

**A STUDY OF THE LINKS BETWEEN PRIMARY SCHOOL
BOYS' CIRCUMCISION AND ACADEMIC
PERFORMANCE IN GATANGA DIVISION, KENYA**

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**A Research Project Report submitted in Partial Fulfillment of the
requirements for the Master of Arts Degree in Project Planning and
Management of the University of Nairobi**

2009

DECLARATION

This research report is my original work and has not been presented to any other University.

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DEDICATION

Dedicated to all Kenyans committed to the achievement of Education For All (EFA).

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TABLE OF CONTENTS

DECLARATION	II
DEDICATION.....	III
ACKNOWLEDGEMENTS	IV
LIST OF FIGURES.....	VIII
LIST OF TABLES	IX
ABBREVIATIONS AND ACRONYMS.....	X
ABSTRACT.....	XI
CHAPTER ONE:INTRODUCTION	- 1 -
1.1 BACKGROUND OF THE STUDY	- 1 -
1.2 STATEMENT OF THE PROBLEM	- 5 -
1.3 THE PURPOSE OF THE STUDY	- 5 -
1.4 RESEARCH OBJECTIVE	- 5 -
1.5 HYPOTHESIS	- 5 -
1.6 JUSTIFICATION	- 6 -
1.7 DELIMITATION OF THE STUDY	- 6 -
1.8 LIMITATIONS OF THE STUDY	- 6 -
1.9 ASSUMPTIONS OF THE STUDY	- 6 -
1.10 DEFINITIONS OF SIGNIFICANT TERMS	- 7 -
1.11 ORGANIZATION OF THE STUDY.....	- 7 -
1.12 SUMMARY	- 8 -
CHAPTER TWO- 9 - LITERATURE REVIEW	- 9 -
2.1 INTRODUCTION.....	- 9 -
2.2 PRIMARY SCHOOL BOYS' CIRCUMCISION	- 9 -
2.3 KCPE PERFORMANCE	- 10 -
2.4 THE CONCEPTUAL FRAMEWORK ANALYSIS	- 14 -
2.5 EXPLANATION OF THE CONCEPTUAL FRAMEWORK.....	- 14 -
2.6 SUMMARY.....	- 15 -
CHAPTER THREE:RESEARCH METHODOLOGY	- 16 -
3.1 INTRODUCTION.....	- 16 -
3.2 RESEARCH DESIGN.....	- 16 -
3.2 TARGET POPULATION	- 17 -
3.3 SAMPLING PROCEDURE AND SAMPLE SIZE	- 17 -
3.4 METHODS OF DATA COLLECTION.....	- 18 -

3.5 VALIDITY AND RELIABILITY	- 18 -
3.6 OPERATIONAL DEFINITIONS OF VARIABLES.....	- 18 -
3.7 METHODS OF DATA ANALYSIS	- 19 -
3.8 SUMMARY	- 20 -
CHAPTER FOUR DATA PRESENTATION, ANALYSIS AND INTERPRETATION	- 21 -
4.1 INTRODUCTION	- 21 -
4.2 PROFILES OF PRIMARY SCHOOLS SAMPLED.....	- 21 -
4.3 HEAD TEACHERS VIEWS	- 23 -
4.4 ACADEMIC PERFORMANCES OF THE CONTROL AND EXPERIMENTAL GROUPS.....	- 31 -
4.5 CORRELATION TEST.....	- 33 -
4.6 THE CHI SQUARE TEST.....	- 34 -
4.7 SUMMARY	- 35 -
CHAPTER FIVE:SUMMARY OF FINDINGS, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS	- 36 -
5.1 INTRODUCTION	- 36 -
5.2 SUMMARY AND DISCUSSION OF THE FINDINGS.....	- 36 -
5.3 CONCLUSIONS.....	- 39 -
5.4 RECOMMENDATIONS OF THE STUDY	- 40 -
5.6 RECOMMENDED AREAS OF FURTHER RESEARCH	- 41 -
REFERENCES	- 43 -

APPENDICES

APPENDIX 1: INTRODUCTION LETTER	- 46 -
APPENDIX 2: INTERVIEW QUESTIONNAIRE.....	- 47 -
APPENDIX 3: DATA COLLECTION SHEET	- 50 -

LIST OF FIGURES

FIGURE 2.1: THE CONCEPTUAL FRAMEWORK - 14 -

LIST OF TABLES

TABLE 3.1: EXPERIMENTAL GROUP VERSUS CONTROL GROUP	- 16 -
TABLE 3.2: OPERATIONAL DEFINITIONS OF VARIABLES AND MEASURING INDICATORS.....	- 19 -
TABLE 4.1 DIFFERENCE IN PERFORMANCE BETWEEN CIRCUMCISED AND UNCIRCUMCISED BOYS	- 24 -
TABLE 4.2 BEHAVIOR OF CIRCUMCISED BOYS	- 25 -
TABLE 4.3 FACTORS CONTRIBUTING TO DIFFERENCE IN PERFORMANCE OF BOYS	- 27 -
TABLE 4.4 FACTORS AFFECTING PERFORMANCES BUT NOT RELATED TO CIRCUMCISION	- 27 -
TABLE 4.5 CIRCUMCISION TIME	- 28 -
TABLE 4.6 SUSTAINABLE SOLUTIONS TO IMPROVING BOYS' ACADEMIC PERFORMANCE	- 29 -
TABLE 4.7 CHALLENGES TO THE ANTI- CIRCUMCISION CAMPAIGN	- 31 -
TABLE 4.8 MEAN OF PERFORMANCES BY CIRCUMCISION STATUS.....	- 32 -
TABLE 4.9 PEARSON'S PRODUCT MOMENT CORRELATION RESULTS.....	- 33 -
TABLE 4.10 CHI-SQUARE TEST STATISTIC	- 34 -

ABBREVIATIONS AND ACRONYMS

AEO	:	Area Education Officer
CATs	:	Continuous Assessment Tests
CBS	:	Central Bureau of Statistics
DEB	:	District Education Board
DHT	:	Deputy Head Teacher
EFA	:	Education For All
ERSWEC:		Economic Recovery Strategy for Wealth and Employment Creation
FPE	:	Free Primary Education
GoK	:	Government of Kenya
HIV/AIDS:		Human Immuno-Deficiency Virus/Acquired Immune Deficiency Syndrome
Hon	:	Honourable
HT	:	Head Teacher
IP-ERS:		Investment Programme for Economic Recovery Strategy
KCPE	:	Kenya Certificate of Primary Education
KNEC	:	Kenya National Examination Council
MC	:	Male Circumcision
MDGs	:	Millennium Development Goals
MoE	:	Ministry of Education
MoEST:		Ministry of Education, Science and Technology
MP	:	Member of Parliament
MPND:		Ministry of Planning and National Development
MSS	:	Mean School Score
SMC	:	School Management Committee
UPE	:	Universal Primary Education

ABSTRACT

This was a study of the links between School Boys' Circumcision and Academic Performance. The research sought to establish if there were any links between Primary School Boys' Circumcision and KCPE Performance in Gatanga Division, Kenya.

Primary Schools in Gatanga Division had successively recorded declining performance in KCPE. The dismal performance has been a major concern among parents, teachers, educationists, public administrators and the general stakeholders in the education sector. The poor performance had over time been attributed to circumcision prior and close to the KCPE examinations. Preferably and advisably, boy circumcision should take place after completion of standard eight and before transition to form one. Boy circumcision results to drastic behavioral changes. This problem was a motivation to carry out this study to examine of any links between Primary School Boys' Circumcision and KCPE Performance.

The research used a quasi-experimental design that uses a non-equivalent pretest – posttest control group design without randomization. A sample of five public primary schools was studied to represent a total population of forty seven primary schools in Gatanga Division. Data collection was through document analysis, recording and key informant interviews. The data collected was analyzed results presented in percentages and frequencies and decision-making criteria done using Chi-Square Test of Independence at the critical alpha of 0.05 significance level and a Pearson's Correlation test.

The study found out that there is a significant difference between the academic performances of circumcised and uncircumcised boys. It concluded that boys who were circumcised performed poorly as compared to those who are uncircumcised. The research recommended offering guidance and counseling to both boys and parents as it emerged to be an imperative solution to future improvement of boys' performances according to the respondents. Setting a sustainable timing for circumcision that will not affect the academic performance of the boys was also recommended.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

This was a study of the links between primary school boys' circumcision and KCPE performance in Gatanga Division, Kenya. The research sought to examine any links of primary school boys' circumcision and KCPE performance and how significant the variations were.

Outwardly a relatively simple physical act, according to the Traditional Music and Cultures of Kenya, Jens Finke 2000-2007, circumcision is in fact of crucial social importance with complex meanings that affect the entire society. On its most basic level, circumcision marks the passage of a child into adulthood. Of all the Kikuyu life stages, circumcision (*irua*) was and remains by far of most important, signifying not only a child's passage into adulthood, but a whole wealth of other socially significant meanings and assumptions of responsibility that are highly emphasized during the initiation process. It's associated with factors such as masculinity and maturity across the Kikuyu culture especially after the circumcised boys undergo a thorough traditional training that initiates them to adulthood which is known as the initiation process. This conviction is no different in Gatanga Division. It is these feelings of manhood by the circumcised male pupils have that make them feel they have grown-up and therefore should not heed to any kind of instructions. They believe that being adults they should be part of decision making rather than on the receiving end.

According to MOE District Education Board task force report 2009, Primary schools in Gatanga Division have successively recorded declining performance in KCPE in Thika District. This dismal performance has now been a major concern among parents, teachers, educationists, public administrators and the general education stakeholders in Gatanga Division. The problem may be attributed to primary school boys' circumcision for initiation prior and close to the KCPE period that results in drastic boyhood behaviour change and assumption of full manhood and the perceived gender roles that accompany it at the expense of preparations for the forthcoming examinations. Therefore, the need to

address this problem motivated the researcher to carry out a study to examine the links of primary school boys' circumcision and KCPE performance.

For instance, in a school committee discussion in Rwegetha Primary School, it was observed that there is poor performance in KCPE. Minute 1 of the school management committee meeting discovered that mature and initiated boys have contributed to poor performance by truancy – running away from school; indiscipline – the feeling of maturity and want of personal independence given that they are more of men than boys after undergoing initiation and lastly most parents were unable to control their children leaving all the child development and behavior modification responsibilities to teachers. The meeting had resolved that a parents meeting be convened and a guest speaker invited to sensitize both parents and pupils, mostly classes 6-8 on the dangers of initiation before completion of Standard 8. The proposed speaker was the Catholic Church Father In-Charge. The same meeting further noted a drop in Mean School Score (MSS) in 2004 KCPE performance of 193.48, a drop of about 32 points compared to the previous year's examination results (Rwegetha Primary School, Minutes 2004).

Minute 2 of the same meeting with reference to previous School Management Committee (SMC) Meeting held on March 21, 2005, similarly discussed the same poor KCPE performance of 2004. It was attended by 10 Members who resolved that an urgent parents meeting be convened to address the matter.

Another parents meeting held on March 23, 2005 attended by 142 out of 300 parents unanimously resolved to stop circumcising male children in primary schools with some still in Class Five and to bring to an end early initiation because it promoted youth immorality, uncontrolled idleness and laziness leading to poor KCPE performance, low transition, completion rates and reduced academic standards. Immorality became rampant as the boys felt they have become men and therefore should freely associate with girl friends. This in most cases resulted to unwanted early pregnancies and high drop out rates of both boys and girls. The parents resolved that there should be no early circumcision before sitting of the KCPE to improve on KCPE performance.

Minutes of MoE Cluster Meeting of Four Head Teachers from Rwegetha, Kirwara DEB, Mabae and Chomo Primary Schools where the Head Teachers spoke to class 8 pupils

from the four schools in turns on the KCPE performance in Gatanga Division. It was emphasized Gatanga Zone ranked last (number 4 out of 4 in the Division). They attributed the poor performance may have links with early circumcision prior to KCPE sessions.

In September 2008, a joint MoE Zonal Meeting of parents, teachers and pupils in classes 6-8 was held. The meeting was facilitated by Gatanga Division Education Committee and also in attendance was the Area MP, Hon. Peter Kenneth. The agenda was to deliberate on the same issue of boy circumcision and KCPE performance (MoE, Zonal Office Minutes, 2008).

According to the Minutes of AEO's Meeting held on March 20, 2009, the AEO was to go round all the Schools in Gatanga Division and address the circumcised boys particularly on discipline matters. The targeted schools included Gathuthu Primary School where the newly initiated men shut out the HT and DHT on claims that they had called them "ihii". This school was in the list of the last 10 Schools in the District in KCPE 2008 examination results and the last in the zone (MoE, AEO's Office Minutes, 2009).

Provision of Social Services such as education and health by the Government has been a key factor to improving livelihoods of the majority of Kenyans through capacity building and empowerment. The attainment of Universal Primary Education (UPE) is a top priority of the Government as stated in Investment Programme for Economic Recovery Strategy (IP-ERS), and in line with the Millennium Development Goals (CBS, Economic Survey, 2006: 36). The FPE Programme introduced in 2003 was intended to broaden access to primary schooling especially among the poor households.

CBS, ERSWEC 2003-2007 emphasized education is a key determinant of earnings and therefore an important exit route from poverty. Education improves people's ability to take advantage of the opportunities that can improve their well-being as individuals and be able to participate more effectively in the community and markets. Higher educational attainment for a household head significantly reduces the likelihood of a household being poor and hence it is imperative to take boy child education critically. The broad objectives of the education sector interventions are to achieve 100 per cent net primary education enrolment rate and reduce the disparity in access and quality education. From

MoE Divisional Education Reports, several sample performance records from schools in Gatanga Division indicated that circumcision really weakens the performance of the boys in KCPE. Primary Schools sampled included Giatutu, Gatura, Kihumbuini, Gichumbu and Ndunyu ya Chege where sample performance records of selected pupils were evaluated and tabulated. Table 1.1 illustrates the performance of boys before and after circumcision both in CATs and KCPE. According to the mean scores, the performances of circumcised boys were not only lower than for the uncircumcised, but also lower than their own scores before they were circumcised.

Table 1.1: Performance Before and After Circumcision (2007)

Circumcised Boys In Both Classes (2007)			Uncircumcised Boys In Both Classes (2007)		
Pupils	Class 7 Score-2006	KCPE Score- 2007	Pupils	Class 7 Score-2006	KCPE Score-2007
Pupil 1	211	157	Pupil 1	269	320
Pupil 2	187	109	Pupil 2	243	325
Pupil 3	254	178	Pupil 3	239	270
Pupil 4	231	125			
Pupil 5	240	120			
Pupil 5	253	136			
Pupil 6	224	117			
Pupil 7	235	181			

Key:

Mean Score for Standard 7 2006 was 192.08

Mean Score for KCPE 2007 was 173.18

There is a 10% drop in performance after circumcision, whereas there is an improvement from the uncircumcised boys.

MPND National Development Plan 2002-2008 emphasized that one of the goals is to achieve Universal Primary Education and one of the strategies to achieve this is to strengthen guidance and counseling services in primary schools.

HIV & AIDS debates advocate for circumcision but at what age? Does this mean that in our efforts to curb the spread of the disease, we forget about the most basic human right?

In view of the above factors, the researcher got motivation to carry out a field experiment seeking to find out why there is a drop in the Mean School Score of Primary Schools in Gatanga Division and establish of any links between Primary School Boys' Circumcision and KCPE Performance.

1.2 Statement of the Problem

The research sought to examine the links between primary school boys' circumcision and KCPE Performance in Gatanga Division, Kenya.

Primary Schools in Gatanga Division successively recorded declining performance in KCPE. This dismal performance was a major concern among parents, teachers, educationists, public administrators and the general stakeholders in the education sector from Gatanga Division. The problem had been attributed to primary school boys' circumcision prior and close to the KCPE period that resulted to drastic behavioral changes and assumption of full manhood following the initiation process that the boys are taken through by the older and earlier circumcised boys at the expense of their academics. The need to address this problem was a motivation to carry out a study to investigate the relationship between school boys' circumcision and academic performance.

1.3 The Purpose of the Study

The study was seeking to examine any links between primary school boys' circumcision and KCPE performance in Gatanga Division, Kenya.

1.4 Research Objective

The objective of the study was to establish if there was any significant difference between the academic performances of boys before circumcision and after circumcision in Gatanga Division.

1.5 Hypothesis

H₀; There is no significant difference between the academic performance of primary school boys before and after circumcision

H₁; There is a significant difference between the academic performance of primary school boys before and after circumcision

1.6 Justification

The successful implementation of the study's recommendations will enhance the rights and responsibilities of all people involved, directly or indirectly, in the improvement of KCPE performance and the education sector in general. It will further contribute to elimination of disparities and cultural beliefs and practices, such as untimely male circumcision in Gatanga Division that may be affecting local educational standards.

The study made available, highlights for the key concerns of male circumcision and education standards including disparities in enrollment, retention, performances and transition rates and will contribute to adopting positive socio-cultural beliefs, practices and attitudes which will assist in realization of good academic performance and equity in the education sector.

1.7 Delimitation of the Study

The research was within the government and university policies of research and development hence possessed supportive legal and ethical issues for national development and academic research achievements.

1.8 Limitations of the Study

This study had limitations of a finite scope. These restrictions included;

- a) Time and budget constraints. These constraints were overcome by adhering to study plan of work and ensuring that the research activities stayed within the budget.
- b) The research design used is quasi-experimental designs where the researcher had relatively little or no control over both the dependent and independent variables. The researcher however incorporated qualitative methods of data collection to improve on validity and reliability of the findings of the study.

1.9 Assumptions of the Study

The following assumptions were made during the study

- a) that the selected sample was a representative of the entire research population;
- b) that data collection instruments were valid and gave an accurate measure of constructs
- c) that respondents gave their views without bias

- d) that the boy pupil shared similar learning environment and all other factors were constant except for their circumcision status

1.10 Definitions of Significant Terms

Education - the gradual process of acquiring knowledge in an institutional environment usually divided into stages such as nursery, primary, secondary, etc. in this study primary education is in terms of levels of education – primary level - will be used.

KCPE Performance - The mean score of schools and class performance in KCPE examinations after completion of Standard Eight.

Academic Performance - The mean score of schools and class performance in both Standard 7 and KCPE performance after completion of Standard Eight.

Boys' Circumcision - This is the act of removing the foreskin that covers the head of unerect penis.

Initiation Process – It's the social progression of the circumcised boys from childhood to adulthood after the cut through socialization, trainings and assumptions of manhood responsibilities.

Population - Population is the people who live in an area, a city, a country etc. The population for this study is defined as all respondents who will be represented during the sampling period.

Respondent - A respondent is a member of the household who will provide household information to the interviewer. For this survey, respondent is an individual who participates in the study process by providing information using an instrument provided by the evaluator. The head of the household or any other adult contributor in education will provide responses to sensitive issues such as primary school boys' circumcision and KCPE performance. Any adult respondent will provide responses to other routine issues provided he/she would have accurate information.

1.11 Organization of the Study

This research project report is organized into five chapters. Chapter One is on the introduction that gives an overview of the study, statement of the problem, the research objective and the significance of the study. Chapter Two contains the relevant literature reviewed and the conceptual framework. It is structured into two sections; first the literature reviewed that show what previous researchers found out in relation to this area

of study and the conceptual framework analysis. Chapter Three explains research design for the study, target population and sampling frame, methods of data collection, data processing and analysis, reporting procedures and information dissemination. Chapter Four discusses the findings of the study and interprets them while Chapter Five presents discusses the findings of the study, offers the conclusion and the recommendations of the study as well as other recommended areas of further research.

The study was implemented by the researcher in collaboration with the Ministry of Education and supervised by the University of Nairobi. The data collection and analysis was carried out over a period of one month beginning July 25, 2009. Financial support of the study was catered for by the researcher.

1.12 Summary

This was a study of the relationship between primary school boys' circumcision and academic performance in Gatanga Division, Kenya. The research was seeking to examine any links between primary school boys' circumcision and Academic Performance specifically KCPE performance.

The study sought to determine how significant the difference between the academic performance of boys before circumcision and after circumcision in Gatanga Division. The successful implementation of this experiment will enhance the rights and responsibilities of all people involved, directly or indirectly, in the improvement of KCPE performance and the education sector in general. It will further contribute to elimination or adjustment of disparities and cultural beliefs and practices, such as untimely male circumcision in Gatanga Division that is contributing to poor academic performance.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This Chapter contains relevant and related literature reviewed and shows what previous researchers have found out in this area of study. The scope of the literature review and research was the last five years (2005-2009).

2.2 Primary School Boys' Circumcision

Government of Kenya (1999) Koech Commission Report observed that the aim in education sector is elimination of existing disparities in education such as those based on geographical factors, social and gender issues by providing a universal and compulsory basic education over a planned period of time with special measures for addressing the needs of previously disadvantaged groups especially those with special needs, this the commission proposed would lead to the achievement of equity in education.

Similarly, previous research studies revealed that children in most of the areas reported that there existed such social-cultural practices which expose children to HIV/AIDS infection as circumcision, early marriages, and incisions on the body. From 6 to 15 years, the child is a big boy or a girl. A child is known by various names in different communities, for example, *kahii* (boy), *kairitu* (girl), among the Kikuyu. At this stage, a child has slightly more complex duties, such as taking care of siblings, cooking, participating in the family's income generating activities and also undergoes initiation and continues with schooling. Between 12 and 20 years, the child is a young adult boy or girl. The child at this stage may continue with similar duties and responsibilities as in age 6-12 years stage. However, in all communities, initiation, rites of passage coupled with instructions for preparation of adulthood and marriage are carried out. These instructions also include training on sexuality. At this stage children may also be involved in community service and continues with schooling. Marriage and employment may also occur at this stage.

2.3 KCPE Performance

Mwangi, (1997) in his study to investigate the problem of absenteeism and its effects on pupil's academic achievement revealed that there was a higher rate of absenteeism in the first month of each term than the second term and third months and highest in the first month of term one. Also revealed was a negative relationship between absenteeism and scholastic aptitude as well as a significant effect of pupils' socio-economic status on the rate of absenteeism. Personal observation indicates that this common absenteeism is also associated with initiation ceremonies when the initiates have to undergo and remain secluded from the rest of the family for some period of time during which they cannot attend schools. Such situations may usually lead to negative performance in examinations.

Machila (2005), in a study elsewhere to investigate factors that affect the effective implementations of UPE in Taveta division exposed that there was an educational wastage problem in the division. A number of school-going age children had not yet enrolled in school. For those who were in school many were repeating classes while others dropped. The study identified factors such as parental ignorance and negligence of education, poor economic growth and increased poverty, child labour, the effects of HIV/AIDS pandemic, teenage pregnancy and early marriages to be the major causes of pupils non enrolment repetition and drop-out. It was also discovered that children were involved in negative cultural practices, long distance to schools, teachers conduct, high cost of schooling, inappropriate policy framework, were other factors affecting implementation of UPE.

Another related anthropological study, Eshiwani, R. E. (1994) explored the gender differentiation in girls' socialization and how it is likely to impact on their academic achievement in Lurambi Division. The study revealed that girls in Lurambi division are ready to take the challenge of education. They work hard and perform better than boys but their performance deteriorates as they move up. There are still age-old beliefs as to what subject's girls should study and what careers they should take up. The early socialization in the family and school should not show girls that they are limited in what they can become.

According to (MoE) research findings, evidence overwhelmingly suggest that minimum of education attainment among the majority of a country's population is a prerequisite for modern development. Findings from many studies show that as compared to the post primary sectors, investment in primary education yield higher returns for individuals and therefore primary education has been declared a human right entitled to every child.

According to MoEST (1990) Primary completion rate and transition rates are some of the performance of primary school quality indicators and in relation to Gatanga Division, boys being circumcised at end of their standard seven year, sometimes do not find it significant to go back to school and finish standard eight as they feel mature and too old to be in school hence some drop out. According to statistics, the percentage of girls being retained is 7% more than boys. For transition rates, the percentage of girls is 3% more than boys.

Using statistics from Mensch, et al, (2001) nearly 600 adolescents aged between 12 -19 in combination with data collected from 33 primary schools the adolescents attended, the study explored whether certain aspects of school environment affect the initiation of pre-marital sex among girls and boys in three districts in Kenya. The results suggested that although neither the school nor the home appeared to influence whether boys engage in sex prior to marriage, for girls, a school characterized by a gender-neutral atmosphere appear to reduce the risk of engaging in pre-marital sex. Further-more although policy makers in Kenya are clearly concerned with the problem of "school girl pregnancy", data indicated that in the sample, pregnancy was not the primary reasons that girls leave school. The recommendations targeted the need for efforts focused on making schools more affordable, effective and inviting to girls. This strategy was viewed to be effective than efforts directed at preventing adolescent pregnancy.

Similarly, Juma 2004 in his study to investigate gender factor in performance at KCPE Examination in Kombewa Division, Kisumu District established that there was a significant difference in performance between boys and girls at KCPE in the division and that family, community, school and individual factors affected the performance of girls more than boys at KCPE. On the family based factors, parent level education was the major factor with parents who were educated found to be more likely to impact a positive view of school amongst their children. Other family based factors included parental

occupation and income levels. Community based factors like things done at home that prevent studies, a number of siblings who have completed primary, secondary schools and university education also affected performance. On work done, girls mostly fetched water and firewood (63%); domestic work (100%) engaging in errands to the market (93%) and prepared the *shamba* (85%) while boys mostly looked after the cattle (78%). This study therefore established that it is a greater sacrifice for parents to send girls to schools than it is to boys because of the girl's contribution to family livelihoods. The school based factors included the existence of hidden curriculum which encourages girls to be inactive and little pride was noted. Other school factors included teachers' attitudes towards both genders, lack of textbooks (78%), and lack of facilities (46%). The study recommendations targeted community leaders, local administrations, teachers, parents, pupils and members of community. The study recommended the need for awareness campaigns on the benefits of education especially of the girl child. This can be done through religious preaching, seminars and public Barazas.

Akeno (2007) in a study to establish the factors that influence pupils drop-out in public primary school in Asego Division majorly found that drop-out rates for boys are higher than that of girls and of the drop-outs are older than their colleagues. Major factors causing girls to drop out in the division were pregnancies 24%, early marriages 20%, lack of interest 19.4%, poverty 13%, family problems 11.2%, repetition 4.3%, truancy 3%, lack of physical facilities in schools 2.5%, peer influence 2.3%. While the following factors caused boys to drop-out from schools: truancy 20%, poverty 19%, to earn money to support themselves 19%, conflict with teachers and repetition 15%, peer influence 11%, family problems 11%, drug abuse 2%, lack of interest 2%, early marriages 2%, HIV/AIDs orphans 1% and poor academic performance and health problems 1%. Guidance and counseling emerged as the most effective means of curbing drop-out problems. The study recommended that the government should embark on sensitization, seminars, programmes and courses on HIV/AIDs scourge among teachers' pupils' parents and the community as a way of curbing its spread. Measures of alleviating poverty from grassroots level should be used. The government should employ more teachers so as to cope with challenges of implementing FPE. Parents who hinder their children from accessing FPE should be sued in a Court of Law.

Gachie 2003 study also sought to determine the effects of school drop-out at primary school levels and identify strategies which can be employed in curbing the drop-out problem. The study found out that the drop-out rate for boys was higher than that of girls. Among the main determinants highlighted include poverty, family problems, lack of parental concerns, lack of interest, peer pressure and repetition and poor performance.

The teachers and pupils indicated the effects of school drop-out as an increase of social evils and crime, low literacy, rates, increase of poverty, dependency, curtailing future prospects of the drop-outs and lack of suitable employment. Guidance and counseling emerged as the most effective means of curbing the drop-out problems. The recommendations targeted the Government to embark on sensitization seminars programmes, courses and forum on HIV/AIDS for the teachers, pupils, parents and community members as a way of curbing its spread. More practical measures of alleviating poverty from grassroots were recommended to empower the people economically. The Government should employ more teachers to cope with challenges of implementing free and compulsory primary education and make it a reality to avoid compromising the quality of education.

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Ncabira, (2005) carried out a study to investigate the factors that lead to poor access and low transition rates from primary to secondary and to find out why students drop out of schools found out that high cost of schooling was the major factor contributing to poor access and participation in secondary education in Meru Central District among other factors. The research recommends that the government through the Ministry of Education should provide a highly subsidized or free secondary education.

Another study by Muiru, (2005) that investigated the factors contributing to primary school pupils' absenteeism in Ruiru Division of Thika District revealed that major causes of absenteeism were illness, family problems, lack of interest and "bad company". It was also revealed that pupils' absenteeism cannot be tackled by teachers alone, but also needs the involvement of the parents, school counselors, education planners and curriculum developers. Recommendation made targeted schools, policy makers, parents and researchers to support efforts to reduce the absenteeism among primary school pupils

2.4 The Conceptual Framework Analysis

From the above document review and literature analysis, this research project started from an idea in the mind of the researcher after a thorough examination and evaluation of previous studies. The idea came from research done by others and previous reports on primary school boys' circumcision and KCPE performance in Gatanga Division. A cross-sectional overview of this conceptual framework illustrates underlying variable relationships and their terminology as used in the research.

The linkages between primary school boys' circumcision and KCPE performance can be conceptualized at a general level, depicted in Figure 2.1, as a two-stage relationship where a set of basic causal factors namely; primary school boys' circumcision may influence KCPE performance .

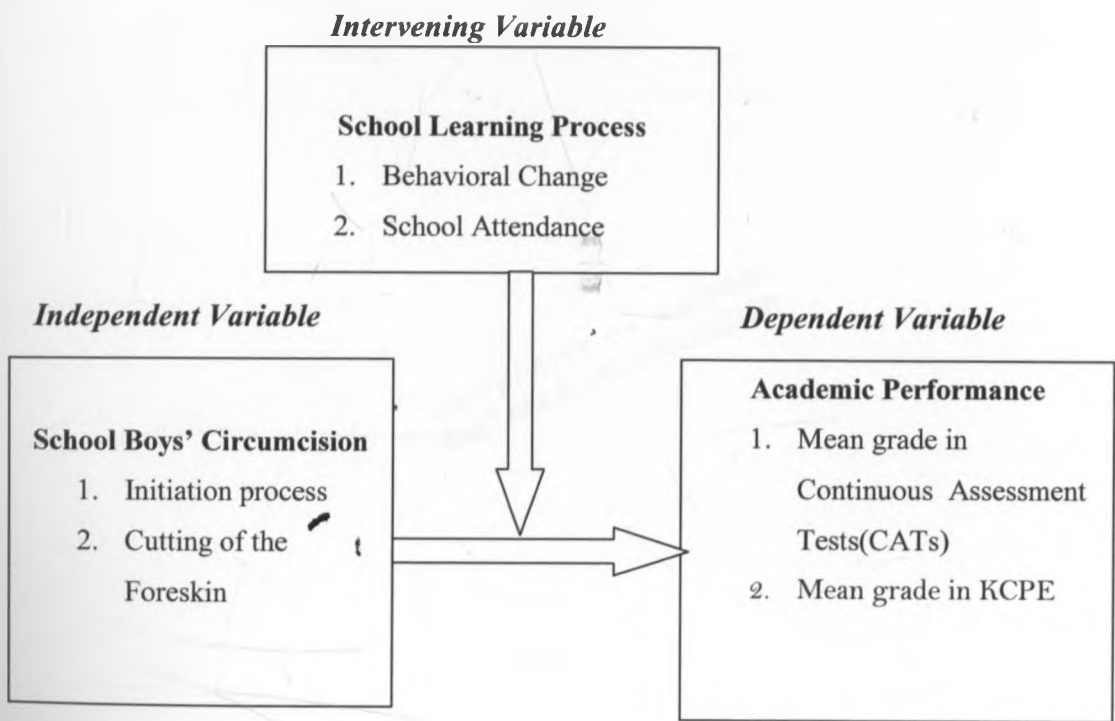


Figure 2.1: The Conceptual Framework

2.5 Explanation of the Conceptual Framework

The independent variable may have an effect on the Academic Performance which is the dependent variable of the study. The boys' circumcision involves the initiation process and the real act of cutting of the foreskin. Academic performance is indicated by the Mean grade score of CATs and Mean grade in KCPE which will be used by the

researcher to establish any relationship between the independent and the dependent variable. The School learning process is the intermediary variable for this study.

2.6 Summary

The literature review presents an overview of findings of other research in relation to this research. The independent variable of the study was primary school boys' circumcision and the dependent variable was the academic performance specifically KCPE in Gatanga Division, Kenya.

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CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This Chapter explains the research design used of the study, the target population and sampling frame, methods of data collection, data processing and analysis, reporting procedures and information dissemination.

3.2 Research Design

The research used a quasi-experimental design that uses a non-equivalent pretest – posttest control group design without randomization. The groups were chosen from clustered units, the classes. Under these conditions, there was a creation of a *non-equivalent control group* composed of the uncircumcised boys.

Table 3.1: Experimental Group versus Control Group

Selected Primary Schools	KCPE Performance in Standard Eight		Academic Performance in Standard Seven	
	Control group A2	Experimental Group B2	Control Group A1	Experimental group B1
Primary School 1				
Primary School 2				
Primary School 3				
Primary School 4				
Primary School 5				

Key;

Experimental group- circumcised boys

Control group- uncircumcised boys

Primary schools- selected randomly

The research design was specifically chosen to address the challenges of attribution and selection bias. The quasi-experimental design includes a treatment group (the circumcised boys) and a control group (the uncircumcised boys) that were assumed to share similar

learning environments and other conditions as the treatment group in critical ways affecting their performance outcomes. A panel data set following the same respondents over time helped to account for the fixed effects of selection bias and for any other exogenous effects on performance that are unrelated to circumcision. To strengthen the case for making inferences about the impacts of male circumcision on KCPE performance, the research was on a mixed-method approach, combining quantitative and qualitative methods. The study measured the intervention's effect by comparing post-intervention outcomes (the Academic performance in both CATs and KCPE performance) for circumcised boys with outcomes from the comparison group that was not exposed to the intervention.

Following a survey, 5 primary schools in Gatanga Division were assigned as both experimental and control groups. Performance of all boys in both the experimental and control groups was extensively evaluated. All girl performances and repeater performances were excluded from the study. The goal of the experiment was to determine how male circumcision is associated with KCPE performance to provide a way forward for improvement. The continuous assessment tests performance of boys in the five selected Primary Schools from both the experimental and control groups were compared with their KCPE performances in Standard Eight. Pretest and Posttests were conducted and allowed for comparison between the experimental and control groups.

3.2 Target Population

A target population of 47 primary schools located in Gatanga Division was studied.

3.3 Sampling Procedure and Sample Size

Five randomly selected primary schools which is a 10% representative probability sample from the larger population were studied. Performances of only boys in the control and experimental groups were measured. The CATs Performance of the pupils both in the experimental and control groups in Standard seven were compared with their KCPE performance to determine existence of any significant variations. Performance of standard eight repeaters as well as of the boys circumcised while in standard seven or before was exempted from the study.

3.4 Methods of Data Collection

The study commenced on 24th July 2009. Data collection was undertaken for a period of 7 days from 2nd August 2009. Data analysis and presentation was done thereafter. The information collected included data on any significant variations in performance of the circumcised and uncircumcised boys. The scope of the study was the last 2 years (2007-2008).

Data collection was mainly in two forms, Secondary and Primary data.

Secondary Data collection included content analysis, that is from performance records from sample primary schools and from KNEC reports, specific School Academic records for standard seven 2007, and KCPE performance records 2008. The data collection instrument included a data collection sheet where performance records were entered.

Primary Data collection involved key informant interviews with 5 Head Teachers as representatives from Gatanga Division. The data collection tools were questionnaires for the key informants' interviews.

3.5 Validity and Reliability

The study ensured validity and reliability by using prepared data collection instruments questionnaires and data collection sheets. Questionnaires were sufficiently pre-tested with subjects who were comparable to the study sample. The methods and procedures used to collect key outcome data from treatment and control groups together with the key informants were the same.

3.6 Operational Definitions of Variables

The operational definitions of variables describe the independent and dependent variables measurable indicators of the study as shown in Table 3.2.

Table 3.2: Operational Definitions of Variables and Measuring Indicators

Variables	Variable Indicators	Means Of Measuring	Measurement Scale	Data Analysis Tool
Independent Variable				
Primary School Boys' Circumcision. 1. Initiation process 2. Cutting of foreskin	1. Circumcision before KCPE. 2. Circumcision after KCPE	3. Mean Score of boys circumcised before KCPE	1. Nominal	Chi-Square Test
Dependent Variable		4. Mean Score of boys circumcised after KCPE		
1. CATs Performance 2. KCPE Performance	1. Performance of Circumcised Boys on completion of Standard Seven 2. Performance of Circumcised Boys in KCPE 3. Performance of Uncircumcised Boys on completion of Standard Seven 4. Performance of Uncircumcised Boys in KCPB	5. Educational Performance and Trends.		

3.7 Methods of Data Analysis

Data collection was through document analysis and recording and questionnaires for the key informant interviews. Quantitative data collected on pre test and post test performances of both control and experimental groups was analyzed using descriptive statistics and results presented in percentages and frequencies. Decision-making was done using Chi-Square Test of Independence at the critical alpha of 0.05 significance level and a Pearson's Correlation test.

Qualitative data collected from the key informant interviews was analyzed using descriptive statistics and results presented in frequencies. Computer software for data

analysis was SPSS Version 12.0, and the Tables formatted using Microsoft Excel. Report writing was in Microsoft Word.

3.8 Summary

A quasi-experimental design that uses a non-equivalent pre-test – posttest control group was used. The groups were chosen from clustered units, the classes. The study measured the intervention's effect by comparing post-intervention outcomes – KCPE performance for circumcised boys with outcomes for a comparison group that was not exposed to the intervention (the uncircumcised boys).

A total population of forty seven primary schools located in Gatanga Division was studied and a sample of five public primary schools was selected randomly as a representative to the larger population. The CATs Performance of the pupils in Standard seven was compared with their KCPE performance to determine existence of any significant variations.

The study used prepared data collection instruments that were deemed valid and reliable to measure key outcomes. Data collection instruments included questionnaires for the key informants and data collection sheets for the performance recording.

Data collection was through document analysis and recording.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter presents the results of the study. The research objective was analyzed critically and the data obtained used to make inferences and deduction in relation to the research objective. They are presented in form of tables.

The analysis is divided into two parts; the first part is the findings from the questionnaires that had 12 standardized items administered to 5 head teachers and part two is data on academic performance (2007-2008) of the control and experimental groups from the sample schools. A total of 5 primary schools were sampled and academic performances of control and experimental groups were compared to make inferences. Data analysis process was in two main broad categories; academic performance of boys who are circumcised and of those who are not circumcised.

4.2 Profiles of Primary Schools Sampled

A 10% sample of 5 public primary schools was selected. The schools were randomly selected and are Rwegetha Primary School, Ndunyu ya Chege Primary School, Rwaitira Primary School, Mabanda Primary School and Gathuthu Primary school. The schools represented two Educational Zones in Gatanga Division. For each school, 100% of boys' performances from the control groups and experimental groups year 2007-2008 were collected to make the sample size statistically relevant.

4.2.1 Rwegetha Primary School

Rwegetha primary is in Gatanga Zone; it is located just about 500 meters from Rwegetha shopping centre and is easily accessible. Opposite the Primary School is Rwegetha Secondary School. The School has a female head teacher who feels passionately about boys' performance and was willing to participate in the study.

A total of 40 pupils undertook the KCPE examinations in the year 2008 with a Mean School Score of 208.83. Out of this total, 16 boys qualified to be in the control group while 5 boys made the population of the experimental group for this study. In 2007, the

school had a total of 59 pupils with a Mean School Score of 183.18. The lower mean score in 2007 in the mean score was attributed to the larger number of circumcised boys as compared to the year 2008.

4.2.2 Rwaitira Primary School

Rwaitira primary is in Gatanga Zone; it's located about 1Km from the local shopping centre and is right opposite the local Catholic Church. Most of the pupils from the school come from within the area and they walk for an average of 25 minutes to school.

The school has a female head teacher who also participated in the study. A total of 40 pupils undertook the KCPE examinations in the year 2008 and attained a Mean School Score of 189.88 Out of these total 15 boys formed the control group while 9 boys made the experimental group for this study. In 2007, the school had a total of 38 pupils with a Mean School Score of 194.69. Out of the total pupils who sat for the KCPE 2007, 11 were uncircumcised and 7 boys were not circumcised.

4.2.3 Ndunyu ya Chege Primary School

Ndunyu ya Chege primary is located about 3Kms from the local shopping centre. Most of the pupils from the school come from within the area and they walk to school. The school has a male head teacher who participated in the study. The school is infamous for having most of the boys getting circumcised before getting completion of standard eight especially in the year 2007 that led to the school being last in Kariara Zone .

The school has the highest population out of the 5 sampled schools for this study. Pupils who undertook the KCPE examinations in the year 2008 were 70 with a Mean School Score of 206.83 out of which 28 boys formed the control group while 11 boys made the experimental group for this study. In 2007, the school had a total of 63 pupils sat for KCPE examinations and attained a Mean Score of 169.86, 18 boys were uncircumcised while 11 were circumcised.

4.2.4 Gathuthu Primary School

Gathuthu primary is in Kariara Zone, Gatanga Division. Most of the pupils from the school come from within the area and they walk to school. The school has a male head teacher who also participated in this study. The head teacher had a preset opinion of

circumcision of boys while still in primary school. He was once locked out of the school gate by the circumcised and unruly boys in 2008 after calling them (*ihii*) and imposing strict rules and punishments.

The school had a total of 48 pupils who undertook the KCPE examinations in the year 2008 with a Mean School Score of 182.93. Out of the 48 pupils, 16 boys formed the control group while 10 boys made the experimental group for this study. The low Mean Score was associated with indiscipline and truancy tendencies exhibited by the circumcised boys who formed a 20% of the total pupils who sat for the examination.

4.2.5 Mabanda Primary School

Mabanda primary is in Gatanga Zone. It's the smallest school compared to the other sampled schools. It was recently renovated and having a female head teacher, maintaining a clean compound is considered to be part of the learning process.

The school had a total of 40 pupils sitting in for the KCPE examinations in the year 2008. A Mean School Score of 210.63 was attained which is the best score from all the study schools. Seventeen boys formed the control group while only 3 boys were in the experimental group. In 2007, the school had a total of 36 KCPE candidates with a Mean School Score of 213.93 still the best in the study sample. The school has maintained good performance reputation for the last 3 years and is the only school from the sample that has no circumcised KCPE candidates year 2009. The school head teacher believes she is lucky to have no mature and unruly boys.

4.3 Head teachers Views

Five head teachers were interviewed and they represented 2 Educational Zones in Gatanga Division namely Gatanga and Kariara Zones. The head teachers were aged between 45- 56 years and were all experienced in teaching with 60% having taught in the particular schools for more than 3 years. The head teachers had all been teaching certain subjects to the control and experimental groups of the study and therefore they had interacted with the pupils long enough and observed their behavioral changes to give conclusive answers to the questions administered to them during the study.

4.3.1 Difference in Performance

On the issue of whether the head teachers thought whether there was any difference in performance between the circumcised and uncircumcised boys in their schools, there was a 100% confirming response amongst all the head teachers who confirmed that they all thought there was a difference in performance. Table 4.1 shows what the head teachers responded when asked to state the difference in performance was between the circumcised and the uncircumcised boys.

Table 4.1 Difference in performance between circumcised and uncircumcised boys

Difference in performance	TOTAL	Name of education zone		Name of school				
	%	Gatanga	Kariara	Rwegetha	Mabanda	Rwaitiria	Ndunyu ya chege	Gathuthu primary
Circumcised boys perform poorly as compared to uncircumcised	100	100	100	100	100	100	100	100

The response was 100% to the circumcised boys performed poorly than the uncircumcised boys. Eighty percent (80%) of the respondents added that majority of the boys who get circumcised before joining standard eight more often than not performed poorly even before circumcision. They were also keen to add that these boys were usually the older boys and hence they the boys felt that they were old enough to become men.

The boys' performance however reduced considerably as compared to how they performed before getting circumcised.

4.3.2 Variations in behavior between the circumcised and uncircumcised boys

Table 4.2 on page 25 illustrates what the head teachers viewed as the differences in behavior between the circumcised and the uncircumcised boys. Uncircumcised boys were often obedient, self-disciplined, respected the teachers and were humble as opposed to circumcised boys. All (100%) of the responses were that the circumcised boys were indisciplined and disobedient from the two Educational Zones.

Table 4.2 Behavior of circumcised boys

Behavior of circumcised boys	Total	Name of education zone		Name of school			
	%	Gatanga	Kariara	Rwegetha	Mabanda	Ndunyu ya chege	Gathuthu primary
		%	%	%	%	%	%
Circumcised boys are indisplined	50	50	50	100	0	100	0
Circumcised boys become disobedient	25	50	0	100	0	0	0
Circumcised boys feel they are above the law	25	50	0	0	100	0	0
Circumcised boys separate themselves from the others	25	0	50	0	0	0	100

The head teachers from the two educational zones added that the indiscipline was so much such that the pupils developed disruptive behavior during class time and one respondent added that some of the boys chewed papers and threw them at the teacher while the teacher looked away. Fifty percent (50%) of the response was that the boys became uncontrollable as they considered themselves mature men. In Gatanga zone, the boys became disobedient, naughty and defiant. They did not accept to perform any tasks when assigned and when given punishments, they often declined to do. This often happened in the schools whose head teachers were female as the boys lacked respect and demeaned the female sex. Being mature men they felt they should not be under women authority.

Twenty five percent (25%) of the responses were that the circumcised boys often separated themselves from the uncircumcised especially in Kariara Zone, where 50% said that the circumcised boys tended to sit at the back of the class and bullied anybody who turned their heads to look at them during class. The boys were overwhelmed by the feelings of being superior. Circumcised boys called the other boys "ihii" meaning uncircumcised boys but it was meant to be insulting and shameful. Bullying of the

smaller boys was also a consequence of the superiority complex. These behavioral changes due to circumcision according to the head teachers led to non concentration in studies and disruptions of other pupils during class periods.

4.3.3 Factors that contributed to differences in performance between circumcised and uncircumcised boys

The respondents were asked to name and explain what they thought were the factors that contributed to variations in performance between the two sets of boys in Gatanga Division. Their responses were categorized and frequencies of each category formed the analysis of data recurring. Table 4.3 on page 27 shows these factors according to the respondents. The study found out that peer pressure especially from other school dropouts carried the highest proportion of 30% as a factor contributing to the poor performance of the circumcised boys as compared to the uncircumcised boys. Sixty percent (60%) of the head teachers noted that circumcised boys from their schools spent a lot of their free time in the evenings and on Sundays with other school drop outs in the villages. The drop outs did not encourage them to study and the pupils ended up neither doing their homework nor revising for examinations. Unfortunately the school drop outs were the same villagers who took the boys through the initiation process after circumcision and the boys considered them as their mentors.

Other major factors adding up to a 20% contribution to the poor performances were that the circumcised pupils attended video shows during free time. The boys would go also to the trading center bars and shoot pool and interact with other non educated villagers. From these interactions the boys learned bad language and also got introduced to alcohol and other drugs. Indiscipline cases such as truancy, inattentiveness during class, uncontrolled laziness that made the boys fail to complete homework plus other cases of immorality had a 20% influence on the their performance. Lack of parental guidance due to the boys classifying themselves as men and becoming unmanageable at home as well as at school contributed up to 10% on performance. Superiority complex and societal set ups that acknowledged the circumcised boys as men regardless of age or education level, resulted to the boys feeling mature and above the law and these carried a 10% influence on their academic performance.

Table 4.3 Factors contributing to difference in performance of boys

Factors affecting performance	TOTAL	Name of education zone		Name of school				
	%	Gatanga	Kariara	Rwegetha	Mabanda	Rwaitiria	Ndunyu ya chege	Gathuthu primary
		%	%	%	%	%	%	%
Peer pressure from school dropouts	60	67	50	100	100	0	100	0
Some attend video shows	40	33	50	100	0	0	0	100
Indispline cases	40	67	0	0	100	100	0	0
Lack of guidance from parents	20	33	0	100	0	0	0	0
Superiority complex	20	33	0	0	100	0	0	0
Society set up	20	0	50	0	0	0	100	0

4.3.4 Other factors affecting performance not related to circumcision

The study further probed to find out whether there were any other considerable factors that led to poor academic performance amongst boys other than circumcision and its elements. The responses illustrated in Table 4.4 indicate that 100% of the respondents felt that drug abuse influenced on the boys' performance in all the sampled schools.

Table 4.4 Factors affecting performances but not related to circumcision

Factors affecting performance not related to circumcision	TOTAL	Name of education zone		Name of school				
	%	Gatanga	Kariara	Rwegetha	Mabanda	Rwaitiria	Ndunyu ya chege	Gathuthu primary
		%	%	%	%	%	%	%
Drug abuse	100	100	100	100	100	100	100	100
Child labour	60	33	100	0	100	0	100	100
Lack of role models	60	33	100	0	100	0	100	100
Joining of unlawful sects -	40	33	50	0	100	0	0	100
Pre marital sex	20	33	0	0	0	100	0	0
Neglection by the community	20	33	0	100	0	0	0	0

In Kariara Zone, 100% of the respondents pointed out that child labour and lack of role models also influenced performance. Joining of unlawful sects mainly the Mungiki was also considered to be a factor with 40% of respondents stating that it had an influence on the boys' performance. The primary school boys and especially the bigger ones join the sect and terrorize villagers at night. This not only led to poor performance "but also gave rise to the number of boy dropouts in the school" was one of the respondent's statements.

Other factors mentioned by Gatanga Zone representatives were engagement in teenage sex and neglection by the community. This was stated by 33% of the respondents. Lack of self motivation by the boys and family disputes were also mentioned but not significantly.

4.3.5 Circumcision time

As shown in Table 4.5, 100% of the respondents had an undivided sentiment that postponing the circumcision time to after completion of standard eight would be a practical measure on improving the performance of the boys and eventually lift up school performances in general. The response was unanimous and the feeling of conviction was felt each time a respondent answered "yes" when asked whether postponing of circumcision time would be a practical measure in improving the performance of the boys.

Table 4.5 Circumcision time

Circumcision time	TOTAL	Name of education zone	
	%	Gatanga	Kariara
		%	%
Postponing circumcision time as a solution	100	100	100

4.3.6 Sustainable solutions suggested to improve on boys' performance in the Division

The study also sought to find out what the respondents thought were sustainable solutions to improve boys' performance in the Division. Table 4.6 on page 31 points out some of the suggestions given by the respondents. The most outstanding solution to the poor performance was offering of frequent guidance and counseling sessions to the boys irrespective of their circumcision status. The response was 100% across the respondents.

The respondents added that the counseling will help the boys understand why it was important to take education more seriously and not let circumcision ruin their future. Formulating a rule or law that would ban circumcision before completion of standard eight was also suggested with a higher weighting of 67% in Gatanga Zone and 50% in Kariara Zone.

Table 4.6 Sustainable solutions to improving boys' academic performance

Sustainable solutions to poor performance	TOTAL	Name of education zone		Name of school				
	%	Gatanga	Kariara	Rwegetha	Mabanda	Rwaitiri a	Ndunyu ya chege	Gathuthu primary
	%	%	%	%	%	%	%	%
Offering guidance and counseling to the boys	100	100	100	100	100	100	100	100
Formulating a rule or law that forbids circumcision before	60	67	50	100	100	0	100	0
Parents to be guided and counseled on circumcision	40	33	50	100	0	0	100	0
The boy child should not be forgotten or neglected	40	33	50	0	0	100	0	100
Invite good role models to schools	20	33	0	0	100	0	0	0
Boys to undergo workshop training	60	67	50	0	100	100	0	100
Relevant speakers should be invited	40	33	50	100	0	0	0	100

Sixty percent (60%) of the respondents felt that unless there was a health reason, the circumcision practice should be postponed until the boys complete their KCPE examinations. One of the respondents added that in her school, after KCPE examinations, those boys who wanted to repeat standard eight were encouraged not to get circumcised if

their wish was to come back to her school. This was a rule that she and the school board of governors put in place and the aim was to make sure that there was no circumcised boy in her school. She was happy with the outcome as there was no circumcised boy in standard eight 2009 that school.

Forty Percent (40%) of the respondents felt that offering guidance and counseling to parents on dangers of circumcising their boys before completion of standard eight and on how to handle the already circumcised boys as well as giving equal focus to boy child education as the girl child would also improve on boys' academic performance. Finally 20% responded that inviting guest speakers who were considered as successful members of the community would boost academic performance as the speakers acted as role models. The speakers would talk to the boys about circumcision, its effects on education and performance and emphasize on the right timing of the act.

Sixty percent (60%) of the respondents recommended workshops or trainings for the boys that would help them spend their free time constructively. Relevant speeches on performance should be given frequently to all pupils and the head teachers to constantly keep reminding boy pupils on the consequences of getting circumcised while still in school. Twenty percent (20%) of the respondents agreed that parents played a crucial role in their children academic performance and therefore they were also to be sensitized on the consequences of allowing their sons to be circumcised while still in primary school.

4.3.7 Challenges faced during the anti- circumcision campaign

Table 4.7 on page 31 shows the two main challenges that the respondents gave as what had been impeding their campaign against circumcision before completion of KCPE examinations.

Table 4.7 Challenges to the anti- circumcision campaign

Challenges Faced	TOTAL	Name of education zone		Name of school			
	%	Gatanga	Kariara	Rwegetha	Mabanda	Ndunyu ya chege	Gathuthu primary
		%	%	%	%	%	%
Pro-circumcision campaigns	75	100	50	100	100	100	0
Gender inequity as overtime the girl child education has been given focus	25	0	50	0	0	0	100

All 100% respondents from Gatanga zone said that circumcision was not only a cultural issue but also a health matter and therefore it was a practice that was encouraged countrywide as a HIV& AIDS prevention measure. For this reason it had been difficult to convince a community that was keen about curbing the spread of AIDS, to stop circumcising their boys. Fifty (50%) of the respondents from Kariara Zone added that gender inequality amongst the pupils was another major challenge they face. The respondents felt that there should be a program aimed at promoting boy child education similar to the nationwide campaign on Educating the Girl Child.

4.4 Academic Performances of the Control and Experimental Groups

The study considered the mean performances of the control and experimental groups for the years 2007 and 2008. The performance results were collected from school performance records and from the KNEC KCPE results records for the years 2007 and 2008 for the sampled schools. Circumcised boys performances were used as the experimental data while the uncircumcised boys' performances were used as the control group data. Academic performances of either of the groups were recorded on data collection sheets to establish whether there were any variations before and after circumcision. The mean of the performances was calculated for easier tabulation and interpretation of the data.

Table 4.8 shows a comparison between the performances of the boys for the different schools in both categories. Mean performances of the uncircumcised boys was noted to have improved in 80% of the sampled schools. The schools' KCPE performances in the year 2008 improved as compared to the boys' Continuous Assessment Tests performance in the year 2007. Gathuthu Primary School however recorded a 5% drop in KCPE performance compared to the boys' previous year performance which the head teacher explained was due to a lot of disruptions during the learning process of all the pupils by the circumcised boys.

Table 4.8 Mean of performances by circumcision status

Primary School	Uncircumcised		Circumcised	
	2008	2007	2008	2007
Gathuthu	209.91	221.03	192.16	210.73
Mabanda	234.32	223.74	217.00	215.56
Rwaitira	223.14	208.17	204.45	204.57
Ndunyu ya Chege	214.43	209.22	194.46	201.34
Rwegetha	233.68	223.43	215.29	217.06
Total Mean	222.77	216.92	203.68	209.25

From the total mean of uncircumcised boys from all the sampled schools, there was a 2% improvement in KCPE performance as compared to the previous years' assessments tests. The highest variation was noted in Rwaitira Primary School that recorded a 7% improvement in KCPE performance year 2008 compared to the CATs performance 2007.

The means of the circumcised boys from the sampled schools were also calculated and recorded. There was a prominent decline in academic performance of the boys after circumcision. Year 2007 Performances were before circumcision and year 2008 were the KCPE performances after the boys underwent circumcision. The total mean performance of the boys was 209.25 before circumcision and 203.68 after circumcision which is 3% drop. The highest drop of 4% was recorder from Ndunyu ya Chege primary School. It was concluded that boys who were circumcised performed poorer than those who were uncircumcised. The total difference in the boys' KCPE performances was an undesirable 9% up from a 4% difference in the year 2007 when they were all not circumcised.

4.5 Correlation Test

Since the study aimed at measuring if there was any relationship between circumcision and performance, Pearson's Correlation test was applied. A correlation test checks the degree of association between two variables (Rogers & Nice wander, 1988). In this study the schools, the year and circumcision status were correlated against the boys' performances for two years.

The correlation test was done on a 99% confidence level. The regions marked with double asterisk (**) on Table 4.9 shows that there was a significant correlation.

Table 4.9 Pearson's Product Moment Correlation results

		2008	2007	Difference in performance in the 2 years
School	Pearson Correlation	.06	-.01	.11
	Sig. (2-tailed)	.37	.87	.08
	N	256.00	256.00	256.00
Year	Pearson Correlation	.03	.01	.04
	Sig. (2-tailed)	.61	.88	.49
	N	256.00	256.00	256.00
Circumcision status	Pearson Correlation	-.53**	-.27**	-.55**
	Sig. (2-tailed)	.00	.00	.00
	N	256.00	256.00	256.00

Key;

** Correlation is significant at the 0.01 level (2-tailed)

r= -0.53

N- Number of cases studied

The school and the years do not have a significant level of association with performance as shown on Table 4.9. When a correlation test was done to get the degree of association between circumcision and academic performance 2008, the results were $r=-0.53^{**}$ which implied there was a negative/inverted association between the two variables. The results meant that the larger the number of circumcised boys the poorer the performance. There was therefore evidence to reject the null hypothesis which stated that (*There is no*

significant difference between the academic performance of primary school boys before circumcision and after circumcision) and hence accepting the alternate hypothesis that concluded that there was a relationship between circumcision status and academic performance. Circumcised boys performed poorer than the uncircumcised boys.

4.6 The Chi Square Test

A further analysis of the results of the academic performance records was done using chi-square. The Chi-square was used to test the null hypothesis of no significant relationship between circumcision status and academic performance.

Both the 2007 and 2008 scores were exposed to a chi-square test and the Table 4.10 gives the results. The table shows the obtained chi-square, the degree of freedom and the level of significance.

In 2007, the level of significance was low (0.0). However, in 2008, this value increased drastically to 0.858 suggesting a high significance level which was attributed to the fact that some boys had been circumcised. A Chi-square test on the difference in performance between 2007 and 2008 obtained a statistic of 95.094, a value greater than the critical table value and hence the null hypothesis is rejected. In addition a comparison between the P-value and the significance level indicated that the P-value was less than the significance level in 2008 and hence the null hypothesis was rejected.

The conclusion was that there is a significant relationship between circumcision status and academic performance. Circumcision had an effect on the academic performance with the circumcised boys performing poorer than the uncircumcised.

Table 4.10 Chi-Square test statistic

The Chi-square	2008	2007	P- value
1. Obtained Chi-Square	107.281	186.750	95.094
2. Degrees of Freedom	124	111	106
3. Level of significance (Asymp. Sig).	0.858	0.000	0.767

4.7 Summary

From the data analysis and interpretation, it was evident that there was 100% difference in academic performance of the boys in relation to their circumcision status. The circumcised boys were observed to have performed poorer as compared to the uncircumcised boys as observed from the calculated means of their academic performances and from the respondents' views. The poor performance was attributed to radical changes in behavior observed from the boys after being circumcised.

Data analysis of the performance of the boys was done using Chi-Square test which obtained a statistic of 95.094 and Pearson's Correlation test resulting to -0.53 established that there was a significance relationship between academic performance and the circumcision status.

CHAPTER FIVE

SUMMARY OF FINDINGS, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter is systematically separated into two main subdivisions; the first will be a summary and discussion of the findings in relation to the literature review, the second part will include the conclusion, recommendations and the recommended areas of further research.

5.2 Summary and Discussion of the findings

The findings of the study are based on the research objective which sought to establish if there is any significant difference between the academic performance of boys before circumcision and after circumcision in Gatanga Division. A comparison of performance of both the circumcised and the uncircumcised boys was done and data analysis done using a Chi-Square test and a Pearson's Correlation test to establish if there was any significance difference in performance between the circumcised and uncircumcised boys. In this section the findings of the study are discussed based on the research objective and the hypothesis and it provides an interpretation of the results by comparing them to the findings of previous studies or theoretical background presented in the literature review.

The study shows that there is in deed 100% difference in academic performance of the boys in relation to their circumcision status. The circumcised boys were observed to have performed poorer as compared to the uncircumcised boys as observed from the calculated means of their academic performances. The head teachers also revealed that in their schools, the circumcised boys' performance was poorer due to the radical change in behavior observed from the boys after being circumcised. One of the respondents commented that the circumcised boys were a head ache especially to the female teachers as more often that not they are big boys who feel mature and above the law. Another universal opinion from the respondents was that the circumcised boys are uncontrollable and always liked to be on the other side of the law to attract attention.

A comparison between the performances of the boys for the different schools in both categories was done and as per the mean performances of the uncircumcised boys, it was noted that 80% of the KCPE performance improved in 2008 as compared to the boys' Continuous Assessment Tests performance in 2007. The mean of the circumcised boys' performances were also calculated and recorded. There was a prominent decline in academic performance of the boys after circumcision. In 2007 Academic Performances before circumcision were compared with KCPE performance 2008 after the boys underwent circumcision. The total mean of performance of the boys was 209.25 before circumcision and 203.68 after circumcision. This was 3% drop confirmed that circumcised boys performed poorer than the uncircumcised boys.

Further to the mean of performance calculations, Chi- square test of independence with 0.05 significant level and a Pearson's Correlation test were done on the performance data. The results indicated that there was a significant correlation between performance of the boys with their circumcision status with the chi-square on the difference in performance between 2007 and 2008, the obtaining a statistic of 95.094 and hence rejected the null hypothesis showing that circumcision had a significant effect on the performance of the boys. The Pearson's Correlation test resultant was $r = -0.53^{**}$ that established that there was a negative relationship between academic performance and the circumcision status

The study observed that there were intense variations in the behavior of the boys according to their circumcision status. The circumcised exhibiting improper behaviors such as indiscipline 50%, disobedience 25%, segregating themselves from the rest of the class 25% and also had a superiority complex. The boys did not accept to perform any of the tasks given by the teachers including homework and class exercises as they always wanted to be against the law.

The study also observed that there was a lot of bullying from the circumcised boys to the smaller and uncircumcised ones especially in Gatanga zone. When asked what they thought contributed mainly to the poor performances of the boys, 30% of the respondents revealed peer pressure from other school dropouts was a major factor. Peer pressure was also recognized by Akengo (2007) in his study that sought to establish factors that influence pupils drop out in public primary school in Asego Division. 40% of the respondents felt that indiscipline cases such as truancy, interruptions during class periods and attending video shows during and after school time often led to poor academic

performance. This finding was in agreement with Mwangi (1997) who concluded that absenteeism may usually lead to negative performance in examinations. The study also noted that not being attentive in class, failure to do school homework and often disruption during class carried a 20% influence on performance. Ten percent (10%) of the respondents felt that superiority complex among the circumcised boys often made them fail to contribute in class work and discussions hence they miss out on the major learning sessions. Twenty percent (20%) of the respondents also attributed the poor performance to lack of parental guidance and societal set ups which they said accepted the circumcised boys as men and hence it was okay for them to behave like men.

The study revealed that there were other factors that would have an effect on the performance of boys that did not arise from circumcision. All 100% of the respondents said drug abuse, 40% observed that joining of unlawful sects like Mungiki was rampant in the area and another 40% blamed the poor academic performance on neglection by community. Sixty six (66%) of the respondents said that lack of role models and engagement in teenage sex had an effect on performance. The respondents added that these factors also led to increased school drop out rate in Gatanga Division. Akengo (2007) also found out that drug abuse led to an increase in school drop out rate. He however found poverty and truancy to be the chief reasons for increased school drop out rate which is different from the findings of this research study.

Postponing the circumcision time was revealed as one of the measures towards improving on boys' performance by all 100% of the respondents. It was mentioned in chapter one that several barazas and meetings held in Gatanga Division discussed the performances of the boys in relation to circumcision. The meetings discovered that the mature and circumcised boys had truancy tendencies, were indisciplined and wanted personal independence given that they viewed themselves as more of men than boys. These behavioral tendencies had not been observed on the uncircumcised boys and that is where the conviction of postponing the circumcision time dwelled on. One of the head teachers reported that there are no circumcised boys in standard eight 2009 in her school. The head teacher provided records of the class performance which showed a 10% improvement in the CATs as compared to the year 2008.

Other sustainable measures on improving boys' performance in relation to circumcision were recorded. All 100% of the respondents suggested guidance and counseling for all boys irrespective of their circumcision status and dwell the sessions on importance of postponing the circumcision time as well as encouraging the boys to take academic issues like performance and school work seriously as this would be the key to a successful future. Twenty percent (20%) respondents argued that the boy child should be given as much attention as the girl child and finally another 20% suggested invitation of guest speakers who are successful members of the community. The guest speakers should talk on issues of circumcision and act as role models to the boys.

Parents were also recognized to be a relevant part of the education stakeholders and therefore sensitizing them on the consequences of allowing their boys to undergo circumcision was considered. Twenty percent (20%) said that parents should also be guided on ways of controlling the boys while at home and talk to them on benefits of education. Parents should also join in the teachers' efforts to post pone the circumcision period. This agreed with past findings by Juma (2004) in his study that encouraged the need for awareness campaigns on the benefits of education and Muiru (2005) who revealed that involvement of the parents and school counselors is essential in improving performance.

During the campaign against circumcision of boys while in primary school which the respondents demonstrated to have been involved in, there were several challenges that they acknowledged to have faced, 75% said that there are campaigns all over the world that encourage male circumcision for health reasons like prevention of HIV/AIDS and 25% added the issue of gender inequity. The respondents were however grateful to the local leaders including the area MP for the support they have given throughout the campaign to postpone the circumcision time to after completion of standard eight.

5.3 Conclusions

Following the analysis of the findings of the study given in Chapter 4, the study concludes that there is a significant difference between the academic performances of the boys based on their circumcision status. The study also established that boys who are circumcised perform poorly compared to those who are uncircumcised as per the Chi-Square and Pearson's correlation tests.

From the key interviews, even 100% respondents agreed that there was a difference in the performance of the boys in relation to the circumcision status. The poor performance was attributed to behavioral changes and other factors such as peer pressure especially from other school dropouts, attending video shows and shooting pool games during free time instead of studying, indiscipline cases such as truancy, inattentiveness during class, uncontrolled laziness and cases of immorality like teenage sex influence the boys' performance. Lack of parental guidance and the superiority complex led to poor academic performance.

The respondents also brought to illumination other factors affecting performance of boys though not related to circumcision. These factors included but not limited to, drug abuse, joining of unlawful sects (Mungiki), lack of role models in the villages and child labour. The study cited postponement of the circumcision time and offering guidance and counseling to both parents and boys were imperative solutions to future improvement of boys' performances.

The study appreciated a few challenges that the head teachers and other educational stakeholders faced while conducting their campaign against circumcision of boys while in primary school. The problems included gender inequality and pro-circumcision campaigns for health reasons like prevention and curbing the spread of HIV/AIDS.

5.4 Recommendations of the Study

In order to contribute to reversing the trends of poor academic performance by the circumcised boys', the study hereby recommends the following areas of action.

5.4.1 Intensification of school guidance and counseling

Most studies as discussed in the literature review have suggested guidance and counseling as a major approach towards improving on performances of both boys and girls. The researcher recommends intensive guidance and counseling sessions to the pupils which specifically should encourage the boys to wait until they complete the KCPE examinations before being circumcised. The counselors should always be available in the schools to provide a cushion for the pupils in need. The pupils will also be availed with information that will help them improve on their study techniques and be taught on how to spend their free time wisely and constructively.

5.4.2 Mobilization and sensitization of parents on dangers of circumcising boys while still in primary school

The study recommends the need for awareness campaigns on the benefits of education especially for the boy child who in his later life will become the head of the house for his family and an educated head of the family is a requirement for a successful and economically stable family. Mobilization and sensitization campaigns for both parents and guardians can be done through religious preaching, seminars and public Barazas.

5.4.3 Invitation of Guest speakers and role models

The speakers will act as the role models to the pupils and will encourage them to emulate them. Suggested speakers are catholic priests, successful members of the Gatanga Division, Area MP Representative. The role of the speaker should also be to encourage the pupils to study hard and not waste their youthful years if they want to be successful in future.

5.4.4 Promotion of gender equity in the education sector

The study also found out that boy education is not given as much attention as girl child and this is affecting the efforts of various stakeholders who want to improve on boys' performance as no much support is offered. The Government, Ministry of Education and any other personnel who supports Education for All (EFA) should introduce initiatives and projects that focus on convincing the nation on the importance of boy child education as much as has been done for the girl child. To paraphrase Plato in his book, "The Republican", it said that if education is neglected, it matters little what else we do.

5.4.5 Sustainable timing of circumcision

Circumcision is a cultural practice and it will never be a non-existent factor to the Kikuyu community. It is however considered to be a cause of poor academic performance and so the research study recommends formation of an official task force that will deliberate and negotiate on an ideal and practical time for circumcision of boys to take place. The Task force will through vigorous deliberations decide on a sustainable timing of circumcision and will represent to 100% the key stakeholders in the education sector and government administrators in Gatanga Division.

5.6 Recommended Areas of further research

- The study sought to find out if there are links between academic performance and circumcision and hence the study was under the assumption that the boys shared similar environmental conditions and other factors that may influence academic

performance. The researcher saw the need for a future study that will compare and evaluate the level of importance of each of the mentioned and unmentioned factors as well as circumcision.

- The study also recommends further research to establish whether circumcision of boys in primary school influence performance of girls. During the study it was mentioned that the bigger boys tended to be the ones getting circumcised before completion of standard eight and hence this study proposes a further study to find out how age contributes to circumcision of boys while in primary school.
- The researcher would also like to recommend a further research on the effects of lack of good teacher-pupil relationship on academic performance as the study found out that the relationship between circumcised boys and the teachers was strained.

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REFERENCES

- Akengo, Arthur Nyawara (2007) *Factors that influence Pupils drop-out in Public Primary School in Asego Division, Homa Bay District*. M.Ed. Thesis, University of Nairobi,(Unpublished)
- Alice Akunga; Lilian Midi; John Mogere; Daniel M. Muia; Dennis Mutahi; Mary W. Mwangi; Lydia A. Oriko; Teresia M. Yulu; Catherine Wandera Solomon (2000). *The Impact Of Hiv/Aids On Education In Kenya, And The Potential For Using Education In The Widest Sense For The Prevention And Control Of HIV/AIDS*. A Government of Kenya and UNICEF Kenya Country Office Study. Final Report November 2000,(Unpublished)
- Central Bureau of Statistics (CBS), 2003, *Economic Recovery Strategy for Wealth and Employment Creation 2003-2007*. June 2003. Ministry of Planning and National Development (MPND), Republic of Kenya. Government Printers, Nairobi, Kenya, pp 39,
- Central Bureau of Statistics (CBS), *Economic Survey 2006*. Ministry of Planning and National Development (MPND), Republic of Kenya. Government Printers, Nairobi, Kenya, pp 36,
- Eshiwani, Rebecca E. (1994) *The socialization of girls and its effects on their academic achievement in Lurambi Division Kakamega District*. M.A Thesis, University of Nairobi, (Unpublished)
- Gachie Lizzie Nyambura. (2003). *An Investigation into the Determinants of Pupils' Drop-out from Primary Schools in Kikuyu Division, Kiambu District*. M.Ed. (Administration and Planning). Research Project. University of Nairobi, (Unpublished)
- Government of Kenya. (1999). *Totally Integrated Quality Education and Training (TIQET), Report of the commission of inquiry into the education system of Kenya*. Koech Commission Report. Nairobi: GOK Printers,
- J.Rodgers, A. Nicewander. *Thirteen ways to look at the correlation coefficient*. The American Statistician, 42(1):59-66, Feb 1988.
- Jens Finke (2000- 2007) *Traditional Music and Cultures of Kenya*,

- Juma, Lucy Stella. (2004). *Gender Factor in Performance at Kenya Certificate of Primary Education (KCPE) Examination*. M.Ed. Thesis Maseno University,(unpublished)
- Kenya National Bureau of Statistics; - *Basic Report: Kenya Integrated Household Budget Survey (KIHBS) – 2005/06 (Revised Edition)*, August 2007, Ministry of Planning and National Development, Republic of Kenya,
- Kothari C.R. (2004), *Research Methodology: Methods and Techniques*, New Age International (P) Limited
- Machila Kilian Nyambu, (2005). *Universal primary education in Kenya: Factors affecting its effective implementation: A case study of Taveta Division, Taita-Taveta District*. Masters in Educational Administration and Planning, University of Nairobi, (Unpublished)
- Mensch, Barbara, Clark, Wesley, Lloyd, Cynthia and Erulkan, Annabel. (2001) *Pre-Marital Sex, School Girl Pregnancy and School Quality in Rural Kenya*. Population Council Journal: Studies in Family Planning. Vol. 32 No. 4: 285-301,
- Ministry of Education (MoE), 2009, *Area Education Office Minutes of the Meetings held on March 20, 2009*. AEOs Office, (Unpublished),
- Ministry of Education (MoE), 2008, *Minutes of Cluster Meeting of Four Head Teachers held in September 2008 Rwegetha Primary School*, (Unpublished),
- Ministry of Education (MoE), 2009, *District Education Board Task Force Report on causes of Poor KCPE Academic performance in Thika District*. Republic of Kenya,
- Ministry of Education (MoE), 2008, *Minutes of Zonal Education Meeting held in September 2008*. Zonal Education Office, (Unpublished),
- Ministry of Education (MoE), 2007, *Gatanga Divisional Schools Performance Reports*. Republic of Kenya,
- Ministry of Education (MoE), 1998. *Master Plan on Education and Training 1999-2010*. Republic of Kenya,
- Ministry of Education, Science and Technology (MoEST, 1990). *Education Statistical Booklet 1990-1998*. Republic of Kenya,
- Ministry of Planning and National Development (MPND, 2002). *National Development Plan 2002-2008. Statutory Policy Development on Effective Management for Sustainable Economic Growth and Poverty Reduction*. Republic of Kenya,

- Muiru, Millicent Thanji. (2005). *An investigation of factors leading to children absenteeism in public primary schools in the era of free education, Ruiru Division, Thika District*. Masters Project, Kenyatta University, (Unpublished)
- Mwangi, Francis Gitonga. (1997). *A study of absenteeism and its effects on academic achievement among marginalized urban children*. M. Ed Thesis, Kenyatta University, (unpublished)
- Ncabira, Misheck (2005). *Factors affecting students' access and participation in secondary school education. Meru Central District*. M.Ed. Thesis, Kenyatta University, (Unpublished)
- Plackett, R.L. (1983). *Karl Pearson and the Chi-Squared Test*. International Statistical Review 51; 59-72
- Republic of Kenya (2007), Ministry of Education (MoE), *Gender Policy in Education*, July 2007.pp 10, 39,
- Rwegetha Primary School (2004). *Minutes of Rwegetha Primary School Management Committee Meeting Held on July 15, 2004*, (Unpublished),
- United Nations (2006). *The Millennium Development Goals Report 2006*. U.N. New York, 2006,

APPENDICES

Appendix 1: Introduction Letter

Dear sir/madam

Good morning/evening,

My name is Winnie N. Nyambura and I am a Master of Arts, Project Planning and Management student from the University of Nairobi. I am carrying out a survey to study if there are any links between primary school boys' circumcision and KCPE performance in Gatanga Division Kenya. I would appreciate if you would give me your views on the same.

The interview will take 30 to 40 minutes to complete. The research findings will be submitted to the University of Nairobi in partial fulfillment for the degree of Arts in Project Planning and Management.

I wish to inform you that the answers you give will be treated in confidence and will be kept at the faculty in the university.

I look forward for your support.

May I begin the interview now?

Name of interviewer.....Signature:.....

Serial number:.....Interview Date:

Appendix 2: Interview Questionnaire

SECTION 1: RESPONDENT'S BACKGROUND	
1.	Name of School:
2.	Education Zone:
3.	Name of Head Teacher/Teacher:
SECTION 2: KCPE PERFORMANCE AND CIRCUMCISION	
4.	Do you think there is a difference in KCPE performance between circumcised and uncircumcised boys? YES <input type="checkbox"/> NO <input type="checkbox"/>
5.	If Yes, What is the difference? If no, why?
6.	Are there any variations in behavior of the boys before and after they are circumcised? If yes, how significant are the variations.

7.	What factors would you say contribute to the variations in performance between the circumcised and uncircumcised boys?
8.	Are there any other factors other than boy circumcision that in your opinion would be affecting the performance of the boys that you would like to discuss?
9.	Do you think that postponing boy circumcision to after KCPE examination would be a practical measure that would improve performance of the boys?
10.	What sustainable solutions would you recommend for future improvement in boys' performance?

11.	What other relevant issues in relation to Primary Boys Circumcision and KCPE Performance do you think you can add?
12.	Do you have any additional comments you would like to share?

Now we have come to the end, you may ask any questions that you may have pertaining to this survey

(Researcher to respond)

Thank you very much for your time and kind collaboration.

