

**SCHOOL BASED FACTORS INFLUENCING GIRLS PERFORMANCE
AT KENYA CERTIFICATE OF PRIMARY EDUCATION IN PUBLIC
PRIMARY SCHOOLS IN ISIOLO SUB- COUNTY, KENYA.**

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DECLARATION

This research project is my original work and has not been presented for a degree in any other university

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DEDICATION

I dedicate this project to my husband Mr. Ismail Boru and our beloved children Tariq Aziz, Fahmi, Fardowsa, Hanif, Ramla, Sadia, my lovely parents, Mr Musa Hassan and Mrs. Halima Gafow, my sisters, brothers and friends.

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LIST OF ABBREVIATIONS AND ACRONYMS

ASAL	Arid and Semi-Arid Lands
BEFA	Basic Education for All
CPSE	Certificate of Primary School Education
DFID	Department for International Development
EFA	Education for All
IEA	International Evaluation of Education
KCPE	Kenya Certificate of Primary Education
KNEC	Kenya National Examination Council
MDGs	Millennium Developments Goals
MOE	Ministry of Education
NACOSTI	National Commission of Science, Technology and Innovation
NAEP	National Assessment of Education program
NGO	Non-Governmental Organization
SPSS	Statistical Package for Social Sciences
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nation International Children Education Fund
UPE	Universal Primary Education

ABSTRACT

The purpose of this study was to establish school based factors influencing girls' performance at Kenya certificate of primary education in public schools in Isiolo Sub-county. The study was set to establish the influence of school physical resources on girls' performance, influence of teachers training and qualification on girls' performance, influence of facilitation of sanitary towels girls' performance as well as assessing the influence of teachers' attitude on girls' performance. The study was influenced by the fact that girls' KCPE performance in Isiolo Sub-county is low compared to other sub-counties. There were also limited researches done in Isiolo Sub-county on school based factors influencing girls' performance at KCPE. The study employed descriptive research design where the target population consisted of 33 head teachers of the public primary schools in Isiolo Sub-county, 484 primary school teachers, 704 class eight pupils and Sub-County Director of Education Isiolo Sub-county. From the study it was established that; girls' performance is influenced by the school physical facilities as indicated by 52.7% of the respondents, teachers training and qualification as indicated by 76.6%, facilitation of sanitary towels as indicated by 54.5% as well as teachers' attitude towards girls as indicated by 38.2% of the respondents. It was concluded that; majority of public primary schools in Isiolo sub-county had enough school facilities though some schools had few classes and had to congest pupils in one class rooms, majority of schools in the study area had no library facilities and the ones which had a library they were poorly equipped, well trained teachers are able to develop interest and ability for teaching girls who are sometimes slow in understanding some subjects especially mathematics and sciences as compared to boys, public primary schools in Isiolo sub-county outsourced for facilitation of sanitary towels from the NGOs, CBOs and ministry of education, some teachers preferred teaching boys as compared to girls which demotivated them. Majority of girls in the study area who give birth or get married do not go back to school. The study recommends that the government should provide funds to build and equip libraries which are resource centers for both pupils and teachers, establish more public primary schools to reduce the distance between the pupils and the school so that girls walk to school within the shortest time possible, the school supervision by the head teacher and the directorate of Quality Assurance and Standards should be enhanced for monitoring to give proper guidance to the teachers on the need to implement child rights education in their schools and also take strict action upon teachers who discriminate girls as well as provide quality sanitary towels to adolescent girls to curb absenteeism during menstruation which affect girls performance. Girls in school should be helped by female teachers to develop positive attitude towards education. The county government of Isiolo should take up all measures to curb forced marriages, advocate for girl-child education rights and encourage the school administration to readmit girls after birth/marriage and also offer them a conducive environment for learning. The study suggested a further research to be carried out on school based factors influencing performance of girls in schools in Arid and Semi-Arid areas in Kenya.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Education has a profound effect on girls' and women's ability in creating awareness about other rights and achieve status in society such as social, economic and political representations, hence creating satisfaction. In addition, basic Education is recognized globally as a fundamental right which should be provided to all without discrimination whatsoever. Female Education worldwide especially at primary school level provides benefits to the family and the society at large. Research evidence shows that education of women enables them to better manage their households, to apply improved nutritional practices, to maintain proper hygiene and to effectively to utilize a wide range of available services including family planning among others (UNESCO, 2009).

United Nations, (UN) also commits in achieving Universal Primary Education (UPE) by ensuring by the year 2015 children all over the world, both boys and girls will be able to acquire and complete a full course of primary education. Moreover, heads of state who met at the Millenium Summit noted that since education was so important for improving health and increasing incomes, hence girls' education goal had a domino effect on all of the eight Millennium Development Goals. The effect of girl-child education is well explained in a quote by Meda-Wagtole, school girl, Ethiopia, "To be educated means...I will not only be able to

help myself, my family, my country, and my people. The benefits will be many.”
(By the Secretary of State for International Development, DFID 2005) Greater investment in girls’ education is vital for increasing female participation and productivity in the labor market especially in nonagricultural wage employment. Greater productivity means higher economic growth and more effective reduction of poverty. Therefore, promoting equality in educational opportunities involves entering the education system at the primary level, progressing to higher levels and making the transition to the labour market.

The overall educational sectors goal is to achieve the Education for All (EFA) and the Millennium Development Goals (MDGs) by 2015, in tandem with national and international Conventions and Commitments as well as the Integration of Science Technology and Innovation (ST&I) in all the productive sectors and processes (MOE 2008). Poor performance of girls’ at KCPE creates gender imbalance in primary and higher level hence making achievement of gender equality in education difficult to achieve.

According to National Assessment of Education program (NAEP; 1990) US girls performance has stagnated or fallen in most subjects since 1970 with targets and most thoroughly established accruing in basic literacy. The results from the International Evaluation of Education Achievement, (IEA 1998) which tested the performance of girls from numerous countries in both 1970 and 1990 showed that

their academic performance was low (Stedman 1991). Osakwe (2006) observed that Nigerian girls, for various reasons bordering on religious, cultural, socio-economic and school related factors, are not given a fair chance in the educational sector.

In Tanzania, a pilot analysis of the Certificate of Primary School Education (CPSE) from 1983 to 2005, The Tanzania Bureau of statistics, 2006 revealed a significant gender difference in performance in science. The average percentage of girl failures was in Maths and Sciences the authors gauge the primary school girl child performance as "being continuously lower than that of boys in all subjects including blanguages." (Tanzania Bureau of Statistics, 2006). The poor academic performance of girls in Kenya at KCPE has been a concern to the government over past six year. In Kenya examinations administered by the Kenya National Examination Council (KNEC), which was relevant, free from bias, valid, reliable and maintained globally accepted standards (KNEC 2007). Hussein (2009), noted that boys performed better than girls in public schools. Poor performance of girl's at KCPE is a serious problem in Arid and Semi-Arid Areas in Kenya, Isiolo being one of them.

According to UNICEF (2006) report, school environmental factors such as the absence or poor toilet facilities hence lack of privacy and congested classrooms contributed to truancy and ultimately led to some girls dropping their grades. The-

se school environment factors are affecting performance in Kenya to the extent of overcrowding in classrooms, great distances to school and gender disparity by subject. Tomkins and Izard (1965) assert that influence of female teachers is an important motivating factor to girl's performance. Kwesiga (2002), emphasized that as role models, female teachers motivate girls to enroll and to increase their attendance and performance. However, both male and female teachers have low expectation of girls than boys just as it is with the wide society which contributes to girl's low performance.

Access to underpants and sanitary pads during menstruation is a major contributor to girl's academic performance in examinations. Kenyan secondary and primary schools have at nearly 1.5 million girls menstruating , at least three fifths or 872,000 of whom miss 4 to 5 days of school per month during school sessions due to lack of finance to buy sanitary towels and underwear combined with insufficient sanitary amenities at their schools (GCN and MOE, 2006). These 3.5 million girls lost learning days monthly hinder their ability to participate in the classroom, and leads to low self-esteem hence affecting performance in examination. Pillow (2004) established that many teenage mothers return to school because of their offspring — they are determined to finish school for the sake of their children. Nonetheless, the girls' difficulty to cope with schooling is attributed to their babies, and to the fact that stakeholders in education and parents often give up on them and fail to take their plans seriously once the girls had babies (Schultz,

2001). The achievement of a teenage mother's re-admission is strongly pegged on a head teacher parent's support and ability to do so.

In Isiolo County, as per the Ministry of Education statistics in the county Directors office shows poor performance of girls at KCPE. (Isiolo County Director of Education Office statistics 2015). Therefore, this may trigger the communities living in Isiolo sub-county to have a second thought on not educating girls thus get married and increase the population of the community as per their culture and this may lead to girls dropping out of school, early marriage and child labor among others. Isiolo sub county is one of the districts in Isiolo County where poor performance of girls' at KCPE has been realized (DEO's statistics 2015). Despite the government's efforts to improve girls' performance, girls persistently perform poorly in K.C.P.E at national and county level compared to the male counterparts. In consideration of this issues the study sort to investigate how the school based factors influence girls academic performance at KCPE in public primary schools in Isiolo-Sub County.

1.2 Statement of the problem

Despite the Kenyan government and other stakeholders commitment to providing basic education to all children, the girl-child's performance at KCPE is low and is a persistent problem in certain sub-counties and counties, the most affected being the Arid and Semi-Arid areas (ASAL) in the country. This has serious implica-

tions to the achievement of Basic Education for All (BEFA) by 2015. The education of the girl is of paramount importance to any society and country at large, as the saying goes educating a woman is educating the whole community. The government of Kenya has taken several measures to reduce gender disparities in education like expanding girls' boarding facilities, appointing qualified female educational managers and teachers. Despite all these efforts, girls persistently perform poorly in K.C.P.E at national and County level compared to the male counterparts. In Isiolo County, Isiolo Sub-County, which is situated in the ASAL area, is among the most affected in relations to low girl's performance at KCPE. In this sub-county, there is low performance of girls and the boys perform better than them, despite the government's effort to ensure gender equity in education and putting all machineries in place to ensure girls compete with boys and perform well.

Although studies done on primary school revealed that such factors like inadequate and relevant text books, teacher qualification and student background affect performance in examination, few research have been done on the influence of school based factors affecting girls performance. This study therefore attempted to investigate the influence of selected school based factors that influence performance of girls at KCPE at public primary schools in Isiolo Sub County.

Table 1.1: KCPE performance disparity in Isiolo Sub County

Zones	2011		2012		2013		2014		2015	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
East	242.	221.	234.	214.	223.	218.	236.	220.	225.	226.
Zone	30	31	40	13	63	78	90	76	01	81
West	237.	217.	223.	210.	215.	198.	208.	197.	205.	199.
Zone	87	30	27	14	18	65	50	75	04	11
Ol-	240.	228.	254.	227.	251.	224.	254.	231.	240.	220.
donyiro	67	9	33	21	26	41	38	92	85	70
Zone										
Total	240.28	222.50	237.33	217.16	230.02	213.94	233.26	216.81		
		223.63	215.58							

Source: Sub County Director of Education, Isiolo Sub County (2015)

Table 1.1 Shows gender disparity in KCPE performance in public primary schools in Isiolo Sub-County whereby boys perform better than girls. Such inconsistency calls for the need to examine the school-based factors that influence girls' academic performance at public primary school in Kenya with special reference to Isiolo Sub-County.

1.3 Purpose of the study

The study sort to explore the school based factors that influence girls' academic performance at KCPE at public primary schools in Isiolo sub-county.

1.4 Objectives of the study

The study was guided by the following objectives:

- i. To establish the school physical facilities that influence girls' performance at KCPE in Isiolo Sub-county.
- ii. To investigate the influence of teachers training and experience on girls' performance at KCPE in Isiolo Sub-county.
- iii. To assess the influence of head teacher facilitation of sanitary towels on girls' performance at KCPE in Isiolo Sub-county.
- iv. To assess the influence of teacher attitudes on girls' performance at KCPE in Isiolo Sub-county.
- v. To assess the influence of head teachers' readmission and support after birth or marriage on girls' performance at KCPE in Isiolo Sub-county.

1.5 Research questions

- i. Do school physical facilities influence the girls' performance at KCPE in Isiolo Sub-county?
- ii. To what extent does teachers training and experience influence the performance of girls' at KCPE in Isiolo Sub-county?

- iii. To what extent does head teachers' facilitation of sanitary towels influence girls' performance at KCPE in Isiolo Sub-county?
- iv. To what extent do teacher attitudes influence the girls' performance at KCPE in Isiolo Sub-county?
- v. To what extent does head teachers' readmission and support after birth or marriage influence girls' performance' at KCPE in Isiolo Sub-county?

1.6 Significance of the study

The study is of great importance to Isiolo Sub-county, Isiolo County, ASAL areas and the whole country in treating education of girls' with the seriousness it deserves towards improvement of the performance of girls' in public primary schools by eradicating school based factors that influence girls' performance at KCPE. The findings of the study may help the government, policy makers, SMC's, head teachers, teachers, parents, students and NGO's such as UNICEF. This may help the government to act on the school based challenges faced by girls by putting corrective measures in place to ensure it achieves gender equality and quality in education by 2015 and also allocate more funds for improvement of girls' performance in the ASAL areas which face difficult situations. The findings is hoped to be useful to administrators and teachers in public primary schools which offer girls' education to know and equip themselves with way forward and steps to undertake in improving girls' education , plan for remedial work and guide learner on ways to improve in KCPE.. The parents learn measures to under-

take for their girls' to compete with the boys and perform better hence adopt the phrase what a man can do a woman can do better. The planner's and NGO's who may offer to sponsor the girl-child education may use the findings to improve performance of girls' so that they can compete effectively to raise the economy of the country. Thus all the stakeholders may acquire knowledge on how girls can perform better and their importance in the society and nation at large. The study findings are expected not only increase awareness on the school based factors influencing girls' performance at KCPE but also serve as a useful source of reference for further research in the field of study.

1.7 Limitation of the study

Some principals were not willing to give honest information for fear that they were exposing negative qualities of their schools. The researcher however assured the respondent that findings were used for academic purpose but not for policy decisions. Also, some of the teachers, due to fear of victimization by their respective heads of institutions and other stakeholders, were not willing to provide adequate information. To overcome this, the researcher gave assurance of confidentiality of their identities. Some respondents failed to bring back the questionnaires for the research in good times. The researcher briefed the respondents before the exercise begin and assured them of confidentiality.

1.8 Delimitations of the study

The study only focused on public primary schools in Isiolo Sub-county. The researcher only focused on school based factors that influence girl's performance in KCPE in primary schools in Isiolo Sub-county. This is because of the dismal performance of girls in KCPE results when compared to boys and other regions in the country. The study was limited to only the girls who are studying in public primary schools in Isiolo Sub-county and was also limited to class 8 pupils, head teachers and teachers of Isiolo Sub-county. The study did not include the private schools since the school environmental factors are different from those in public schools.

1.9 Assumptions of the study

The study was based on the following assumptions:

- i. Girls' performance at KCPE in Isiolo Sub-county is low.
- ii. That performance of girls' at KCPE in public primary schools in Isiolo Sub-county has been neglected by stakeholders.
- iii. That the public primary schools in Isiolo Sub-county have all records of girls' performance for the past years in place.
- iv. In Isiolo Sub-county, the girl-child is disadvantaged at school compared to the boy-child who has more privileges thus performing better and
- v. The respondents will cooperate and give honest responses.

1.10 Definitions of significant terms

Discrimination refers unjust or prejudicial treatment of different categories of people or things, especially on the ground of age, race or sex.

Education refers to socialization or indoctrination that is passive and force acquisition of knowledge, skills, attitudes, values and norms without questioning.

Gender refers to attributes, roles, activities, responsibilities and privileges accorded to men and women by the society.

Low academic performance refers to failing to meet the average academic performance in tests or examination scores.

School environment refers to everything that is around the school.

School Based Factors refers to identifiable school based variables that may influence performance of a girl, by either performing poorly or well. Some schools have proper sanitation facilities and poor learning materials which affect girl's performance.

Attitude refers to a feeling or opinion about something or someone.

Sanitary towels refer to absorbent item worn by menstruating girls to maintain cleanliness and comfort. Lack of sanitary towels contributes to girls missing school which affect their performance.

Readmission to school refers to the act of the girl child getting back to school after drop out as a result of various factors. Head teachers play the role of admitting pupils in their school.

1.11 Organization of the study

The project was organized in five chapters, ascending from chapter one to five. Chapter one focused on the background to the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, limitations of the study, delimitations of the study, assumptions of the study, definitions of main terms and organization of the study.

Chapter two will look at the literature review. This includes girl-child education globally and locally, and the school based factors that influence performance of girls' at KCPE. The chapter also consists of theoretical framework and conceptual framework of the study.

Chapter three comprised of research methodology which will entail the research design, target population, sampling techniques and the sample size, research instruments, their validity and reliability, data collection procedures, and the data analysis techniques.

Chapter four covered data analysis techniques and interpretation while chapter five focused on summary of the study, summary of the findings, conclusions and recommendations, and also provides suggested areas of studies.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter provides an overview of existing literature from past studies on the school-based factors influencing performance of girls at Kenya certificate of primary education. It covers general trends of gender disparity in education, school physical facilities, teachers' training and qualification, head teacher's facilitation of sanitary towel, Teacher attitudes, head teachers' readmission and support of girl-child after birth or marriage, summary of literature review theoretical and conceptual framework.

2.2 General trends of gender disparity in education

Throughout the world females come across problems as clients and providers of education. The female perform low in formal education in relation to their male counterparts. They also perform poorly especially in mathematics, science, technology related subjects and are under-represented in senior posts in education service, whose decision making bodies tend to favor the man.. Until recently these problems had been neglected for reasons which include: Persistent confusion between sex and gender, the prevailing power of traditional assumptions, the invisibility of important evidence and pervasiveness of gender stereotyping. Education systems can overcome many of women's difficulties. Nowhere in the world do women participate equally with men. In the third world countries male enrolment

out numbers female by a factor of two to three times (Eshiwani 1993) and later on the gap between the enrolments of each sex grows exponentially for each year of education. Differences due to gender should be stable and appear in all cultures if they are genuinely biologically determined; however gender differences vary widely from one culture to another. The most important single factor influencing women access to schooling is, whether a conducive environment for schooling is made available and accessible. Since that is a matter of public policy, it can be changed if the will is there. Women have received little attention in the history of educational thought. They have been denied the opportunity to understand and evaluate the range of ideals that educational thinkers of the past have held for them.

2.3 School physical facilities and girls' academic performance

According to Kuthemba Mwale (1988) irrelevant curriculum, teachers' shortage, poor instructional method, congestion in classrooms, far distances to school, gender inequality by subject and lack of enough teaching and learning resources influence girls' performance. Teaching practices are perchance the most important implication for female persistence and academic attainment (Odaga and Heneveld 1995). This problem was embedded in societal beliefs which teachers bring into the classroom situation this may be connected to the cultural beliefs which tend to look at females as having less ability than males and leading to the discrimination of girls in the classroom and further discourage girls in their academic quest.

In handling the issue of school setting it has also become very common to explore the existence and conditions of school amenities such as wash rooms. This is especially in view of the negative effect that the absence of such services may have on girls' perseverance in schools (Herz 1995). He further noted that student's success is mainly dogged by the school quality, which in turn is determined by the performance of the teachers whose efficiency in working partly depends on the school management. School related factors which include, shortage of teachers', poor teaching methods, irrelevant curriculum and lack of enough instructional materials affecting performance in Kenya to the extent of congestion in classrooms, far distances to school and gender inequality by subject.

At schools, female and male teachers have less expectation of boys than girls just as it is with the wide society. Several studies have also indicated that parents are reluctant to send their girls to school if the school environment is not safe and secure for girls. Girls approach subjects like sciences and mathematics with negative attitude. They believed that such subjects are meant for the boys. They either avoid them altogether or do not take them seriously. Odaga (1995) argued that the problem is even more severe with girls where gender biases in subject choices together with cultural factors hinder girls' chances of advancement.

2.4 Teachers' training and qualification towards girls performance

According to Koech report (1999), he recommended that the admission criteria for teacher training colleges be reviewed to ensure, that only qualified candidates were admitted. Ngaroga (2008) stated that the pupils are congested with a poor teacher-pupil ratio. The girls shy off because the teacher cannot attend to them effectively. According to Moumouni (1998), a good training is very necessary to help a teacher develop his interest and ability for teaching girls. Eshiwani (1993) noted that most schools faced a lot of problems in terms of finance and qualified teachers as a result of which pupils performed poorly in national examination. Lewis (1984) asserted that morale of teachers; professional support and awareness of educational possibilities through ample pre- and in-service training are important determinants of curricular quality. Mills (1974) noted that sound training imparts not only a way of training but also a way of doing, so that a trained teacher confronted with conditions acts intelligently and fast.

Research carried out by Kokurirwa (1982), revealed that teachers in mixed schools pay more attention to boys. In the United Kingdom, teachers were found to devote 63% of their time attending to boys marginalizing or ignoring girls. Kokurirwa (1982) noted that girls are treated as a group while boys are given individual attention. Tomkins and Izard (1965) asserted that the influence of female teachers is an important motivating factor to girls. Kwesiga (2002) emphasized that as role models, female teachers motivate girls to enroll and to increase their

attendance and performance. Therefore teachers should be well trained to treat all pupils the same regardless of their gender be good role models and pay equal attention to all without discrimination.

2.5 Head teacher's facilitation of sanitary towel towards girls academic performance

According to Kotoh (2008), menstrual blood is considered filthy and detrimental, resulting in girls who are menstruating being controlled from taking part in some activities for fear that they may 'contaminate' others and the things they may handle. For instance, in most African societies, menstruating girls are not permitted to be in the kitchen to cook or to do the dishes, or to take part in games with other youthful people during their menstruation period. This may foster stigma as the limitations create the perception that menstruation is harmful and that menstrual blood is shameful.

In some rural areas during menstruation girls use old rags, cow dung, leaves or even dig a hole on the ground to sit on for the whole period as a means to manage their menstrual flow hence not able to move from one place to another. In an ethnographic study carried out in a primary school in Bungoma District, Lukalo (2010) affirmed that menstruation is not just a concealed matter but has the potency to become public, embarrassing and stigmatizing to the girl child. Parents and

teachers in all areas insisted that the girls used cloth or toilet roll because pads were unaffordable. Most believed traditional methods were adequate.

Sankok (2012) studied the influence of institutional factors on girl child's participation in education in public secondary schools in Kajiado North District and adopted a descriptive survey since the variables were not to be manipulated; the target population included all the ten public secondary schools in Kajiado North District and the sample size comprised ten principals, 10 class teachers and 248 form four students. The study established that girl child participation in education is hindered by quite a number of factors which needs to be addressed including provision of sanitary. The key recommendations established includes; the government of Kenya and other stakeholders should provide sanitary towels to menstruating girls in schools, school principals should adhere to government education policies, there should be teachers who are good role models to girls in schools, girls needs to be sensitized on career, and there should be no forced repetitions for girls in schools. This therefore calls for more head teachers intervention in provision of sanitary pads and underpants in public schools.

McMahon (2011) stated that vulnerable girls are unable to buy sanitary pads to use during menstruation hence causes absenteeism from school. The embarrassment associated with leaks due to use of poor sanitary products can discourage girls from attending school which affect their performance in national examina-

tions. With regard to the impacts of sanitary product access on school attendance, Scott et al. (2009) found that the provision of sanitary pads and menstrual hygiene education in Ghana contributed to reduced girls' absenteeism in school by more than half. Lukalo (2010) findings established that the provision of sanitary towels is a major determinant in achieving gender parity in education in Kenya hence a need to consider this as a major factor in education policy planning and development. There is also a need to address the menstrual issues that restrict adolescent girls' from achieving their full potential in relation to schooling and their unrestricted lives.

2.6 Teachers' attitude and girls' academic performance

Teacher attitudes have significant implications to the success and persistence of girls in schools. Studies from some countries in Sub-Saharan Africa showed that both female and male teachers insinuate that boys are academically better than girls (Anderson-Levett et al., 1994; Brock and Cammish, 1991; Long Fofanah, 1990; Davison and Kanyuka, 1992). In others there are conditions where boys are being given priority in the distribution of books and other learning resources.

Palme (1993) reports that in Mozambique there is less communication between learners and teachers and that the higher rate of failure for girls might be due to discrimination in treatment. Although the promotion of female teachers had been recommended as a strategy to create role models as well their safety, studies

showed no difference in low expectations of female students between female and male teachers Odaga and Haneveld (1995). However, studies from Uganda showed that the biggest gender-gaps in enrolment exist in poorer areas where the percentage of female teachers is low (World Bank, 1992).

According to Kwesiga (2002), male teachers may be impatient with girls and their attitudes have proved to be biased in favour of boys. Stone (1966), emphasized that lower achievement by girls may be lack of encouragement by teachers. Pala and Awori (1978) noted that only a small proportion of women hold positions in high and middle-level employment. The jobs which women hold (teachers, nurses and secretaries) are not as highly paid as those held by men in public and private sectors hence they tend to relax when carrying out their duties. According to Tanner (1961), boys' work appears to teachers to be better than that of girls and that girl's lag behind boys in achievement. In the United Kingdom, teachers were found to devote 63% of their time attending to boys marginalizing or ignoring girls.

2.7 Head teachers' readmission and support of girl-child after birth or marriage and girls academic performance

Teenage pregnancy is one of the main barriers to the educational achievement of girls in many developing countries in Sub-Saharan Africa (Gordon & Kadzamira, 1998). Research indicates that there are factors that influence whether or not

young mothers are able to continue schooling after the birth of the child. Most of the factors depend on the girls' ability to administer logistics and money associated with mothering and schooling concurrently (Kaufman, Wet & Stadler, 2001). While it is no longer common to deny teenage mothers from enduring with their education, those who go back to school after the birth of their babies face a number of challenges as learners and that makes it hard for them to continue with their schooling. Arlington Public School (2004) reports that youngster mothers face difficulties and the girls experience unwarranted pressure from parents, peers and teachers.

Pillow (2004) established that many teen mothers return to school because of their children - they are determined to accomplish schooling for the sake of their children. Nevertheless, the girls' difficulty in coping with schooling is attributable to their offspring, and also to the fact that teachers and parents always give up on them and fail to take their plans seriously once the girls had offspring (Schultz, 2001). Research by the US Department of Education (1992) indicated that parenting is the leading reasons girls give for poor performance. The success of a teenage mother's re-admission is strongly pegged on a head teacher support and ability to do so. This therefore imply that, there should be a deliberate practices by head teachers to provide a safe and secure learning environment for young mothers which should address issues such as: school violence, corporal punishment and bullying. There is also need for the government to come up with clear policies

on creating conducive school environments to encourage enrolment, retention and completion of girls' education after marriage or birth.

2.8 Summary of literature review

The literature review has shown that school based factors that influence performance of girls at Kenya certificate of primary education. Studies done by Kuthemba Mwale (1988) have argued that irrelevant curriculum, teachers' shortage, poor instructional method, overcrowding in classrooms, great distances to school, gender disparity by subject and lack of enough teaching and learning resources influence girls performance. Several studies also done by Kokurirwa (1982) and Eshiwani (1993) revealed that teachers in mixed schools pay more attention to boys and that most schools face a lot of problems in terms of finance and qualified teachers as a result of which pupils perform poorly in national examination. Studies by Sankok (2012) established that girl child participation in education is hindered by quite a number of factors which needs to be addressed including provision of sanitary pads. Studies by Kwesiga (2002) concluded that male teachers may be impatient with girls and their attitudes have proved to be biased in favour of boys. A report by Arlington Public School (2004) concluded that young mothers encounter difficulties and the girls experience unnecessary pressure from parents, peers and teachers and they also receive very little support from school administration. These factors affect girls' performance in different parts of the world but the extent to which they affect the girl's performance at

KCPE in Isiolo Sub-county is yet to be established. Isiolo Sub-County is among the most affected in relations to low girl's performance at KCPE and the boys perform better than girls hence the rationale for this study.

2.9 Theoretical framework

This study adopted Pearson's gender relations theory, this theory was first developed by Pearson (1995). This is where the society views all activities that are carried out to be based on societal roles and interactions of men and women. The society seems to have final authority on the precise nature of what women and men actually do, and their real contribution to production and reproduction which turns out to be biased against women (Pearson, 1995). According to Pearson, the society views all activities that are carried out to be based on social roles and interactions of men and women. The concept of gender roles and activities have a strong ideological content and policy often reflects normative or prescriptive versions of male and female roles rather than activities actually practiced by men and women. Pearson's gender relations theory will be suitable for this study because it emphasizes the various societal, cultural and financial norms and standards which must be considered for women to take the opportunities to perform in communal activities such as education. These cultural and financial norms emphasized in the theory are the factors that affect girls' academic attainment in school. Women are expected to be good wives and mothers, girls and women are seen as subordinates and education for them is less important. The benefits of education for girls can

be explained by the effect that education has on girls' achievement. Learned girls acquire and use new personal, social and economic behaviours that in turn affect communal change (Moulton, 1997). As such gender becomes a critical factor in deciding who goes to school and for how long (Pscharopoilos and Woodhall, 2005). Before parents make the decision, considerations are taken concerning family priorities and in most cases, girls are more underprivileged by factors operating within the home and school than boys.

2.10 Conceptual framework

The conceptual framework in Figure 2.1 summarizes the school-based factors that influence girls' performance in KCPE.

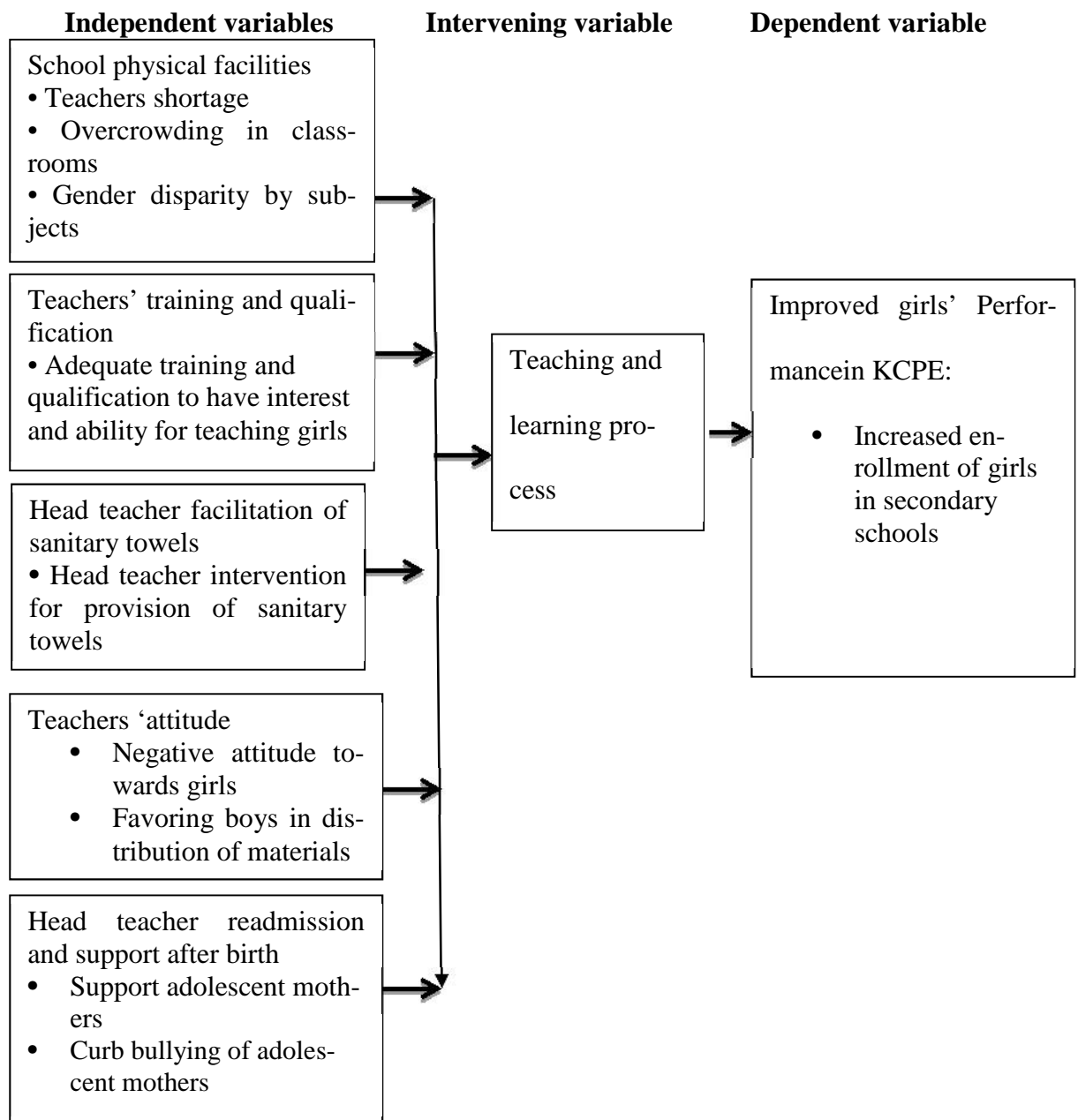


Figure 2.1: Conception frame work: School-based factors that influence girls' academic performance.

The conceptual framework diagram shows the relationship between school-based factors and performance of girls in KCPE. These factors are assumed to be directly related such that a change in the independent variables which are school physical facilities, teachers training and qualification, head teachers facilitation of sanitary towels, teachers' attitude and Head teacher readmission and support after birth or marriage causes a change in the dependent variable which is girls' performance in KCPE. The independent variables are factors found within the schools which are the input into the teaching and learning process. They influence the teaching learning process which in turn influences the outcome which in this study is the girls' academic performance in KCPE.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter focuses on the following sub-topics on the methodology of the study. Included are: research design, target population, sample size and sampling procedures, research instruments (validity and reliability of instruments), data collection procedures, data analysis techniques and ethical considerations.

3.2 Research design

According to Kothari (2008) a research design refers to the structure, plan, and strategy of investigation conceived so as to obtain answers to research questions. The study used descriptive research design. It is a scientific method which involves describing and observing the behaviour of a subject without in anyway influencing it. The reason as to why descriptive survey research design was used is because the researcher did not manipulate variables and also the use of questionnaire which is one of the instruments to use for data collection. The design is therefore appropriate for examining the nature of relation among variables identified as school physical facilities, teachers training and experience, head teachers facilitation of sanitary towels and readmission of girls after birth or marriage on the performance of girls in KCPE.

3.3 Target population of the study

Mugenda and Mugenda (1999) define population as an entire group of individuals, events or an object having common visible characteristics to which a researcher wishes to generalize the results of the research study. This study was carried out in Isiolo sub-county. Isiolo sub-county has 33 public primary schools, 484 teachers and 704 class eight girls (Researcher 2016).

3.4 Sampling technique and sample size

A sample is a small proportion of target population selected for analysis. Any statement made about the sample should be true about the population (Orodho, 2012). Mugenda & Mugenda (2003) states that 10% - 30% of the accessible population is enough for descriptive study thus the researcher sampled 10% of the class eight girls and teachers thus 48 teachers and 70 class eight girls. Stratified sampling was used to select the schools from which to draw the students. Stratified random sampling involves dividing the population into homogeneous sub-groups and taking a sample random in each group. The stratified sampling enables the researcher to represent the overall population and the key sub – groups of the population, and generally has more statistical precision than simple random sampling. 10 schools were selected in each zone using simple random sampling in order to obtain the sample of students.

The register of students in each school was obtained from the class teachers in order to select the appropriate sample of students. Teachers who participated in the study were selected using random sampling technique. Random selection is choosing a sample where every member of the population has an equal chance of being selected. The whole population of the head teachers was sampled and the sub-county director of education was also interviewed to make a total of 152 respondents. Systematic sampling was used to select the primary schools from which to draw the teachers to constitute the sample size. Stratified sampling design was used to sample the girls. This ensured that all the teachers and girls in the selected schools had the probability to participate in the study.

Table 3.1: Sample size

Target group	Target population	Sample size	Percentage
Head teachers	33	10	10%
Teachers	484	48	10%
All girls	704	70	10%
Sub-county director of education	1	1	100%
Total	1222	152	-

3.5 Research instrument

A researcher needs to develop instruments with which to collect data. Orodho, (2008) states that in research instrumentation refers to the instruments used to collect data from the sampled respondents. The study used questionnaire as the tool for data collection. A typical questionnaire consists of questions and statements which are either structured (close-ended) or unstructured (open-ended). Mugenda and Mugenda (2003) explain that structured items refer to questions that are accompanied by a list of all possible alternatives from which respondents select the answer that best describes their situation.

Unstructured questions refer to questions which give the respondent complete liberty of response where he or she responds in their own words. A questionnaire enables the researcher to obtain a large quantity of data inexpensively from a wide range of participants sometimes spread extensively in a geographic space. The respondents will have enough time to think about the questions and will give well thought answers (Kothari, 2008).

The research instruments that were used in this study included the head teachers, teachers and class eight girls' questionnaire with both closed and open-ended questions. The questionnaire was divided into two sections. Section A covered the background information of the respondents and section B covered the respondents' perceptions on influence of school physical facilities, section C covered the

respondents' perceptions on influence of teachers training and qualification, section D covered the respondents' perceptions on influence of head teachers facilitation of sanitary towels, section E covered the respondents' perceptions on influence of teachers' attitude, section F covered the respondents' perceptions on influence of head teachers' readmission and support of girl-child after birth or marriage .The personal interview collected information on background information, the influence of school physical facilities, teachers' training and qualification, head teachers' facilitation of sanitary towels, teachers' attitude and head teachers' readmission and support of girl-child after birth or marriage on the performance of girls in KCPE.

3.6 Validity of the instrument

Validity indicates the degree to which an instrument measures what it is supposed to measure. That is the extent to which differences found in the measuring instrument reflect true differences among those who have been tested Kothari (2004). The instruments were pre-tested by piloting in order to allow the researcher to improve their validity as well as familiarize with data collection process. Content validity was used to check the representation of the research questions in the questionnaires. The items that were found inadequate were discarded while some were modified. The researcher sought an expert judgment to determine whether the set of items accurately represented the concept under study and also sought assistance from the supervisor in order to help improve content validity of the in-

strument. According to Mugenda and Mugenda (2003), a pre-test comprises of between 1 to 10 percent of the target population. Therefore, the pilot study was done in 3 public primary schools representing 10% of the 33 public primary schools in Isiolo sub-county where three head teachers, six teachers and 9 class eight girls were interviewed.

3.7 Reliability of the instrument

Mugenda and Mugenda (2003) define reliability of the research instrument as its level of internal consistency over time. Reliability therefore means a research instrument gives consistent results or data after repeated trial. Reliability was tested through test-retest method. This technique involved administering the questionnaires twice within a period of two weeks after which the scores in the two sets were correlated. The researcher used Pearson's moment co-efficient approach to determine the co-efficient of correlation using the formula shown

$$r = \frac{n\sum xy - (\sum x \sum y)}{\sqrt{(n\sum x^2 - (\sum x)^2)(n\sum y^2 - (\sum y)^2)}} \quad \text{Where,}$$

$\sum x$ = the sum of score in x distribution

y = the sum of score in y distribution.

\sum = summation symbol

x^2 = the sum of square scores in x distribution

xy = the sum of products of spilled x and y scores.

n = the total number of subjects.

A correlation coefficient of between -1 to 1 is considered reliable (Mugenda & Mugenda 2003).

The correlation coefficient obtained for pupils' questionnaire.

$$0.981 = \frac{9(15485) - (227*366)}{\sqrt{(9(8409 - (227)^2))(9(30021 - (366)^2))}}$$

The correlation coefficient obtained for teachers' questionnaire

$$0.99 = \frac{9(20485) - (267*486)}{\sqrt{(9(11419 - (267)^2))(9(40022 - (486)^2))}}$$

The correlation coefficient obtained for head teachers questionnaire

$$0.617 = \frac{9(13007) - (150*372)}{\sqrt{(9(10400 - (150)^2))(9(30692 - (372)^2))}}$$

3.8 Data collection procedures

The researcher obtained a permit from National Commission of Sciences, Technology and Innovation (NACOSTI) and introduction letter from the Department of Educational Administration and Planning University of Nairobi before visiting the field. The researcher visited the sub-County director of education and the County Commissioner to alert them on the collection of data. A visit to the participating schools was required for administering the instrument. The researcher administered questionnaires in person and assured the respondents confidentiality. Questionnaires were collected immediately they were filled.

3.9 Data analysis technique

Data analysis entails categorizing, ordering, manipulating and summarizing raw data to obtain answers to the research questions (Kothari, 2004). Quantitative data was analyzed by the use of descriptive statistics using the Statistical Package for Social Sciences (SPSS) version 21 and presented through percentages, means, standard deviations and frequencies. The information was displayed by use of bar charts, graphs and tables. This was done by tallying up responses, computing percentages of variations in response as well as describing and interpreting the data in line with the study objectives and assumptions through use of SPSS.

Qualitative data to be generated in the study from open questions was organized in themes and patterns, grouped through content analysis and then tabulated. Coefficients from Linear Regression analysis was used to establish the relation between physical facilities, teachers' training and qualification, head teachers' facilitation of sanitary towels, teachers' attitudes, head teachers' readmission and support of girl-child after birth or marriage and girls performance in KCPE whereby if the p value was less than 0.5 the relationship was considered significant and if the p value was greater than 0.5 the relationship was considered not significant.

3.10 Ethical considerations

According to Mugenda and Mugenda (1999) ethical considerations are important for any research. In this study, the research ethics were reviewed by an Ethics Board to ascertain ethical guidelines for conducting the research so that ethical values are not violated. The researcher started by seeking permission to collect data from the relevant authorities like a letter of introduction from the Department of Educational Administration and Planning University of Nairobi and research permit from National Commission for Science, Technology and Innovation. She also informed the sub-county director of education and the county commissioner. Researcher observed confidentiality and acknowledged all author's she got information for the study.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter deals with the analysis, presentation and interpretation of the data and discussions based on the objectives. The study sought to investigate school based factors that influence performance of girls at KCPE at public primary schools in Isiolo sub-county. The interpretations for this chapter are based on each of the objectives and questionnaire that guided this study. Presentation was done using tables, charts and graphs. The analysis was based on the predefined objectives and aimed at answering the research questions. The chapter begins with questionnaire return rate, demographic information of head teachers, teachers and pupils, followed by presentation and discussions of research findings based on the research question.

4.2 Response rate

The respondents involved were the head teachers, teachers, class eight pupils and sub-county director of education. They returned the questionnaires as tabulated in Table 4.1.

Table 4.1: Instrument return rate

Respondents	Sampled size	No. collected	Return rate (%)
Head teachers	10	10	100.0
Teachers	48	45	93.7
Pupils	70	66	94.3
Sub-County director of education	1	1	100.0

Table 4.1 shows that the average questionnaire return rate was well above 80% which according to Mugenda and Mugenda (2003) is an acceptable proportion and can be termed adequate for analysis.

4.3 Demographic information

4.3.1 Demographic data of head teachers and teachers

The demographic data of head teachers and teachers was based on their gender, age, highest academic qualification and professional experience. Respondents were asked to indicate their gender. Responses are summarized and presented in Figure 4.1.

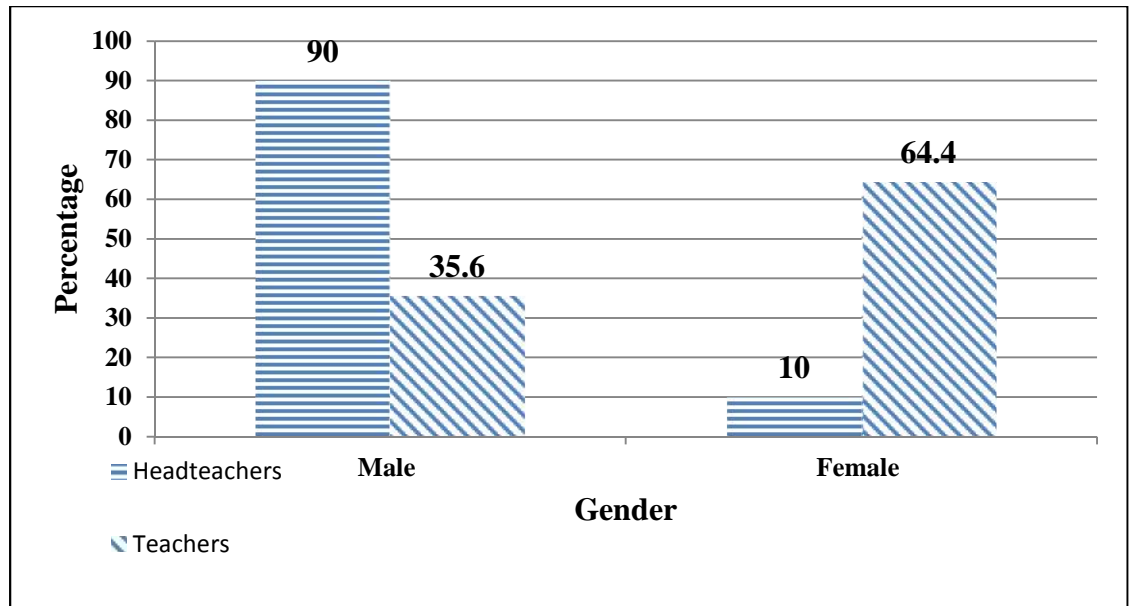


Figure 4.1: Gender of head teachers and teachers

Findings in Figure 4.1 show that 90% of the head teachers were male and 64.4% of the teachers were female. This shows majority of schools in Isiolo Sub-County are dominated by male head teachers and female teachers. This might influence girls' performance since they don't see women take up school leadership.

The study sought to establish the age of school heads and teachers. Responses are summarized and presented in Figure 4.2.

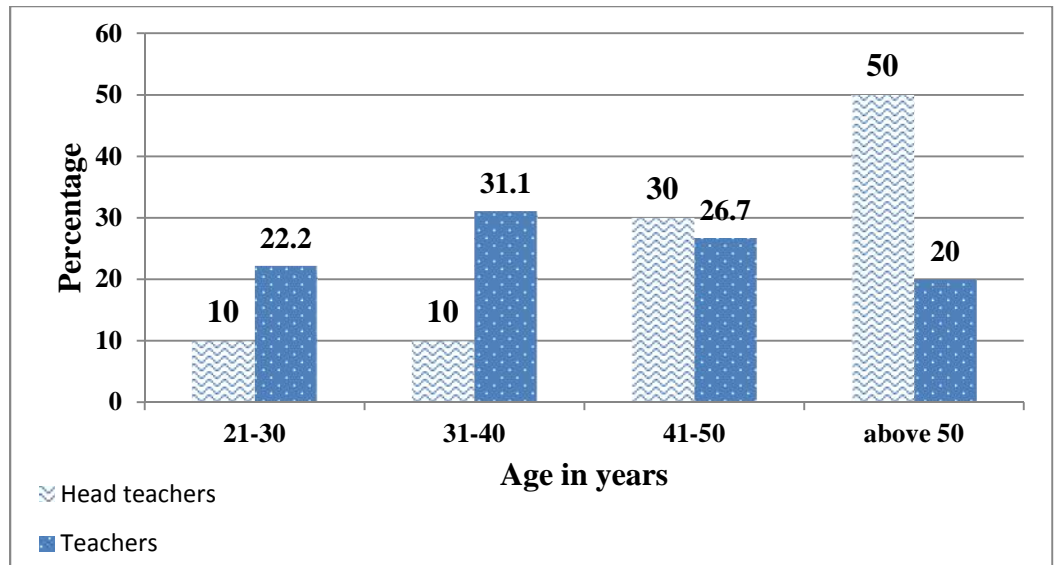


Figure 4.2: Age of head teachers and teachers

Findings in Figure 4.2 shows that 50% of the head teachers were aged between 41-50 years and 31.1% of the teachers were aged between 31-40 years. This shows that the head teachers and teachers were relatively old to understand the school based factors influencing girls' performance. The head teachers and teachers were asked to indicate their level of education. Responses are summarized and presented in Figure 4.3.

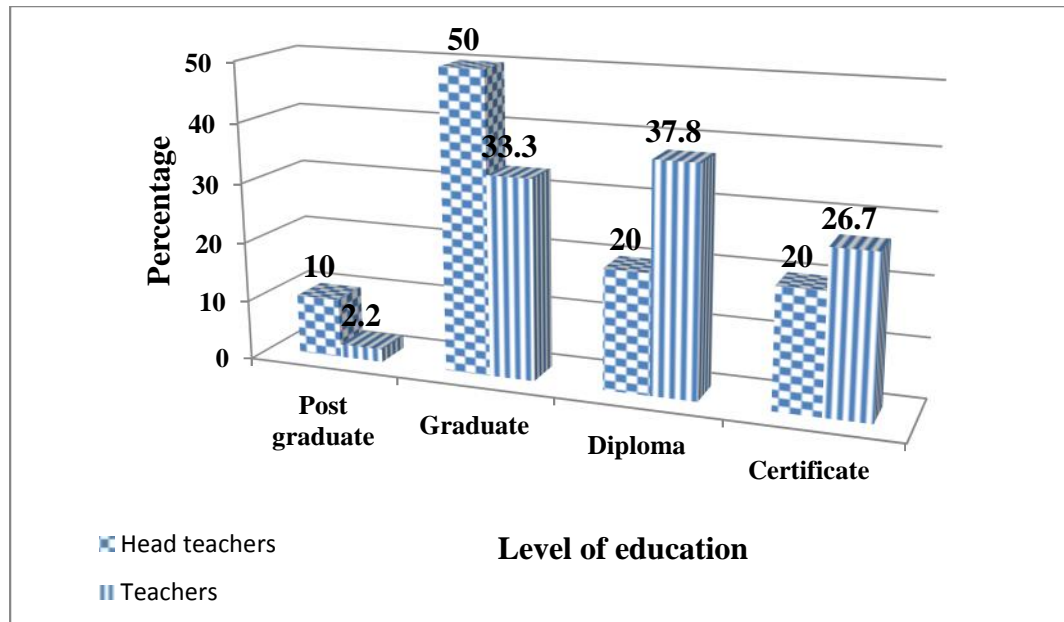


Figure 4.3: Head teachers’ and teachers’ level of education

Findings in Figure 4.3 show that 50% of the head teachers had attained undergraduate degree in education and 37.8% of the teachers had attained diploma. This shows that the head teachers were well educated to take up school leadership and the teachers in Mandera East Sub-County public primary schools have the required professional qualifications for their job.

Respondents were asked to indicate the number of years they have served as head teacher or teacher. Responses are summarized and presented in Figure 4.4.

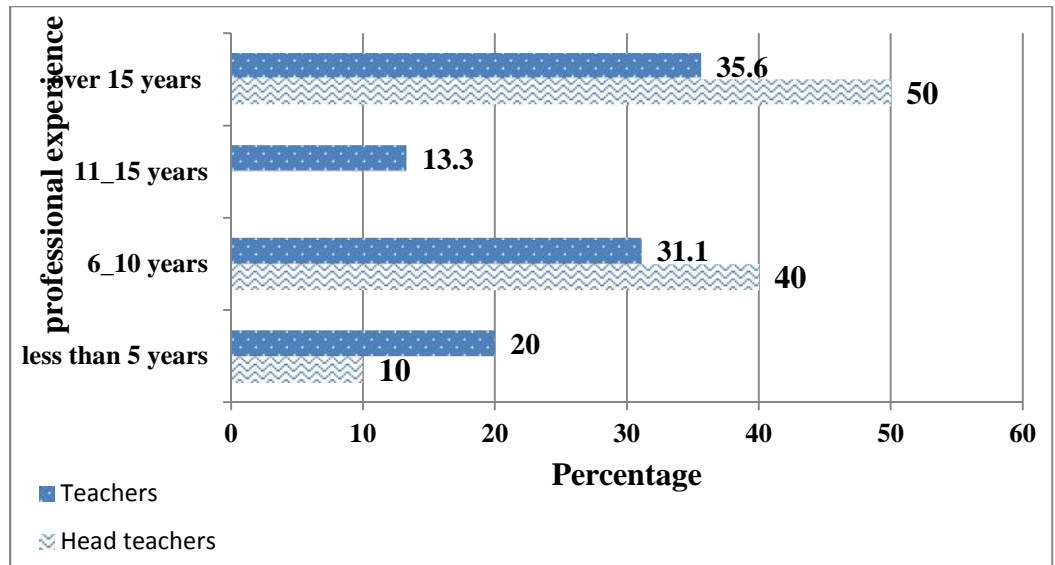


Figure 4.4: Professional experience

Findings in Figure 4.4 show that 50% of the head teachers have been serving as school heads for between 1-10 years and 35.6% of the teachers have been in the profession for over 15 years. This shows that the head teachers and teachers were in a position to understand school based factors that influence performance of girls at KCPE at public primary schools in Isiolo sub-county due to the number of years they have been in the teaching profession. The more experience the head teachers have the more effective they become as managers in public primary schools.

4.3.2 Demographic data of pupils

The demographic data of pupils was based on their gender and age. Responses on pupils' gender are summarized and presented in Figure 4.5.

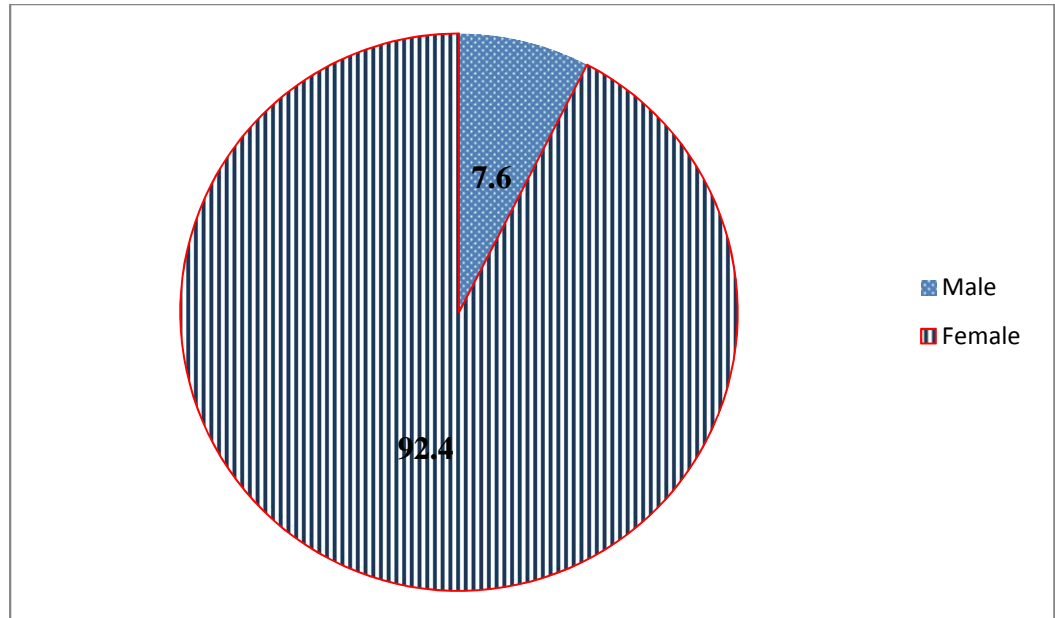


Figure 4.5: Gender of pupils

Findings in Figure 4.5 show that 92.4% of the pupils were female. This shows that the researcher was able to interview the pupils whose performance was highly affected by the school-based factors. Pupils were also asked their age. Responses are summarized and presented in Figure 4.6.

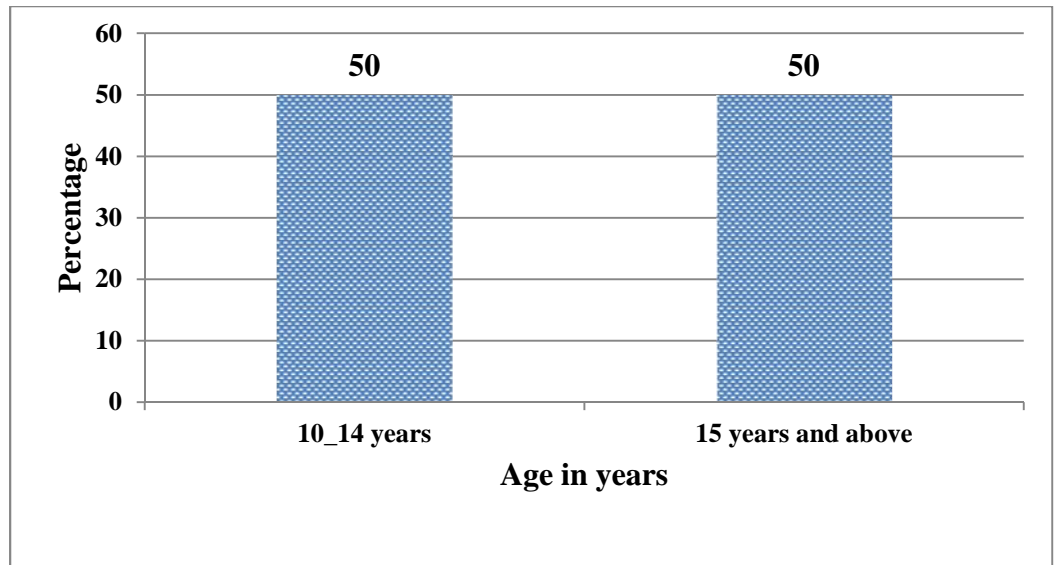


Figure 4.6: Age of pupils

Findings in Figure 4.6 show that 50% of the pupils were aged between 10-14 years and the other 50% were aged more than 15 years. This implies that the pupils were old enough to understand school based factors influencing girls' performance.

4.4 Influence of school physical facilities

The first objective of the study was to establish the extent to which school physical facilities influences girls' performance. Respondents were asked whether the listed facilities were enough. Responses are summarized and presented in Table 4.2 below.

Table 4.2: Influence of school physical facilities

School physical facilities	Yes		No	
	F	%	F	%
Teaching and learning materials	30	54.5	25	45.5
Reading space within school	35	63.6	20	36.4
Classes	35	63.6	20	36.4
Sanitary facilities	41	74.5	14	25.5
Library	18	27.3	48	72.7

Findings in Table 4.2 show that 54.5% of the respondents said that the teaching and learning materials were enough, 63.6% indicated the reading space and classes were enough, 74.5% indicated the sanitary facilities were enough for both girls and boys and 72.7% of the respondents indicated that the libraries were not enough. The sub-county director of education indicated that the classrooms in the sub-county primary schools are inadequate which makes the girls feel uncomfortable when they are squeezed with boys in one desk. He also said that lack of text books and school libraries influence girls' performance but he is working with school management to seek funds for construction of more classrooms and purchasing text books. This implies that majority of schools in Isiolo sub-county do not have a library. Libraries are essential resource centres which help pupils to access a lot of educational information and lack of this facility could contribute to poor performance. This concurs with Kuthemba Mwale (1988) that, teachers' shortage, poor instructional method, overcrowding in classrooms, gender disparity by subject and lack of enough teaching and learning resources influences girls'

performance. The researcher sought to establish the extent to which availability of sanitary facilities affect girls' performance. Head teachers and teachers' responses are summarized and presented in Table 4.3 below.

Table 4.3: Extent to which availability of sanitary facilities affect girls' performance

Extent	Frequency	Percentage
Very great extent	11	20.0
Great extent	29	52.7
Moderate extent	8	14.5
Little extent	6	11.0
No extent	1	1.8
Total	55	100

Findings in Table 4.3 show that 52.7% of the respondents indicated that availability of sanitary facilities in public primary schools in Isiolo sub-county has helped improve girls' performance to a great extent. This implies that clean and secure sanitation facilities are necessary to ensure girls do not miss school which might affect their performance. This is in agreement with (Herz 1995) that absence of sanitary facilities may have on girls' persistence in schools. The study also sought to establish whether distance affects girls' performance. Responses are summarized and presented in Table 4.4 below.

Table 4.4: Effects of distance to school

Extent of effects of distance to school	Frequency	Percentage
Very much	23	34.8
Much	21	31.8
Not much	17	25.8
Too little	5	7.6
Total	66	100

Findings in Table 4.4 show that 34.8% of the respondents indicated that distance they cover to and from school affects girls' performance very much. This implies some that primary schools in Isiolo sub-county are far from homes and the long distances to and from school affected girls' school attendance and concentration in class and this affected their academic performance. This concurs with Kuthemba Mwale (1988) that great distance to school affects girls' performance.

Table 4.5: Relationship between school physical facilities and girls' performance

Model		Coefficients ^a			t	Sig.
		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta		
1	(Constant)	1.899	.356		5.331	.000
	How much do the conditions of facilities like toilets, water and general appearance of the school infrastructure affects your academic performance	.198	.153	.160	1.295	.002

a. Dependent Variable: To what extent does school based factors affect girls performance in KCPE

The results in Table 4.5 indicate that availability of school physical facilities had significant ($p < 0.05$) influence on girls performance.

4.5 Influence of teachers training and qualification

The second objective of the study was to establish whether teachers training and qualification influence girls' performance. Teachers were asked whether qualified teachers help improve the performance of girls. Responses are summarized and presented in Table 4.6.

Table 4.6: Influence of training and qualification

Responses	Frequency	Percentage
Yes	45	100
No	-	-
Total	45	100

Findings in Table 4.6 show that all respondents agreed that qualified teachers help to improve the performance of girls through acting as good role models, guiding and counselling girls, protecting against discrimination and mentoring girls. This implies that public primary schools in Isiolo sub-county lack adequate training and qualification for teaching which affects girls' performance. The findings are in agreement with Lewis (1984) that teacher morale, professional support and awareness of educational possibilities through adequate pre- and in-service training are critical determinants of curricular quality.

The researcher also requested the teachers to indicate their level of agreement on whether training helps a teacher to develop his interest and ability for teaching girls. Responses are summarized and presented in Table 4.7.

Table 4.7: Teachers' responses on interest and ability for teaching girls

Level of agreement	Frequency	Percentage
Strongly agree	34	75.6
Agree	8	17.8
Somehow agree	3	6.7
Total	45	100

Findings in Table 4.7 show that 76.6% of the respondents strongly agreed that training helps a teacher to develop his interest and ability for teaching girls. The sub-county director of education also agreed that good training helps teachers develop interest and ability for teaching girls especially for male teachers who discriminate girls. This shows that public primary teachers in Isiolo sub-county need good training to help them develop interest and ability for teaching girls. The finding concurs with Moumouni (1998) that a good training is very necessary to help a teacher develop his interest and ability for teaching girls.

Pupils were also asked whether the teachers have interest and ability for teaching girls. Responses are summarized and presented in Figure 4.7.

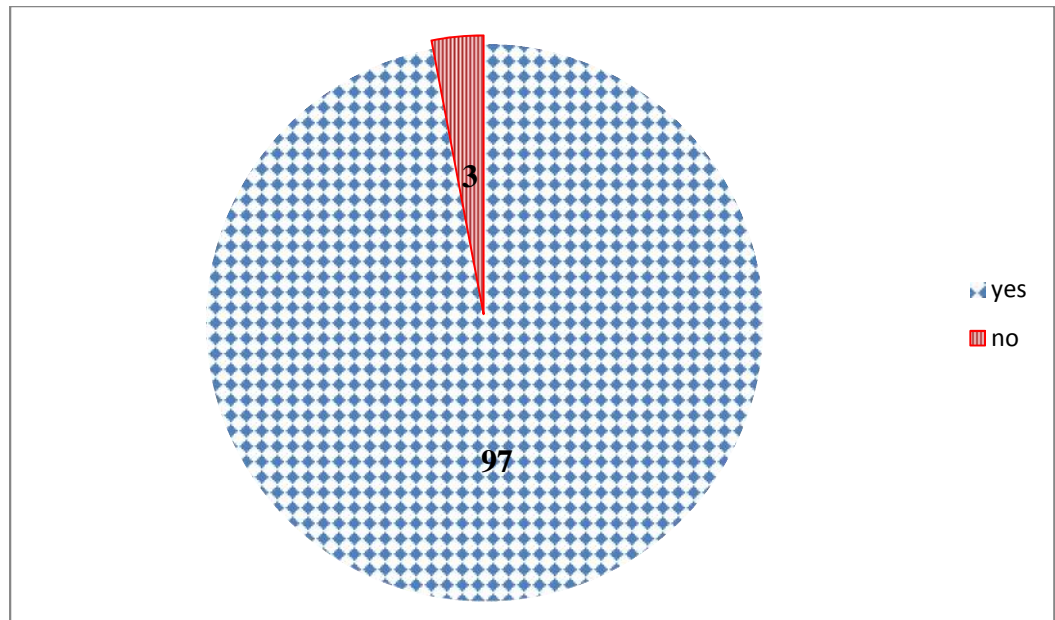


Figure 4.7: Pupils' responses on interest and ability for teaching girls

Findings in Figure 4.7 show that 95.5% of the respondents said that training helps a teacher to develop his interest and ability for teaching girls. This shows that the pupils in Isiolo sub-county also know that good training is very necessary to help a teacher develop his interest and ability for teaching girls which is also in agreement with Moumouni (1998) that a good training is very necessary to help a teacher develop his interest and ability for teaching girls.

The researcher also requested the teachers and head masters to rate teachers in terms of their competence. Table 4.8 shows head teachers response on teachers competency.

Table 4.8: Head teachers' responses on teachers competency

Level of competency	Frequency	Percentage
Very high competence	2	20.0
High competence	8	80.0
Total	10	100

Findings in Table 4.8 show that 80% of the respondents indicate that the teachers have high competence. This shows that teachers in Isiolo sub-county are competent and might help improve girls' performance. This finding is in agreement with Mills (1974) that sound training imparts not only a way of doing but also a way of training, so that a trained teacher confronted with a situation acts wisely and quickly

Table 4.9: Teachers' responses on their competency

Level of competency	Frequency	Percentage
Very high competence	15	33.3
High competence	30	66.7
Total	45	100

Findings in Table 4.9 show that 66.7% of the respondents indicate that the teachers have high competence. This shows that teachers in Isiolo sub-county believe that they are competent in teaching which if well practiced can help improve girls' performance. This also concurs with Mills (1974) that sound training im-

parts not only a way of doing but also a way of training, so that a trained teacher confronted with a situation acts wisely and quickly.

The researcher also sought from the head teachers and pupils whether the female teachers are good role models. Findings are summarized and presented in Table 4.10.

Table 4.10: Influence of female teachers

Responses	Frequency	Percentage
Yes	76	100
No	-	-
Total	76	100

Findings in Table 4.10 show that all respondents agreed that female teachers in Isiolo county public schools are good role models to girls. This shows that female teachers motivate girls to enroll and to increase their attendance and performance. This concurs with Tomkins and Izard (1965) that influence of female teachers is an important motivating factor to girls.

Table 4.11: Relationship between teachers training and girls' performance

Model	Coefficients ^a			t	Sig.
	Unstandardized Coefficients	Standardized Coefficients			
	B	Std. Error	Beta		
1 (Constant)	2.244	.287		7.822	.000
Do you agree that good training helps a teacher to develop his interest and ability for teaching girls	.017	.200	.013	.085	.932

a. Dependent Variable: To what extent does school based factors affect girls performance in KCPE

The results in Table 4.11 indicate teachers training and qualification had no significant effect ($p > 0.05$) on girls performance.

4.6 Influence of facilitation of sanitary towels

The third objective of the study was to establish whether facilitation of sanitary towels influence girls' performance. Respondents were asked whether menstruation affects girls' performance. Responses are summarized and presented in Table 4.12 .

Table 4.12: Effects of menstruation on girls performance

Responses	Frequency	Percentage
Yes	66	54.5
No	55	45.5
Total	121	100

Findings in Table 4.12 show that 54.5% of the respondents indicated that facilitation of sanitary towels has helped improve girls' performance in Isiolo sub-county whereby before the facilitation of sanitary towels, some girls missed school as they feared leakages, some experienced pains that made them lose concentration in class and some girls felt uncomfortable during menstruation. The sub-county director of education indicated that lack or use of poor menstruation materials made girls to miss class as some prefer to stay at home to avoid embarrassment incase of leakages. This shows that provision of sanitary towels coupled with menstrual hygiene education reduces girls' absence from school. The finding concurs with Lukalo (2010) that the provision of sanitary ware is a major determinant in achieving gender parity in education in Kenya.

The study also sought to establish whether schools provided sanitary towels sanitary towels to girls. Responses are summarized and presented in Table 4.13.

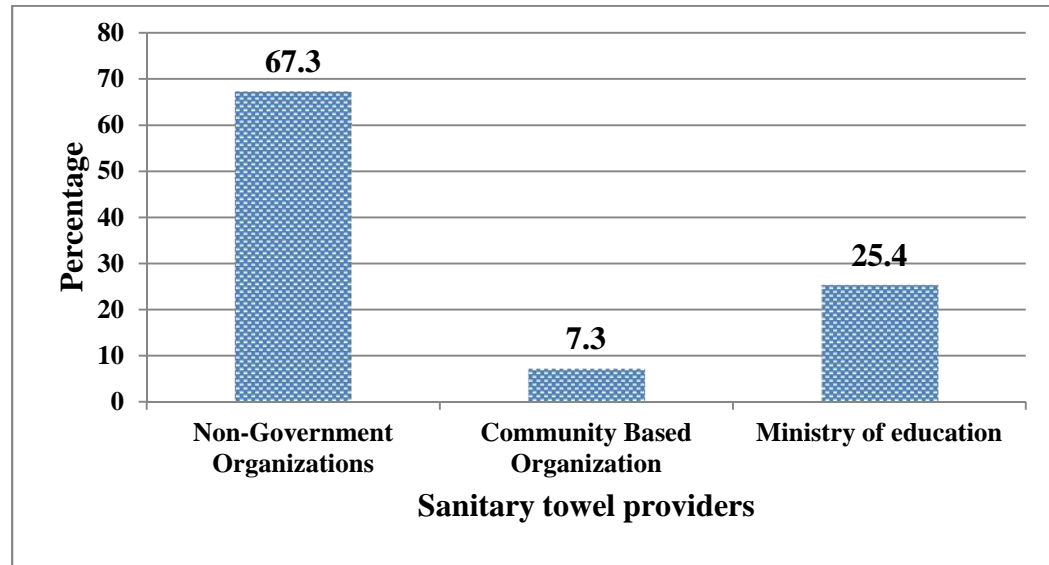
Table 4.13: Provision of sanitary towels

Responses	Frequency	Percentage
Yes	109	90.0
No	12	10.0
Total	121	100

Findings in Table 4.13 show that 90% of the respondents indicated that the public primary schools in Isiolo sub-county provided sanitary towels to girls. The sub-county director of education was also in agreement that girls in Isiolo sub-county public primary schools are provided with sanitary towels which has helped improve girls' performance in the sub-county. This shows that the schools have made effort to facilitate sanitary towels to girls to reduce absenteeism thus improving their performance. The findings concurs with Scott (2009) that the provision of sanitary towels coupled with menstrual hygiene education reduced girls' absence from school by more than half.

Respondents were also asked to indicate the sources of sanitary towels. Responses are summarized and presented in Figure 4.8 below.

Figure 4.8: Sanitary towels providers



Findings in Figure 4.8 show that 67.3% of the respondents indicated NGOs are the major providers of sanitary towels to primary schools in Isiolo sub-county. This shows that the non-governmental organizations, community based organizations and the ministry of education are concerned with the girl child education thus making efforts to maintain them in school hence improving their performance.

The researcher also requested the pupils to indicate how sanitary towels are distributed. Responses are summarized and presented in Table 4.14.

Table 4.14: Mode of distributing sanitary towels

Mode of distributing	Frequency	Percentage
Given to all pupils	35	53.0
Given to selected pupils	30	45.5
Not sure how it is done	1	1.5
Total	66	100

Findings in Table 4.14 show that 53.0% of the respondents indicated that sanitary towels are given to all mature girls in class eight. This shows that schools in Isiolo sub-county do not discriminate girls when distributing sanitary towels.

Table 4.15: Relationship between facilitation of sanitary towels and girls' performance

Model	Coefficients ^a			t	Sig.	
	Unstandardized Coefficients	Std. Error	Standardized Coefficients			
1	(Constant)	2.810	.519		5.414	.001
	Does menstruation affect girls' performance in KCPE	-.238	.376	-.218	-.632	.004

a. Dependent Variable: To what extent does school based factors affect girls performance in KCPE

The results in Table 4.15 indicate that facilitation of sanitary towels had significant ($p < 0.05$) influence on girls performance.

4.7 Influence of teachers' attitude

The fourth objective of the study was to establish the extent to which teachers' attitude towards girls affect their performance. Responses are summarized and presented in Table 4.16 below.

Table 4.16: Influence of teachers' attitude on girls performance

Extent	Frequency	Percentage
Very great extent	21	38.2
Great extent	17	31.0
Moderate extent	7	12.7
Little extent	8	14.5
No extent	2	3.6
Total	55	100

Findings in Table 4.16 show that 38.2% of the respondents indicated that teachers' attitude towards girls affect their performance. The sub-county director of education indicated that girls fail in subjects that teachers have a negative attitude towards girls. This shows that positive attitude towards girls help improve their performance. The finding is in agreement with Stone (1966) that lower achievement by girls may be lack of encouragement by teachers who have negative attitude towards students.

Respondents were asked whether teachers understand the educational difference between boys and girls. Responses are summarized and presented in Table 4.17 below.

Table 4.17: Understanding the educational difference between boys and girls

Responses	Frequency	Percentage
Yes	50	91.0
No	5	9.0
Total	55	100

Findings in Table 4.17 show that 91% of the respondents indicated that primary school teachers in Isiolo Sub County understand the educational difference between boys and girls. This shows that the teachers Isiolo Sub County believe that all pupils have an equal chance of performing better and teach girls with the same attitude as they do with boys. This differs with Anderson-Levett et al,(1994) that both female and male teachers believe that boys are academically better than girls.

The researcher also sought the opinion of the pupils on whether teachers have different expectations from girls and boys. Responses are presented in Table 4.18.

Table 4.18: Teachers' different expectations from pupils

Responses	Frequency	Percentage
Yes	22	33.3
No	44	66.7
Total	66	100

Findings in Table 4.18 show that 66.7% of the respondents indicated that public primary teachers in Isiolo sub-county do not have different expectations from girls and boys. This shows that majority of the teachers treat all pupils equally. This differs with Palme (1993) that the higher rate of failure for girls might be due to inequality of treatment.

Pupils were also asked to rate the extent to which teachers demonstrate differences between boys and girls. Responses are presented in Table 4.19 below.

Table 4.19: Areas which teachers demonstrate difference

Areas	Mean	Standard deviation
Paying special attention	1.75	0.560
Giving better marks	2.00	0.559
Giving material incentives	1.922	0.714
Praising	1.75	0.708
Provision of school materials	1.65	0.648
Guidance and counselling	1.88	0.696

Findings in Table 4.19 show that on average, teachers pay more attention to boys as indicated by a mean of 1.75, give better marks to boys as indicated by a mean of 2.00, give material incentives to boys leaving out girls as indicated by a mean of 1.922, praise boys more than girls indicated by a mean of 1.75, provide school materials to boys indicated by a mean of 1.65 and provided guiding and counseling more often to boys indicated by a mean of 1.88. This shows that some teachers in Isiolo public primary schools have a negative attitude towards girls and discriminate them in certain areas of education which negatively affect girls' performance. This finding concurs with Kwesiga (2002) that male teachers may be impatient with girls and their attitudes have proved to be biased in favour of boys and are being given priority in the distribution of books and other learning materials.

The researcher further requested the teachers to indicate between girls and boys whom they would prefer to teach. Responses are presented in Table 4.20 below.

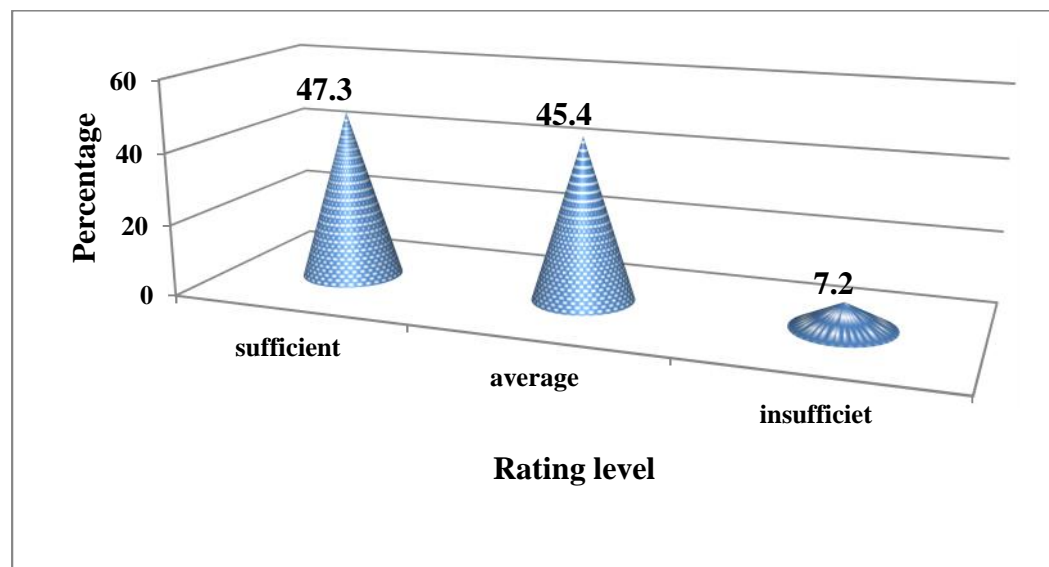
Table 4.20: Teaching preference

Teaching preference	Frequency	Percentage
Boys	14	31.1
Girls	8	17.8
Teach both gender equally	23	51.1
Total	45	100

Findings in Table 4.20 show that 51.1% of the respondents said that they would teach both gender equally. This shows that majority of the teachers in Isiolo sub-county do not discriminate pupils. The findings are in agreement with Kokurirwa (1982) that teachers in mixed schools pay more attention to boys and devote more of their time attending to boys marginalizing or ignoring girls.

Respondents were asked to indicate to rate teachers' capacity to understand gender issues in education. Responses are summarized and presented in Figure 4.9 below.

Figure 4.9: Teachers' capacity to understand gender issues in education



Findings in Figure 4.9 show that 47.3% of the respondents indicated that rate teachers' capacity to understand gender issues in education is sufficient. This

shows that teachers in Isiolo sub-county have the capacity to understand gender issues in education. This concurs with Kokurirwa (1982) that failure to understand gender issues by treating girls as a group while boys are given individual attention affects girls' performance.

Table 4.21: Relationship between teachers' attitude and girls' academic performance

Model		Coefficients ^a			t	Sig.
		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta		
1	(Constant)	2.041	.243		8.390	.000
	to what extent does teachers' attitude towards girls affect their performance	.109	.103	.159	1.055	.297

a. Dependent Variable: To what extent does school based factors affect girls performance in KCPE

The results in Table 4.21 indicate teachers attitude had no significant effect ($p > 0.05$) on girls performance.

4.8 Influence of head teachers' readmission after birth or marriage

The fourth objective of the study was to establish the influence of head teachers' readmission and support after birth or marriage on girls' performance. Respondents were asked whether the schools readmit girls after birth or marriage. Responses are summarized and presented in Table 4.22.

Table 4.22: Readmission of girls after birth or marriage

Responses	Frequency	Percentage
Yes	21	17.3
No	100	82.7
Total	121	100

Findings in Table 4.22 show that 82.7% of the respondents said that they do not readmit girls after birth/marriage. This implies that majority of girls who give birth or get married in Isiolo Sub County do not go back to school lack of finance to take care of the baby and school and inability to balance school and parenting. This concurs with Kaufman, Wet & Stadler(2001) that inability to manage logistics and finances associated with mothering and schooling simultaneously hinders teenagers mother from going back to school.

Respondents were also asked to indicate whether the school administration offer support and conducive environment for parenting pupils. Responses are summarized and presented in Table 4.23..

Table 4.23: School administration support

Responses	Frequency	Percentage
Yes	18	15.0
No	3	2.3
Not applicable	100	82.7
Total	121	100

Findings in Table 4.23 show that 15% of the respondents said that the school administration offers support and conducive environment for parenting pupils. This implies that the school administrators in schools which readmit girls after birth/marriage provide safe and secure learning environment for young mothers enabling them to concentrate in their studies thus improving performance. This concurs with US Department of Education (1992) findings that deliberate practices by head teachers to provide a safe and secure learning environment for young mothers such as: school violence, corporal punishment and bullying helps improve girls' performance.

Table 4.24: Relationship between readmission and girls' academic performance

Model	Coefficients ^a			t	Sig.
	Unstandardized Coefficients	Standardized Coefficients			
	B	Std. Error	Beta		
1 (Constant)	2.095	.663		3.161	.013
Does your school re-admit girls who have given birth or married	.238	.376	.218	.632	.545

a. Dependent Variable: To what extent does school based factors affect girls performance in KCPE

The results in Table 4.24 indicate readmission had no significant effect ($p > 0.05$) on girls performance.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the major findings of the study and giving conclusions which attempt to give answers to specific questions that were investigated. It also presents recommendations for possible actions and suggestions for future research.

5.2 Summary of the study

The purpose of this study was to establish school based factors influencing girls' performance at Kenya certificate of primary education in public schools in Isiolo Sub-county. The study was set to establish the influence of school physical resources on girls' performance, influence of teachers training and qualification on girls' performance, influence of facilitation of sanitary towels girls' performance as well as assessing the influence of teachers' attitude on girls' performance. The study was influenced by the fact that girls' KCPE performance in Isiolo Sub-county is low compared to other sub-counties. There were also limited researches done in Isiolo Sub-county on school based factors influencing girls' performance at KCPE. The study employed descriptive research design where the target population consisted of 33 head teachers of the public primary schools in Isiolo Sub-

county, 484 primary school teachers, 704 class eight pupils and Sub-County Director of Education Isiolo Sub-county.

5.3 Summary of findings

Findings established that school physical facilities influences girls' performance to a great extent as indicated by 52.7% of the respondents whereby the teaching and learning materials were enough as indicated by 54.5%, reading space and classes were enough as indicated by 63.6%, sanitary facilities were enough for both girls and boys as indicated by 74.5% but the libraries were not enough as indicated by 72.7% of the respondents. Libraries help pupils to read more and lack of them could affect the pupils' performance as libraries act as resource center for both pupils and teachers. Findings also established that the distance to and from school affect girls' performance very much as indicated by 34.8% of the respondents. The long distances makes pupils get to school late and the fatigue makes them lose concentration in class which affects their performance negatively. This concurs with Kuthemba Mwale (1988) findings that irrelevant curriculum, teachers' shortage, poor instructional method, overcrowding in classrooms, great distances to school, gender disparity by subject and lack of enough teaching and learning resources influence girls' performance.

Findings established that qualified teachers help improve the performance of girls performance as indicated by all respondents whereby good training helps teachers

develop interest and ability for teaching girls as indicated by 76.6% of the respondents. The study also established that teachers in Isiolo sub-county are of high competence as indicated by 80% and female teachers are good role models to girls as indicated by all respondents. Qualified teachers help to improve the performance of girls through acting as good role models, guiding and counselling girls, protecting against discrimination and mentoring girls. This is in agreement Moumouni (1998) report that a good training is very necessary to help a teacher develop his interest and ability for teaching girls

The findings revealed that facilitation of sanitary towels influence girls' performance as indicated by 54.5% of the respondents whereby the schools catered for facilitation of sanitary towels as indicated by 90% of the respondents through collaboration with non-governmental organizations, community based organizations and the ministry of education. Findings also established that the schools do not discriminate while distributing sanitary towels and they give them to all mature girls as indicated by 53% of the respondents. Lack of sanitary towels or use of poor quality sanitary materials cause girls miss school fearing embarrassment of leakages and some girls experience so much period pain that affect their concentration in class hence poor performance. This concurs with Sankok (2012) findings that girl child performance in education is hindered by quite a number of factors which needs to be addressed including provision of sanitary pads.

Findings established that teachers' attitude towards girls affect their performance to a very great extent as indicated by 38.2% of the respondents whereby teachers have different expectations from girls and boys as indicated by 33.2% and some teachers preferred teaching boys as compared to girls as indicated by 31.1. findings also established that teachers who preferred teaching boys had a negative attitude towards girls and demonstrate differences between boys and girls by paying more attention to boys, giving better marks to boys, give material incentives to boys leaving out girls, providing school materials to boys and guiding and counselling more often to boys which demoralized the girls and affected their performance. This concurs with Kwesiga (2002) report that male teachers may be impatient with girls and their attitudes have proved to be biased in favour of boys.

Findings established that head teachers' readmission and support after birth or marriage do not influence girls' performance in Isiolo Sub County since majority of them do not go back to school after birth or marriage as indicated by 82.7% of the respondents. However, findings established that the schools which admitted girls after birth or marriage offered them a conducive environment for learning as indicated by 15% of the respondents. This concurs with US Department of Education (1992) findings that deliberate practices by head teachers to provide a safe and secure learning environment for young mothers such as: school violence, corporal punishment and bullying helps improve girls' performance.

5.4 Conclusion

It was concluded that majority of public primary schools in Isiolo sub-county had school facilities which included enough teaching/learning materials, enough reading space within the schools, enough class and enough sanitary facilities for both boys and girls. However some schools had few classes and had to congest pupils in one class rooms which affected girls' performance as they felt uncomfortable squeezed with boys, they were shy to ask questions and it was hard for a teacher to all pupils in a large class. The study established that majority of schools in the study area had no library facilities and the ones which had a library they were poorly equipped. Libraries are essential facility in a school and lack of them could affect the pupils' performance as libraries act as resource center for both pupils and teachers. Distance to and from school also affected girls performance as some had to walk long distances hence they arrived to school late and tired which affected their concentration in class.

The study established that qualified teachers help improve the performance of girls performance. When teachers are well trained they are able to develop interest and ability for teaching girls who are sometimes slow in understanding some subjects especially mathematics and sciences as compared to boys. Qualified teachers are said to be very competent in the curriculum activities which might influence girls performs. Female teachers in Isiolo sub county public primary schools are

good roles who fight against discrimination of girl child education and early marriages thus improving performance of girls in KCPE.

The study also established that facilitation of sanitary towels influence girls performance in KCPE. School in the sub-county outsourced for facilitation of sanitary towels from the NGOs, CBOs and ministry of education. The female teachers were given the responsibility of distributing sanitary towels to mature girls as they were in a good position to understand the age of menstruation and they were not biased while distributing them. Provision of sanitary towels helped to curb absenteeism which affected girls' performance. It was not that some girls used sub-standard sanitary materials and they missed school due to embarrassment in case of leakages, some experienced severe period pain and others felt discomfort while menstruating hence could not concentrate in class.

It was concluded that teachers' attitude affect girls' performance. Some teachers preferred teaching boys as compared to girls which demotivated them. Other teachers had different expectations from girls and boys and discriminated girls in areas like paying more attention to boys while teaching, awarding better marks to boys, praising boys in class, giving text books to boys and guiding and counseling boys.

The study established that majority of girls in the study area who give birth/ get married do not go back to school. This could be attributed to fear or bullying by other pupils and teachers, lack of parental support and the hardship that comes with taking care of a baby.

5.5 Recommendations

Based on the findings of this study the study recommends that more public schools should be built to reduce the distance between the pupils and the school so that girls walk to school within the shortest time possible. Good and enough toilets should be built for girls alone, boys alone. There should be no sharing of toilets between girls and boys and the schools should seek funds to build and equip libraries

The study also recommends good training for teachers in order to handle girls well and also government should organize regular workshops for teachers to help them be at par with the changing technology. Girls in school should be helped by female teachers to develop positive attitude towards education by being good role models. The study recommends that the government should provide sanitary towels to adolescent girls to curb absenteeism during menstruation.

Findings established that teachers' attitude affect girls' performance. Therefore, the school supervision by the head teacher and the directorate of Quality Assur-

ance and Standards should be enhanced for monitoring to give proper guidance to the teachers on the need to implement child rights education in their schools and also take strict action upon teachers who discriminate girls. The study also recommends that county government of Isiolo should take up all measure to curb forced marriages, advocate for girl-child education rights and encourage the school administration to readmit girls after birth/marriage and also offer them a conducive environment for learning.

5.6 Suggestions for further study

Given the scope and limitations of this study, the researcher recommends the following as areas for further studies:

- i) Further research to be carried out on school based factors influencing performance of girls in schools in Arid and Semi-Arid areas in Kenya.
- ii) A study on the impact of non-governmental organizations in promoting girls education.
- iii) A study on the role of government on improving girl's performance.
- iv) A replica of the study should be carried out incorporating more variables that possibly influence girls' performance at KCPE. These variables also include social factors as well as cultural factors.

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APPENDICES

APPENDIX I: INTRODUCTION LETTER

Letter to Head teachers

Habiba Musa Hassan

University of Nairobi

P.O Box 56 Isiolo.

THE HEAD TEACHER

Dear Sir/Madam

RE: PERMISSION TO CONDUCT A RESEARCH IN YOUR SCHOOL

I am a post graduate student at the University of Nairobi currently carrying out a research on the school based factors influencing performance of girls at Kenya certificate of primary education in Isiolo sub-county Kenya. Your school has been selected to take part in the study. I am therefore humbly requesting for your permission to gather the required information from your school.

The questionnaires will be specifically meant for this study and therefore no name of the respondents or that of your school will be required. The responses are strictly meant for this study, your school identity and respondents will be treated with confidentiality.

Your assistance and support on this matter will be highly appreciated.

Thank you in advance

Yours Faithfully,

Habiba Musa Hassan.

APPENDIX II: HEAD TEACHERS QUESTIONNAIRE

I am Habiba Musa Hassan a student at University of Nairobi (UON) and in line with academic graduation requirement of the university; I am carrying out a study on school based factors influencing performance of girls at Kenya certificate of primary education in Isiolo sub-county Kenya. You do not have to write your name your identity will remain confidential. Answer all the questions by indicating your choice by a mark (✓) where appropriate or fill in the blank spaces.

Section A: Demographic information

1. What is your gender.

Male () Female ()

2. Which is your age bracket?

21 – 30 years () 31 – 40 years () 41 – 50 years () above 50 years ()

3. What is your highest academic qualification?

Post graduate level () Graduate level () Diploma level ()

Certificate level-P1 () P2 () P3 () other.....

4. How many years have you served as a school head teacher?

Less than 5 years () 6-10 years () 11-15 years () over 15 years ()

5. To what extent does school based factors affect girls performance in KCPE?

Very great extent [] great extent [] moderate extent [] little extent [] no extent

[]

Section B: School physical facilities

6. Does the school have enough teaching/learning materials?

Yes [] No []

7). Are there enough reading space within the school?

Yes [] No []

8). Are there enough classes in the school?

Yes [] No []

If no what measures have you put in place to ensure pupils study effectively-

9. Are there enough sanitary facilities in for girls and boys?

Yes [] No []

10. To extent does availability of sanitary facilities affect girls' performance?

Very great extent [] great extent [] moderate extent [] little extent [] no extent []

Section C: Teachers training and qualification

11. How do you rate the teachers in terms of their competence?

Very High Competence [] High Competence [] Low competence[]Very Low competence[]

12. Are all teachers trained and qualified to teach in the school?

Yes [] No []

13. To what extent does teachers' attitude towards girls affect their performance?

Very great extent [] great extent [] moderate extent [] little extent [] no extent []

14. Do you think that female teachers in your school are good role models to girls?

Yes [] No []

15. As a head teacher what do you perceive as your role in girls education. _____

Section D: Facilitation of sanitary towels

16. Does the school cater for provision of sanitary towels?

Yes [] No []

17. Where does the school get assistance to provide sanitary towels?

Non-Governmental Organisations (NGOs) [] Community Based Organizations (CBOs) []

Religious groups [] d) others (specify) _____

18. Does menstruation affect girls' performance in KCPE?

Yes [] No []

Kindly explain

Section E: Teachers' attitude

19. Do you think that teachers understand the educational difference between boys and girls in your school? Yes [] No []

20. To what level do you rate teachers' capacity to understand gender issues in education?

Sufficient [] Average [] insufficient []

Section F: Readmission after birth or marriage

21. Does your school readmit girls who have given birth/married? Yes [] No []

22. Does the school administration offer support and conducive environment for parenting pupils? Yes [] No []

23. To what extent do the head teachers protect parenting pupils from bullying?

Very great extent [] great extent [] moderate extent [] little extent [] no extent []

Thank you very much for your co-operation

APPENDIX III: TEACHERS QUESTIONNAIRE

I am Habiba Musa Hassan a student at University of Nairobi (UON) and in line with academic graduation requirement of the university; I am carrying out a study on school based factors influencing performance of girls at Kenya certificate of primary education in Isiolo sub-county Kenya. You do not have to write your name your identity will remain confidential. Answer all the questions by indicating your choice by a mark (✓) where appropriate or fill in the blank spaces.

Section A: Demographic information

1. State your gender.

Male () Female ()

2. Which is your age bracket?

21 – 30 years () 31 – 40 years () 41 – 50 years () above 50 years

3. What is your highest academic qualification?

Post graduate level () Graduate level () Diploma level ()

Certificate level-P1 () P2 () P3 () other.....

4. How many years have you served as a teacher?

Less than 5 years () 6-10 years () 11-15 years () over 15 years ()

5. To what extent does school based factors affect girls performance in KCPE?

Very great extent [] great extent [] moderate extent [] little extent [] no extent []

Section B: School physical facilities

6. Does your school have enough teaching/learning materials?

Yes [] No []

7). Are there enough reading space within the school?

Yes [] No []

8). Are there enough classes in the school?

Yes [] No []

If no what measures have you put in place to ensure pupils study effectively?

9. Are there enough sanitary facilities in for girls and boys?

Yes [] No []

10. To extent does availability of sanitary facilities affect girls performance?

Very great extent [] great extent [] moderate extent [] little extent []

no extent []

Section C: Teachers training and qualification

11. How do you rate the teachers in terms of their competence?

Very High Competence [] High Competence[] Low competence[]

Very Low competence[]

12. Do you agree that good training helps a teacher to develop his interest and ability for teaching girls? Strongly agree [] Agree [] Somehow agree [] Disagree [] Strongly disagree[]

13. Do you think that qualified teachers help improve the performance of girls?
Yes [] No []

14. As a teacher what do you perceive as your role in girls education.

Section D: Facilitation of sanitary towels

15. Does the school cater for provision of sanitary towels? Yes [] No []

16. Where does the school get assistance to provide sanitary towels?

Non-Governmental Organisations (NGOs) []) Community Based Orgarnisations (CBOs) [] Religious groups[]d) others (specify)_____

17. Does menstruation affect girls' performance in KCPE? Yes [] No []

Kindly explain.

Section E: Teachers' attitude

18. Do you think that teachers understand the educational difference between boys and girls in your school? Yes [] No []

19. To what level do you rate teachers' capacity to understand gender issues in education?

Sufficient Average insufficient

20. If you were asked to choose between boys and girls for teaching, whom do you think you will prefer? Girls Boys teach both gender equally

Section F: Readmission after birth or marriage

21. Does your school readmit girls who have given birth/married? Yes No

22. Does the school administration offer support and conducive environment for parenting pupils? Yes No

23. To what extent do the head teachers protect parenting pupils from bullying?

Very great extent great extent moderate extent little extent no extent

Thank you very much for your co-operation

APPENDIX IV: PUPIL'S QUESTIONNAIRE

I am Habiba Musa Hassan a student at University of Nairobi (UON) and in line with academic graduation requirement of the university; I am carrying out a study on school based factors influencing performance of girls at Kenya certificate of primary education in Isiolo sub-county Kenya. You do not have to write your name your identity will remain confidential. Answer all the questions by indicating your choice by a mark (✓) where appropriate or fill in the blank spaces.

Section A: Demographic information

1. What is your gender?

Male () Female ()

2. Which is your age bracket?

10-14 years [] 15 years and above []

3. To what extent does school based factors affect girls performance in KCPE?

Very great extent [] great extent [] moderate extent [] little extent [] no extent []

Section B: School physical facilities

3. How much do the conditions of facilities like toilets, water and general appearance of the school infrastructure affects your academic performance?

Very much () Much () Not much () Not applicable` () Too little ()

4. How much does the distance that you walk or take every morning and evening from home to school and vice versa affects your performance?

Very much () Much () Not much () Not applicable` () Too little ()

5. Does your school have a library?

Yes [] No []

If yes is it well stocked with books?

Yes [] No []

Section C: Teachers training and qualification

6. Do you have female teachers in the school? Yes [] No []

If yes are they good role models? Yes [] No []

7. Do you think that the teachers have the interest and ability for teaching girls?

Yes [] No []

8. Do teachers in the school discriminate girls? Yes [] No []

If Yes explain the form(s) of discrimination

Section D: Facilitation of sanitary towels

9. Does your school provide sanitary towels to students?

Yes [] No []

If yes how is it distributed?

It is given to all students[] It is given to selected students[] I am not sure how

it is done[]

10. Does menstruation affect your performance in exams? Yes [] No []

Kindly explain.

Section E: Teachers' attitude

11. Do you think that teachers in your school do have different expectations from girls and boys? Yes [] No []

12. Rate the extent to which teachers demonstrate differences in the following areas between boys and girls in your classroom?

Areas	High	Average	Low
Paying special attention			
Giving better marks			
Giving material incentives			
Praising			
Provision of school materials			
Guidance and counselling			

Section F: Readmission after birth or marriage

13. Have any of your classmates been readmitted to school after birth or marriage? Yes [] No []

14. Does the school administration offer support and conducive environment for parenting pupils? Yes [] No []

15. To what extent do the head teachers protect parenting pupils from bullying by other pupils?

Very great extent [] great extent [] moderate extent [] little extent [] no extent []



Thank you very much for your co-operation

APPENDIX V: INTERVIEW SCHEDULE FOR SUB-COUNTY DIRECTOR OF EDUCATION

1. For how long were you at this station.....years
2. What is your highest academic qualification.....?
3. How do physical facilities influence performance of girls?
4. Do schools in Isiolo sub-county have enough teaching/learning materials?
5. How do teachers' training and qualification influence performance of girls?
6. Do the schools in Isiolo sub-county provide sanitary towels?
7. How do provision of sanitary towels influence performance of girls?
8. To what extent does teachers' attitude towards girls affect their performance?
9. Do you think that teachers understand the educational difference between boys and girls in your schools?
10. Do primary schools in the area readmit girls after birth or marriage?

APPENDIX VII: RESEARCH PERMIT

<p>THIS IS TO CERTIFY THAT: MS. HABIBA MUSA HASSAN of UNIVERSITY OF NAIROBI, 0-60300 ISILOLO, has been permitted to conduct research in Isiolo County on the topic: SCHOOL BASED FACTORS INFLUENCING GIRLS' PERFORMANCE AT KENYA CERTIFICATE OF PRIMARY EDUCATION IN PUBLIC PRIMARY SCHOOLS IN ISILOLO SUB COUNTY KENYA for the period ending: 24th October, 2017</p>	<p>Permit No : NACOSTI/P/16/65807/14228 Date Of Issue : 24th October, 2016 Fee Received : ksh 1000</p>
 Applicant's Signature	  Director General National Commission for Science, Technology & Innovation

<p>CONDITIONS</p> <ol style="list-style-type: none"> 1. You must report to the County Commissioner and the County Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit. 2. Government Officer will not be interviewed without prior appointment. 3. No questionnaire will be used unless it has been approved. 4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries. 5. You are required to submit at least two(2) hard copies and one (1) soft copy of your final report. 6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice 	 REPUBLIC OF KENYA  NACOSTI National Commission for Science, Technology and Innovation RESEACH CLEARANCE PERMIT Serial No. A 11314 CONDITIONS: see back page
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APPENDIX VIII: AUTHORIZATION LETTER



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

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when replying please quote

9th Floor, Utalii House
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NAIROBI-KENYA

Ref. No.

Date:

NACOSTI/P/16/65807/14228

24th October, 2016

Habiba Musa Hassan
University of Nairobi
P.O. Box 30197-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "*School based factors influencing girls' performance at Kenya Certificate Of Primary Education in public primary schools in Isiolo Sub County Kenya,*" I am pleased to inform you that you have been authorized to undertake research in Isiolo County for the period ending 24th October, 2017.

You are advised to report to **the County Commissioner and the County Director of Education, Isiolo 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.


BONIFACE WANYAMA

FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Isiolo County.

The County Director of Education
Isiolo County.

National Commission for Science, Technology and Innovation is ISO 9001:2008 Certified