INFLUENCE OF MIRAA BUSINESS ON PUPILS' PERFORMANCE IN KENYA CERTIFICATE OF PRIMARY EDUCATION IN IGEMBE EAST DIVISION, MERU COUNTY

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A Project Report Submitted in Partial Fulfilment of the Requirement for the Award of the Degree of Master of Education in Curriculum Studies

UNIVERSITY OF NAIROBI

2015

DECLARATION

This Project Report is my original work and has not been submitted for a degree in any other university

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I dedicate this work to my dear husband Timothy and my loving parents Stanley and Elizabeth.

ACKNOWLEDGEMENT

I greatly acknowledge the role played by my supervisors Mrs. Lucy Njagi and Dr. Rosemary Imonje of the University of Nairobi for their humble guidance and dedication to seeing my success. May God bless you all. I also extend my sincere appreciation to all who contributed to the success of this work.

ABSTRACT

The purpose of this study was to investigate the influence of miraa business on pupils' performance in Kenya Certificate of Primary Education, in Igembe East division Meru County. The objectives of the study were: To establish the extent to which involvement of pupils in public primary schools in picking, packing and transporting miraa for traders influences their performance in Kenya Certificate of Primary Education, to determine the extent to which participation of pupils in public primary schools in buying and selling miraa influences their performance in Kenya Certificate of Primary Education and to find out if chewing of miraa by pupils in public primary schools influences their performance in Kenya Certificate of Primary Education. The study was informed by Walberg's theory of educational productivity. Descriptive survey design was employed. The researcher collected data using an interview guide, questionnaires and a focus group discussion. Simple random sampling technique was used to identify respondents. The sample size included 16 head teachers, 2 education officers, 60 teachers and 125 public primary school pupils. Data was analysed by use of descriptive statistics and presented in tables, charts and graphs. Study findings indicated that pupils in Igembe East division are highly involved in picking, packing, and transporting miraa for traders. As a result, these activities limit the possibility of pupils to attend school, do homework and revise for their exams. It is due to irregular school attendance as a results of harvesting activities pupils struggle to catch up with the curriculum but the general sense amongst head teachers and teachers was that the pupils' education does suffer, resulting to poor KCPE results. Therefore there is need for strict and rigorous supervision of miraa trade activities so as it does not compromise schooling of primary school children. The local leaders such as the chief and the county education secretary should be empowered to strengthen monitoring of parents and miraa traders who are engaging pupils in picking, packing and transporting miraa. Study findings also indicated that primary school pupils in the region are involved in buying and selling miraa. More boys than girls are involved in buying and selling miraa which earns them quick money. This results to truancy, failure to do homework, failure to revise for examinations and lack of concentration in class. Since pupils cannot focus on their studies, the result is poor performance in KCPE. Therefore, school supervisors should work closely with parents to ensure students are not missing school to participate in buying and selling miraa. Moreover, participation of pupils in miraa trade activities exposes them to miraa chewing habits. This results to pupils missing school, missing lessons, failing to do homework, failing to revise for exams and lack of concentration in class. As a result pupils' performance in KCPE is negatively affected. To curb the habit of chewing miraa there is need for guidance and counselling programs in all institutions of learning with trained personnel to counsel and disseminate relevant information concerning the harmful influence of chewing miraa on primary school pupils.

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LIST OF ABBREVIATIONS AND ACRONYMS

CDF	Constituency Development Fund
KCPE	Kenya Certificate of Primary Education
KNEC	Kenya National Examination Council
MOE	Ministry of Education
UK	United Kingdom
UNESCO	United Nations Educational, Scientific and Cultural Organization
USAID	United States Agency for International Development

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Miraa is an evergreen shrub native to tropical East Africa, having dark green opposite leaves that are chewed fresh for their stimulating effects. It is also commonly known as khat (Cox & Rampes, 2003). In countries where khat farming is prevalent, the habit of chewing it is spreading at an alarming rate among primary school children, high school students and also those in higher institutions of learning (Carrier, 2005). Students who use khat claim that it improves their performance in examinations. On the contrary, studies indicate that khat chewing may not improve student's performance in examinations (Carrier, 2005).

In Yemen a major side effect of khat on school going children is decreased academic performance. Children who indulge in khat chewing tend to prioritize khat sessions over time spent on their studies and revision for their examinations. They also miss school to spend time chewing khat with their parents (Jamin, 2012). In Saudi Arabia, research carried out by Ageely (2009) revealed that the prevalence of khat chewing among students was 3.8 per cent of females and 37.7 per cent of males. The students argued that khat helped them to stay alert in class, concentrate and have better flow of ideas (Ageely, 2009). On the contrary the research proved that khat lowers students' concentration levels while in class and interferes with their revision for examinations since they cannot stay alert for long (Ageely, 2009). According to Beckerleg (2006), in Lamu district Kenya,

miraa is one of the main contributors of high dropout rates of school children, low performance in examinations and bad discipline. Research carried out in Embu County by the Kenya National Commission for UNESCO in 2013, revealed that children of primary school going age are deeply involved in miraa business. Moreover, the study found out that involvement of school children in miraa business results to lack of concentration in class, poor performance in examinations, truancy and absenteeism, school drop outs and high cases of indiscipline. According to King'ori (2013), low enrolment in schools and poor results in national examinations in Garissa County have been attributed to miraa business. Miraa chewing causes students to sleep in class or be absent from school (King'ori, 2013).

In Tigania and Igembe areas of Meru County, many miraa traders use children to pick, transport and pack miraa since they are less expensive to pay for their labour compared to grownups (Wanja, 2010). The result of children taking part in miraa business in the region is general lack of discipline and poor performance in national examinations. Daily school attendance by pupils is poor (Wanja, 2010). In Igembe East division, pupils' performance in Kenya Certificate of Primary Education has been persistently and alarmingly low over the years as shown in table 1.1.

Table 1.1

2008 to 2012 KCPE mean scores in Igembe East division

Name of the Primary school	K.C.P.E MEAN SCORES				
	2008	**2009**	**2010**	**2011**	**2012**
Kiujuline	177	157	-	152.55	156.5
Lakathi	-	-	190.65	192.89	177.3
Kabuitu	-	250.39	213.60	154.71	172.5
Nkiene	-	-	140.64	181.70	178.3
Ngujuju	201.5	218.77	206.41	202.50	174.15
Kalimikuu	218.66	194.63	200.31	224.00	182.18
Nthare	235.55	220.9	199.21	206.89	190.6
Kariru	188.62	180.11	181.75	195.86	216.44
Kathathene	210.76	211.18	184.53	218.44	210.45
Kimutubua	192.95	197.52	207.89	192.38	187.13
Mpinda	170.54	164.58	161.63	180.66	190.72
Ntuti	185.78	205.06	175.16	158.41	236.72
Ura River	192	216	169.14	183.24	195.8
Luluma	190.5	190.63	200.80	178.76	208.1
Giika	184	158	-	193	216
Matiandui	213	174	227.74	208.88	242.69

Source: Igembe East Disrtict Education Office, Meru County (2012)

Table 1.1 indicate that the average mean score of some schools dropped between 2008 and 2012 while in others it increased. Some of the schools did not have KCPE results for some of the years hence no mean scores. The pass mark in the Kenya Certificate of Primary Education is 250 marks out of a total of 500 marks. In Igembe East division, schools' performance is below the minimum score. Therefore most pupils may not be admitted to national schools or provincial schools. According to the Kenya National Examination Council, the national KCPE mean scores for the years 2008, 2010 and 2011 were 220, 245 and 222 respectively. The KCPE mean scores for majority of the schools in Igembe East division during the years 2008, 2010 and 2012 was below the national averages. The low KCPE performance is a cause of worry and concern to many stakeholders in this division as it is likely to impact on the implementation and achievements of Universal Primary Education. In Igembe East division, no study has been carried out to investigate the influence of miraa business on pupils' performance in KCPE. Therefore this study will investigate the influence of miraa business on pupils' KCPE performance.

1.2 Statement of the problem

Student's performance at KCPE level is a major concern for all stakeholders in education. This is because good performance is associated with social, economic development of a nation. In Kenya, this is a major drive towards realization of Vision 2030. The Kenyan Government has formulated policies aimed at expanding and strengthening basic education. These include; government funding through Constituency Development Fund

(CDF), bursaries and improved access to quality education through Free Primary Education. Furthermore the government has put in place laws against child labour to increase school attendance. Despite the above government strategies, pupil's performance in KCPE has been persistently low over the years in Igembe East division as shown in Table 1.1. This is a major problem to parents, teachers and other stakeholders in education.

Igembe East division is a big producer of miraa which is its main economic activity (Carrier, 2005). Stakeholders note that the drug is having adverse influence on students, with some consuming, others peddling it while the rest work on miraa farms for money (The Standard Newspaper, Wednesday, November 28th 2012). School head teachers note that miraa selling is so rampant in the area that it has become difficult to keep students away from the drug (The Standard Newspaper, Wednesday, November 28th, 2012). While a lot has been said by politicians, education officers, Non-Governmental Organisations and parents about the relationship between participation of children in picking miraa and their KCPE performance in Igembe East division, there is lack of empirical data to support the many assertions on the influence of miraa business activities on pupils' KCPE performance. Therefore, there is need to carry out a study in Igembe East division to investigate and document on the influence of miraa business on primary school pupil's performance in Kenya Certificate of Primary Education

1.3 Purpose of the study

The purpose of this study was to investigate the influence of miraa business on pupils' performance in Kenya Certificate of Primary Education, in Igembe East division Meru County.

1.4 Objectives of the study

The study was guided by the following research objectives;

i. To establish the extent to which involvement of pupils in public primary schools in picking and packing miraa influence their performance in Kenya Certificate of Primary Education.

ii. To determine the extent to which participation of pupils in public primary schools in buying and selling miraa influence their performance in Kenya Certificate of Primary Education.

iii. To find out if chewing of miraa by pupils in public primary schools influences their performance in Kenya Certificate of Primary Education.

iv. To examine the extent to which involvement of pupils in public primary schools in transporting miraa from miraa farms to business centres influence their performance in Kenya Certificate of Primary Education.

1.5 Research questions

The study was guided by the following research questions;

i. To what extent does the involvement of pupils in public primary schools in picking and packing miraa influence their performance in Kenya Certificate of Primary Education?

ii. In which ways does participation of pupils in public primary schools in buying and selling miraa influence their performance in Kenya Certificate of Primary Education?

iii. To what extent does chewing of miraa by pupils in public primary schools influence their performance in Kenya Certificate of Primary Education?

iv. How does the involvement of pupils in public primary schools in transporting miraa from miraa farms to business centres influence their performance in Kenya Certificate of Primary Education?

1.6 Significance of the study

This study investigated influence of miraa business on primary school pupils' performance in Kenya Certificate of Primary Education in Igembe East division. The findings will enable the schools in the division and the county at large to employ the findings in the improvement of pupils' KCPE performance. The findings will also sensitize policy makers and assist in formulation of policies and strategies to mitigate against the adverse influence of miraa business on pupils' KCPE performance. Moreover, the findings will be used by the head teachers to alleviate the influence of miraa business

on KCPE performance by initiating counselling sessions to create awareness on the influence of miraa business among pupils. The findings of the study will also be a great contribution to the existing body of knowledge on influence of miraa business on primary school children.

1.7 Limitations of the study

According to Komb and Tromp (2006), limitations are challenges anticipated or faced by the researcher. The respondents could have withheld sensitive information for fear that it could be used by the relevant stakeholders to stop Miraa business. The researcher made it clear to the respondents that this was an academic study. Also, the design of the questionnaire was such that sensitive issues were concealed from direct interpretation. This avoided biased responses, failure of response and unwillingness of the respondents to participate. Furthermore, the identity of all respondents was concealed in the questionnaires so that they could not withhold any information required from them.

1.8 Delimitation of the study

The study focused only on class 7 and 8 pupils because at this level pupils are able to read and write independently. Only public primary schools in the region were involved in the study because the private schools in the region are very few and therefore majority of pupils go to public schools. Teachers and head teachers were involved in the study because they interact with pupils in the teaching and learning process and are very much aware of pupils' behaviour and KCPE performance in the schools.

1.9 Basic assumptions of the study

According to Simon (2011), basic assumptions in the study are things that are somewhat out of researcher's control but if they disappear, the study would become irrelevant. The following were the basic assumptions of the study;

i. The information obtained from the respondents was true to the best of their knowledge.
ii. All respondents cooperated and provided reliable responses.
iii. All respondents had relevant knowledge and information on the influence of Miraa business on pupils' KCPE performance.

1.10 Definition of significance terms

This section defines variables and terms used in the study.

Miraa/khat refers to an evergreen shrub native to tropical East Africa, having dark green opposite leaves that are chewed fresh for their stimulating effects.

Miraa business refers to the activity of making money by producing or buying and selling miraa.

Pupil refers to a young person, who is learning under the close supervision of a teacher at primary school level.

Picking miraa refers to the act of removing miraa shoots from the miraa plant.

Transporting miraa refers to carrying packed miraa from one place to another using different means.

Packing miraa refers to the act of putting harvested miraa in bundles and in sacks for transport.

Chewing miraa refers to the act of biting miraa shoots and leaves continuously for their stimulating effect.

1.11 Organization of the study

This study is organized into five chapters. Chapter one consist of; introduction presenting the background to the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, limitation of the study, delimitation of the study, assumption of the study, definition of significant terms and organization of the study. Chapter two presents overview of literature review, which consist of the following subheadings; introduction, definition of khat, concept of khat business, involvement of school children in khat business activities and its effects, consumption of khat by school children and its effects, summary of literature review, theoretical framework and conceptual framework. Chapter three describes research methodology under research design, target population, the sample and sampling techniques, research instruments, instrument reliability, instrument validity, data collection procedures and data analysis techniques. Chapter four contains data analysis, interpretation and discussion of the findings. Chapter five presents summary of the findings, conclusions and recommendations of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter of the study presents a review of related literature under the following subheadings; Overview of khat trade, involvement of school going children in khat business activities and its influence on their studies, consumption of khat by school children and its influence on their studies, summary of literature review, conceptual framework and theoretical framework.

2.2 Overview of khat trade

According to Cox and Rampes (2003), khat is a plant grown in the countries around the Red Sea and on the eastern coast of Africa. Its leaves are chewed by the local people for their stimulant action. Khat is mainly grown in Ethiopia, Kenya, Yemen, Somalia, Sudan, South Africa and Madagascar. It has also been found in Afghanistan and Turkestan. Previously, khat leaves were available only near to where they were grown (Cox & Rampes, 2003). Recently, improved roads and air transport have allowed a much wider distribution (Cox & Rampes, 2003).

According to Carrier (2005), khat is an outstanding cash crop, very profitable to farmers as it is grown for the local market as well as for the export market. As a cash crop it provides employment to many people; farmers, middle men, businessmen, and

transporters (Carrier, 2005). According to USAID (2011), khat contributed 13.7 and 54 per cent of the volume and value of the National export respectively in Kenya with a growth rate of 9.7 per cent value within the period 2006 to 2010. The total export value was Ksh 16.6 billion ($211.5 million). Somalia was the main export destination with new market opportunities in Mozambique. Khat is traded in bundles of varying sizes. Small bundles may have four shoots. Ten of these small bundles are tied together and make up one bundle. This is the minimum quantity that is traded. Twenty such bundles make up one kilo (approximately one kilogramme), tied in two parts and wrapped in banana leaves in order to remain fresh. Ten kilos packed together constitute one big bundle (Carrier, 2005).

2.3 Involvement of school going children in khat business activities and its influence on their studies

In Ethiopia, a number of school children are involved in harvesting, sorting, packing, transporting, loading and unloading khat (UN-Emergencies Unit for Ethiopia, 2004). According to Karega (2013), primary school boys in Meru County Kenya are engaged in khat picking, khat preparation and transportation, working in khat kiosks, selling khat in shops, providing manual labour in khat farms and marketing, and hawking khat in towns. School children miss classes to work for miraa traders from 6 to 9 a.m. and then hang around for the rest of the day chewing Khat (Kinoti, 2007). The Meru North District Strategic Plan (2005-2010) revealed that the labour force in the region consisted 49.7 per cent of the total population and was composed mainly of school going boys who engaged

in khat small-scale and micro-enterprises resulting to low levels of school attendance rates. In 2012, the Education Permanent Secretary was concerned over the alarming rate at which boys in the region were missing school to work as casual labourers in miraa farms, which gave them easy money (Sum, 2013).

According to Feyisa and Aune (2005), a large number of young people are involved in transporting and unloading of khat. Carrier (2007) asserts that in Nyambene hills different means are used to transport khat depending on the destination. These means of transport are as follows.

a) Legwork

Young school going age children (pickers) working in Igembe carry bundles from miraa farms to distribution points as part of their job which earns them money making them to miss school and have no time to focus on their studies. Indeed, not just young pickers but also many farmers trek each morning into towns with "bundas" (bundles of packed miraa) balanced on their heads (Carrier, 2007).

b) Wheelbarrows

Wheelbarrows can generate a handy income for enterprising young children around Muringine in Nyambene hills, as it is almost a kilometre from the main road. Ferrying sacks of miraa on a wheelbarrow from miraa farms enables the youngsters earn money

which attracts them to the business other than attending to their school work (Carrier, 2007).

c) Bicycles

Young people and retailers from Nyambene hills also make use of bicycles to transport miraa. This allows miraa distribution points to be reached quickly. In more remote areas of Kenya where miraa is sold, bicycles are also used by retailers and young people to reach outlying villages. Young people earn a lot of money from this kind of transport making it hard to stop them from engaging in the business (Carrier, 2007).

2.4 Consumption of khat by school children and its influence on their studies

The habit of chewing khat is highly prevalent in East Africa and South-western Arabian Peninsula. The fresh leaves and twigs of the khat shrub have a stimulating effect when chewed. Khat consumption has substantially increased in decades. This is reflected in the recent issue of the World Drug Report (2001) which reported an increase of khat chewing in five countries. Studies by Patel (2008), amongst the Somali migrants in Britain, point out chewing khat as one of the draw backs to education of the youth. When the youth meet to chew khat, they end up taking up a significant portion of their study time chatting as they chew khat. Gebissa (2008), notes child labour as yet another social problem prompted by khat growing in Kenya around Mount Kenya region and its environs.

According to Gebissa (2004), most of the people who chew khat are young people, school going children and farmers in khat growing areas. According to Reda, Ayalu, Asmamaw and Biadgilign (2012), about 28.5 per cent of females and 71.5 per cent of male students in Ethiopia are involved in chewing khat. In Ethiopia, students say that they are using khat to "increase" their concentration levels, examination performance and attention span (Reda, Ayalu, Asmamaw & Biadgilign, 2012). In Saudi Arabia students who chew khat are lazy, sleep a lot and many of them suffer from insomnia. Most of them are less effective at their school work (Ageely, 2009). Maithya (2009) and Sternberg (2003) have reported that students who use khat lose their concentration span, interest in school work leading to absenteeism and eventual dropping out of school. An academic research carried out by Mohamed, Jibril and Ibrahim (2012), found out some effects of khat on education of children in Somali. According to their findings, khat users spend reasonable amount of time searching for the substance and using it other than concentrating on their studies.

2.5 Summary of literature review

The chapter reviewed involvement of pupils in miraa trade activities and its influence on their studies. The reviewed literature shows that primary school children in different countries in the world are highly engaged in miraa business activities such as; picking, packing, transporting, buying, selling and providing cheap labour in miraa farms. The literature review further proves that engagement of school children in miraa business activities results to low school attendance rate, lack of time for studies, low concentration

in class and low performance in examinations (Karega, 2013). Moreover, the reviewed literature shows that more boys than girls are involved in the trade and their education is more affected by the trade than that of girls (Kinoti, 2007). The reviewed literature also shows that as primary school children participate in miraa trade activities, chewing miraa becomes part and parcel of their life style. They chew khat because they believe it improves their attention, flow of ideas and performance in examinations (Carrier, 2005). However a number of studies have proved that chewing khat results to low concentration levels in class and lack of adequate time to concentrate on school work (Carrier, 2005).

The reviewed literature does not clearly indicate if involvement of pupils in miraa trade in miraa growing counties in Kenya has any influence on their performance in Kenya Certificate of Primary Education. Igembe east division in Meru County is a huge producer of miraa and pupils' KCPE results have been persistently low over the years as shown in table 1.1. Therefore there is need to investigate the influence of pupils' involvement in miraa business on their KCPE performance.

2.6 Theoretical framework

In this study, the researcher applied Walberg's theory of educational productivity. Walberg (1984, 1992) theorizes that educational outcomes can be analyzed from a business or economic productivity model, and that combinations of these factors influence what he calls educational productivity. The assumption of this model is that academic learning is based upon affective, behavioral, and cognitive activity that is

primarily a function of individual ability, yet is strongly affected by environmental and instructional variables as well. Walberg's model encompasses nine factors which fall into three categories: student aptitude, instruction, and psychological environment. Student aptitude includes three items: ability or prior achievement, development and motivation or self-concept. Instruction includes two items: the amount of time students engage in learning and the quality of the instructional experience. The environment factors encompass four items: the home, the classroom social group, the peer group outside the school and use of out-of-school time.

Walberg's theory is applicable in this study because in Kenya, education productivity is measured in terms of performance in national examinations such as KCPE. Walberg asserts that learning outcomes are influenced by the amount of time students engage in learning, use of out-of-school time and the quality of the instructional experience. In Igembe East division learners engage in miraa business activities which results in missing school time, inadequate use of out-of-school time and poor quality of instructional experience (low levels of concentration in class). This results to low performance in national examinations like KCPE.

2.7 Conceptual framework

This section shows the conceptual framework that the researcher used in the study. It identifies various variables in miraa business and how they affect primary school pupil's performance in KCPE as indicated in figure 2.1.

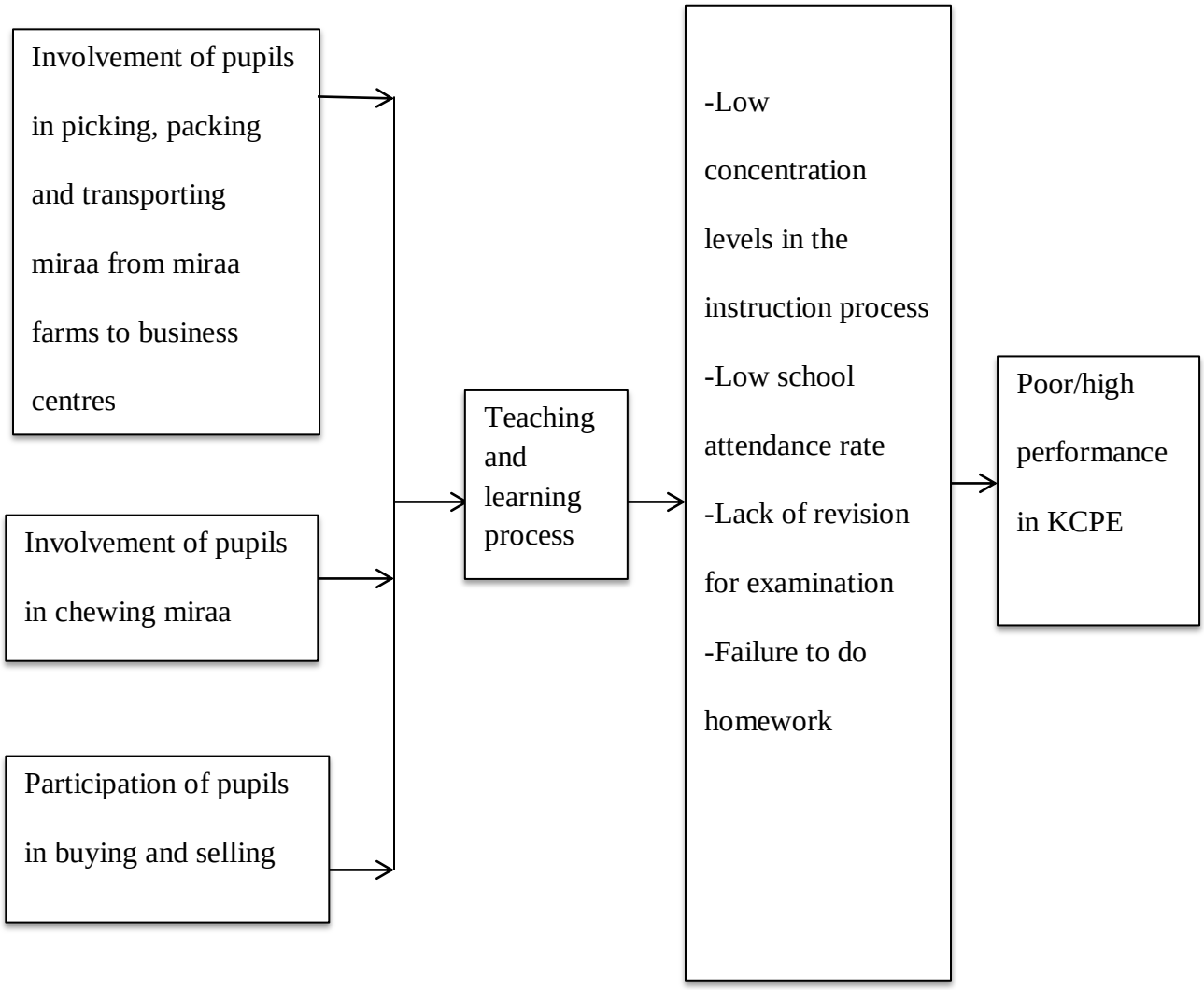

Figure 2.1: Effect of pupils' involvement in miraa business on pupils' KCPE performance

Primary school pupils miss school in order to pick, pack and transport miraa for traders. They also miss school or some lessons to participate in buying and selling miraa because the business brings very good earnings to them. This results to high levels of absenteeism and lack of time to focus on revision for examinations. Children also chew miraa

especially after school in the evening and sleep late. This results to very low levels of concentration in class during the process of instruction and lack of time to focus on their studies. The result of high levels of absenteeism, low concentration on school work and lack of revision for examinations is low performance in KCPE.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter covers introduction, research design, target population, sample size and sampling techniques, research instruments, validity and reliability of research instruments, procedure of data collection and data analysis techniques.

3.2 Research design

In this study the researcher used descriptive survey design. Descriptive survey is a method of collecting information by interviewing or administering a questionnaire to a sample of individuals (Orodho, 2003). Cooper (1996) adds that descriptive study is concerned with finding out who, what, where and how of a phenomenon. The descriptive survey design was useful in this study because it helped in finding out how involvement of primary school pupils in miraa business affects their KCPE performance in the area of study. This approach enabled the researcher to collect data in a fast, convenient and economical way.

3.3 Target population

The target population of this study comprised of 16 head teachers and 201 teachers of all public primary schools in Igembe East division. It also comprised of 2,147 classes 7 and 8 pupils who attend the public primary schools in the region. Class 7 and 8 pupils were

targeted because at this level they are able to read and write independently. Furthermore, the target population also included the District Education Officer (DEO) in Igembe District and the Area Education Officer (AEO) in Igembe East division. The total target population was 2,366 respondents.

3.4 Sample size and sampling technique

According to Mugenda and Mugenda (2003), a sample size of between 10 and 30 per cent is a good representation of the target population. Sixteen head teachers of public primary schools in Igembe East division were included in the study. The District Education Officer in Igembe District and the Area Education Officer in Igembe East division were also included in the study. Sixty teachers were included in the study, which was 30 per cent of the targeted population. Schools were ranked according to number of teachers in each school. For the first twelve schools, four teachers were randomly picked from each of them and 3 teachers from each of the last 4 schools making a total of 60 teachers using the simple random sampling technique. Two hundred and fifteen primary school pupils were included in the study which is 10 per cent of the target population. Schools were ranked according to the total number of class seven and eight pupils in each school. Fourteen pupils were randomly picked from each of the first 7 schools and thirteen pupils from each of the remaining 9 schools using the simple random sampling method. The sample size for all respondents was represented in Table 3.1.

Table 3.1

Target population and samples size

Respondents	**Targeted population**	**Percentage**	**Sample size**
Pupils	2147	10%	215
Teachers	201	30%	60
Head teachers	16	100%	16
Education officers (Area Education Officer and District Education Officer)	2	100%	2
Total	2366	13%	297

3.5 Research instruments

The research instruments for this study included questionnaires, an interview guide and a focused group discussion. The interview guide was used to obtain information from the education officers while the questionnaires were used to obtain information from head teachers, class teachers and pupils. Furthermore, a focus group discussion was used to gather more information from pupils. The research instruments had four sections; A, B, C and D. Section A sought demographic information about the respondent. Section B contained items seeking information on participation of pupils in chewing miraa and how it affects their performance in KCPE. Section C sought information on involvement of pupils in picking, packing and transporting miraa while section D sought information on involvement of pupils in buying and selling miraa and how this affects their performance

in KCPE. In addition, this section sought information from the respondent on what is being done and what more should be done to alleviate the influence of miraa business on pupils' KCPE performance in Igembe East division.

3.6 Instrument validity

A research instrument is valid depending on how the data collected is related in terms of how effective the items have sampled significant aspects of the purpose of the study (Orodho, 2005). To ensure content validity, the questionnaires were subjected to a pilot study. This was carried out in two randomly selected primary schools in Igembe East District but outside Igembe East division. Furthermore, the questionnaires were checked and corrected by the supervisors to ensure that the questions were valid to the topic. This increased the probability that measures obtained were appropriate and that conclusions were valid. Questions that were not well understood during the pilot study were revised.

3.7 Instrument reliability

According to Mugenda and Mugenda (2003), reliability is a measure of the degree to which research instruments yield consistent results or data after repeated trials. To ensure reliability of the research instruments, the researcher used the test-retest method to obtain reliability of the measuring instruments. This involved administering the same instruments twice in a span of two weeks in two of the schools in the pilot study. After that, scores from both testing periods were correlated to determine the internal consistency using the Pearson's Product Moment Correlation Coefficient (*r*). According

to Best and Khan (2005), the formula for computing Pearson's Product Moment Correlation Coefficient (*r*) is as follows.

$$r = \frac{n\sum xy - \left(\sum x\right)\left(\sum y\right)}{\sqrt{n\left(\sum x^2\right) - \left(\sum x\right)^2}\sqrt{n\left(\sum y^2\right) - \left(\sum y\right)^2}}$$

Where:

n is the size of the sample

r is the correlation coefficient

Σ is the summation symbol

After correlating the scores of the first test ad the second test, the correlation coefficient was 0.8521. This implied that the research instruments were reliable. According to Mugenda and Mugenda (2003), when a correlation is found to be closer to +1.00, then the instrument is considered reliable.

3.8 Data collection procedures

The researcher sought permission to conduct the study from the National Council of Science and Technology through an introduction letter from the University department. Authority was then sought from the District Education Officer in order to carry out the research in the selected schools. The Area Education Officer was also informed at the division level. The researcher then sent letters of introduction to the head teachers of the selected schools for the study. Thereafter the researcher visited the schools to familiarise

herself with the institution and also to develop a good relationship with the head teachers and the teachers. The researcher then issued the questionnaire to the teachers to be completed within a period of three days. The researcher arranged for sessions with the pupils in which they completed the questionnaires and also engaged them in focus group discussions. This allowed the researcher to monitor the pupils and clarify any questions and also to avoid them from discussing the responses they gave.

3.9 Data analysis techniques

The questionnaires were collected and checked for completeness. To analyse quantitative data, questionnaires were analysed using descriptive statistics by percentages and frequencies. The teachers' questionnaires were sorted out and marched with those of the students. Both qualitative and quantitative analytical methods were used. Qualitative data was analysed thematically by classifying it into major themes from which opinions from respondents were coded and put into frequency tables. Quantitative data was analysed by use of descriptive statistics supported by tables, frequency distributions and percentages using the statistical package for social sciences (SPSS), a computer software that generates frequencies (f) and percentage (%).

3.10 Ethical considerations

Sommer, R. and Sommer, B. (2004) argue that ethical considerations such as confidentiality, anonymity and avoidance of deception are very important issues in social research. For the purpose of this study, permission was first sought from relevant

authorities and a letter granted to allow the researcher to carry out the research. Furthermore, the researcher explained the purpose of the study to the respondents and assured them of confidentiality of their responses and identities. Saunders, Lewis and Thornhill (2003), define research ethics as the appropriateness of the researcher's behaviour in relation to the rights of those who become the subject of the research project, or who are affected by it. The researcher adhered to appropriate behaviour in relation to the rights of the head teachers, teachers and pupils in public schools who were the respondents.

CHAPTER FOUR

DATA ANALYSIS, RESULTS, INTERPRETATION AND DISCUSSION

4.1 Introduction

This chapter presents the analysed data in tables, pie-charts and graphs according to the study objectives. Interpretation of the findings has also been done to answer research questions. The purpose of the study was to investigate the influence of miraa business on pupils' performance in Kenya Certificate of Primary Education, in Igembe East division Meru County. The objectives of the study were; to establish the extent to which involvement of pupils in public primary schools in picking and packing miraa influence their performance in Kenya Certificate of Primary Education, to determine the extent to which participation of pupils in public primary schools in buying and selling miraa influence their performance in Kenya Certificate of Primary Education, to find out if chewing of miraa by pupils in public primary schools influences their performance in Kenya Certificate of Primary Education, to examine the extent to which involvement of pupils in public primary schools in transporting miraa from miraa farms to business centres influence their performance in Kenya Certificate of Primary Education. Data was analysed by use of descriptive statistics and presented in tables, charts and graphs. The results of the findings were presented in sections according to the study objectives.

4.2. Questionnaire return rate

Table 4.1

Questionnaire return rate

Respondents	Targeted respondents	Number returned	Percentage
Head Teachers	16	12	75%
Teachers	60	55	91.7%
Pupils	215	204	94.88
Totals	291	271	93.12%

The study findings in table 4.1 indicate that 291 questionnaires were distributed to the respondents. 271 questionnaires out of the 291 were returned, which gives a response rate of approximately 93.12%. This response rate was considered satisfactory to answer the study questions and conforms to Mugenda, O. and Mugenda, A. (2003) stipulation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent.

4.3 Demographic information

The study through the questionnaires sought to find out the gender of the respondents. This background information was useful to the study as it helped the researcher to balance the views of both males and females regarding influence of miraa trade on pupils' KCPE performance.

4.31 Pupils response by gender

Figure 4.1 demonstrates representation of boys and girls in the study. The study results showed that 49% of boys participated in the study while 51% of girls participated in the study. This is a clear indication of gender balance in administration of questionnaires to the primary school pupils. This was important in the study so as to balance and compare views of both boys and girls.

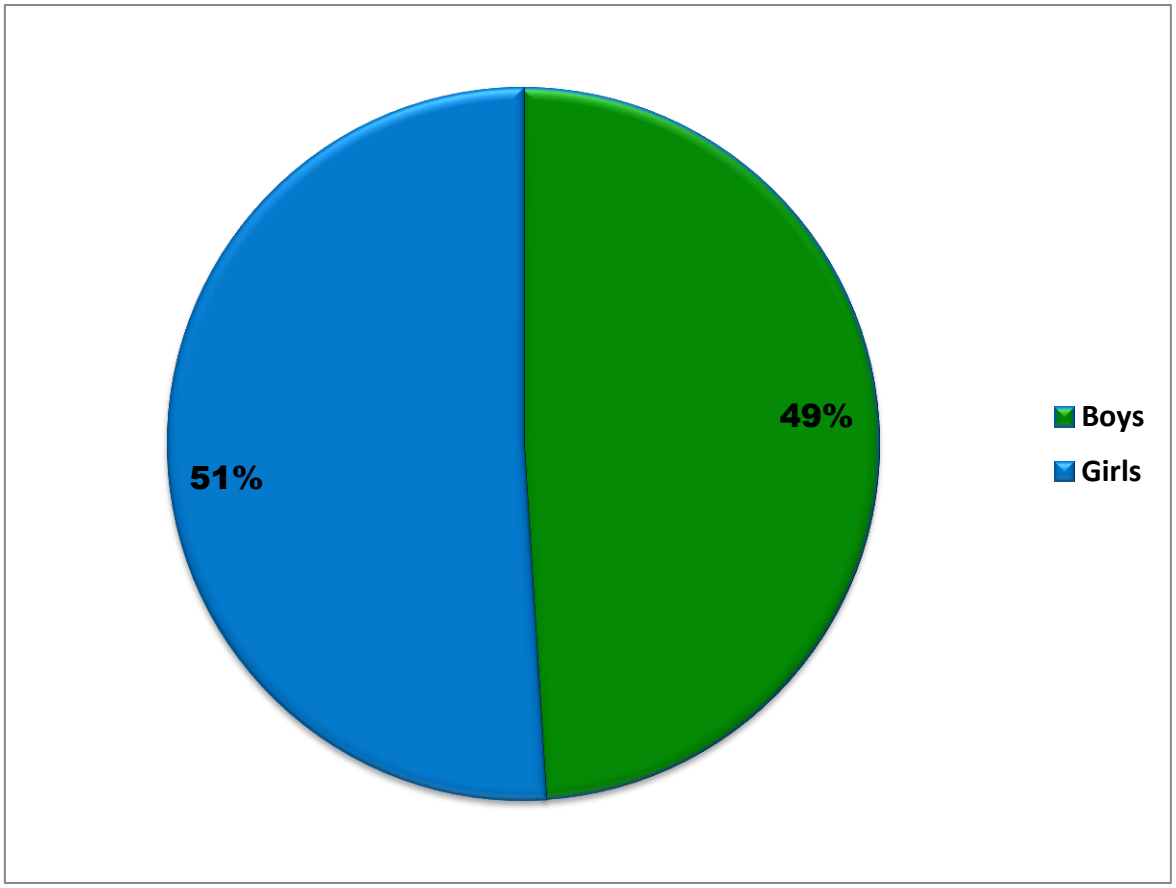

Figure 4.1: Pupils response by gender

4.32 Response of teachers and head teachers by gender

Study results in figure 4.2 indicate that most of the head teachers were males 62%, while 38% were females. Among teachers were 56% of males and 44% of females. In summary more males participated in the study than females.

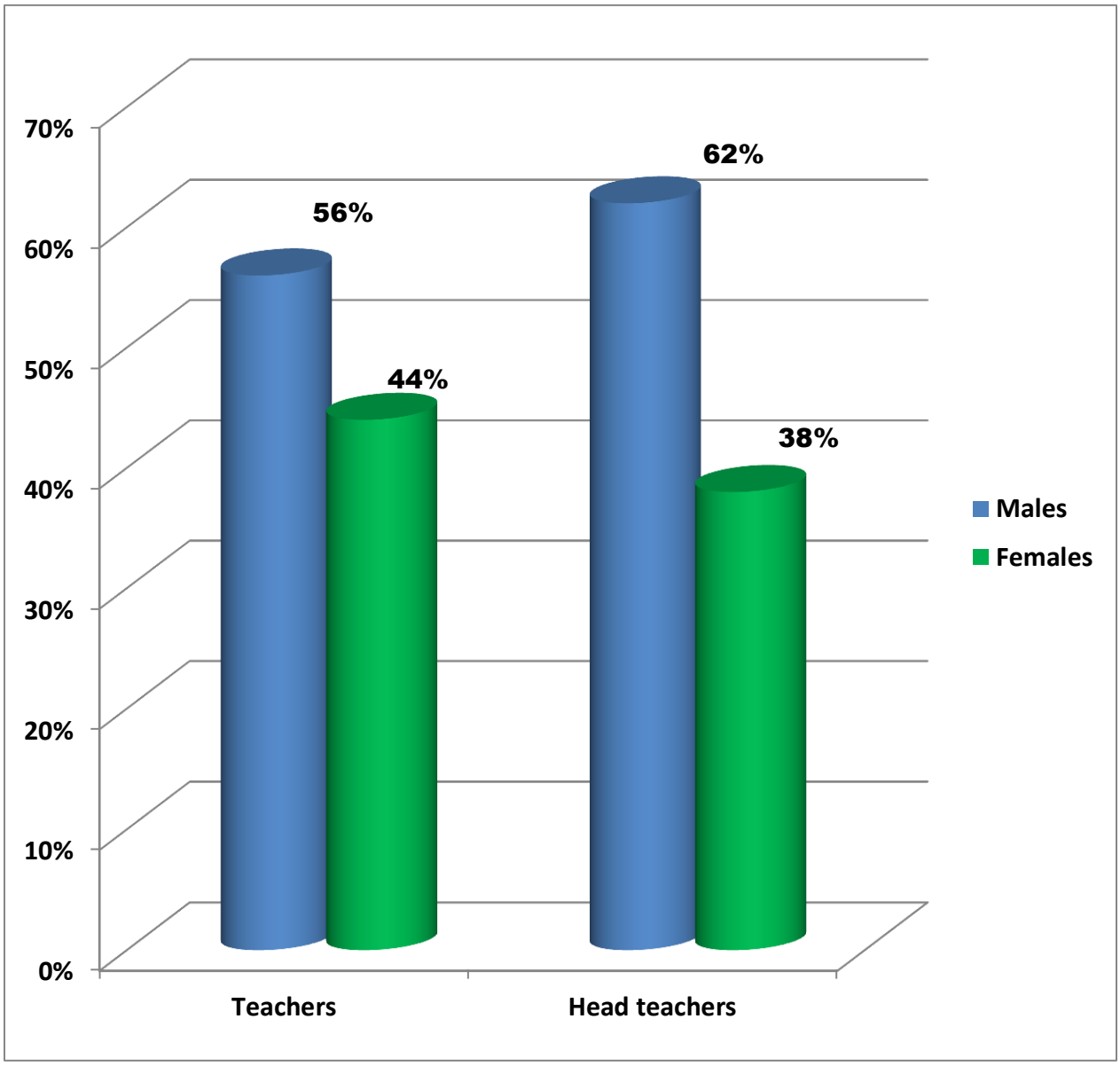

Figure 4.2: Response of teachers and head teachers by gender

4.4 Pupils' KCPE performance in the selected schools

Pupils' KCPE performance in the selected schools was considered since this was the dependent variable. The study findings in figure 4.3 indicate that majority of the teachers and head teachers indicated that pupil's KCPE performance in their schools was poor while very few of them agreed that the performance was good and satisfactory. According to the study findings, it is clear that pupils' KCPE performance in Igembe East division is below average and this is a major concern for all stake holders in the education sector.

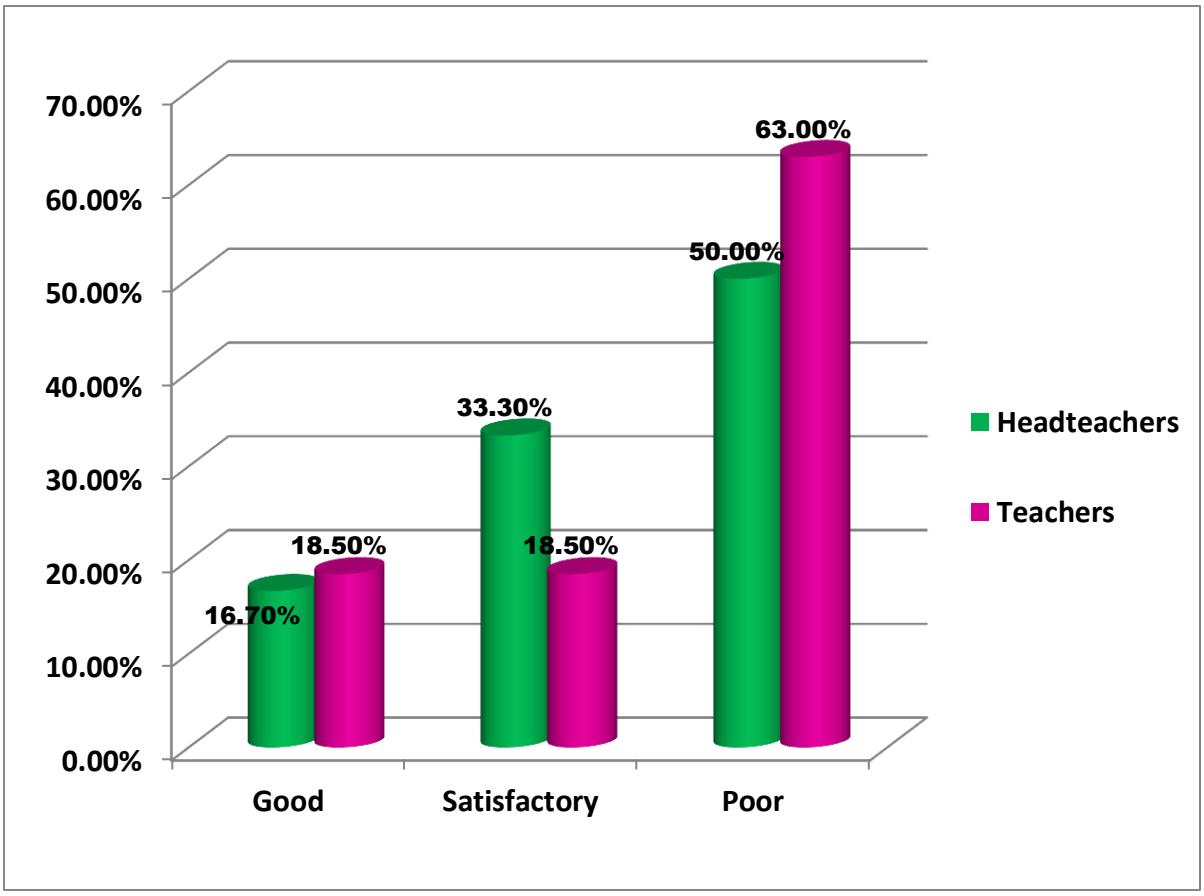

Figure 4.3: Rating of pupils' KCPE performance

4.5 Causes of pupils' poor performance in KCPE

The study sought to find out the cause of the poor KCPE results in Igembe East division. Results in figure 4.4 reveal that most of the head teachers (86.7%) agreed that miraa trade results to poor performance in KCPE while only 13.30% did not agree. Similarly, Majority of the class teachers (74.70%) agreed that miraa trade results to poor performance in KCPE while 25.30% did not agree. This is a clear indication that miraa trade has a negative influence on pupils' KCPE performance in the region. The study findings strengthen the work of UNESCO (2013), who reported that in Embu County, Miraa business has adversely affected academic performance of primary school children in the region.

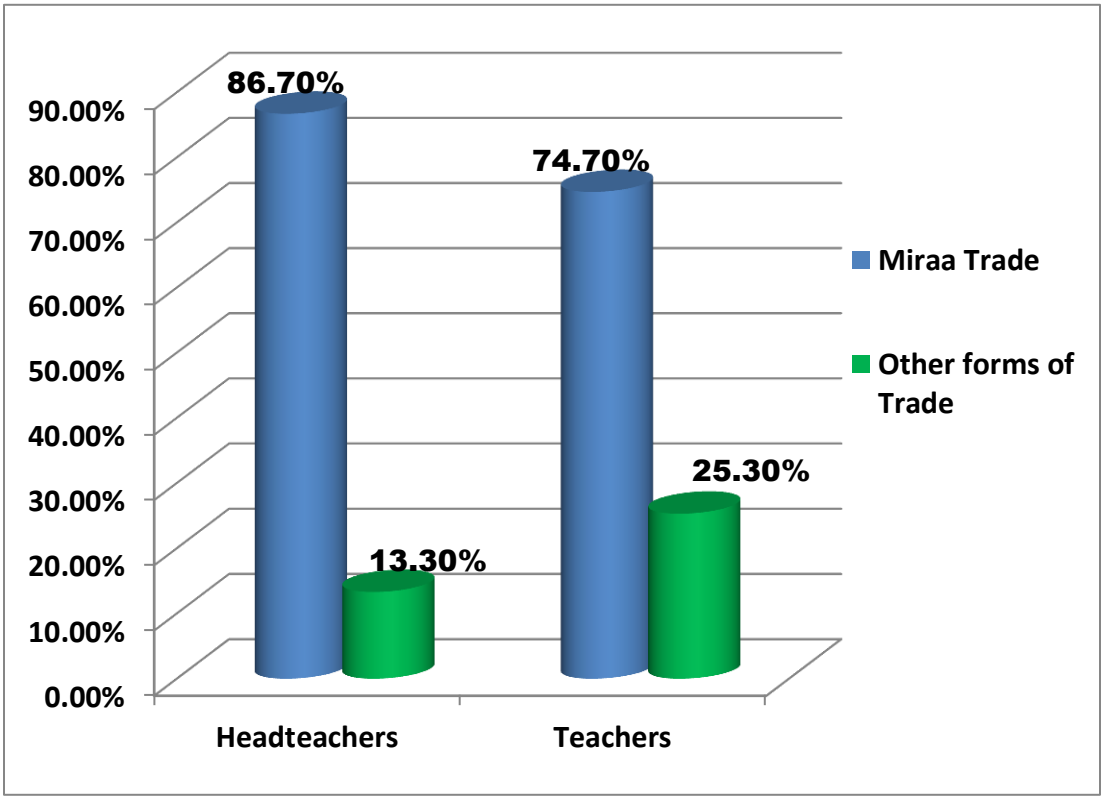

Figure 4.4: Causes of pupils' poor performance in KCPE

4.6 Influence of pupils involvement in picking, packing and transporting miraa on their performance in Kenya Certificate of Primary Education

The study sought to find out the extent to which involvement of primary school children in picking, packing and transporting miraa influences their performance in Kenya Certificate of Primary Education. Study findings in figure 4.5 indicate that most of the boys are highly involved in picking, packing and transporting miraa for traders while very few of them are not involved. Only a few girls are involved in picking, packing and transporting miraa for traders.

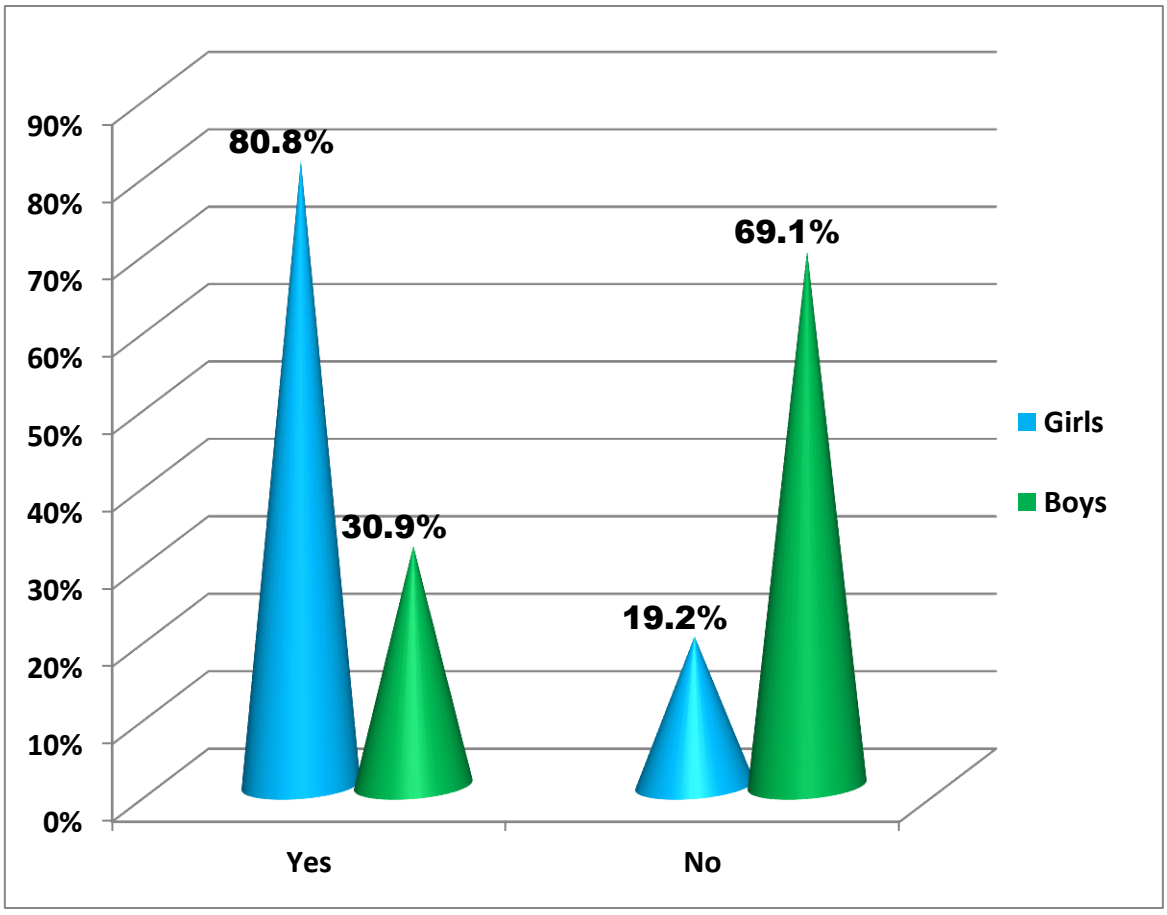

Figure 4.5: Pupils' involvement in picking, packing and transporting miraa

The study findings in figure 4.5 are similar to the findings in literature review where by in Ethiopia, many school children are involved in harvesting, sorting, packing, transporting, loading and unloading khat (UN-Emergencies Unit for Ethiopia, 2004). Involvement of pupils in picking, packing and transporting miraa results to pupils reporting to school late, missing lessons and school days. In addition, pupils have no time to focus on revision for their examinations since they spend most of their time working for miraa traders. A study conducted by United Nations Educational, Scientific and Cultural Organization (UNESCO) in Primary Schools in Embu County shows similar results. The findings of the study indicate that in Embu County School going children are involved in picking, selling, planting, weeding and transporting Miraa to markets. Walberg (1984, 1992) asserts that learning outcomes are influenced by the amount of time students engage in learning, use of out-of-school time and the quality of the instructional experience. This implies that involvement of children in picking, packing and transporting for traders could result to poor performance in their KCPE especially due to waste of quality study time.

4.61 Pupils missing school to pick, pack and transport miraa for traders

The study sought to find out if pupils miss school to pick, pack and transport miraa for traders. Findings in figure 4.6 reveal that all head teachers (100%) agreed that their pupils miss school to pick, pack and transport miraa for traders. Moreover, majority of the teachers agreed that their pupils miss school to pick, pack and transport miraa for traders. According to these findings, there is evidence that pupils in Igembe East division spend

time that could be used for quality studies to pick pack and transport miraa for traders. As a result, they miss lessons, get to school late and loose on quality study time. The study findings are similar to those of Kinoti (2007) who found out that in Meru County pupils miss classes to work for miraa traders from 6 a.m. to 9 a.m. and then hang around for the rest of the day chewing Khat.

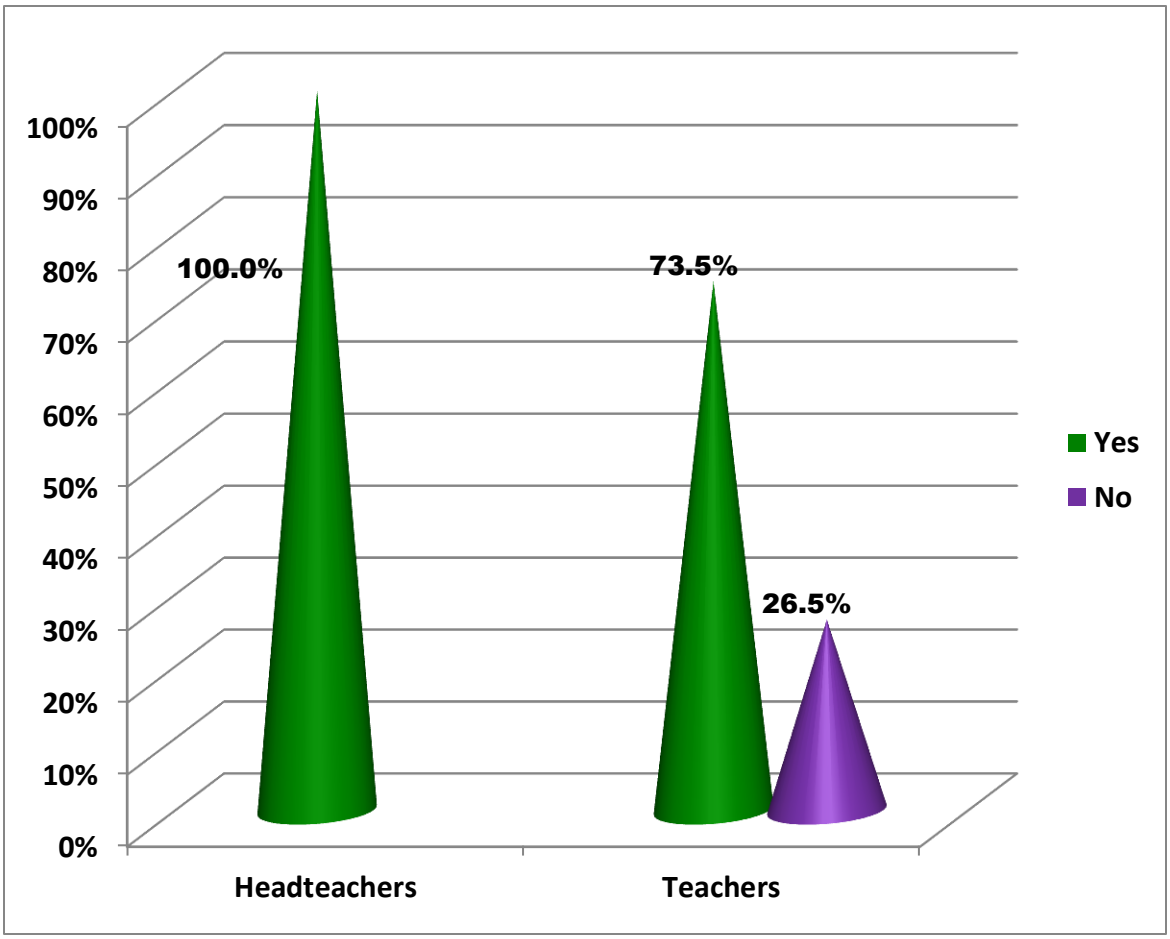

Figure 4.6: Pupils missing school to pick, pack and transport miraa for traders

4.7 Pupils' involvement in buying and selling miraa

The study sought to determine the extent to which participation of pupils in public primary schools in buying and selling miraa influences their performance in Kenya Certificate of Primary Education. Study findings in figure 4.7 reveal that majority of boys (80.8%) in Igembe East division are involved in buying and selling miraa while only 19.2% are not involved. Very few girls (29.1%) are involved in buying and selling miraa. Moreover, 70.9% of girls are not involved in buying and selling miraa while only 19.2% of the boys are not involved in buying and selling miraa. From the study findings, pupils are highly involved in buying and selling of miraa. Most of the pupils who are involved in buying and selling miraa are boys.

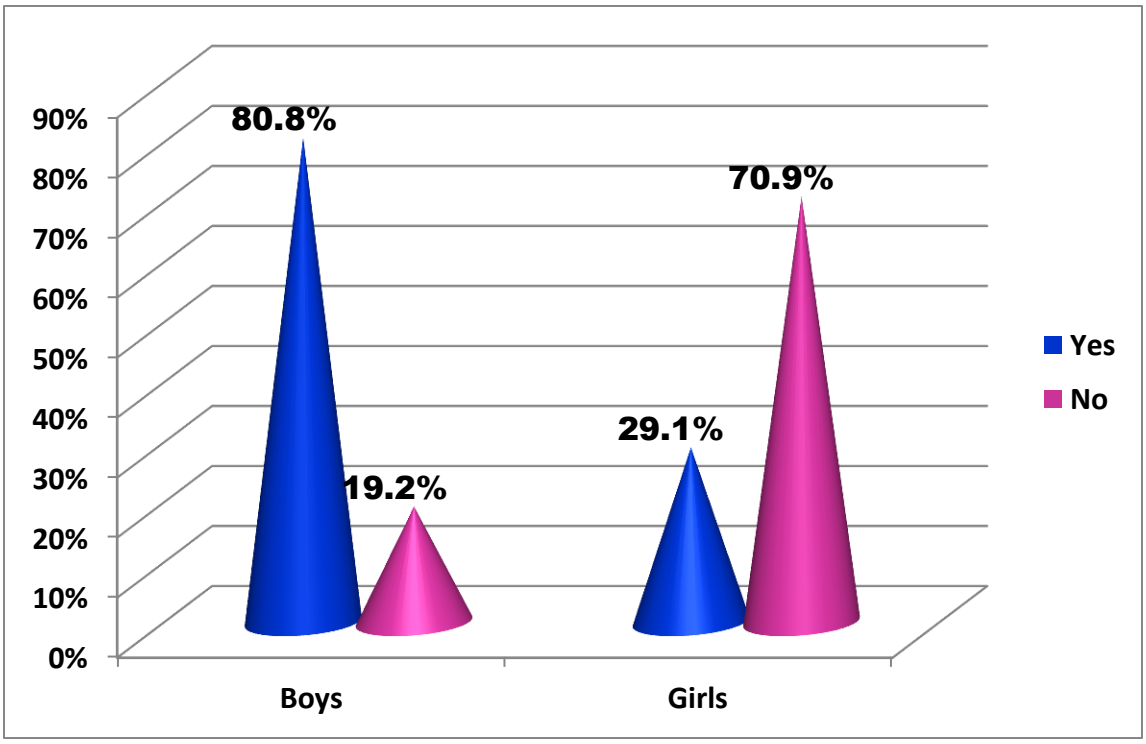

Figure 4.7: Pupils' involvement in buying and selling miraa

The study findings in figure 4.7 are similar to those of Karega (2013), who asserts that primary school boys in Meru County Kenya are engaged in working in khat kiosks, selling khat in shops and hawking khat in towns. The outcome of pupils participating in buying and selling miraa is lack of revision for examinations, missing school and a total lack of focus in their studies. Most studies find that attending classes or lectures yields a positive and significant impact on exam performance by students (Marburger, 2001; Bratti and Staffolani, 2002; Kirby and McElroy, 2003; Rodgers, 2001; Rocca, 2003; Stanca, 2006; Lin and Chen, 2006). This implies that involvement of pupils in buying and selling miraa results to waste of adequate study time and this negatively influences their performance in KCPE.

4.8 Influence of pupils' involvement in buying and selling miraa

Table 4.2

Influence of pupils' involvement in buying and selling miraa

	Head Teachers		Teachers	
	Frequency	**Percentage**	**Frequency**	**Percentage**
Responses				
Pupils have no time to do their homework	4	33.3%	8	14.5%
Pupils have no time to revise for their exams	3	25%	14	25.5%
Pupils miss lessons	1	8.3%	9	16.4%
Pupils miss school days	2	16.7%	11	20%
Pupils get into bad company	0	0%	5	9.1%
Results to indiscipline	2	16.7%	8	14.5%
Total	**12**	**100%**	**55**	**100%**

The head teachers' and teachers' opinions on how involvement of pupils in buying and selling miraa influences them in their studies were sought. Both teachers and head teachers gave several opinions as illustrated in table 4.2. According to the study findings, involvement of pupils in buying and selling miraa results to lack of revision for examination, failure to do homework, missing lessons and missing school days. All these factors are key for good performance by students in any examination.

4.9 Influence of miraa trade on pupils KCPE performance

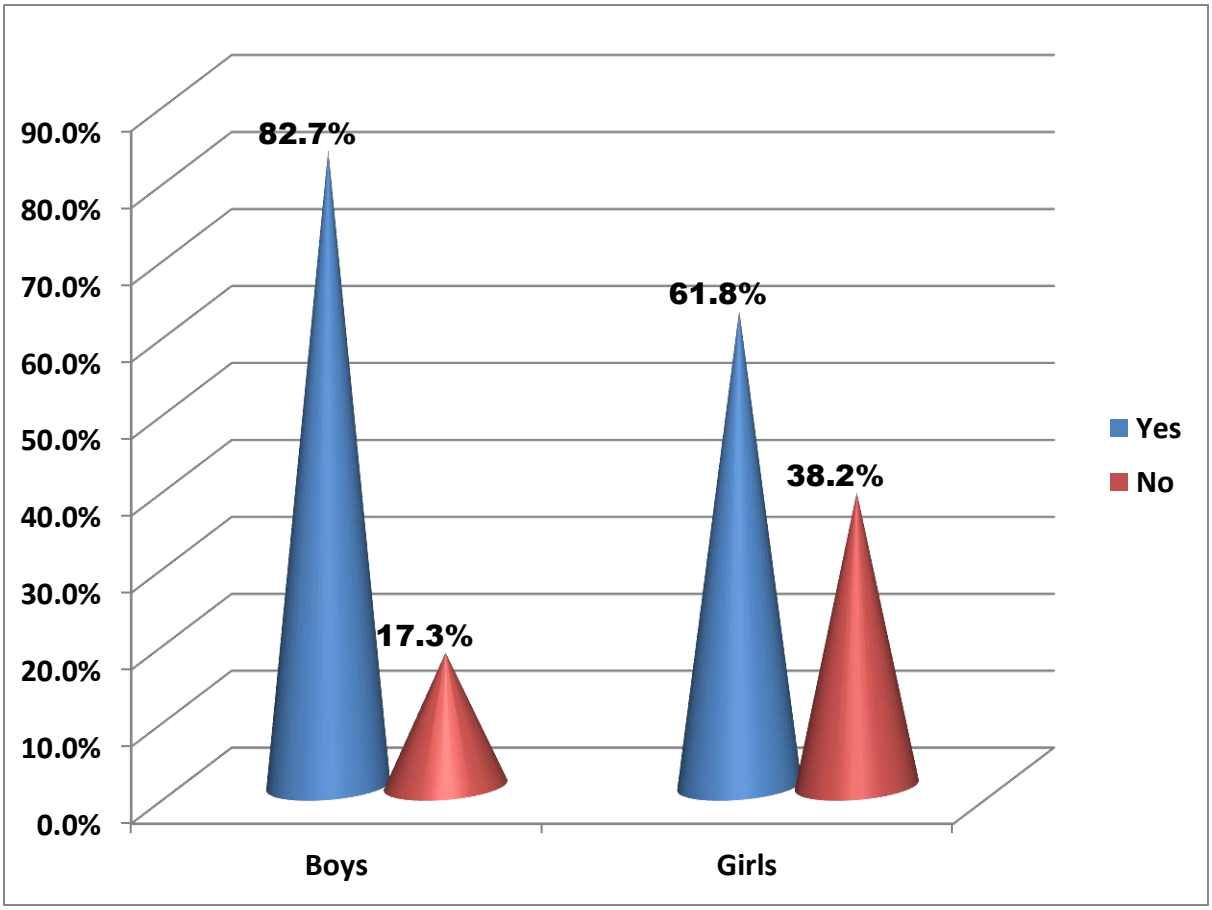

Figure 4.8: Influence of miraa trade on pupils KCPE performance

According to the study results in figure 4.8 majority of the boys (82.7%) agreed that miraa trade has a negative influence on their KCPE performance while very few boys (17.3%) did not agree that miraa trade has a negative influence on their KCPE performance. Similarly most of the girls (61.8%) agreed that miraa trade has a negative influence on their KCPE performance while very few of them (38.2%) did not agree that miraa trade has a negative influence on their KCPE performance. Study findings in the previous sections indicate that miraa trade activities such as picking, packing, transporting, buying and selling affects pupils study time. According to Kirby and McElroy (2003), quality study time has a positive impact on pupils' performance in examinations.

4.10 Involvement of pupils in chewing miraa and its influence on their performance in Kenya Certificate of Primary Education.

Kinoti, (2007) explains that as primary school children work for miraa traders they get used to the habit of chewing miraa as they interact with adults who chew the drug. He further asserts that pupils work for miraa traders from 6.00 a.m. to 9 a.m. and then hang around for the rest of the day chewing Khat. In this regard, the study sought to find out if chewing of miraa by pupils in public primary schools influences their performance in Kenya Certificate of Primary Education.

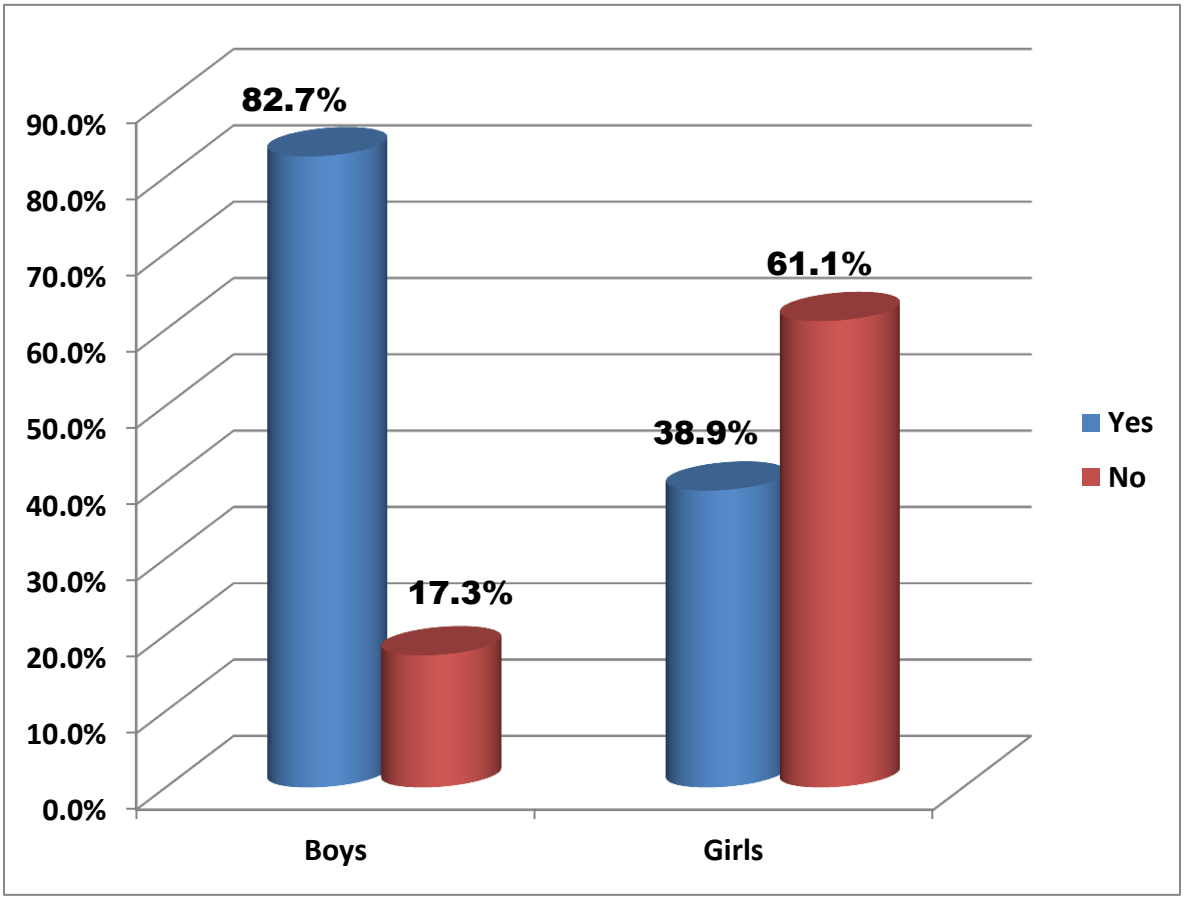

Figure 4.9: Percentage of pupils who agreed that they chew miraa

Study results in figure 4.9 show that majority of the pupils who chew miraa are boys (82.7 %) while very few girls chew miraa (38.9%). These results are similar to studies conducted in other parts of the world such as: Somalia (Patel, 2008), and Ethiopia (Feyisa, 2003), where by more males than females indulge into the habit of chewing miraa.

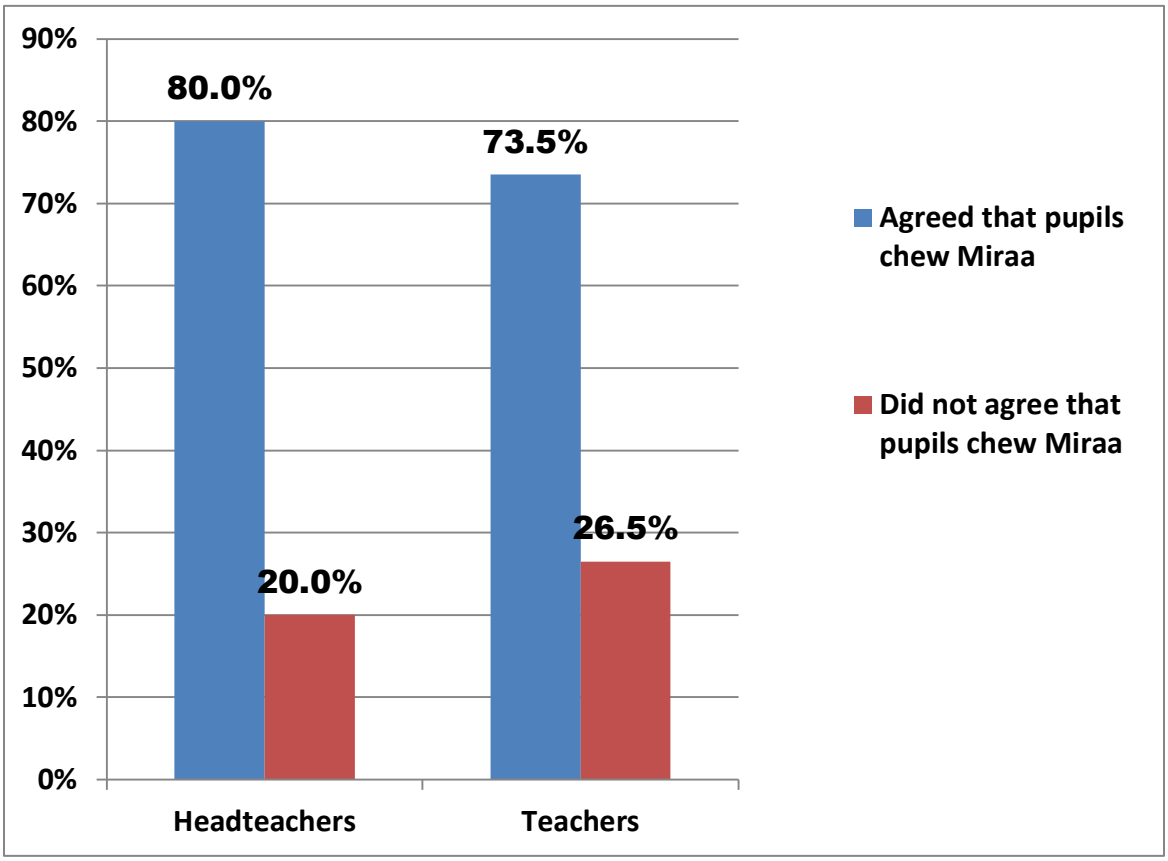

Figure 4.10: Percentage of teachers and head teachers who agreed that pupils chew miraa

Figure 4.10 shows that 80% of head teachers agreed that pupils in their schools are involved in chewing miraa while 20% said that pupils in their schools are not involved in chewing miraa. About 73.5% of classroom teachers also agreed that their pupils are actively involved in chewing miraa while 26.5% disagreed. This clearly shows that Primary school children in the region are highly involved in chewing miraa. These suggested pupils were wasting time chewing miraa when they could be attending classes, revising for examinations or doing school assignment while at home.

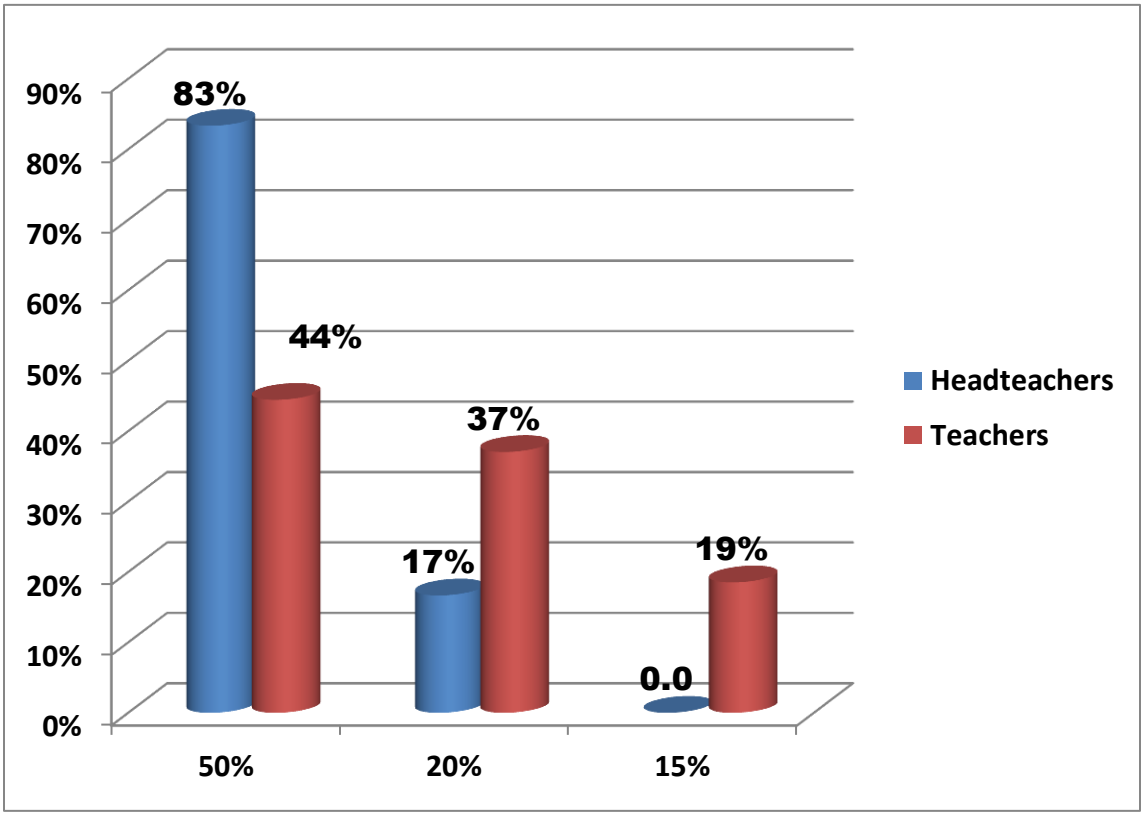

Figure 4.11: Percentage of pupils involved in chewing miraa

Study results in figure 4.11 illustrate that 83% of head teachers agreed that 50% of pupils in their schools are involved in chewing miraa. Only 17% of head teachers agreed that 20% of pupils in their schools chew miraa and none of the head teachers agreed that 15% of pupils in their schools are involved in chewing miraa. About 44% of teachers agreed that 50% of pupils in their schools chew miraa while only 37% of teachers agreed that 20% of their pupils are involved in chewing miraa. Lastly 19% of the teachers agreed that 15% of the pupils are involved in chewing miraa. This is a clear indication that primary school pupils in Igembe East division spend a lot of their time chewing miraa. This time

spent on chewing miraa if multiplied by the frequency of miraa chewing days during the week, the impact in terms of time wasted is inevitable (NACADA, 2006).

4.11 Reasons why pupils chew miraa

The study sought to find out why pupils in primary schools chew miraa. This was mainly to enable the researcher come up with measures that would help in preventing pupils from chewing the drug. Figure 4.6 illustrate that 65.6% of pupils chew miraa to feel good while 31.3 % chew miraa to be like other boys and girls. Very few pupils (3.1%) said that they chew miraa to be able to score high marks in examinations. The study findings strengthen the findings of other researchers (National Council for Science and Technology, 1996; Wanja, 2010) who have also confirmed that Khat chewing exposes young people to peer pressure as they fear to be labelled non-conformists. This means that the pupils need life skills education especially the skills of being assertive and being able to make effective decisions to avoid the influence of peer pressure. Moreover, pupils need good education on influence of miraa as a drug. There is need to make them understand the good feeling is short lived and that the negative influence on their studies is long-term.

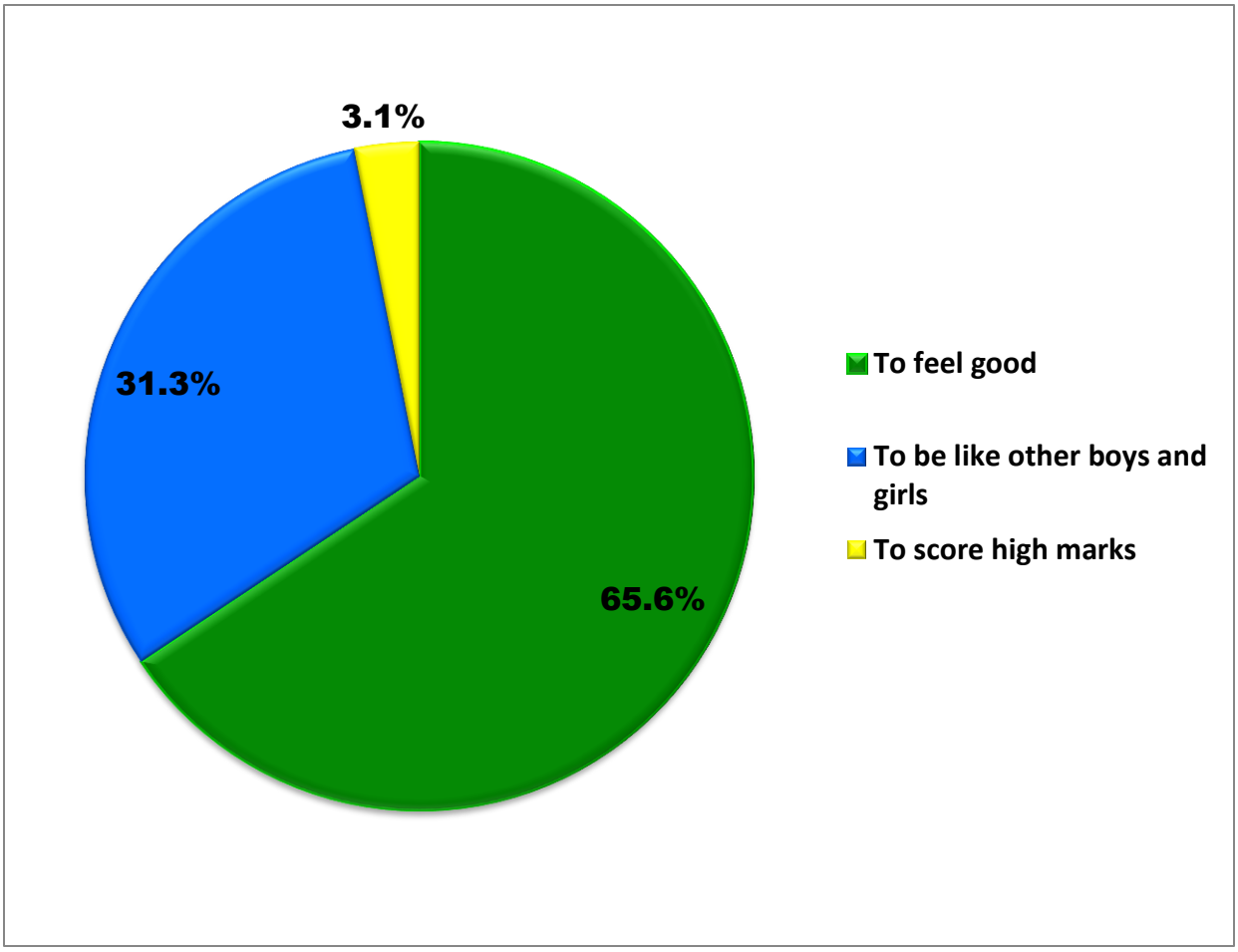

Figure 4.12: Reasons why pupils chew miraa

4.12 Influence of chewing miraa on pupils while in school

Study findings in figure 4.13 reveal that 71.9% of the pupils agreed that chewing miraa makes them sleep in class while 21.9% agreed that chewing miraa makes them concentrate well in class. The other 6.3% of pupils gave other different effects of chewing miraa. These include attending to school late, low concentration in class, truancy, failing to do homework and inability to read for exams and continuous assessment tests. The study findings are similar to those of UNESCO (2013), who found

that in Embu County chewing miraa by pupils' results to low concentration in class. Studies carried out in Kangeta division in Meru County indicate that loss of concentration, lack of interest, anxiety, stress and fatigue are some of the consequences of chewing Khat (Kyalo, 2010; Maithya, 2009). Lack of good concentration in class means that pupils get very little of what the teacher is teaching and this result to poor performance in examinations. This implies that there could be a link between pupils' involvement in chewing miraa and their poor performance in KCPE.

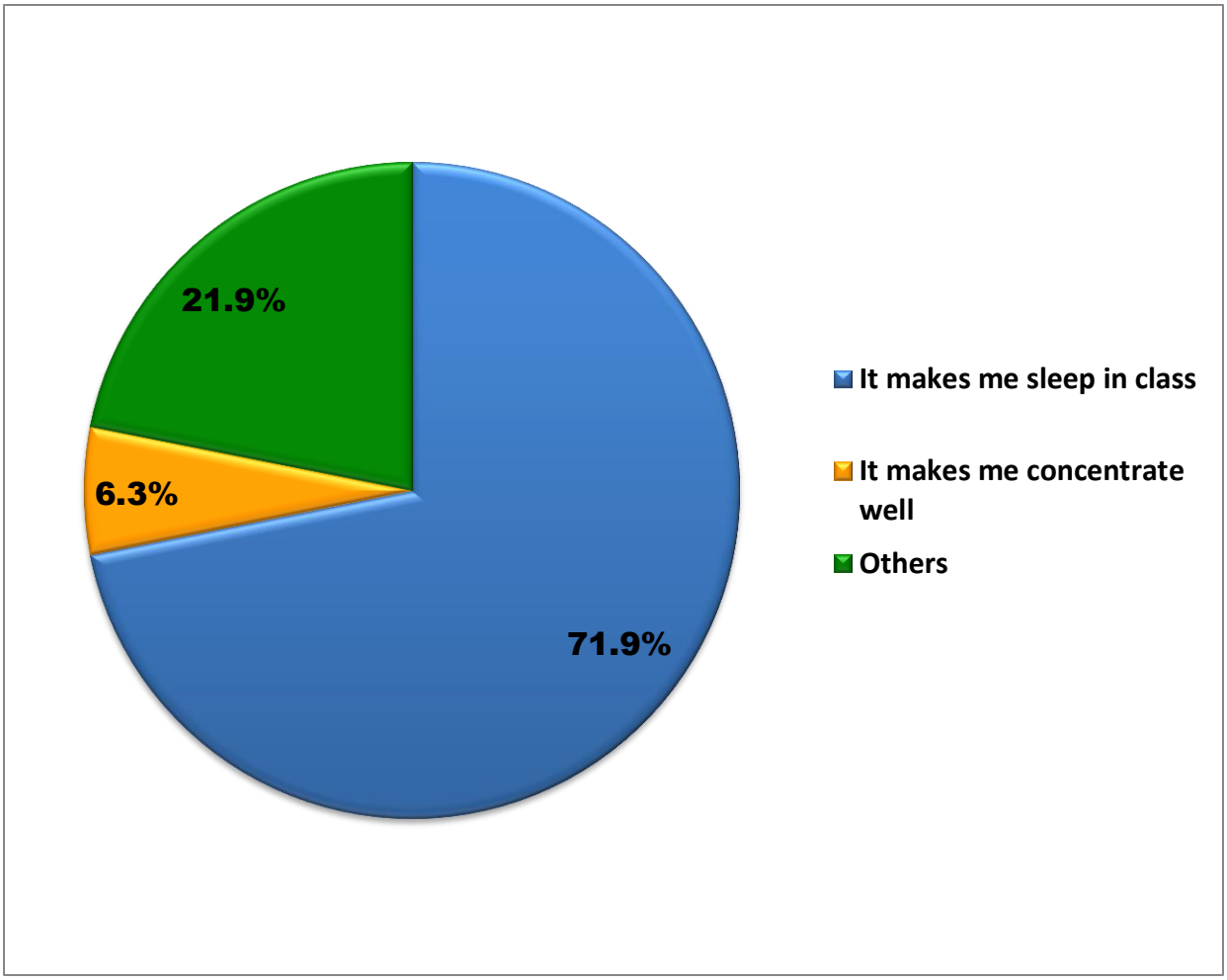

Figure 4.13: Influence of chewing miraa on pupils while in school

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes and presents the research findings, from the study. It has been organized to provide a concise summary of the study findings, conclusions and areas suggested for further research.

5.2 Summary of the study

The purpose of this study was to investigate the influence of miraa business on pupils' performance in Kenya Certificate of Primary Education, in Igembe East division Meru County. The objectives of the study were; to establish the extent to which involvement of pupils in public primary schools in picking and packing miraa influence their performance in Kenya Certificate of Primary Education, to determine the extent to which participation of pupils in public primary schools in buying and selling miraa influence their performance in Kenya Certificate of Primary Education, to find out if chewing of miraa by pupils in public primary schools influences their performance in Kenya Certificate of Primary Education, to examine the extent to which involvement of pupils in public primary schools in transporting miraa from miraa farms to business centres influence their performance in Kenya Certificate of Primary Education. Descriptive survey design was employed. The target population of the study comprised of 16 head teachers and 201 teachers of all public primary schools in Igembe East division. It also comprised of 2,147 classes 7 and 8 pupils who attend the public primary schools in the

region. Furthermore the target population also included the District Education Officer (DEO) in Igembe District and the Area Education Officer (AEO) in Igembe East division. All 16 head teachers and the 2 education officers were also included in the study. Questionnaires, focused group discussion and an interview schedule were used to collect data from respondents. Data was analysed by use of descriptive statistics and presented in tables, charts and graphs.

The study sought to find out the extent to which involvement of primary school children in picking, packing and transporting miraa influences their performance in Kenya Certificate of Primary Education. The study established that primary school children are highly involved in picking, packing and transporting miraa for traders. Teachers and head teachers confirmed that these activities limit the possibility of children to attend school, do homework and revise for their exams. It is due to irregular school attendance as a results of harvesting activities pupils struggle to catch up with the curriculum but the general sense amongst head teachers and teachers was that the pupils' education does suffer, resulting to poor KCPE results. Primary school pupils also confirmed that their involvement in picking, packing and transporting miraa for traders makes them miss lessons, miss school days, fail to do homework and fail to revise for examinations. The pupils also agreed that their participation in picking, packing and transporting miraa for traders has a negative influence on their KCPE performance.

The study also sought to determine the extent to which participation of pupils in public primary schools in buying and selling miraa influences their performance in Kenya Certificate of Primary Education. The study established that more boys than girls are involved in buying and selling miraa. Teachers and head teachers confirmed that majority of pupils miss school days and lessons to engage in buying and selling miraa which earns them quick money. Pupils also agreed that they miss school to engage in buying and selling miraa. Moreover, teachers and head teachers noted that engagement of pupils in buying and selling miraa results to truancy, failure to do homework, failure to revise for examinations and lack of concentration in class. Since pupils cannot focus on their studies, the result is poor performance in KCPE.

The study sought to find out if chewing of miraa by pupils in public primary schools influences their performance in Kenya Certificate of Primary Education. The study results indicate that primary school pupils in Igembe East division are highly involved in chewing miraa. More boys than girls are involved in chewing miraa and therefore bear the bulk of the effects of chewing miraa. Study findings also reveal that most of the pupils chew miraa to feel good. Others chew miraa to due to peer pressure. However some pupils chew miraa hoping it will increase their attention span and make them alert. The research findings also indicate that chewing miraa affects pupils in their studies. It makes them miss lessons, attend school late and sleep in class hence lowering their concentration levels. Most teachers and head teachers attributed poor KCPE results to miraa chewing by pupils especially boys.

5.3 Conclusions

The researcher concluded that, pupils in Igembe East division, Meru County are highly involved in picking, packing and transporting miraa for traders. As a result, pupils are left with very little time to focus on their studies. Pupils miss lessons, get to school late and have not time to do their homework and revise for examinations. This results to poor KCPE results. The researcher also concluded that primary school pupils in the region are involved in buying and selling miraa resulting to a total lack of focus in their studies. This implies that there is link between pupils' involvement in buying and selling miraa and the poor KCPE results in Igembe East division. The researcher further concluded that, pupils in Igembe East division are highly involved in chewing miraa. Study findings indicate that this makes pupils sleep in class and have very low concentration levels. Furthermore it makes pupils report to school late and even miss lessons. The study results also indicate that pupils' KCPE performance in Igembe East division is poor. There is a possibility that miraa chewing by pupils is negatively influencing their KCPE performance in the region as indicated by responses of pupils, teachers and head teachers.

5.4 Recommendations

To start with, there is need for strict and rigorous supervision of miraa trade activities so as it does not compromise schooling of primary school children. The local leaders such as the chief and the county education secretary should be empowered to strengthen monitoring of parents and miraa traders who are engaging pupils in picking, packing and transporting miraa. Secondly, school supervisors should work closely with parents to

ensure students are not missing school to participate in buying and selling miraa. Furthermore, government authorities should work with stakeholders to sensitize parents on the importance of education and good performance in KCPE as this examination is used as a yardstick against which progression to secondary school is measured.

School supervisors and education officers should organize meetings and community conversations with the community members to discuss ways to combat influence of miraa chewing on pupils' performance in KCPE. This strategy should also include role modelling and mentorship programmes by prominent community members from the area who have excelled in education. Moreover, establishment of child to child clubs can also raise awareness on the influence of miraa trade on pupils KCPE performance and how to alleviate the problem. To sum up, there is need to develop counselling programs in all institutions of learning with trained personnel to counsel and disseminate relevant information concerning the harmful influence of chewing miraa on primary school pupils.

5.5 Suggestions for further research

This study investigated pupils in primary schools only and it is therefore necessary to extend a similar study to secondary school students. Secondly, the study targeted only Igembe East division. Thus, future research should focus on the entire Meru County and other Counties where miraa is grown. Finally, it is fair to say, that although much has been written about influences of miraa on educational success, there are areas, which

require further investigation with regard to attitude, awareness, and the underlying factors, which influence primary school pupils to develop the habit of chewing the drug.

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APPENDICES

APPENDIX I: INTRODUCTION LETTER

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School of Education,

P.O. Box 92,

Kikuyu.

To the Head Teacher,

_____Primary school,

P.O Box _____

Dear Sir/Madam,

Re: PERMISSION TO CARRY OUT RESEARCH

I am a postgraduate student at University of Nairobi pursuing a master of education degree in curriculum studies. I am conducting an academic research to investigate the influence of miraa business on public primary school pupils' KCPE performance in Igembe East division. The purpose of this letter is to kindly request you to allow me to administer questionnaires to teachers and students. I shall also have a focus group discussion with class 7 and 8 pupils. This is purely an academic research and the results will not be used for any other purpose.

Yours faithfully,

Angela Wanja Kithao

APPENDIX II: QUESTIONNAIRE FOR HEAD TEACHERS

This questionnaire seeks to establish "Influence of miraa business on pupils' KCPE performance." The information you provide will be treated with sure confidentiality and will be used for research purpose only. Please fill in all the required information as precisely as possible and do not write your name.

Part A: Demographic information

1. What is your designation: _____

2. What is your professional training: _____

3. What is your sex: A) Male ◯ B) Female ◯

4. What is your age: _____

Part B: Influence of chewing miraa on pupils' KCPE performance

5. Do pupils in your school chew miraa? (Outside school or in school)

(Tick in the appropriate circle)

A) Yes ◯ B) No ◯

6. If yes, what percentage do you think chews miraa in your school?

A) 100% ◯ B) 50% ◯

C) 20% ◯ D) 15% ◯

7. Do you think chewing miraa affects pupils' in their studies?

A) Yes ◯ B) No ◯

8. If your answer is yes, briefly explain:

_____

_____

Part C: Influence of pupils' involvement in picking, packing and transporting miraa on their KCPE performance

9. How would you rate the daily attendance of pupils in your school?

A) Very good ◯ B) Good ◯

C) Satisfactory ◯ D) Poor ◯

10. If satisfactory or poor, what is the cause of the low attendance rate?

_____

_____

_____

11. Do pupils in your school miss school to pick, pack and transport miraa for traders?

A) Yes ◯ B) No ◯

12. Does the involvement of pupils in picking, packing and transporting miraa affect their performance in KCPE?

A) Yes ◯ B) No ◯

13. If your answer to the above question is yes, briefly explain:

_____

_____

_____

Part D: Influence of pupils' involvement in buying and selling miraa on their KCPE performance

14. Do pupils in your school miss school to participate in buying and selling miraa to earn money? A) Yes ◯ B) No ◯

15. How would you rate pupils' KCPE performance in your school for the last three years? (A) Very good ◯ (B) Good ◯

(C) Satisfactory ◯ (D) Poor ◯

16. If satisfactory or poor, what is the cause of the poor performance?

A) Miraa trade ◯ B) Other forms of trade ◯

C) School based factors ◯ D) Any other explain:

_____

_____

17. If the involvement of pupils in miraa business has a negative influence on KCPE performance, what do you think should be done to solve the problem?

_____

_____

_____

Thank you for your cooperation

APPENDIX III: QUESTIONNAIRE FOR CLASS TEACHERS

This questionnaire seeks to establish "Influence of miraa business on pupils' KCPE performance." The information you provide will be treated with sure confidentiality and will be used for research purpose only. Please fill in all the required information as precisely as possible and do not write your name.

Part A: Demographic information

1. What is your designation: _____

2. What is your professional training: _____

3. What is your sex: A) male ◯ B) female ◯

4. What is your age: _____

Part B: Influence of chewing miraa on pupils' KCPE performance

5. Do pupils in your class chew miraa? (outside school or in school)

(Tick in the appropriate circle) A) Yes ◯ B) No ◯

6. If yes, what percentage do you think chews miraa?

A) 100% B) 50%

C) 20% D) 15%

7. Do you think chewing miraa affects pupils in their studies?

A) Yes ◯ B) No ◯

8. If your answer is yes, briefly explain:

_____

_____

Part C: Influence of pupils' involvement in picking, packing and transporting miraa for traders on their KCPE performance

9. How would you rate the daily attendance of pupils in your class?

A) Very good ◯ B) Good ◯

C) Satisfactory ◯ D) Poor ◯

10. If satisfactory or poor, what is the cause of the low attendance rate?

_____

_____

_____

11. Do pupils in your class miss school to go pick, pack and transport miraa for traders?

A) Yes ◯ B) No

12. Does the involvement of pupils in picking, packing and transporting miraa affect their school work? A) Yes ◯ B) No ◯

13. If your answer to the above question is yes, briefly explain:

_____

_____

Part D: Influence of pupils' involvement in buying and selling miraa on their KCPE performance

14. Do pupils in your class miss school to participate in buying and selling miraa to earn money? A) Yes ◯ B) No ◯

15. How would you rate pupils' KCPE performance in your school for the last three years? (A)Very good ◯ (B) Good ◯

(C) Satisfactory ◯ (D) Poor ◯

16. If satisfactory or poor, what is the cause of the poor performance?

A) Miraa trade ◯ B) Other forms of trade ◯

C) School based factors ◯ D) Any other explain:

_____

_____

_____

17. If the involvement of pupils in miraa business has a negative influence on KCPE performance, what do you think should be done to solve the problem?

_____

_____

_____

Thank you for your cooperation

APPENDIX IV: QUESTIONNAIRE FOR PUPILS

This questionnaire seeks to establish "Influence of miraa business on pupils' KCPE performance." The information you provide will be treated with sure confidentiality and will be used for research purpose only. Please fill in all the required information as precisely as possible and do not write your name.

Part A: Demographic information

1. What is your class level: _____

2. What is your age: _____

3. What is your sex: A) Male ◯ B) Female ◯

Part B: Influence of chewing miraa on pupils' KCPE performance

4. Do you chew miraa? (Outside school or in school)

(Tick in the appropriate circle)

A) Yes ◯ B) No ◯

5. If you chew miraa state the reasons?

A) To feel good ◯

B) To be like others boys and girls ◯

C) To score high marks ◯

D) Any other (specify):

_____

_____

6. If you chew miraa, how does it affect you while in school?

A) It makes me sleep in class ◯ B) It makes me concentrate well ◯

C) Any other

(explain):_____

_____

Part C: Influence of pupils' involvement in picking, packing and transporting miraa on their KCPE performance

7. Do you miss school to pick, pack and transport miraa for traders?

A) Yes ◯ B) No ◯

8. If yes, do you think missing school influences your studies?

A) Yes ◯ B) No ◯

9. If your answer is yes briefly explain.

_____

_____

_____

Influence of pupils' involvement in buying and selling miraa on their KCPE performance

10. Do you miss school to buy and sell miraa to earn money?

A) Yes ◯ B) No ◯

11. If yes, how does it affect your performance in school? Briefly explain:

_____

_____

_____

12. Do you think the involvement of pupils in buying and selling miraa has an influence on KCPE performance in your school?

D) Yes ◯ B) No ◯

13. If the answer is yes to the above question, briefly explain:

_____

_____

Thank you for your cooperation

APPENDIX V: FOCUS GROUP DISCUSSION FOR PUPILS

This focus group discussion is designed to help the researcher find out the influence of miraa business on pupils' KCPE performance. The information you give will be used for the purpose of the study only.

Demographic information

Please tick in the appropriate circle to indicate your answer

1. What is your sex?

A) Male: ○ ○ ○ ○ ○ ○ ○

A) Female: ○ ○ ○ ○ ○ ○

Facilitator's welcome, introduction and instructions to participants

Welcome:

Welcome and thank you for agreeing to participate in this focus group discussion. I am Angela Wanja studying a master of Education degree in Nairobi University. This focus group discussion is designed to establish your thoughts and opinions about the influence of miraa business on pupils' KCPE performance in Igembe East division. As we discuss I shall take notes of your opinions and thoughts of the discussions. Please feel free to participate.

Ground rules

1. Everyone should participate.

2. There are no wrong answers.

3. You do not have to agree with the views of other pupils in the group.

Does anyone have a question? (Respond to the questions).

Warm up

First I would like you to introduce yourself by telling us your two names and your favourite game.

Questions

1. Let's start by talking about the influence of chewing miraa on pupils' while they are in school. Does chewing miraa affect pupils' concentration in class while the teacher is teaching? Does it affect pupils' concentration while they are reading, revising for examinations or when doing homework?

2. What effect does involvement of pupils in picking, packing and selling miraa has on their studies? Does it affect their performance in examination especially KCPE?

3. Does involvement of pupils in buying and selling miraa have any effect on pupils' performance in examinations? Does it affect pupils' performance in KCPE? How does it affect their performance in examinations?

4. What do you think should be done to stop pupils from chewing miraa?

5. What do you think should be done to stop pupils' from participating in buying and selling miraa?

Thank you for coming and sharing your opinions and thoughts with me.

APPENDIX VI: INTERVIEW GUIDE FOR DISTRICT EDUCATION OFFICER AND AREA EDUCATION OFFICER

This interview guide seeks to establish "Influence of miraa business on pupils' KCPE performance." Kindly complete it indicating your honest responses and do not write your name.

Part A: Demographic information

1. What is your designation: _____

2. What is your professional training:

_____?

3. What is your sex: A) Male ◯ B) Female ◯

4. What is your age:

_____?

Part B: Influence of chewing miraa on pupils' KCPE performance

5. Do pupils in your schools chew miraa? _____

6. How does chewing miraa affect pupils in their studies?

_____

_____

_____

Part C: Influence of pupils' involvement in picking, packing and transporting miraa for traders on their KCPE performance

7. Do pupils in your schools miss school to go pick, pack and transport miraa for traders?

_____

_____

_____

8. How does the involvement of pupils in picking, packing and transporting miraa affect their school work?

_____

_____

_____

Part D: Influence of pupils' involvement in buying and selling miraa on their KCPE performance

9. Do pupils in your schools miss school to participate in buying and selling miraa to earn money?

_____

_____

_____

10. Does the involvement of pupils in miraa business activities affect their KCPE performance?

_____

_____

_____

11. If the answer is yes to the above question, briefly explain.

_____

_____

_____

12. What measures have you put in place to ensure your pupils do not miss classes due to miraa business?_____

_____

_____

13. If the involvement of pupils in miraa business has a negative influence on KCPE performance, what more do you think should be done to solve the problem?

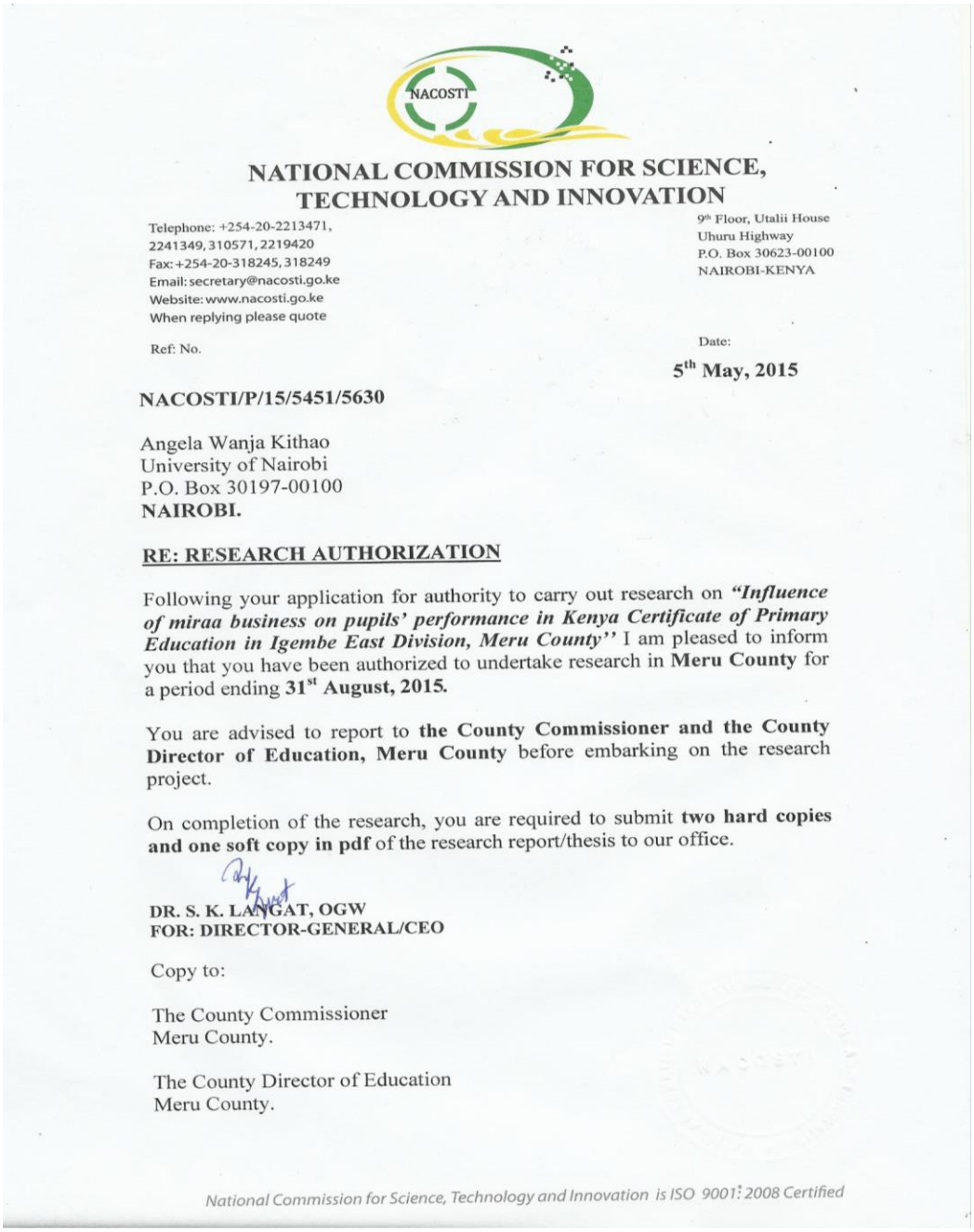
_____

_____

_____

Thank you for your cooperation

APPENDIX VII: AUTHORISATION LETTER



NACOSTI

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

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2241349, 310571, 2219420
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Email: secretary@nacosti.go.ke
Website: www.nacosti.go.ke
When replying please quote

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

Ref: No.

Date:
5th May, 2015

NACOSTI/P/15/5451/5630

Angela Wanja Kithao
University of Nairobi
P.O. Box 30197-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Influence of miraa business on pupils' performance in Kenya Certificate of Primary Education in Igembe East Division, Meru County"*** I am pleased to inform you that you have been authorized to undertake research in **Meru County** for a period ending **31st August, 2015.**

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

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

DR. S. K. LANGAT, OGW
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Meru County.

The County Director of Education
Meru County.

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

APPENDIX VIII: RESEARCH PERMIT

THIS IS TO CERTIFY THAT:
MS. ANGELA WANJA KITHAO
of UNIVERSITY OF NAIROBI, 0-60600
Maua Ngujuju,has been permitted to
conduct research in *Meru County*

on the topic: *INFLUENCE OF MIRAA BUSINESS ON PUPILS' PERFORMANCE IN KENYA CERTIFICATE OF PRIMARY EDUCATION IN IGEMBE EAST DIVISION, MERU COUNTY*

for the period ending:
31st August,2015

Permit No : NACOSTI/P/15/5451/5630
Date Of Issue : 5th May,2015
Fee Recieved :Ksh 1,000

CONDITIONS

1. You must report to the County Commissioner and the County Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit
2. Government Officers will not be interviewed without prior appointment.
3. No questionnaire will be used unless it has been approved.
4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.
5. You are required to submit at least two(2) hard copies and one(1) soft copy of your final report.
6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice

REPUBLIC OF KENYA

National Commission for Science, Technology and Innovation

RESEARCH CLEARANCE PERMIT

Serial No. A 5041

CONDITIONS: see back page