. The elements were correlated to establish whether they influence academic performance of girls. The results are indicated in Table 16.

**Table 16**  
**Correlation between Socio-Cultural Factors and Girls Academic Performance**

<b>Correlations</b>		<b>Academic performance KCSES cores</b>
<b>Socio-cultural factors combined</b>	Pearson Correlation	0.723**
	Sig. (1-tailed)	0.000
	N	165

\*\* . Correlation is significant at the 0.05 level (1-tailed).

From Table 16 above, the results revealed that there was a strong significant positive relationship of ( $r = 0.723$ ,  $p < 0.05$ ) between socio-cultural factors and girls academic performance. This is because the P-value of 0.000 was less than the set significant level of 0.05 for the analysis. Based on the data, the study concluded that there was a positive influence by socio-cultural factors on girls' academic performance. This study is in agreement with a study done in Bugoma that established that cultural practices such as early marriages, FGM and domestic chores had negative impact on

girls' academic performance and contributed to their dismal performance (Achoka *et al*, 2013).

#### 4.7 Parents Economic Status

Parents' economic status refers to the resources a parent has to meet the needs of the family. The needs include basic needs like food, clothing, shelter and education for their children. Experts argue that low economic status has negative effects on the academic performance of students since their needs are not adequately met (Juma, 2012, Farooq, Chaudry, Shafiq & Berhanu, 2011). Descriptive statistical analysis was used to analyze parents' economic status as factors which influence Girls' Academic Performance. In reference scaling (Likert scale) used in the study design, 1 represented strongly disagree, 2 represented disagree, 3 represented neutral, 4 represented agree and 5 represented strongly agree, therefore strongly disagree (1) was minimum, strongly agree (5) was maximum. The mean was analyzed based on the respondents choices scaled between strongly agree and strongly disagree. Table 17 represents the results from responses given by form four girls.

**Table 17**  
**Parents Economic Status Factors- Form Four Girls**

<b>Elements of Parents economic status</b>	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Std. Dev.</b>
My academic performance is influenced by low income of my parents/guardians.	176	1	5	4	1.6
My academic performance is influenced by lack of basic needs.	176	1	5	4	1.5
My academic performance is influenced by poor study environment at home.	176	1	5	4	1.5
My academic performance is influenced by lack of proper diet at home.	176	1	5	2	1.4
My academic performance is influenced by poor accommodation at home.	176	1	5	3	1.5
My academic performance is influenced by long distance from home to school.	176	1	5	4	1.6
Valid N (listwise)	176				

Source: Field Data (2015)

The respondents (form four girls) in the study agreed that their academic performance was influenced by low income of their parents/guardians, lack of basic needs, long distance from home to school and poor study environment at home(response of a mean of 4). The respondents were not sure whether their academic performance was influenced by poor accommodation at home (response of a mean of 3). The respondents on the other hand disagreed that their academic performance is influenced by lack of proper diet at home (response of a mean of 2). The form four class teachers gave responses on the influence of parents’ economic status on girls academic performance as shown is Table 18.

**Table 18**  
**Parents Economic Status Factors-Class Teachers**

<b>Elements of Parents economic status</b>	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Std.Dev.</b>
Girls’ academic performance is affected by low income of parents/guardians.	10	1	5	4	1.1
Girls’ academic performance is influenced by lack of basic needs.	10	1	5	4	1.4
Girls’ academic performance is affected by the poor study environment at home.	10	1	2	4	0.5
Girls’ academic performance is influenced by poor diet at home	10	1	5	3	1.4
Girls’ academic performance is affected by lack of proper accommodation at home.	10	1	4	4	0.8
Girls’ academic performance is influenced by long distances from home to school.	10	1	4	4	0.7
Girls’ academic performance is influenced by lack of support from parents/guardians.	10	1	4	4	1.0
Valid N (list wise)	10				

Source: Field Data (2015)

The respondents (class teachers) in the study agreed that girls’ academic performance was affected by low income of parents/guardians, lack of basic needs, poor study environment at home, lack of proper accommodation at home, long distances from home to school and lack of support from parents/guardians(response of a mean of 4). The respondents on the other hand, were not sure whether girls’ academic

performance was influenced by poor diet at home (response of a mean of 3). The researcher sought to get the view of the parents' representatives on influence of economic status of parents on academic performance of girls. The findings are given in Table 19.

**Table 19**  
**Parents Economic Status Factors-Parents Representatives**

<b>Elements of Parents economic status</b>	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Std. Dev.</b>
Girls' academic performance is affected by low income of parents/guardians.	18	1	5	4	1.3
Girls' academic performance is influenced by lack of basic needs.	18	1	5	4	1.1
Girls' academic performance is affected by the poor study environment at home.	18	1	3	4	0.7
Girls' academic performance is influenced by poor diet at home	18	1	5	3	1.4
Girls' academic performance is affected by lack of proper accommodation at home.	18	1	5	3	1.2
Girls' academic performance is influenced by long distances from home to school.	18	1	5	4	0.9
Girls' academic performance is influenced by lack of support from parents/guardians.	18	1	5	3	1.3
Valid N (listwise)	18				

Source: Field Data (2015)

The respondents (parents representatives) in the study agreed that girls' academic performance was influenced by low income of parents/guardians, lack of basic needs, poor study environment at home and long distances from home to school(response of a mean of 4). The respondents were not sure whether girls' academic performance was influenced by poor diet at home, lack of proper accommodation at home and lack of support from parents/guardians (response of a mean of 3).

#### 4.7.1 Correlation between Parents Economic Status and Girls Academic Performance

The third objective of the study was to explore the influence of parents' economic status on academic performance of girls in mixed day secondary schools. The key elements for parents economic status analyzed were; low income of parents/guardians, lack of basic needs, poor study environment for girls at home, poor diet at home, lack of proper accommodation at home, long distances from home to school and lack of support from parents/guardians. All these elements were correlated to establish whether parents' economic status influenced girls' academic performance and the results are shown in Table 20.

**Table 20**  
**Correlation between Parents Economic Status and Girls Academic Performance**

Correlations	Academic performance KCSE scores
Pearson Correlation	0.847**
<b>Parents economic status</b>	Sig. (1-tailed)
	0.000
N	165

\*\* . Correlation is significant at the 0.05 level (1-tailed).

From Table 20 above, the results revealed that there was a strong significant positive relationship of ( $r = 0.847$ ,  $p < 0.05$ ) between parents economic status and girls academic performance. This is because the P-value of 0.000 was less than the set significant level of 0.05 for the analysis. Based on the data, the study concluded that there is a positive influence of parents' economic status on girls' academic performance. This suggests that girls' academic performance will be high in school if parents' income is high. Ayodo *et al* (2012) claim is consistent with this finding that girls from parents of high economic status performed better than those from low income parents.

## 4.8 Personal Factors

The researcher sought to examine the extent to which personal (student related) factors influenced academic performance of girls in mixed day secondary schools. Descriptive statistical analysis was used to analyze personal factors Influencing Girls' Academic Performance. Likert scale was used in the study design, 1 represented strongly disagree, 2 represented disagree, 3 represented neutral, 4 represented agree and 5 represented strongly agree, therefore strongly disagree (1) was minimum, strongly agree (5) was maximum. The mean was analyzed based on the respondents choices scaled between strongly agree and strongly disagree. The results are indicated in Table 21.

**Table 21**  
**Personal Factors- Form Four Girls**

<b>Elements of Personal factors</b>	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Std. Dev.</b>
My academic performance is influenced by lack of self-motivation to study on my own.	175	1	5	3	1.5
My academic performance is affected by lack of support from my parents/guardians.	176	1	5	4	1.6
My academic performance is affected by failure to complete assignments in time.	175	1	5	4	1.5
My academic performance is influenced by fear to consult teachers for assistance in difficult topics.	176	1	5	4	1.4
My academic performance is affected by feeling worthless when teachers don't appreciate my work.	176	1	5	4	1.5
Girls' academic performance is influenced by lack of guidance and counseling from parents and teachers.	176	1	5	4	1.4
Girls' academic performance is influenced by failure to work in groups in school.	176	1	5	3	1.5
Girl's academic performance is influenced by lack of persistence to complete assignments when faced with challenges.	176	1	5	4	1.3
Valid N (listwise)	174				

Source: Field Data (2015)



The respondents (form four girls) in the study agreed that their academic performance was influenced by lack of support from their parents/guardians, failure to complete assignments in time, fear to consult teachers for assistance in difficult topics, feeling worthless when teachers don't appreciate their work, lack of guidance and counseling from parents and teachers and lack of persistence to complete assignments when faced with challenges (response of a mean of 4). The respondents on the other hand were not sure whether their academic performance was influenced by lack of self-motivation to study on their own and failure to work in groups in school (response of a mean of 3). The results of the form four class teachers' views are indicated in Table 22.

**Table 22**  
**Personal factors- Class teachers**

<b>Elements of personal factors</b>	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Std. Dev.</b>
Girls' academic performance is affected by lack of self-motivation to study on their own.	10	1	4	4	0.9
Girls' academic performance is affected by failure to complete assignments in time.	10	1	4	4	0.9
Girls' academic performance is affected by fear to consult teachers for clarification or assistance in difficult topics.	10	1	3	4	0.6
Girls' academic performance is affected by feeling worthless when teachers don't appreciate their work.	10	1	4	3	1.1
Girls' academic performance is influenced by lack of guidance and counseling from parents and teachers.	10	1	5	3	1.4
Girls' academic performance is influenced by failure to work in groups in school.	10	1	4	3	1.2
Girls academic performance is influenced by lack of persistence to complete assignments when faced with challenges	10	1	3	4	0.8
Valid N (listwise)	10				

Source: Field Data (2015)

The respondents (class teachers) in the study agreed that girls' academic performance was influenced by lack of self-motivation to study on their own, failure to complete assignments in time, fear to consult teachers for clarification or assistance in difficult topics and lack of persistence to complete assignments when faced with challenges(response of a mean of 4). The respondents on the other were not sure whether girls' academic performance was affected by feeling worthless when teachers don't appreciate their work, lack of guidance and counseling from parents and teachers and failure to work in groups in school(response of a mean of 3). The researcher sought the parents' representatives views on the influence of personal factors on girls' academic performance and the results are indicated in Table 23.

**Table 23**  
**Personal Factors- Parents Representatives**

<b>Elements of Personal factors</b>	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Std. Dev.</b>
Girls' academic performance is affected by lack of self-motivation to study on their own.	18	1	4	4	0.8
Girls' academic performance is affected by failure to complete assignments in time.	18	1	4	4	1.1
Girls' academic performance is affected by fear to consult teachers for clarification or assistance in difficult topics.	18	1	5	4	1.1
Girls' academic performance is affected by feeling worthless when teachers don't appreciate their work.	18	1	5	3	1.2
Girls' academic performance is influenced by lack of guidance and counseling from parents and teachers.	18	1	5	3	1.3
Girls' academic performance is influenced by failure to work in groups in school.	18	1	5	3	1.2
Girls academic performance is influenced by lack of persistence to complete assignments when faced with challenges	18	1	4	4	0.8
Valid N (listwise)	18				

Source: Field Data (2015)

The respondents (parents' representative) in the study agreed that girls' academic performance is affected by lack of self-motivation to study on their own, failure to complete assignments in time, fear to consult teachers for clarification or assistance in difficult topics and lack of persistence to complete assignments when faced with challenge(response of a mean of 4). The respondents on the other hand were not sure whether girls' academic performance was influenced by lack of guidance and counseling from parents and teachers and failure to work in groups in school (response of a mean of 3).

#### 4.8.1 Correlation between Personal Factors and Girls Academic Performance

The fourth objective of the study was to examine how personal factors influence academic performance of girls in mixed day secondary schools. The key elements for personal factors analyzed were; girls lack of self-motivation to study on their own, failure to complete assignments in time, fear to consult teachers for clarification or assistance in difficult topics, feeling worthless when teachers don't appreciate their work, lack of guidance and counseling from parents and teachers, failure to work in groups in school and lack of persistence to complete assignments when faced with challenges.

**Table 24**  
**Correlation between Personal Factors and Girls Academic Performance**

<b>Correlations</b>	<b>Academic performance KCSES scores</b>
Pearson Correlation	0.732**
<b>Personal factors</b>	0.000
N	165

\*\* . Correlation is significant at the 0.05 level (1-tailed).

From table 24 above, the results revealed that there was a strong significant positive relationship of ( $r = 0.732$ ,  $p < 0.05$ ) between personal factors and girls academic performance. This is because the P-value of 0.000 was less than the set level of 0.05 for the analysis. Based on the data, the study concluded that there is a positive relationship between personal factors and girls' academic performance. The findings

concur with studies conducted by Loo & Choy (2013) which indicated that a student with high ability to organise and execute given tasks will achieve better academic performance. Bandura (1997) hypothesized that beliefs in ones capability to organise and execute the courses of action required to produce given attainments, can determine whether a task will be initiated, the amount of effort that will be expected and the level of persistence to complete the task when faced with obstacles and aversive challenges. The respondents in the study agreed that girls' academic performance was influenced by lack of self-motivation to study on their own, failure to complete assignments in time, fear to consult teachers for clarification or assistance in difficult topics and lack of persistence to complete assignments when faced with challenges (response of a mean of 4). This means that these personal factors can positively impact academic performance incase a student is self-motivated.

#### **4.9 Combined Influence of School Related Factors, Socio-Cultural Factors, Parents Economic Status and Personal Factors on Academic Performance.**

The fifth objective of the study was to find out the combined influence of school related factors, socio-cultural factors, parents' economic status and personal factors on academic performance of girls in mixed day secondary schools. A multiple regression model was used to establish this relationship. Multiple regression attempts to determine whether a group of variables together predict a given dependent variable (Borg & Gall, 1989). Regression analysis which yields a statistic called coefficient of determination was computed to establish the actual contribution of selected factors to girls' academic performance (Table 25).

#### **Multiple Regression Model**

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + \epsilon$$

Where Y – is the dependent variable (Academic performance of girls)

a – Is the Constant

b<sub>1</sub>- b<sub>3</sub> – are the Régression coefficients (change induced in Y by each X)

X<sub>1</sub>. X<sub>4</sub> – are the Independent variables

X<sub>1</sub> - School related factors

X<sub>2</sub> - Socio-cultural factors

X<sub>3</sub> -Parents economic status

X<sub>4</sub> -Personal factors

ε - Is the error term

**Table 25**  
**Results of Multiple Regression Analysis Determining the Influence of Selected Factors that Influence Academic Performance.**  
**Coefficient of Determination**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.990 <sup>a</sup>	.979	.979	.075

a. Predictors: (Constant), personal factors, socio-cultural factors, parents economic status, school related factors

#### **Regression Analysis**

Model		Un standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.076	0.025		-3.013	0.003
	School related factors	0.268	0.020	0.314	13.305	0.000
	Socio-cultural factors	0.065	0.018	0.076	3.658	0.000
	Parents economic status	0.377	0.013	0.437	28.210	0.000
	Personal factors	0.321	0.010	0.395	30.870	0.000

a. Dependent Variable: academic performance KCSE scores

The regression results in Table 25 indicate that factors influencing academic performance of girls in mixed day secondary schools accounted for 97.9% of the

variation in girls academic performance ( $R^2 = 0.979$ ). The unstandardized beta coefficients indicate that School related factors ( $\beta = 0.268$ ,  $p < 0.05$ ), Socio-cultural factors ( $\beta = 0.065$ ,  $p < 0.05$ ), Parents economic status ( $\beta = 0.377$ ,  $p < 0.05$ ) and Personal factors ( $\beta = 0.321$ ,  $p < 0.05$ ) were the strongest predictors of girls academic performance in mixed day secondary schools. This suggests that, all the factors (School related factors, Socio-cultural factors, Parents economic status and Personal factors) influenced academic performance of girls in mixed day secondary schools in Njoro Sub County. Objective five sought to find out whether there is a significant relationship between combined influence of school related factors, socio-cultural factors, parents' economic status and personal factors on academic performance of girls in mixed day secondary schools. Based on the data, the study concluded that there is a positive relationship between combined influence of school related factors, socio-cultural factors, parents' economic status and personal factors on academic performance of girls in mixed day secondary schools. This implies that girls academic performance will be high in mixed day secondary schools that take into consideration the influence of combined factors (school related factors, socio-cultural factors, parents economic status and personal factors) on girls academic performance. These findings are consistent with those of Ngesu *et al* (2012) who established that girls' poor performance in KCSE is not influenced by one factor but seems to stem from a combination of factors. The above multiple regression model indicate that the combined influence of school related factors, socio-cultural factors, parents economic status and personal factors positively influence academic performance of girls in mixed day secondary schools.

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter presents the summary of the study, conclusions, recommendations and suggestions for further research.

#### 5.2 Summary of the Study

The purpose of the study was to investigate the factors influencing academic performance of girls in mixed day secondary schools in Njoro Sub-County; Nakuru County, Kenya.

Chapter one dealt with the background against which the study was carried out. The objectives of the study included:

- (i) To determine the influence of school related factors on academic performance of girls in mixed day secondary schools.
- (ii) To investigate the influence of socio-cultural factors on academic performance of girls in mixed day secondary schools.
- (iii) To explore the influence of parents economic status on academic performance of girls in mixed day secondary schools.
- (iv) To examine the influence of personal factors on academic performance of girls in mixed day secondary schools.
- (v) To find out the combined effect of school related, socio-cultural, parents economic status and personal factors on academic performance of girls in mixed day secondary schools.

In order to investigate the issues raised in the statement of the problem, research questions were derived from the objectives of the study. The significance of the study was well stated as well as the scope of the study, which was confined to public mixed day secondary schools in Njoro Sub-County. The assumption of the study was that the respondents were to be co-operative in giving the information.

Chapter two covered the literature review which provided information guidelines relevant to the background of the study. It covered the status of girl-child education in developed countries, Sub-Saharan Africa and Kenya. It reviewed literature on school related factors, socio-cultural, parents economic status and personal factors influencing academic performance of girls. Related theories to the study were discussed.

Chapter three looked at the methodology of the study which included research design, study location, target population, sampling procedures and sample size. The research used descriptive survey design. The chapter also contains descriptions of the instruments used, pilot study and the measures used to test reliability and validity of the instruments. The instruments were administered by the researcher through personal visits to the respective schools. The completed questionnaire return rate was 88% for the form four girls, 100% for the class teachers and 90% for the parents' representatives. Descriptive statistics and inferential statistics were used to analyse the data using the Statistical Package for Social Sciences (SPSS) version 20. Data analysis was done, tabulated and the results interpreted accordingly. The conclusions were drawn from the findings.

### **5.3 Conclusions**

The study came up with a number of very important findings on selected factors influencing academic performance of girls in mixed day secondary schools in Njoro Sub-County; Nakuru County, which are presented in this section. Each finding is hereby summarized under the corresponding objective.

First, the study established that academic performance of girls in mixed day secondary schools was influenced by school related factors namely; less classroom participation, being intimidated by boys in class, gender streaming (discouraged from doing math & sciences), traditional gender stereotyped roles and attitudes by teachers, lack of female teachers to serve as role models, sexual harassment by adult males in the community and lack of modern toilets, water and sanitary pads in school (response mean of 4) which means agreed according to Likert scale. On the other hand, the study established that school related factors had a strong influence on academic



performance of girls in mixed day secondary school represented by strong positive correlation ( $r = 0.845$ ,  $p < 0.05$ ).

Second, the study established that academic performance of girls in mixed day secondary schools was influenced by Socio-cultural factors namely; early marriages, involvement in domestic chores like cooking and looking after siblings affected their academic performance. Girls' academic performance was also influenced by early pregnancies, negative attitude of the local community towards educating girls and cultural practices like female genital mutilation (response mean of 4) which was agree according to Likert scale. The study also established that socio-cultural factors had a strong influence on academic performance of girls in mixed day secondary school represented by strong positive correlation ( $r = 0.723$ ,  $p < 0.05$ ).

Thirdly, the study established that academic performance of girls in mixed day secondary schools was influenced by parents economic status namely; low income of their parents/guardians, lack of basic needs, long distance from home to school and poor study environment at home(response mean of 4) which was agree according to Likert scale. The study also established that parents economic status had a strong influence on academic performance of girls in mixed day secondary school represented by strong positive correlation ( $r = 0.847$ ,  $p < 0.05$ ).

Fourthly, the study established that academic performance of girls in mixed day secondary schools was influenced by personal factors namely; lack of support from parents/guardians, failure to complete assignments in time, fear to consult teachers for assistance in difficult topics, feeling worthless when teachers don't appreciate their work, lack of guidance and counseling from parents and teachers and lack of persistence to complete assignments when faced with challenges(response of a mean of 4) which was agree according to Likert scale. The study also established that personal factors had a strong influence on academic performance of girls in mixed day secondary school represented by strong positive correlation ( $r = 0.732$ ,  $p < 0.05$ ).

The fifth objective of the study was to find out the combined influence of school related factors, socio-cultural factors, parents' economic status and personal factors on academic performance of girls in mixed day secondary schools. The regression results in Table 25 indicate that factors influencing academic performance of girls in

mixed day secondary schools accounted for 97.9% of the variation in girls academic performance ( $R^2 = 0.979$ ). The unstandardized beta coefficients indicate that School related factors ( $\beta = 0.268, p < 0.05$ ), Socio-cultural factors ( $\beta = 0.065, p < 0.05$ ), Parents economic status ( $\beta = 0.377, p < 0.05$ ) and Personal factors ( $\beta = 0.321, p < 0.05$ ) were the strongest predictors of girls academic performance in mixed day secondary schools. This suggests that, all the factors (School related factors, Socio-cultural factors, Parents economic status and Personal factors) influenced academic performance of girls in mixed day secondary schools in Njoro Sub County. Based on the data the study concluded that there is a positive relationship between combined influence of school related factors, socio-cultural factors, parents' economic status and personal factors on academic performance of girls in mixed day secondary schools.

Based on the findings, some implications can be drawn from this study. The study established that school related factors and parents economic status were the most influencing factors whereas, socio-cultural factors and personal factors were the least factors influencing performance of girls in mixed day secondary school in Njoro Sub county; Nakuru county, Kenya. This implies that the academic performance of girls in mixed day secondary schools is influenced by a combination of factors.

#### **5.4 Recommendations**

On the basis of the findings and conclusions already discussed, to improve the academic performance of girls in mixed day secondary schools the following recommendations were made:

1. The ministry of education need to empower the teachers, parents associations through gender sensitization programs to deal with issues of sexual harassment in schools which was noted to affect girls' academic performance. At the same time boys and men need to be discouraged from any behaviors which adversely affect girls in school.
2. The stakeholders need to be empowered with appropriate support to take lead in encouraging girls to participate in education. This will reduce socio-cultural practices that hinder progress in girl-child education. Awareness campaigns and community involvement programs to change the negative attitudes towards girls' education need

to be carried out at community level to discourage FGM, early marriages and overburdening girls with domestic chores. These issues need to be addressed through the chief's Barazas, religious meetings, and annual general meetings in schools by the respective leaders.

3. Low economic status of parents was one of the leading factors influencing girls' academic performance established by the study. To address this issue, the government needs to review the system of awarding bursaries to avoid exclusion of the poor parents who have children in day schools and have difficulties sustaining them in school due to financial constraints. The parents need to have access to credit facilities that would enable them to engage into some form of income generating activities. This can be facilitated by the government and other organizations that are interested in girl-child education. To reduce the distance of commuting from home to school and the related challenges, the County government and National government needs to establish boarding facilities in the existing Sub-County schools or establish completely Sub-County girls' schools which are affordable by those parents experiencing financial constraints.

4. Girls need to be empowered to overcome the physical, social and emotional challenges they go through which influence their academic performance. To achieve this, the Ministry of education needs to equip teachers and parents' association with skills to handle girls of different ages, abilities and backgrounds by offering refresher courses and in-service training.

5. The study established that girls' academic performance is influenced by a combination of factors. It is therefore recommended that mixed day secondary schools take into consideration the influence of these factors seriously and come up with more ways of mitigating them in addition to those stated above in order to improve the academic performance of girls.

### **5.5 Suggestions for Further Research**

Due to limited scope and time, the researcher could not exhaust all the aspects of the study; hence the researcher recommended the following areas for further research.

1. A research may be conducted on the impact of gender responsive pedagogy in mixed day secondary schools in Kenya.

2. A similar research may be done in mixed private day secondary schools to establish the factors influencing girls' academic performance for concrete analysis.

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## APPENDICES

### APPENDIX A: LETTER OF INTRODUCTION SEEKING PERMISSION TO COLLECT DATA

EGERTON UNIVERSITY

INSTITUTE OF WOMEN, GENDER AND DEVELOPMENT

P.O BOX 536

NJORO

Dear Sir/Madam

I am a post graduate student in Egerton University undertaking a research study entitled '**Factors influencing academic performance of girls in mixed day secondary schools in Njoro Sub-County Nakuru County, Kenya.**

Your school has been selected to participate in this study. I therefore seek permission to be allowed to visit your school and collect information necessary for the study from form four class teachers, form four girls and two parents' representatives (PTA). The information is purely for academic research and will be treated with outmost confidentiality.

The participation of your school in the study will be highly appreciated.

Thank you for your co-operation

Yours faithfully,

JOSEPHINE NTHENYA MUANDU

## APPENDIX B: QUESTIONNAIRE FOR THE CLASS TEACHERS

Dear Respondent,

The purpose of this questionnaire is to gather information on a research being carried out in Njoro Sub-County entitled 'Factors influencing academic performance of girls in mixed day secondary schools in Njoro Sub-County, Nakuru County. You are kindly requested to provide information to help in the research. Your responses will be treated with great confidentiality. The information will only be used for the purpose of this study. Please respond to the questions as they apply to you and do not indicate your name, the name of your school or any other form of identification.

**Read each question and indicate your choice by a tick in the box. Please answer all the questions.**

### SECTION A: BACKGROUND INFORMATION

1. Please indicate your gender    Male (    )                      Female (    )
  
2. For how long have you been a class teacher? (    )
  
3. Category of your classes    (a) Girls only (    )            (b) Boys and girls (    )
  
4. Indicate the number of streams in your school  
  
                    1 stream (    )    2 streams (    )    3 streams (    )    Over 3 streams (    )
  
5. Indicate the total number of students in form four in your school  
  
                    Total boys (    )                      Total girls (    )
  
6. Indicate the number of teachers  
  
                    Male (    )                                      Female (    )

7. Indicate the number of students who scored grade C+ and above in KCSE exams in the years indicated below

Year	2010	2011	2012	2013
Boys				
Girls				
Total(C+ and above)				
Total KCSE entry				

### SECTION B: FACTORS INFLUENCING ACADEMIC PERFORMANCE OF GIRLS IN MIXED DAY SECONDARY SCHOOLS

The following are factors assumed to be influencing academic performance of girls in mixed day secondary schools. Please tick to indicate the extent to which you agree with the following statements.

**KEY:** 5-Strongly Agree, 4-Agree, 3-Undecided, 2-Disagree, 1-Strongly Disagree

SN	STATEMENT	5	4	3	2	1
		SA	A	U	D	SD
8.	Girls' academic performance is influenced by less classroom participation.					
9.	Girls' academic performance is influenced by intimidation by boys in class.					
10.	Girls academic performance is influenced by gender streaming (girls are directed away from math & sciences).					
11.	Girls' academic performance is affected by the sitting arrangement in class.					
12.	Girls' academic performance is influenced by traditional gender stereotyped roles and attitudes by teachers.					
13.	Girls' academic performance is affected by discrimination in class by teachers.					
14.	Girls' academic performance is affected by lack of					

	female teachers to serve as role models.					
15.	Girls' academic performance is affected by sexual harassment by peers in school.					
16.	Girls' academic performance is affected by sexual harassment by male teachers.					
17.	Girls' academic performance is affected by sexual harassment by male adults in the community.					
18.	Girls' academic performance is influence by lack of modern toilets, water and sanitary pads.					
19.	Girls' academic performance is influenced by early marriages.					
20.	The preference of the boy child influences the self confidence of girls and this affects the girls' academic performance.					
21.	Girls' academic performance is influenced by the belief that men should be more educated than women.					
22.	Girls' academic performance is affected by too many domestic chores after school.					
23.	Girls' academic performance is affected by absenteeism from school to take care of siblings and sick relatives.					
24.	Girls' academic performance is affected by early pregnancies.					
25.	Girls' academic performance is affected by the negative attitude of the local community towards education of girls.					
26.	Cultural practices like female genital mutilation affects girls' academic performance.					
27.	Girls' academic performance is affected by low income of parents/guardians.					
28.	Girls' academic performance is influenced by lack of basic needs.					
29.	Girls' academic performance is affected by the poor study environment at home.					
30.	Girls' academic performance is influenced by poor diet at home.					

31.	Girls' academic performance is affected by lack of proper accommodation at home.					
32.	Girls' academic performance is influenced by long distances from home to school.					
33.	Girls' academic performance is influenced by lack of support from parents/guardians.					
34.	Girls' academic performance is affected by lack of self motivation to study on their own.					
35.	Girls' academic performance is affected by failure to complete assignments in time.					
36.	Girls' academic performance is affected by fear to consult teachers for clarification or assistance in difficult topics.					
37.	Girls' academic performance is affected by feeling worthless when teachers don't appreciate their work.					
38.	Girls' academic performance is influenced by lack of guidance and counseling from parents and teachers.					
39.	Girls' academic performance is influenced by failure to work in groups in school.					
40.	Girls' academic performance is influenced by lack of persistence to complete assignments when faced with challenges.					

41. In your opinion what measures can be taken to improve the academic performance of girls in mixed day secondary schools in Njoro Sub County?

(a).....

.....

b).....

.....

(c).....

.....

(d).....

.....

## APPENDIX C: QUESTIONNAIRE FOR FORM FOUR GIRLS

Dear Respondent,

The purpose of this questionnaire is to collect data on a research entitled 'Factors influencing academic performance of girls in mixed day secondary schools in Njoro Sub-County, Nakuru County. Your school has been sampled to participate in the study. Your responses will be treated with great confidentiality. The information will only be used for the purpose of this study. Please respond to the questions as they apply to you and do not indicate your name, the name of your school or any other form of identification.

**Please read each question and indicate your choice by a tick in the box. Please answer all the questions.**

### SECTION A: BACKGROUND INFORMATION

Please indicate your response by ticking in the box or filling in the spaces provided.

1. Please indicate your age ( ) years

2. Category of your class (a) Girls only ( ) (b) Boys and girls ( )

3. What is the general performance of your school in K.C.S.E exams?

Unsatisfactory ( )

Satisfactory ( )

Good ( )

Very good ( )

Excellent ( )

4. How would you rate your performance in your school continuous assessment tests?

Very good ( )

Good ( )

Satisfactory ( )

Not satisfactory ( )

Not sure ( )



**SECTION B: FACTORS INFLUENCING ACADEMIC PERFORMANCE OF  
GIRLS IN MIXED DAY SECONDARY SCHOOLS**

The following are factors assumed to be influencing academic performance of girls in mixed day secondary schools. Please tick to indicate the extent to which you agree with the following statements.

**KEY:** 5-Strongly Agree, 4-Agree, 3-Undecided, 2-Disagree, 1-Strongly Disagree

SN	STATEMENT	5	4	3	2	1
		SA	A	U	D	SD
5.	My academic performance is influenced by less classroom participation.					
6.	My academic performance is influenced by being intimidated by boys in class.					
7.	My academic performance is influenced by gender streaming (discouraged from doing math & sciences).					
8.	My academic performance is affected by the sitting position in class.					
9.	My academic performance is affected by traditional gender stereotyped roles and attitudes by teachers.					
10.	My academic performance is affected by discrimination in class by teachers when answering questions.					
11.	My academic performance is influenced by lack of female teachers to serve as role models.					
12.	My academic performance is affected by sexual harassment by peers in school.					
13.	My academic performance is affected by sexual harassment by male teachers.					
14.	My academic performance is affected by sexual harassment by adult males in the community.					
15.	My academic performance is influenced by lack of modern toilets, water and sanitary pads.					
16.	Girls' academic performance is affected by early marriages.					

17.	The preference of the boy child influences the self confidence of girls and this affects the girls' academic performance.					
18.	Girls' academic performance is influenced by the belief that men should be more educated than women.					
19.	My involvement in domestic chores like cooking and looking after siblings affects my academic performance.					
20.	I miss school very often to take care of their siblings and sick relatives.					
21.	Girls' academic performance is affected by early pregnancies.					
22.	Negative attitude of the local community towards educating girls affects the girls' academic performance.					
23.	Cultural practices like female genital mutilation affects girls' academic performance.					
24.	My academic performance is influenced by low income of my parents/guardians.					
25.	My academic performance is influenced by lack of basic needs.					
26.	My academic performance is influenced by poor study environment at home.					
27.	My academic performance is influenced by lack of proper diet at home.					
28.	My academic performance is influenced by poor accommodation at home.					
29.	My academic performance is influenced by long distance from home to school.					
30.	My academic performance is influenced by lack of self motivation to study on my own.					
31.	My academic performance is affected by lack of support from my parents/guardians.					
32.	My academic performance is affected by failure to complete assignments in time.					

33.	My academic performance is influenced by fear to consult teachers for assistance in difficult topics.					
34.	My academic performance is affected by feeling worthless when teachers don't appreciate my work.					
35.	Girls academic performance is influenced by lack of guidance and counseling from parents and teachers					
36.	Girls' academic performance is influenced by failure to work in groups in school.					
37.	Girl's academic performance is influenced by lack of persistence to complete assignments when faced with challenges.					

38. In your own opinion what are the measures that can be taken to improve academic performance of girls in your school?

- (a).....  
.....
- (b).....  
.....
- (c).....  
.....
- (d).....  
.....

## APPENDIX D: QUESTIONNAIRE FOR PARENTS

Dear Respondent,

This questionnaire is designed to gather information on a study being carried out in Njoro Sub-County entitled 'Factors influencing academic performance of girls in mixed day secondary schools in Njoro Sub-County, Nakuru County. You have been selected to participate in the study. You are kindly requested to provide information to help in the research and to be honest in giving the responses. The responses to this questionnaire will be treated with confidentiality and will only be used for purposes of the study. Please respond to the questions as they apply to you and do not indicate your name or any other form of identification.

**Please read each question and indicate your choice by a tick in the box. Please answer all the questions.**

### SECTION A: BACKGROUND INFORMATION

1. What is your gender? Male (  )                  Female (  )
2. Marital status.                  Married (  )                  Single (  )
3. What is your age in years? (  )
4. Indicate the number of years you went to school (  )
5. Total number of children in the family. 1-3(  )                  4-6(  )                  7-9(  )  
Above 9(  )
6. Gender of your children. Males (  ) females (  ) both males and females (  )
7. How many years have you been a parent in this school? (  )                                  (  )

**SECTION B: ISSUES RELATED TO ACADEMIC PERFORMANCE OF GIRLS IN MIXED DAY SECONDARY SCHOOLS IN THE SUB-COUNTY**

The following are factors assumed to be influencing academic performance of girls in mixed day secondary schools. Please tick to indicate the extent to which you agree with the following statements.

**KEY:** 5-Strongly Agree, 4-Agree, 3-Undecided, 2-Disagree, 1-Strongly Disagree

SN	STATEMENT	5	4	3	2	1
		SA	A	U	D	SD
8.	Girls' academic performance is influenced by less classroom participation.					
9.	Girls' academic performance is influenced by intimidation by boys in class.					
10.	Girls academic performance is influenced by gender streaming (girls are directed away from math & sciences).					
11.	Girls' academic performance is affected by the sitting arrangement in class.					
12.	Girls' academic performance is influenced by traditional gender stereotyped roles and attitudes by teachers.					
13.	Girls' academic performance is affected by discrimination in class by teachers.					
14.	Girls' academic performance is affected by lack of female teachers to serve as role models.					
15.	Girls' academic performance is affected by sexual harassment by peers in school.					
16.	Girls' academic performance is affected by sexual harassment by male teachers.					
17.	Girls' academic performance is affected by sexual harassment by male adults in the community.					
18.	Girls' academic performance is influence by lack of modern toilets, water and sanitary pads.					

19.	Girls' academic performance is influenced by early marriages.					
20.	The preference of the boy child influences the self confidence of girls and this affects the girls' academic performance.					
21.	Girls' academic performance is influenced by the belief that men should be more educated than women.					
22.	Girls' academic performance is affected by too many domestic chores after school.					
23.	Girls' academic performance is affected by absenteeism from school to take care of siblings and sick relatives.					
24.	Girls' academic performance is affected by early pregnancies.					
25.	Girls' academic performance is affected by the negative attitude of the local community towards education of girls.					
26.	Cultural practices like female genital mutilation affects girls' academic performance.					
27.	Girls' academic performance is affected by low income of parents/guardians.					
28.	Girls' academic performance is influenced by lack of basic needs.					
29.	Girls' academic performance is affected by the poor study environment at home.					
30.	Girls' academic performance is influenced by poor diet at home.					
31.	Girls' academic performance is affected by lack of proper accommodation at home.					
32.	Girls' academic performance is influenced by long distances from home to school.					
33.	Girls' academic performance is influenced by lack of support from parents/guardians.					
34.	Girls' academic performance is affected by lack of self motivation to study on their own.					

35.	Girls' academic performance is affected by failure to complete assignments in time.					
36.	Girls' academic performance is affected by fear to consult teachers for clarification or assistance in difficult topics.					
37.	Girls' academic performance is affected by feeling worthless when teachers don't appreciate their work.					
38.	Girls' academic performance is influenced by lack of guidance and counseling from parents and teachers.					
39.	Girls' academic performance is influenced by failure to work in groups in school.					
40.	Girls' academic performance is influenced by lack of persistence to complete assignments when faced with challenges.					

41. In your opinion what could be done to improve the academic performance of girls in mixed day secondary schools in Njoro Sub County?

.....

.....

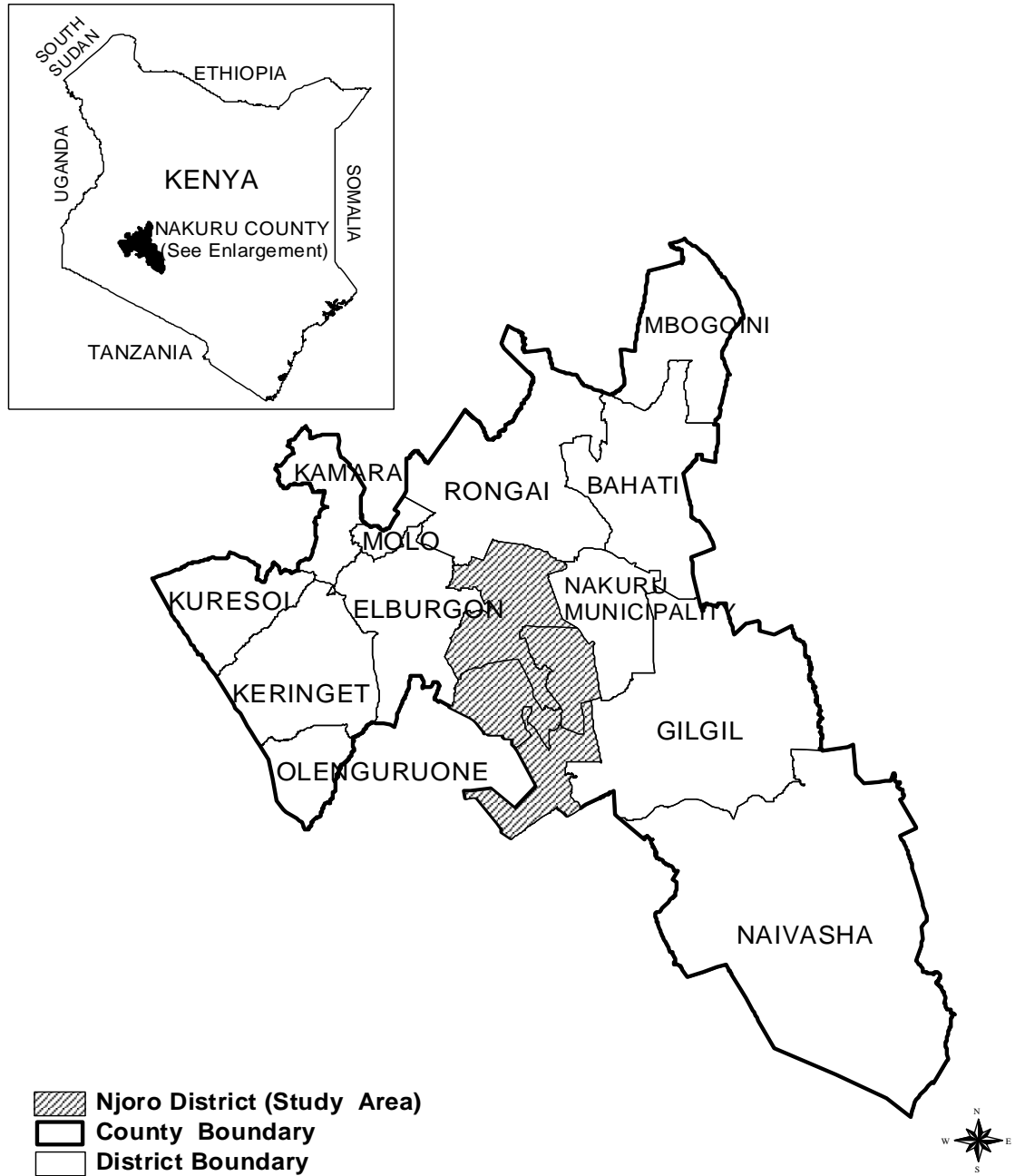
**APPENDIX E: LIST OF MIXED DAY SECONDARY SCHOOLS IN NJORO  
SUB-COUNTY**

<b>No.</b>	<b>School</b>	<b>No.</b>	<b>School</b>
1.	Njoro Day Secondary	16.	Ogiek Nesuit Secondary
2.	Njoro Central Secondary	17.	Mwigito Excel Secondary
3.	Kiliomo Secondary	18.	Naishi Secondary
4.	Cheptoroi Secondary	19.	Lare Vision Secondary
5.	Kianjoya Secondary	20.	Bagaria Secondary
6.	Mau Narok Secondary	21.	Keriko Secondary
7.	Analat Secondary	22.	Mahinga Secondary
8.	Sururu Secondary	23.	Mugumo Secondary
9.	Ngwataniro Secondary	24.	Wendani Secondary
10.	Gichobo Secondary	25.	Taita Mauche Secondary
11.	Teret Secondary	26.	Ewaat Secondary
12.	Larmudiac Mixed Secondary	27.	Kapkembu Secondary
13.	Kenyatta Secondary	28.	Subuku Secondary
14.	Tarakwet Secondary	29.	Njoro Township Secondary
15.	Sinedet Secondary	30.	Ndege Secondary



**APPENDIX F: MAP OF KENYA SHOWING NAKURU COUNTY AND MAP OF**

**NAKURU COUNTY SHOWING NJORO-SUB COUNTY**



Source: Geography Department, Egerton University

**APPENDIX G: NJORO SUB-COUNTY SECONDARY SCHOOLS  
ENROLMENT AND STAFFING ESTABLISHMENT 2012-2013**

<b>Year</b>	<b>Institution</b>	<b>No.of institutions</b>	<b>Boys</b>	<b>Girls</b>	<b>Total</b>	<b>Male teachers</b>	<b>Female teachers</b>	<b>Total</b>
<b>2012</b>	Public	30	4249	2988	7237			
	Private	6	462	502	964			
	<b>Total</b>	<b>36</b>	<b>4711</b>	<b>3490</b>	<b>8201</b>			
<b>2013</b>	Public	35	4597	3332	7929	181	91	<b>272</b>
	Private	7	310	443	753			
	<b>Total</b>	<b>42</b>	<b>4907</b>	<b>3775</b>	<b>8682</b>			

**Source: Njoro Sub-County Education Office**

**APPENDIX H: SUB-COUNTY OVERALL K.C.S.E PERFORMANCE 2009-  
2014**

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<b>YEAR</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
<b>MEAN SCORE</b>	4.62	5.42	5.20	5.40	5.41	5.51

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**Source: Njoro Sub-County Education Office**

**APPENDIX I: RESEARCH PERMIT FROM NATIONAL COUNCIL OF  
SCIENCE TECHNOLOGY AND INNOVATION**


**THIS IS TO CERTIFY THAT:**



**MS. JOSEPHINE NTHENYA MUANDU**  
**of EGERTON UNIVERSITY, 0-20107**  
**NJORO, has been permitted to conduct**  
**research in Nakuru County**

**on the topic: FACTORS INFLUENCING**  
**ACADEMIC PERFORMANCE OF GIRLS IN**  
**MIXED DAY SECONDARY SCHOOLS IN**  
**NJORO DISTRICT NAKURU COUNTY,**  
**KENYA**

**for the period ending:**  
**30th April, 2015**

**Permit No. : NACOSTI/P/14/9665/4122**  
**Date Of Issue : 2nd December, 2014**  
**Fee Received :Ksh 1,000**



**Applicant's Signature**  **Secretary** 

**National Commission for Science, Technology & Innovation**



**NATIONAL COMMISSION FOR SCIENCE,  
TECHNOLOGY AND INNOVATION**

Telephone: +254-20-2213471,  
2241349, 310571, 2219420  
Fax: +254-20-318245, 318249  
Email: secretary@nacosti.go.ke  
Website: www.nacosti.go.ke  
When replying please quote

9<sup>th</sup> Floor, Utalii House  
Uhuru Highway  
P.O. Box 30623-00100  
NAIROBI-KENYA

Ref: No.

Date:

**2<sup>nd</sup> December, 2014**

**NACOSTI/P/14/9665/4122**

Josephine Nthenya Maundu  
Egerton University  
P.O. Box 536-20115  
**EGERTON.**

**RE: RESEARCH AUTHORIZATION**

Following your application for authority to carry out research on *“Factors influencing academic performance of girls in Mixed Day Secondary Schools in Njoro District Nakuru County, Kenya,”* I am pleased to inform you that you have been authorized to undertake research in **Nakuru County** for a period ending **30<sup>th</sup> April, 2015.**

You are advised to report to **the County Commissioner and the County Director of Education, Nakuru County** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

  
**DR. S. K. LANGAT, OGW  
FOR: SECRETARY/CEO**

Copy to:

The County Commissioner  
Nakuru County.

The County Director of Education  
Nakuru County.



**APPENDIX J: RESEARCH AUTHORIZATION FROM COUNTY DIRECTOR  
OF EDUCATION, NAKURU COUNTY**

**MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY  
State Department of Education**

Telegrams: "EDUCATION",  
Telephone: 051-2216917  
Fax: 051-2217308  
Email: cdenakurucounty@yahoo.com  
When replying please quote



COUNTY DIRECTOR OF EDUCATION  
NAKURU COUNTY  
P. O. BOX 259,  
NAKURU.

Ref. No. CDE/NKU/GEN/4/1/21 VOL.  
II/102

10 February, 2015

Sub-County Education Officer  
**NJORO**

**RE: RESEARCH AUTHORIZATION – JOSEPHINE NTHENYA MAUNDU**

Authority is hereby given to the above named to carry out research on "***Factors influencing academic performance of girls in Mixed Day Secondary Schools in Njoro District Nakuru County, Kenya***" for a period ending 30<sup>th</sup> April, 2015.

Kindly accord her the necessary assistance.

A handwritten signature in blue ink, appearing to read 'Saka W. Maurice'.

**For COUNTY DIRECTOR OF EDUCATION  
NAKURU COUNTY**

**SAKA W. MAURICE  
FOR: COUNTY DIRECTOR OF EDUCATION  
NAKURU COUNTY**

Copy to:

Egerton University  
P. O. Box 536-20115  
**EGERTON**

**APPENDIX K: RESEARCH AUTHORIZATION FROM DEPUTY COUNTY  
COMMISSIONER NJORO SUB COUNTY**

**OFFICE OF THE PRESIDENT  
MINISTRY OF INTERIOR AND CO-ORDINATION  
OF NATIONAL GOVERNMENT**

Telegrams: "DISTRICTER" Njoro  
Telephone: Njoro  
When replying please Quote



DEPUTY COUNTY COMMISSIONER  
NJORO SUB-COUNTY  
P.O BOX 500  
**NJORO**

Ref: *ED.12/10A.VOL.I/124*

18<sup>th</sup> February, 2015

All Assistant County Commissioner  
Njoro Sub-County

**RE: RESEARCH AUTHORIZATION**  
**JOSEPHINE NTHENYA MAUNDU**

This office is in receipt of a letter Ref. CC.SR.EDU 12/1/2 VOL.I/131 dated 10<sup>th</sup> February, 2015 from the County Commissioner Nakuru.

This is therefore to inform you that the above named lady has been authorized to undertake research on "**Factors influencing academic performance of girls in Mixed Day Secondary Schools**" in Njoro Sub-County. She is therefore authorized to undertake research for a period ending 30<sup>th</sup> April, 2015.

Please accord her all the necessary assistance to facilitate the success of her research.

**P. G. KINYANJUI**  
**FOR: DEPUTY COUNTY COMMISSIONER**  
**NJORO SUB-COUNTY**

**C.C.**

- ✓ County Commissioner  
Nakuru
- ✓ National Commission for Science  
Technology and Innovation
- ✓ Josephine Nthenya Maundu