

**INFLUENCE OF MIRAA BUSINESS MANAGEMENT ON STUDENTS'  
PARTICIPATION IN SECONDARY SCHOOL EDUCATION IN  
MARSABIT CENTRAL SUB-COUNTY, MARSABIT COUNTY, KENYA**

**Guyo Jattani Halakhe**

**A Research Project Submitted in Partial Fulfillment of the Requirements for  
the Award of Degree of Master of Education in Corporate Governance**

**University of Nairobi**

**2019**

**DECLARATION**

The research project is my original work and has not been submitted for award of a degree in any other university.

Guyo Jattani Halakhe

E55/74023/2014

.....  
This research project has been submitted for examination with our approval as university supervisors

.....  
Jeremiah M. Kalai, PhD

Associate Professor

Department of Educational Administration and Planning

University of Nairobi

.....  
Prof. Ursulla Okoth

Associate Professor

Department of Educational Administration and Planning

University of Nairobi

## **DEDICATION**

This project is dedicated to my beloved wife Grace Tunu Gabriel and my sons, Jattani Guyo, Halakhe Guyo and daughters Diramu Guyo, Elizabeth Badane, Darmi Guyo and Orge Guyo.

## **ACKNOWLEDGEMENT**

To my supervisors Prof. Jeremiah M. Kalai and Prof. Ursulla Okoth, I am forever grateful for the support and guidance. This work was demanding but you were ever at my disposal for advice and guidance. Thank you. My utmost gratitude goes to my entire family especially my wife for her moral support during the entire course. I would also wish to extend my appreciation to the whole teaching staff of University of Nairobi for their contributions. Further, gratitude goes to all my professional colleagues who in one way or another offered constant encouragement and support whenever I needed them.

To my most precious treasured parents Mr. and Mrs. Jattani Halakhe who believed in me and gave me a head-start through education when nomadic parents who valued it were few and far in between. I also acknowledge my family members who understood, encouraged and supported me in the process of conducting this study. Your enormous contribution has been invaluable and timeless. I love you all and may God's blessings be showered upon you all. Words are never enough to express the gratitude from the inner soul of my heart. Only God can reward you for the rare gift you bestowed upon me. Thank you once more.

## TABLE OF CONTENTS

<b>Content</b>	<b>Page</b>
Declaration.....	ii
Dedication.....	iii
Acknowledgement .....	iv
List of tables.....	x
List of figures.....	xiii
Abbreviations and acronyms .....	xiv
Abstract.....	xv

## CHAPTER ONE

### INTRODUCTION

1.1 Background to the study .....	1
1.2 Statement of the problem.....	6
1.3 Purpose of the study.....	8
1.4 Research objectives.....	8
1.5 Research questions.....	9
1.6 Significance of the study.....	9
1.7 Limitation of the study.....	10
1.8 Delimitation of the study .....	10
1.9 Basic assumptions of the study.....	11

1.10 Definition of significant terms .....	11
1.11 Organization of the Study .....	13

## **CHAPTER TWO**

### **LITERATURE REVIEW**

2.1 Introduction.....	14
2.2 Concept of students’ participation .....	14
2.3 Miraa business activities and students’ school participation .....	16
2.4 School governance strategies in miraa activities and students’ participation .....	17
2.5 Parental involvement in miraa activities and students’ school participation .....	19
2.6 Ministry of Education policies on miraa use and students’ school participation .....	21
2.7 Summary of literature review .....	22
2.8 Theoretical framework.....	24
2.9 Conceptual framework.....	26

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

3.1 Introduction.....	28
3.2 Research design .....	28
3.3 Target population .....	28
3.4 Sample size and sampling procedures .....	29
3.5 Research instruments .....	30
3.6 Validity of instrument.....	31
3.7 Reliability of instrument .....	32
3.8 Data collection procedures.....	33
3.9 Data analysis techniques .....	34
3.10 Ethical considerations .....	36

## **CHAPTER FOUR**

### **DATA ANALYSIS, PRESENTATION AND DISCUSSION OF FINDINGS**

.....	<b>37</b>
4.1 Introduction.....	37
4.2 Questionnaire return rate .....	37
4.3 Demographic data .....	38
4.4 Students' participation in secondary school education .....	45

4.5 Miraa business activities and students’ participation in secondary school education.....	48
4.6 School governance strategies and students’ participation in secondary school education .....	60
4.7 Parental involvement in miraa business management and students’ participation in secondary school education.....	72
4.8 Ministry of education policies and students’ participation in secondary school education .....	82

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

5.1 Introduction.....	98
5.2 Summary of study.....	98
5.3 Discussion of findings .....	99
5.4 Conclusions.....	102
5.5 Recommendations for study .....	103
5.6 Suggestions for further study.....	105
<b>REFERENCES.....</b>	<b>106</b>



## APPENDICES

Appendix I: Introduction letter .....	112
Appendix II: Questionnaire for teachers.....	113
Appendix III: Questionnaire for parent representatives .....	118
Appendix IV: Questionnaire for students .....	122
Appendix V: Principals interview guide.....	123
Appendix VI: Sample of miraa plantation in Qilta Location.....	125
Appendix VII: Authorization letter.....	126
Appendix VIII: NACOSTI letter .....	127
Appendix IX: Map of Marsabit Central Sub County.....	128

## LIST OF TABLES

<b>Table</b>	<b>Page</b>
Table 1.1: Marsabit Central Sub-County Education Office.....	6
Table 3.1: Sample size .....	30
Table 3.2: Reliability statistics.....	32
Table 3.3: Summary of Analysis Techniques .....	35
Table 4.1: Response rate .....	37
Table 4.2: Distribution of respondents by gender.....	39
Table 4.3: Distribution of respondents by age .....	41
Table 4.4: Distribution of respondents by level of education.....	42
Table 4.5: Distribution of respondents by designation .....	44
Table 4.6: Distribution of teachers by years of experience .....	45
Table 4.7: Students' participation in secondary school education.....	46
Table 4.8: Teachers' responses on miraa business activities and students' participation .....	49
Table 4.9: Students' responses on miraa business activities and students' participation .....	52
Table 4.10: Model Summary for miraa business activities and students' participation .....	54
Table 4.11: Analysis of variance for miraa business activities and students' participation .....	55

Table 4.12: Regression analysis of miraa business activities and students' participation .....	56
Table 4.13: Demanding nature miraa business activities.....	58
Table 4.14: Effectiveness of school governance strategies in enhancing students' participation .....	59
Table 4.15: Parental involvement in miraa business activities .....	59
Table 4.16: School governance strategies and students' participation .....	61
Table 4.17: Model summary for school governance strategies and students' participation .....	66
Table 4.18: Analysis of variance for school governance strategies and students' participation .....	67
Table 4.19: Regression analysis of school governance strategies and students' participation .....	68
Table 4.20: Teachers responses on parental involvement in miraa business management and students' participation.....	73
Table 4.21: Parents responses on parental involvement in miraa business management and students' participation.....	75
Table 4.22: Model summary for parental involvement and students' participation .....	78
Table 4.23: Analysis of variance for parental involvement and students' participation .....	79

Table 4.24: Regression analysis of parental involvement and students' participation .....	80
Table 4.25: Teachers' responses on Ministry of Education policies and students' participation .....	83
Table 4.26: Parents' responses on Ministry of Education policies and students' participation .....	87
Table 4.27: Model summary for ministry of education policies and students' participation .....	91
Table 4.28: Analysis of variance for ministry of education policies and students' participation .....	92
Table 4.29: Regression analysis of ministry of education policies and students' participation .....	93
Table 4.30: Effectiveness of the Ministry of Education policies in mitigating the use of miraa among students.....	96

## LIST OF FIGURES

<b>Figure</b>	<b>Page</b>
Figure 2.1 Conceptual framework .....	26

## **ABBREVIATIONS AND ACRONYMS**

<b>BOM</b>	Board of Management
<b>CDE</b>	County Director of Education
<b>DP</b>	Deputy Principal
<b>HOD</b>	Head of Department
<b>ILO</b>	International Labour Organization
<b>KCPE</b>	Kenya Certificate of Primary Education
<b>KCSE</b>	Kenya Certificate of Secondary Education
<b>KEMI</b>	Kenya Education Management Institute
<b>MOE</b>	Ministry of Education
<b>NACOSTI</b>	National Commission of Science, Technology and Innovation
<b>NESP</b>	National Education Sector Plan
<b>NGCDF</b>	National Government Constituency Development Fund
<b>OECD</b>	Organization for Economic Cooperation and Development
<b>QASO</b>	Quality Assurance and Standards Officer
<b>SPSS</b>	Statistical Package for Social Sciences
<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organization
<b>USAID</b>	United States Agency for International Development

## ABSTRACT

The purpose of this study was to investigate the influence of miraa business management on students' participation in secondary school education in Marsabit Central Sub-County, Kenya. The study sought to determine the influence of demographic information, miraa business activities, school governance strategies, parental involvement and Ministry of Education Policies on students' participation in secondary school education in Marsabit Central Sub-County, Marsabit County, Kenya. The study was guided by Walberg's theory on educational productivity and Individualized (Eclectic) Theory. The study employed descriptive survey design. The study target population comprised 72 parent representatives, 3000 students, 144 teachers and 12 principals of secondary schools and sample consisted of 106 teachers, 61 parent representatives and 353 students in Marsabit central Sub-County. Stratified random sampling was used to select 106 teachers, 61 parent representatives and 353 students in Marsabit central Sub-County. Census technique was used to select all the 12 principals in Marsabit central Sub-County. Primary data were collected using three sets of questionnaires administered to teachers, parent representatives and students. Interview guide was also held with school principals where responses were handwritten. The output of the regression coefficient showed that there is a statistically significant relationship between miraa business activities and students' participation in secondary school education, school governance strategies and students' participation in secondary school education, parental involvement and students' participation in secondary school education, Ministry of Education Policies and students' participation in secondary school education in Marsabit Central Sub-County. The study recommends that school management need to create awareness on dangers of engaging students in picking miraa and transporting miraa to business centres. Parents need to be vigilant on how their children go about their daily school activities as far as miraa business activities are concerned. There is need for proper school governance strategies that include involving checking things students carry, motivational speakers by Board of management, during morning assemblies, engaging students through a guiding and counselling session on miraa use and engaging all students in enforcing school policies on miraa use. The study further recommends for active parental involvement that includes counselling students on miraa use and guiding students on miraa use, parents need to maintain close monitoring of their children. Though there are Ministry of Education Policies on drug use, there are no clear laws on miraa use. There is need for the creation of policies in support by the Ministry of Education to mitigate use of miraa among students. Based on the study findings, the study made suggestions for future research that include to: determine the effects of miraa business management on students' academic performance, establish a comparison study on benefits of miraa business activities and its harmful effects on educational outcome and determine the relationship between miraa use, use of other drugs and substance and students' delinquency in school.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background to the study**

Regular school participation among students is significantly important to their academic achievement. However, in Marasabit Central Sub-County students are engaged in miraa business activities at the expense of being in school. Engaging students in miraa business activities take much of their school time (Mworia, 2018). As a result of too much engagement in miraa business activities, chronic absenteeism is common among school going children (Kassie, Darroudi, Kundi, Schulte-Hermann & Knasmüller, 2011; Bade, Muturi & Samantar, 2017). Students spend most of their time picking, packing, transporting and selling miraa (Jamin, 2012). As a result of the miraa economic activities, students find no time to participate in school activities (Gichovi, 2016). Miraa business activities may significantly derail student's school participation (Wabe & Mohammed, 2012). According to Gebiresilus, Gebresilus, Yizengaw, Sewasew and Mengesha (2014), miraa business management activities negatively affect students' participation in school activities that results from chronic absenteeism among students.

Students' involvement in miraa economic activities consume most of their time at expense of school activities (Rugendo, Njue & Gatimu, 2012). Miraa economic activities include picking, packing, transporting and selling in the market (Mworia, 2018). Some students are unable to attend school. Students'



absenteeism becomes chronic (Bade, Muturi & Samantar, 2017; Kassie, *et al.* 2011).

Parents are expected to oversee over students' academic activities which however, is not the case because students spent lots of their time in the miraa farms picking, packing and selling miraa products (Gebiresilus, *et al.*, 2014). Some parents engage their children in picking and packing miraa at home at the expense of going to school (Njeru, 2013). Miraa use is not illegal but has negative consequences to students' school attendance (World Drug Report, 2005). Studies by Soenens and Vansteenkiste (2005) and Rafiq, Fatima, Sohail, Saleemand Khan (2013) suggest that perception of parental involvement is relatively related to academic performance and that in order for students to excel academically, parents must be all time involved through parenting which generates conducive home environment for studying (WHO, 2006). Thus, it may seem that the more time parents spend in Miraa business and as a result students spend a lot of time away from school activities (Njeru & Mwangi, 2013).

The intervention of school management on student' participation is important. School governance strategies play a very important role in guiding students about miraa adverse effects. By involving children in miraa business activities, parents breach government laws and Ministry of education policies on child labour. According to Ministry of education policies school age children are supposed to be in school and not engaging any commercial labour activity. According to Njeru

(2013) school governance strategies need to create awareness on the dangers of miraa use among students. Some students fail to attend school while participating in miraa economic activities that include picking, transporting and selling (Bururia & Nyaga, 2015). These miraa economic activities interfere with daily school attendance by students (Njeru, 2013). The school management is forced to intervene by tightening school disciplinary policies and rules in order to curb frequent students' absenteeism (Mutunga, 2017).

In most instances, school management goes hand in hand with the government in managing the menace (Wazema & Madhavi, 2017). Government through Ministry of Education, County Government, Sub County Education Offices and local administration led by chiefs are instructed to jointly participate in ensuring that students attend school and that no students should be involved in miraa economic activities especially during school days (Kassie, *et al.*, 2011). The government intervention policies may involve punitive measures for parents who violate these and engage students in miraa activities at the expense of school (Cheloti & Gathumbi, 2016).

In countries where miraa economic activities are prevalent, student school participation has been undermined to a great extent (Ongwae, 2016). In the United States (US) Miraa is most prevalent among immigrants from Somalia, Ethiopia and Yemen (Dachew, Biffu & Tiruneh, 2015). The use of miraa among young children is likely to develop into a compulsive daily habit (Patel, 2008). For

school going children, their school attendance is largely affected (El-Menyar, Mekkodathil, Al-Thani & Al-Motarreb, 2015).

In Yemen, Yi, Kim, Hussein and Saitz (2012) noted students school participation has been harmed leading to irregular school attendance. School going children tend to prioritize miraa sessions over time spent on their studies and school activities. They also miss school to engage in chewing miraa and selling them (Jamin, 2012). In India, Kassim and Al'absi (2016) observed that children are being used in harvesting of miraa as a cheap source of labour and not getting any chance to attend school. Students' spend time in miraa farming picking and packing the product (WHO, 2008). This is further affirmed by Rahman and Tripathi miraa harvesting activities influence regularity of school attendance where children fail to attend school to assist their families in harvesting.

In Saudi Arabia, Al-Sanosy (2009) indicated that excessive engagement in miraa business activities has interfered with student school participation. Students usually consume miraa, claiming that it improves their academic performance. Ageely (2009) concurs that prevalence of miraa business activities including consuming in Saudi Arabia, because of the stimulating effect of miraa, it had been traditionally used as a medicine by students preparing for examination. According to Alsanosy, Mahfouz and Gaffar (2013) the risk of poor academic performance was high among students engaging in transposing and selling miraa. Alsanosy *et*

*al.* (2013) attributed the poor academic performance to irregular school attendance emanating from excess time spent in miraa business activities.

In Ethiopia, the prevalence of miraa consumption among youths range from age 16 to 30 and accounts for 62 percent of the total miraa consumption in the country (Teni, Surur, Hailemariam, Aye, Mitiku, Gurmu & Tessema, 2015). The magnitude of students' miraa use in Ethiopia ranges from 13.4% to 41% in the entire life time (Bade, Muturi & Samantar, 2017). According to Kassa, Loha and Esaiyas (2017), it is reported that more than 34.8% of school going children chew miraa. In Nigeria, some communities believe that miraa use enhances students' academic enhancement (Kassie, *et al.*, 2011). However, according to Olawole-Isaac, Ogundipe, Amoo and Adeloye (2018), students' involvement in miraa economic activities consume most of their time at expense of school activities.

According to Wanja (2010), the effect of miraa activities has greatly hampered student school participation in Kenya. In Meru County, students are involved in picking, packing, transporting and selling miraa (Gichovi, 2016). As a result of indulging much on miraa activities, students' lack time to attend to school work and school absenteeism becomes chronic (Bururia & Nyaga, 2015).

Marsabit Central Sub-County is involved in miraa trade; an activity that involves even school going children who as a result of the long time they spend in the business fail to attend school (Marsabit Central Sub-County Education, 2019). The result of children taking part in miraa business in the region is chronic school

absenteeism (Mutunga, 2017). Secondary school students in Marsabit central Sub-county 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 quickly. There is need for more studies to be carried out to establish the influence of miraa business on the participation of students in secondary school education in the region.

### **1.2 Statement of the problem**

School attendance among students in Marsabit County remains very low (Sub County Education Office, 2018). Most students actively engage in miraa economic activities including picking, packing and selling of miraa in Marsabit Central Sub-County. However, it is not clearly established whether students' engagement in miraa activities is the cause of chronic absenteeism in the region. Reports from Marsabit Central Sub-County Education Office indicated that student attendance in Marsabit Central Sub-County has been on drastic decline as shown in Table 1.1.

**Table 1.1: Marsabit Central Sub-County Education Office.**

<b>Year</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>
Student Attendance	1984	2099	2114	2076	1730
Total Students' Enrollment	3743	3582	3155	2924	2189
Percentage average Annual Attendance	53%	59%	67%	71%	79%

**Source: Marsabit Central Sub-County Education, 2019**

In 2018 average student participation in Marsabit central Sub-County Secondary was 53 percent to the overall student population. Despite the Ministry of Education initiatives including laws and policies (NACADA) to bar students from engaging in miraa business activities, students' enrolment in schools has been persistently low over the years in Marsabit Central Sub-County (Marsabit Central Sub-County Education, 2019). Marsabit Central Sub-County is fertile with favourable highland climate that supports miraa economic activities. Locals in Marsabit Central Sub-County and from the neighboring sub counties including school going students come to engage in miraa business activities. As a result the total attendance of students compared to total students' enrollment has persistently been declining. According to Marsabit Central Sub-County Education (2019), total attendance of students' attendance was 53 percent of the total students' enrollment in 2018. This is a major problem to parents, teachers and other stakeholders in education. As a result of this revelation, there was need to carry out this study in Marsabit Central Sub-County to investigate the influence of miraa business on students' participation in secondary school education.

There is scanty literature on influence of miraa activities on students' participation in Marsabit Central Sub-County. A study by Gichovi (2016) investigated the extent to which the growing of miraa has influenced the education of boy child in Embu County. Kithao (2015) focused on the effects of business activities on pupils' academic performance in Meru County. This study therefore sought to establish the influence of miraa business management

activities on students' participation in secondary school education in Marsabit Central Sub-County, Kenya.

### **1.3 Purpose of the study**

The purpose of this study was to investigate the influence of miraa business management on students' participation in secondary school education in Marsabit Central Sub-County, Kenya.

### **1.4 Research objectives**

The following objectives guided the study.

1. To establish the extent to which miraa business activities influence students' participation in secondary school education in Marsabit Central Sub-County, Marsabit County, Kenya.
2. To establish the extent to which school governance strategies on miraa activities influence students' participation in secondary school education in Marsabit Central Sub-County, Marsabit County, Kenya.
3. To establish the extent to which parental involvement in miraa business influences students' participation in secondary school education in Marsabit Central Sub-County, Marsabit County, Kenya.
4. To establish the influence of Ministry of Education Policies on miraa use influence on students' participation in secondary school education in Marsabit Central Sub-County, Marsabit County, Kenya.

### **1.5 Research questions**

1. To what extent do miraa business activities influence the students' participation in secondary school education in Marsabit Central Sub-County, Marsabit County, Kenya?
2. To what extent do school governance strategies on miraa activities influence students' participation in secondary school education in Marsabit Central Sub-County, Marsabit County, Kenya?
3. To what extent does parental involvement in miraa business influence students' participation in secondary school education in Marsabit Central Sub-County, Marsabit County, Kenya?
4. To what extent do Ministry of Education Policies on miraa use influence students' participation in secondary school education in Marsabit Central Sub-County, Marsabit County, Kenya?

### **1.6 Significance of the study**

The study may benefit the government of Kenya through the Ministry of Education (MOE) as it may use findings to formulate policies to regulate miraa business. The findings may be used by teachers in the mitigation against use of miraa among students as they act as counselors for students. The results of the study may also be significant to parents. Parents may be sensitized on the dangers of involvement in miraa business by students.



The results of the study may be of significant benefit to the students by highlighting the dangers associated with miraa business and use hence be encouraged to engage in constructive school and home activities. The study may also add to the existing body of knowledge in the field of miraa business management and its influence on students' school participation. The study may provide data for future studies in the field of miraa business activities and its influence on educational matters.

### **1.7 Limitation of the study**

Some of respondents were unwilling to respond to the questionnaire and to participate in the study for fear of exposing the situation in their schools. However, this was mitigated by assuring respondents of confidentiality during the study. Furthermore, the identity of all respondents was concealed in the questionnaires so that they may not withhold any information required from them. The researcher mitigated this by assuring them of the confidentiality of their identity and the information from respondents only used for academic purpose.

### **1.8 Delimitation of the study**

The study was delimited to secondary schools in Marsabit Central Sub-County. The study involved both public and private secondary schools in the region since miraa business is a challenge to students across the board. Principals, teachers and parent representatives were involved in the study because they interact with students in the teaching and learning process and are very much aware of students' behaviour and their participation in education matters at school.

### **1.9 Basic assumptions of the study**

The following were the basic assumptions of the study;

- i. The information obtained from the respondents was honest.
- ii. Miraa business activities continue to be undertaken in the foreseeable future.
- iii. All respondents had relevant information on the influence of Miraa business on students' participation in secondary school education in the area.

### **1.10 Definition of significant terms**

This section defines the variables and terms as used in the study.

**Ministry of Education policy on Miraa** refers to the laws and regulations enacted to regulate the involvement of students in miraa business including school community intervention strategies that create public awareness of miraa effects on health and education. Some of the policies in Kenya include NACADA policies on drug and substance use.

**Miraa business activities** refer to all activities that include planting, picking, packing, transporting and selling of miraa where students are involved in undertaking these miraa business activities.

**Miraa** refers to evergreen seedless and hardy plant whose leaves and soft twigs are chewed as a drug and used as a commercial plant.

**Parental involvement** refers to the roles played by parents to influence students' participation in miraa business activities and effect on education.

**Student school participation** refers to students' school attendance and student's engagement in class activities. Students' school participation is in terms of daily school attendance, transition rate, completion rate, exam attendance and participation in co-curricular activities.

**School governance strategies** refer to school plans to regulate miraa business activities among students in school. Some of school governance strategies include checking of items students carry to school, nature of punishment when found, motivational speakers from NACADA, church leaders, Board of management and speakers.

**Miraa business management** refer to the various miraa business activities including planting, picking, packing, transporting and selling and how various actors that include school governance strategies, parental involvement and Ministry of Education Policies affect the activities.

### **1.11 Organization of the Study**

This study was organized into five chapters. Chapter one consisted 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 consisting of introduction, concept of students' participation, miraa business activities, school governance strategies, parental involvement and Ministry of Education Policies on miraa usage, summary of literature review, theoretical framework and conceptual framework.

Chapter three described research methodology under research design, target population, the sample size and sampling techniques, research instruments, validity and reliability of instruments, data collection procedures and data analysis techniques and ethical considerations. Chapter four contains data analysis, interpretation and discussion of the findings. Chapter five presented summary of the study, conclusions and recommendations and suggestions for further research.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter presents a review of related literature broken down into; overview of students' participation, miraa business activities, school governance strategies, parental involvement and Ministry of Education Policies. The chapter also presents the summary of literature review, conceptual framework and theoretical framework.

#### **2.2 Concept of students' participation**

Miraa business activities have been found to be a contributor to reduced school participation amongst school going children (Thiharu, 2015). Students' participation in school predicts class attendance. Miraa farming and related trade activities often deter students from participating in class work (Gebiresilus, *et al.*, 2014). More students participating in miraa business management activities have limited time to attend classes. As a result, the miraa business management activities significantly affect children participation in educational activities (Rugendo, Njue & Gatimu, 2012).

The retention of students' in school is a major problem especially with those engaging in miraa business activities. Some students drop out of school to engage in miraa selling (Karimi, 2013). As a result of student engagement in miraa business activities, most of them do not complete their secondary education and

hence the transition rate to tertiary education becomes very low (Cheloti & Gathumbi, 2016).

In most other parts of the world, people chew miraa for Leisure (Patel, 2008). The expansion of miraa production is not simply due to the result of growing international demand but population growth in miraa growing areas. Due to pressure on land and diminishing resources, in miraa growing countries such as Kenya and Ethiopia, farmers in these countries are switching to growing of miraa as their chief cash crop (Soyoum, Kidane & Gebru, 1986; Gebissa, 2004). In the United Kingdom (UK) miraa is not criminalized, but it is elsewhere, in Western Europe and North America (Herbold, 1999). In the United States (US) miraa is most prevalent among immigrants from Somalia, Ethiopia and Yemen (Patel, 2008; Fitzgerald, 2009).

In Kenya, the economic importance of miraa in miraa producing areas is considered invaluable (Maitai, 1996). Miraa is cultivated both for export and local consumption (Odenwald, 2007) and because of its economic importance control may be difficult at present since the export potential is increasing. According to USAID (2017), miraa contributed 13.7 and 54 percent of the volume and value of the National export respectively with a growth rate of 9.7 percent value within the period 2011-2016. The total export value was Ksh 16.6 billion (\$211.5 million) for the period 2011-2016.

### **2.3 Miraa business activities and students' school participation**

Engaging students in miraa economic activities takes much of their school time (Mworia, 2018). As a result of too much engagement in miraa economic activities, chronic absenteeism is common among school going children (Kassie *et al.* 2011; Bade, Muturi & Samantar, 2017). Megerssa, Esayas and Mohamed (2014) revealed that miraa related projects had economic importance in providing employment to farmers, business people, transporters and revenue (levy duty) to the government upon export.

According to Gebiresilus, *et al.* (2014), in Ethiopia a number of school children are involved in harvesting, sorting, packing, transporting, loading and unloading miraa. Njeru (2013) in a study established that, secondary school boys in Meru County Kenya are engaged in miraa picking, miraa preparation and transportation, working in miraa kiosks, selling miraa in shops, providing manual labour in miraa farms and marketing, and hawking miraa in towns. Students miss classes to work for miraa traders from 6 to 9 a.m. and then hang around for the rest of the day chewing miraa.

Kithao (2015) conducted a study on the influence of miraa business on pupils' performance in Kenya certificate of primary education in Igembe division, Meru County. The study findings indicated that primary school pupils in the region were involved in buying and selling miraa. It was pointed out that because the pupils were always out busy trading on miraa, they attended school occasionally.

This resulted into truancy, failure to do homework, failure to revise for examinations and lack of concentration in class whenever they were able to attend school. This results to pupils missing school, missing lessons, failing to do homework, failing to revise for exams and lack of concentration in class.

Patel (2008) conducted a study to determine the influence of Khat chewing on school participation among Somali immigrants in Britain. The findings of the study indicated that, chewing khat was one of the draw backs to education among the Somali immigrants in Britain. The study argued that, when the youth meet to chew khat, they end up taking up a significant portion of their study time chatting as they chew khat with some dropping out of school completely.

#### **2.4 School governance strategies in miraa activities and students' participation**

School governance strategies play a very important role in guiding students about miraa adverse effects. These school governance strategies are written to support the development of effective governance in schools, to promote high standards, and drive school improvement to ensure that all pupils attend without failing (Cheloti & Gathumbi, 2016). School governance strategies need to be clear that they are accountable for the policies and procedures within their school and for the strategic direction. Some of school governance strategies include checking things students carry, punishing (suspension) when found, motivational speakers by Board of management, during morning assemblies and speeches from



NACADA officers. According to Njeru (2013) school governance strategies creates awareness on the dangers of miraa use among students. The school governance organs should be vigilant in monitoring daily students' attendance and include BoM, parents' association, school administration and prefects' body. This is possible when there are proper coordination strategies among the school management, teachers and students. In most occasions, students fail to report to school in order to work in miraaa farms which go undetected or reported.

School governance strategies should help create friendly learning environment and safe learning environment that is drug free for learners. The welfare of the students in school should be clearly outlined. The intervention of school governance strategies on students' participation is important. Some students fail to attend school while participating in miraa economic activities that include picking, transporting and selling (Bururia & Nyaga, 2014). These miraa economic activities interfere with daily school attendance by students (Njeru, 2013). The school governance organs are forced to intervene by tightening school disciplinary policies and rules in order to curb frequent students' absenteeism (Mutunga, 2017). In some instances, miraa chewing has formed a sub-culture within the schools in where teachers consume miraa in the presence of students. According to Kyalo (2010) miraa chewing has become a problem of significant proportion to student school participation where many students are involved picking, packing and selling of miraa produce.

Cheloti and Gathumbi (2016) conducted a study on Curbing Drug and Substance Abuse in Secondary Schools in Kenya; The Disconnect in School Community Intervention Strategies. The study employed descriptive survey design. The findings of the study show that students obtain drugs from the school community. Lack of cooperation from parents and guardians was frustrating Drug and Substance Abuse intervention efforts in schools. However, the study did not bring out the effects of drug and substance use on student participation.

## **2.5 Parental involvement in miraa activities and students' school participation**

Parental involvement is paramount for daily smooth student attendance. Parents need to maintain close monitoring of their children. In the case of a study, parents tend to engage their children in miraa business (Njeru & Mwangi, 2013). Young children who are students are involved in picking, packaging, transporting and selling miraa (Bade, Muturi & Samantar, 2017). Local leaders such as the chief and the county education director need to pay close attention on parents and miraa traders who are engaging students in picking, packing and transporting miraa (Mutunga, 2017). At times, children who indulge in miraa chewing tend to prioritize miraa sessions over time spent on their studies (Jamin, 2012). Parents should help students complete education by discouraging them from engaging in miraa activities.

Miraa use is not illegal but has negative consequences to students' school attendance (World Drug Report, 2005). Studies by Soenens and Vansteenkiste (2005) and Rafiq *et al.* (2013) suggest that perception of parental involvement is relatively related to academic performance and that in order for students to excel academically, parents must be all time involved through parenting which generates conducive home environment for studying (WHO, 2006). Thus, it may seem that the more time parents spend in Miraa business and as a result students spend a lot of time away from school activities (Alsanosy, *et al.*, 2013).

Since miraa business is lucrative, parents in most instances engage their children in providing labour required at the expense of going to school. This undermines student school attendance (Rafiq, *et al.*, 2013). By large extent, school going children find themselves emulating the parents and other adult relatives in consuming miraa (Gichovi, 2016). Families, in which adults chew miraa, will in no doubt influence the children to use the substance in the long run. Further to this, the cultural practice of chewing miraa has continuously been passed from generation to generation (Bururia & Nyaga, 2015). Child labour encourages loss of school time for the students and hence poor student participation.

## **2.6 Ministry of Education policies on miraa use and students' school participation**

In 2016, miraa earned Kenya Ksh3.6 billion, however; European Union banned the product in its market. As a result of economic and social effects of miraa farming, the government needs to intervene by regulating the production, consumption and the supply chain of miraa. In most instances, school going children are engaged in picking, packing, transporting and selling miraa (Krueger, 2017). Involving students in miraa production interferes with normal school participation. The government is required to regulate by passing policies to safeguard school going children from being exploited (Klein, Beckerleg & Hailu, 2009). The government on the other hand should play her noble role to sensitize the entire community on the effects of engaging students in miraa business activities (Mailutha & Kikechi, 2014).

The Basic Education Act (2013) outlines the guidelines to manage schools. The Board of management is mandated to formulate school policies to guide day to day management of school. In a bid to address illiteracy, low quality education, low completion rates at the secondary level, high cost of education and poor community participation the Government of Kenya launched Free Tuition Secondary Education (FTSE) in January 2008. The FSE was also established to increase transition from primary to secondary by 100 percent in all regions in Kenya (Mutegi, Muriithi & Wanjala, 2017).

The government, which has the sole responsibility to enhance law and order within the society, should be vigilant to discourage child labour. The school community intervention strategies from the MoE create students' awareness of the health effects of miraa. Miraa farming and any other miraa related commercial activity should be banned for minors (school going age) and surveillance of child labour for its eradication be done through the provincial administration hierarchy and heavy penalties should be administered on those found to encourage it.

The government, through the MOE has emphasized provision of guidance and counselling programmes in schools to help miraa usage among students in school. Because of addiction issues some students miss school in order to participate in miraa activities. The government policies should emphasize on public awareness, liaison activities and support service, and targets students in and out of learning institutions (Maithya, 2009). Education goals have to be achieved through good academic performance, however, drug abuse has played the reverse role where majority of students are less interested in school life.

## **2.7 Summary of literature review**

The chapter reviewed involvement of students in miraa trade activities and its influence on their participation in school. The reviewed literature shows secondary school students in different countries across the globe are highly engaged in miraa business activities such as; picking, packing, transporting, buying, selling and providing cheap labour in miraa farms. Critical review of

literature was conducted to establish knowledge gaps. A study by Patel (2008) to determine the influence of Khat chewing on school participation among Somali immigrants in Britain focused students in Britain presenting contextual gap. According to Jamin (2012) school going children tend to prioritize miraa sessions over time spent on their studies and school activities in Yemen. However, the study did not illustrate the influence of miraa chewing on students' school participation.

A study by Kassim and Al'absi (2016) in India observed that children are being used in harvesting of miraa as a cheap source of labour and not getting any chance to attend school. However, the study did interrogate the influence of time spent in miraa harvesting on students' school participation. According to Kassa, Loha and Esaiyas (2017), it is reported that more than 34.8% of school going children chew miraa in Ethiopia. However, the study did interrogate the influence of time spent in miraa chewing on students' school participation. A study by Gichovi (2016) investigated the extent to which the growing of miraa has influenced the education of boy child in Embu County did not highlight the effects of miraa business activities on students' participation. A study by Kithao (2015) while focusing on the effects of miraa business activities on pupils' academic performance in Meru County did not bring out the aspects of pupils' participation.

## **2.8 Theoretical framework**

The study was guided by Walberg's theory on educational productivity that was developed by Walberg in 1981. The theory states that, to achieve educational productivity and efficiency, educational process goals need to be aligned to the social environment through proper policies (Walberg, 1982). According to the theory, educational process goals are interpreted to include student perceptions of the social environment, creativity and self-concept.

Walberg's theory is applicable in this study because in Kenya, education productivity is measured in terms of participation and performance of a student in educational activities. 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 Marsabit central Sub-County, 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 or poor performance in academics at the end of the day.

The study is also anchored in the Individualized (Eclectic) Theory. The individualized theory was developed by Kolb and Chickering (1981). The theory assumes that no single approach to subject matter, teaching, or resource allocation is adequate for all students. Rather, it attempts to identify the curricular content and instructional methods that best meet the needs of the individual

student. With its emphasis on borrowing what is most useful from other pedagogical approaches, this flexible approach could also be termed eclectic.

But the individualized theory goes far beyond curriculum. It emphasizes, for instance, the importance to the student of advising and counselling and of independent study (Astin, 1984). The philosophy underlying most student personnel work (guidance, counselling, selective placement and student support services) implicitly incorporates the individualized or eclectic theory of student development. The individualized approach is also associated with particular instructional techniques such as self-paced instruction (Roberts and McNeese, 2010).

The most obvious limitation of the individualized theory is that it can be extremely expensive to implement, because each student normally requires considerable individualized attention (Newbold, *et al.*, 2010). In addition, because there are virtually no limitations to the possible variations in subject matter and pedagogical approach, the individualized theory is difficult to define with precision (Nabli & Nugent, 2014). In other words, although the theory is appealing in the abstract, it is extremely difficult to put into practice.

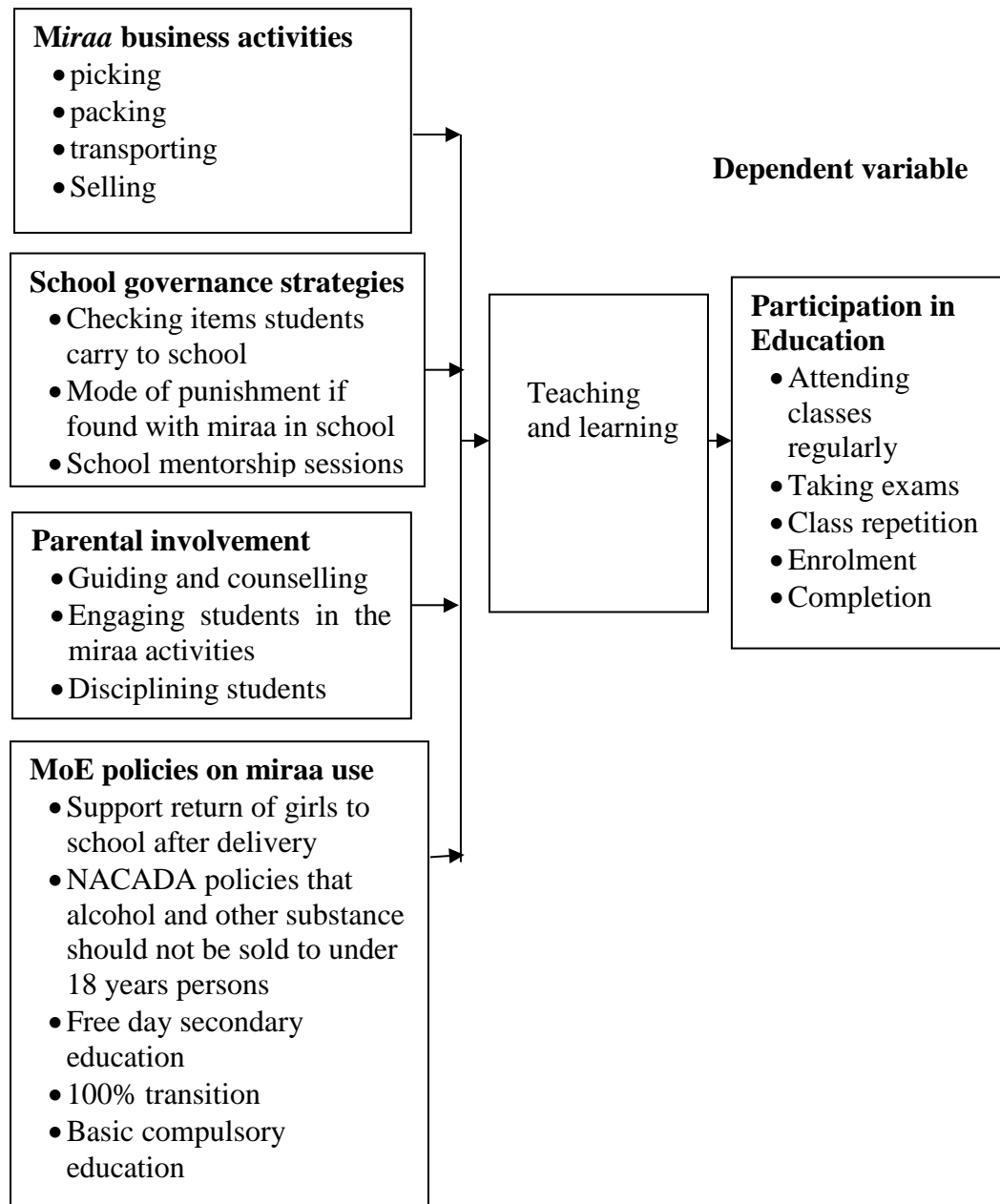
The theory is relevant to the study because it points out the socio and environmental factors that influence students' participation in school activities. The theory highlights that student individual factors need to be considered in enhancing student academic growth and active participation in school activities.



## 2.9 Conceptual framework

Figure 2.1 is a pictorial representation of the variables to be explored.

### Independent Variables



**Figure 2.1 Conceptual framework**

The independent variables of the study are miraa business activities, school governance strategies, parental involvement and MoE policies on miraa use. Miraa business activities have been operationalized into picking, packing, transporting and selling while school governance strategies is operationalized into checking items students carry to school, mode of punishment if found with miraa in school and mentorship sessions.

Further, parental involvement is operationalized using guiding and counselling, engaging students in the miraa activities while MoE policies on miraa use is operationalized using NACADA policies that alcohol and other substance should not be sold to under 18 years persons, free secondary education, 100% transition and basic compulsory education. The dependent variable is participation in education measured using class attendance, exam taking, class repetition and enrolment. It is expected that miraa business activities, school governance strategies, and parental involvement and MoE policies on miraa use have an influence on students' participation in education.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter presents a review of the research methodology. Specifically, this section discusses the research design, the population of the study, the sample size and the sampling procedure. The chapter also presents the research instruments, instrument validity, instrument reliability, data collection procedures, data analysis techniques and ethical consideration.

#### **3.2 Research design**

According to Meyers, Gamst and Guarino (2016), a research design can be regarded as a composition of rules for data collection and analysis of the same in a way that combines relevance with the aim of the research. The study employed descriptive survey design. Descriptive survey design allows the use of both quantitative and qualitative approach in answering research questions. Descriptive survey design is used to describe characteristics of a population or phenomenon under study (Rea & Parker, 2014). Descriptive survey design is appropriate for this study since it is based on the assumption that the sample shares similar characteristics with the whole population from where it is drawn.

#### **3.3 Target population**

The focus was the study of 12 secondary schools in Marsabit Central Sub-County. The target population of this study comprised of 72 parent representatives, 144 teachers and 12 principals of secondary schools in Marsabit central Sub-County.

The target population was also comprised of 3000 students in Marsabit Central Sub-County (Marsabit Central Sub County Education Office, 2018).

### 3.4 Sample size and sampling procedures

Sample size of the study was determined using Yamane (1967) formula. The formula is presented below as

$$n = \frac{N}{1 + N(e)^2}$$

Where:

$n$  = sample size

$N$  = population size

$e$  = the level of precision

1 = Constant

$$n_1 = \frac{144}{1 + 144 (0.05)^2}$$

= 74 teachers

$$n_2 = \frac{72}{1 + 72 (0.05)^2}$$

= 61 parent representatives

$$n_2 = \frac{3000}{1 + 3000 (0.05)^2}$$

= 53 students

The sample size for the entire study is as represented in Table 3.1.

**Table 3.1: Sample size**

<b>Respondents</b>	<b>Target population</b>	<b>Sample size</b>	<b>Percentage</b>
Teachers	144	106	74
Parent representatives	72	61	85
Students	3000	353	11
Principals	12	12	100
Total	3228	532	-

The study employed stratified random sampling procedure and census to choose study samples. Stratified random sampling was used to select 106 teachers, 61 parent representatives and 353 students in Marsabit central Sub-County. The strata were the different participants that include teachers, parent representatives and students from various schools in the region. Census technique was used to select all the 12 principals in Marsabit central Sub-County. Census technique is employed when the study population is small and must be studied in entirety.

### **3.5 Research instruments**

The study employed sets of questionnaires and interview guide to collect data. This study employed three sets of questionnaires developed by the researcher. Questionnaire 1 (Appendix II) was administered to teachers. Questionnaire 2 (Appendix III) was administered to parent representatives while Questionnaire 3 (Appendix IV) was administered to students. Marshall and Rossman (2010) point out that, questionnaires are appropriate for studies since they collect information that is not directly observable as they inquire about feelings, motivations, attitudes, accomplishments as well as experiences of individuals. Questionnaires

are easy to administer and are appropriate when collecting data for large sample size.

School principals were engaged in an interview session as indicated in Appendix V. Use of in-depth interview mechanism allows one on one conversation with respondents. The use of in-depth interview technique allows in-depth understanding of the topic under study by facilitating one on one conversation with the principals. Responses from the principals were written down for triangulation analysis. Further triangulation of findings was conducted to compliment quantitative data collected via questionnaires.

### **3.6 Validity of instrument**

Validity refers to whether an instrument is measuring what it purports to measure (Noble & Smith, 2015). This study employed content validity to test for the validity of the instrument. To ensure content validity the questionnaires were subjected to thorough review to evaluate items for relevance and clarity (Leung, 2015). The validity of the interview guide was enhanced by engaging supervisors who scrutinized the data collection tools and suggested comments to improve it. The instrument was then adjusted appropriately before subjecting it to the final data collection exercise. Supervisors' review comments were used to enhance content validity (Dikko, 2016).

### 3.7 Reliability of instrument

Test retest method was used to test the reliability of the questionnaire. To test the reliability of the measures in the questionnaire, Cronbach's alpha methodology was used (Cronbach, 1951) as cited by Leung (2015). According to Creswell and Creswell (2017), a pilot study is undertaken on 10 percent of the sample population. In this study, the questionnaires were tested on 10 percent of the sample of the size to ensure that the questionnaires are relevant and effective. Reliability was tested on each of the set of questionnaires. These respondents were not included in the final study sample in order to control for response biasness. The closer Cronbach's alpha coefficient is to 1, the higher the internal consistency reliability (Leung, 2015). A coefficient of 0.7 or more is recommended for a newly developed questionnaire. Results are presented in Table 3.2.

**Table 3.2: Reliability statistics**

Variable	Cronbach alpha	Comments
Questionnaire for teachers	.780	Reliable
Questionnaire for parent representatives	.756	Reliable
Questionnaire for students	.822	Reliable

The study findings indicated that the data instruments were reliable with a Cronbach alpha Value of above 0.70. Taherdoost (2016) provided the following rules of thumb: >0.9 – Excellent, >0.8 – Good, >0.7 – Acceptable, >0.6 – Questionable, >0.5 – Poor and <0.5 – Unacceptable. The findings indicated that

the Cronbach alpha for each of the variables was above the lower limit of acceptability thus reliable. The validity of the interview guide was enhanced by engaging supervisors who scrutinized the data collection tool for validity and reliability. Supervisors' review comments were used to enhance content validity of the interview guide by adjusting appropriately before subjecting it to the final data collection exercise.

### **3.8 Data collection procedures**

Research permit was granted from the National Commission for Science, Technology and Innovation (NACOSTI) before the onset of data collection. The 12 schools were visited on different occasions and questionnaires distributed. The questionnaires were delivered to the respondents and filled in my presence to ensure better understanding of the questions and enhanced reliability. Some parents could not understand the language used to write the questionnaires. Translator was thus employed to help translate questions into language understandable by parents. Interview sessions were held with the principals. Interview responses from the principals were handwritten and transcribed for analysis.



### **3.9 Data analysis techniques**

Quantitative data were coded and then entered into computer using SPSS Software Version 23.0. Objective one (miraa business activities), two (school governance strategies), three (parental involvement) and four (MoE policies on miraa use) were analyzed using multiple regression analyses to interrogate their influence on students' participation in secondary school education. Content analysis method was also employed to analyze qualitative data collected from the interview guide.

Mira business activities that include picking, packing, transporting and selling were regressed against students' participation in secondary school education. School governance strategies that include checking items students carry to school, mode of punishment if found with miraa in school, school mentorship sessions were regressed against students' participation in secondary school education. Further, parental involvement that include guiding and counselling, engaging students in the miraa activities and disciplining students were regressed against students' participation in secondary school education. Finally, Ministry of Education Policies that include support return of girls to school after delivery, NACADA policies that alcohol and other substance should not be sold to under 18 years persons, Free day secondary education, 100% transition and Basic compulsory education were regressed against students' participation in secondary school education. A critical p value of 0.05 was used to check the significant level of the statistics generated. Table 3.3 summarizes analyses techniques.

**Table 3.3: Summary of Analysis Techniques**

<b>Research Question</b>	<b>Indicators of the independent variable</b>	<b>Mode of analysis</b>	<b>Statistics</b>
To what extent do miraa business activities influence the students' participation in secondary school education in Marsabit Central Sub-County, Marsabit County, Kenya?	<ul style="list-style-type: none"> <li>• picking</li> <li>• packing</li> <li>• transporting</li> <li>• Selling</li> </ul>	Descriptive analysis, multiple regression analysis and Content analysis technique	Frequencies, percentages, means, standard deviations, Regression coefficients, R-square, model summary and thematic representations
To what extent do school governance strategies on miraa activities influence students' participation in secondary school education in Marsabit Central Sub-County, Marsabit County, Kenya?	<ul style="list-style-type: none"> <li>• Checking items students carry to school</li> <li>• Mode of punishment if found with miraa in school</li> <li>• School mentorship sessions</li> </ul>	Descriptive analysis, multiple regression analysis and Content analysis technique	Frequencies, percentages, means, standard deviations, Regression coefficients, R-square, model summary and thematic representations
To what extent does parental involvement in miraa business influences students' participation in secondary school education in Marsabit Central Sub-County, Marsabit County, Kenya?	<ul style="list-style-type: none"> <li>• Guiding and counselling</li> <li>• Engaging students in the miraa activities</li> <li>• Disciplining students</li> </ul>	Descriptive analysis, multiple regression analysis and Content analysis technique	Frequencies, percentages, means, standard deviations, Regression coefficients, R-square, model summary and thematic representations
To what extent do Ministry of Education Policies on miraa use influence students' participation in secondary school education in Marsabit Central Sub-County, Marsabit County, Kenya?	<ul style="list-style-type: none"> <li>• Support return of girls to school after delivery</li> <li>• NACADA policies that alcohol and other substance should not be sold to under 18 years persons</li> <li>• Free day secondary education</li> <li>• 100% transition</li> <li>• Basic compulsory education</li> </ul>	Descriptive analysis, multiple regression analysis and Content analysis technique	Frequencies, percentages, means, standard deviations, Regression coefficients, R-square, model summary and thematic representations

### **3.10 Ethical considerations**

Ethical considerations relate to the moral standards that the researcher should consider in all research methods in all stages of the research design. Consent letter was sought from the university. All participants were requested to give their informed consent before participating in the study. There was anonymity of respondents. There was no study participants' identifiers like names that would link the participant to any data, instead code numbers were created and used.

## CHAPTER FOUR

### DATA ANALYSIS, PRESENTATION AND DISCUSSION OF FINDINGS

#### 4.1 Introduction

This chapter comprises data analysis, presentation, interpretation and discussion of the findings. The order of what is contained is: response rate, influence of miraa business activities, school governance strategies, parental involvement, and MoE policies on students' participation in secondary school education.

#### 4.2 Questionnaire return rate

The return rate provides a profile of respondents who participated in the study. The respondents of the study were teachers, parents, students and principals. It was important to indicate the response rate in order to confirm that the participation rate by respondents was adequate to conduct analysis. Response rate for the study is shown in Table 4.1.

**Table 4.1: Response rate**

<b>Respondents category</b>	<b>Administered</b>	<b>Returned</b>	<b>Unreturned</b>	<b>Percentage returned</b>
Teachers	106	102	4	96.2
Parents	61	57	4	93.4
Students	353	342	11	96.9
Principals	12	11	1	91.7

Teachers= 106    Parent representatives= 61    Students= 353    Principals= 12

The response rate for teachers, parents, students and principals was sufficiently good for further analysis. According to Mugenda and Mugenda (2003); Kothari (2004) a response rate of above 50 percent is adequate for a descriptive study.

Based on these recommendations, all the respondents' response rate was very good allowing results to be acceptable. The data collection procedures that included administering questionnaires in person and having them filled and collected immediately, pre-notification of respondents, voluntary participation and assurance of confidentiality was attributed to this high response rate.

### **4.3 Demographic data**

The study considered it important to establish the background information of the respondents which included gender, age, level of education, designation and years of working. This was inspired by the need to establish whether there exists any close relationship among respondents' demographic characteristics, miraa business activities and students' participation. Data is presented according to gender, age, level of education, designation and years of working.

#### **4.3.1 Distribution of respondents by gender**

The study sought to indicate the demographic characteristics of study participants. It was necessary to indicate the gender of the respondents so as to establish any significant relationship between gender composition of respondents, engagement in miraa business activities and students' participation in academic activities. The respondents were asked to indicate their gender and the results are presented in Table 4.2.

**Table 4.2: Distribution of respondents by gender**

Demographic Characteristics	Teachers		Parent representatives		Students	
	f	Percent (%)	f	Percent (%)	f	Percent (%)
<b>Gender</b>						
Male	76	74.5	30	52.6	172	48.7
Female	26	25.5	27	47.4	181	51.3
<b>Total</b>	<b>102</b>	<b>100</b>	<b>57</b>	<b>100</b>	353	100.0
Teachers= 106	Parent representatives= 61		Students= 353			

Findings in Table 4.2 indicate that there are more male teachers than female teachers. School teaching has long been associated with women. There has been an ideological link between women's domestic role and their career as school teachers. However, the result imply that majority of teachers are males. In this region, female education is not highly regarded and this may attribute to the highest number of male teachers as compared to female teachers. The results contrast Tašner, Žveglič and Čeplak (2017) in the EU as a whole; the great majority of teachers are still women, with less than one third being men. According to Tašner, Žveglič and Čeplak (2017) that historically across the OECD, the teaching profession has been largely dominated by women.

Majority of parents who participated in the study were male attributed to the fact that majority of miraa owners are males and dominate in the parents' association committees. In most societies, women are closely associated with production of food and raw materials for the industrial sector. However, women rarely own any reasonable forms of land property; do not have adequate access to the same, and

do not even make major decisions pertaining to allocation and use of such land. Among farming communities where the basic property is land, women's access to it is determined by men as a matter of patriarchy cultural tradition.

Further, majority of students who participated in the study are females. This may imply that more girls are attending school. In this Sub-County, less women are in gainful employment due to cultural drawbacks like early marriages, bias for boys and female genital mutilation for girls. The cultural drawbacks undermine active education participation in children. According to Jelas, Salleh, Mahmud, Azman, Hamzah, Hamid and Hamzah (2014) gender differences with regard to academic performance remain one of the more challenging issues in educational activities. Gender disparity in education has traditionally focus on the under participation of girls and still is in some parts of the world. In Malaysia, gender disparity in basic and higher education are in favour of girls both in terms of participation and performance (Jelas, *et al.*, 2014). The phenomena could be attributed to gender mainstreaming strategies being employed by the government. Both males and females were included in the study to give balanced views.

#### **4.3.2 Age of respondents**

The study presented the age of respondents that participated in the study. Miraa business activities attract young persons including school going students who want to acquire quick money to spend on. It was necessary to indicate age of the respondents so as to establish any significant relationship between age of

respondents, miraa business activities and students' participation in academic activities. Age also determines the experience of teachers when it comes to student guidance and counselling. The results are presented in Table 4.3.

**Table 4.3: Distribution of respondents by age**

Demographic Characteristics	Teachers		Parent representatives		Students	
	f	Percent (%)	f	Percent (%)	f	Percent (%)
<b>Age</b>						
Less than 13 years	-	-	-	-	6	1.7
14-15 years	-	-	-	-	107	30.3
16-19 years	-	-	-	-	240	68.0
20- 30 years	57	55.9	11	19.3	-	-
31-40 years	33	32.4	16	28.1	-	-
41-50 years	6	5.9	18	31.6	-	-
51 years and above	6	5.9	12	21.1	-	-
<b>Total</b>	<b>102</b>	<b>100</b>	<b>57</b>	<b>100</b>	<b>353</b>	<b>100.0</b>
Teachers= 106	Parent representatives= 61	Students= 353	Principals= 12			

Table 4.3 indicates that 55.9 percent of the teachers who were the majority were aged 20- 30 years. The results imply that teachers are freshly from college. Age affects efficiency and performance of an individual. Age is a key factor in determining the experience and competency of individuals.

Majority of parents who participated in the study were aged 41 years and above. Most parents were at their middle age and were involved actively in miraa economic activities. At this age, parents have more responsibilities that include fetching for the family and other social responsibilities.



Majority of students were aged 16-19 years. This is the age that most students encounter teenage pressure and may be tempted to engage in miraa business activities in order to earn some money to spend on. Without proper guidance, young persons are more likely to be attracted to miraa business. Moreover, business persons tend to hire young persons in school because they will offer cheap labour. Skirbekk (2008) concurs with these observations that age influences efficiency and performance of an individual. Age is a key factor in determining the experience and competency of individuals.

#### 4.3.3 Highest level of education

The study presented the level of education of respondents that participated in the study. It was necessary to indicate the level of education so as to establish any significant relationship between level of education of respondents, miraa business activities and students' participation in academic activities. The results are presented in Table 4.4.

**Table 4.4: Distribution of respondents by level of education**

Demographic Characteristics	Teachers		Parent representatives		Students	
	f	Percent (%)	f	Percent (%)	f	Percent (%)
<b>Level of education</b>						
None	-	-	6	10.5	-	-
Primary	-	-	24	42.1	-	-
Secondary	-	-	5	8.8	-	-
Diploma	14	13.7	12	21.7	-	-
Bachelors	82	80.4	10	17.5	-	-
Masters	6	5.9	-	-	-	-
Form 1-2	-	-	-	-	197	55.8
Form 3-4	-	-	-	-	156	44.2
<b>Total</b>	<b>102</b>	<b>100</b>	<b>57</b>	<b>100</b>	<b>353</b>	<b>100.0</b>
Teachers= 106	Parent representatives= 61	Students= 353	Principals= 12			

Findings in Table 4.4 indicate that majority of teachers who participated in the study had bachelors level of education. The results imply that the teachers are well trained to enhance academic delivery. The level of education facilitates acquisition of necessary management skills required in the management of learning institutions. The results concur with the requirements of the Republic of Kenya Basic Education Act (2013) that teachers employed in secondary education must be holders of degree in education from a recognized university or post diploma qualification.

Most parent representatives had primary level of education implying that most parents did not pursue studies to secondary levels of education and even tertiary levels. The fact that majority of parents had lower than secondary level of education implies that majority of parents could not comprehend the adverse effects of miraa business activities on students' academic activities. Students who participated in the study were drawn from all across classes. Cases of student engagement in miraa business activities is evident across all classes from form one to form four and thus, involving students drawn from various classes enhanced the comprehensiveness of the study.

#### **4.3.4 Designation of respondents**

The study established the designation held by the respondents that participated in the study. It was necessary to indicate the designation of the teachers so as to establish any significant relationship between role of teachers, miraa business

activities and students' participation in academic activities. The results findings are presented in Table 4.5.

**Table 4.5: Distribution of respondents by designation**

<b>Designation</b>	<b>Frequency</b>	<b>Percent</b>
Heads of department	26	25.5
Class teacher	32	31.4
Guidance and counselling teacher	7	6.9
Deputy principals	10	9.8
Teacher	27	26.5
<b>Total</b>	<b>102</b>	<b>100</b>

Teachers= 106

Findings in Table 4.5 indicate that most of teachers, who participated in the study, were class teachers, ordinary teachers and heads of department. The results imply that in a school setting, roles are subdivided among teachers to enhance academic delivery. The sub-groups are actively involved in daily educational activities in school including disciplinary cases.

#### **4.3.5 Years of experience**

The study investigated the years of work of respondents that participated in the study. It was necessary to indicate years of experience of the respondents so as to establish any significant relationship between years of work of respondents, miraa business activities and students' participation in academic activities. The results from the findings are presented in Table 4.6.

**Table 4.6: Distribution of teachers by years of experience**

<b>Demographic Characteristics</b>	<b>Teachers Count</b>	<b>Percent (%)</b>
<b>Years of work</b>		
less than 2 years	50	49.0
3 to 5 year	33	32.4
6 to 8 years	14	13.7
More than 8 years	5	4.9
<b>Total</b>	<b>102</b>	<b>100</b>

Teachers= 106

Findings in Table 4.6 indicate that most of the teachers who participated in the study had worked for less than 2 years. The work experience of an individual determines the skills acquired over time that influence job performance. The skills acquired by teachers over time are necessary in student guidance and counselling. The skills are also important in mentorship programmes. According to Dial (2008), years of experience, as well as the interaction between years of experience and degree level of teachers, has an effect on student achievement.

#### **4.4 Students' participation in secondary school education**

Teachers were asked to respond on state of students' participation in secondary school education. The responses were rated on a three Likert scale as (1 – Poor, 2 – Fair, 3 – Good). The results for students' participation in secondary school education are presented in Table 4.7.

**Table 4.7: Students' participation in secondary school education**

Students' participation in academic activities			Poor	Fair	Good	Mean	SD
		f	11	66	25		
i.	Transition rate	%	10.5%	64.9%	24.6%	2.1	0.6
		f	2	77	23		
ii.	Completion rate	%	1.8%	75.4%	22.8%	2.2	0.5
		f	2	54	47		
iii.	Daily attendance.	%	1.8%	52.6%	45.6%	2.4	0.5
		f	4	38	61		
iv.	Exam attendance.	%	3.5%	36.8%	59.6%	2.6	0.6
v.	Absenteeism with reason.	f	7	70	25		
		%	7.0%	68.4%	24.6%	2.2	0.5
vi.	Absenteeism without reason.	f	13	28	62		
		%	12.3%	27.4%	60.4%	3.7	0.7
vii.	participation in co-curricular activities	f	9	52	41		
		%	8.8%	50.9%	40.4%	2.3	0.6
		f	4	68	30		
viii.	General performance	%	3.5%	66.7%	29.8%	2.3	0.5

Table 4.7 shows that majority of teachers noted that transition rate of students was fair, with mean score of 2.1 and standard deviation is 0.6 implying that miraa business inhibits students' transition rate to next stage of education. The results also showed that majority of the teachers noted that completion rate of students was rated fair, with mean score of 2.2 and standard deviation is 0.5 implying that miraa business inhibits students' completion rate in school. The results also showed that majority of the teachers noted that daily attendance of students was rated fair, with mean score of 2.4 and standard deviation is 0.5 implying that miraa business inhibits students' school daily attendance.

Further, majority of the teachers noted that exam attendance of students was rated 'good', with mean score of 2.6 and standard deviation is 0.6 implying that miraa business fairly inhibits students' school exam attendance. The study established that majority of the teachers noted that absenteeism with reason of students was rated 'fair', with mean score of 2.2 and standard deviation is 0.5. The study established that majority of the teachers noted that absenteeism without reason of students was rated 'good', with mean score of 3.7 and standard deviation is 0.7 implying that absenteeism without reason of students was high. It was also noted that general performance of students was rated 'fair', with mean score of 2.3 and standard deviation is 0.5 implying that general performance of students was fairly low.

In an interview with principals, school principal 11 noted,

'Students spent a lot of time in miraa picking and selling miraa. A good number of them do not complete the four year cycle. Miraa business activities are lucrative business as students sometimes decide to drop out of school to carry out the business. Moreover, some students are chewing miraa thus lacking time for their studies. The effects felt in students' decline in class performance, reduces enrolment, retention and completion rates'. School principal 11, [Key Informant Interviewee, 2019].

However, school principal 12 indicated,

'The school attendance is good due to stringent measures put in place by the school. The school also works with chiefs to reduce absenteeism. Absenteeism has been reduced though it was a major problem due to parents' illiteracy and students' poor commitment to education'. School principal 12, [Key Informant Interviewee, 2019].

Miraa business activities have been found to be a contributor to reduced school participation amongst school going children. Students' participation in school determines class attendance. Miraa farming and related trade activities often deter

students from participating in class work. More students participating in miraa business management activities have limited time to attend classes. The results concur with Rugendo, Njue and Gatimu (2012) that miraa business management activities significantly affect children participation in educational activities.

The retention of students' in school is a major problem especially with those engaging in miraa business activities. Some students drop out of school to engage in miraa selling. As a result of student engagement in miraa business activities, most of them do not complete their secondary education and hence the transition rate to tertiary education becomes very low.

#### **4.5 Miraa business activities and students' participation in secondary school education**

The study sought to establish the various miraa business activities and their influence on students' participation in secondary school education. The results of the study are presented in the subsequent sub-sections.

##### **4.5.1 Parent representatives' responses on miraa business activities and students' participation in secondary school education**

The parents were asked to respond on whether miraa business activities influence students' participation in secondary school education. The responses were rated on a four Likert scale (1 – not at all, 2 – small extent, 3 – moderate extent and 4 – large extent). The results of miraa business activities and students' participation in secondary school education are presented in Table 4.8.

**Table 4.8: Teachers’ responses on miraa business activities and students’ participation**

Miraa business activities			not at all	small extent	moderate extent	large extent	Mean	SD
i.	Picking miraa	f	25	14	12	6		
		%	43.9%	24.6%	21.1%	10.5%	2.0	1.0
ii.	Packing miraa	f	31	12	10	4		
		%	54.4%	21.1%	17.5%	7.0%	1.8	1.0
iii.	Transporting miraa	f	26	11	10	10		
		%	45.6%	19.3%	17.5%	17.5%	2.1	1.2
iv.	Selling miraa	f	39	9	3	6		
		%	68.4%	15.8%	5.3%	10.5%	1.6	1.0
v.	Weeding miraa	f	19	16	5	17		
		%	33.3%	28.10%	8.8%	29.8%	2.4	1.2

Table 4.8 shows that majority of parents noted that picking miraa influences students’ participation in secondary school education to no extent, with mean score of 2.0 and standard deviation is 1.0 implying that picking miraa inhibits students’ participation in secondary school education. Involving students in miraa business activities take most of students’ time that entails participating in school related activities. This results to students missing school, missing lessons, failing to do homework, failing to revise for exams and lack of concentration in class. Some parents engage their children in picking and packing miraa at home at the expense of going to school. Thus students fail to attend school while participating in miraa economic activities that include picking. Miraa use is not illegal but has negative consequences to students’ school attendance. The results concur with



Rafiq, Fatima, Sohail, Saleem and Khan (2013) that students spend time in miraa farming picking at the expense of being in school.

The results also showed that majority of the parents noted that packing miraa influence students' participation in secondary school education to no extent, with mean score of 1.8 and standard deviation is 1.0 implying that packing miraa inhibits students' participation in secondary school education. The effect of miraa activities has greatly hampered student school participation in Kenya. Students are involved in packing, miraa. As a result of indulging much on miraa activities, students' lack time to attend to school work and school absenteeism becomes chronic. According to UN-Emergencies Unit for Ethiopia (2004) number of school children are involved in packing miraa.

The results also showed that majority of the parents noted that transporting miraa influences students' participation in secondary school education to no extent, with mean score of 2.1 and standard deviation is 1.2 implying that transporting miraa inhibits students' participation in secondary school education. Some students miss to attend school transporting miraa from farm to home and to the market. According Bade, Muturi and Samantar (2017), young children who are students are involved in picking, packaging, transporting and selling miraa.

Further, parents noted that selling miraa influences students' participation in secondary school education to no extent, with mean score of 1.6 and standard deviation is 1.0 implying that selling miraa inhibits students' participation in

secondary school education. The study established that majority of the parents noted weeding miraa influences students' participation in secondary school education to no extent, with mean score of 2.4 and standard deviation is 1.2 implying that weeding miraa inhibits students' participation in secondary school education. In some cases, students are sent to the market to sell miraa. Some students also drop out of school to engage in miraa selling. The results are in line with Kithao (2015) that students are involved in buying and selling miraa at the expense of being in school.

Parents were asked to indicate how demanding was miraa business activities. Majority of parents 71.9 percent indicated that miraa business activities are very demanding. Students were further asked to indicate the extent miraa business activities affects student participation.

#### **4.5.2 Students' responses on miraa business activities and students' participation in secondary school education**

Table 4.9 shows the result for miraa business activities and students' participation.

**Table 4.9: Students’ responses on miraa business activities and students’ participation**

Miraa business activities		No extent	Little extent	Not sure	Great extent	Very great extent	Mean	SD
i.	Picking miraa affects my school attendance	f 72 % 20.4%	21 5.9%	22 6.2%	110 31.2%	128 36.3%	3.6	1.5
ii.	Packing miraa affects my school attendance	f 66 % 18.8%	25 7.1%	27 7.7%	130 36.9%	104 29.5%	3.5	1.5
iii.	Transporting miraa to the market affects my school attendance	f 63 % 17.8%	21 5.9%	23 6.5%	118 33.4%	128 36.3%	3.6	1.5
iv.	Selling miraa affects my school attendance	f 59 % 16.7%	14 4.0%	19 5.4%	107 30.3%	154 43.6%	3.8	1.5
v.	Weeding miraa affects my school attendance	f 72 % 20.6%	20 5.7%	31 8.9%	121 34.6%	106 30.3%	3.5	1.5
vi.	Chewing miraa affects my school attendance	f 46 % 13.0%	8 2.3%	10 2.8%	89 25.2%	200 56.7%	4.1	1.4

Table 4.9 showed that majority of students indicated that picking miraa affects school attendance to great extent, with mean score of 3.6 and standard deviation is 1.5 implying that picking miraa inhibits students’ participation in secondary school education. The results also showed that majority of the students noted that packing miraa affects school attendance to great extent, with mean score of 3.5 and standard deviation is 1.5 implying that packing miraa inhibits students’ participation in secondary school education. The results also showed that majority of the students indicated that transporting miraa affects school attendance to great extent, with mean score of 3.6 and standard deviation is 1.5 implying that transporting miraa inhibits students’ participation in secondary school education.

Further, students indicated that selling miraa affects school attendance to great extent, with mean score of 3.8 and standard deviation is 1.5 implying that selling miraa inhibits students' participation in secondary school education. The study established that majority of the students indicated that weeding miraa affects school attendance to great extent, with mean score of 3.5 and standard deviation is 1.5 implying that weeding miraa inhibits students' participation in secondary school education. The study established that majority of the students indicated that chewing miraa affects their school attendance to great extent, with mean score of 4.1 and standard deviation is 1.4 implying that Chewing miraa affects their school attendance inhibits students' participation in secondary school education. In an interview with principals, school principal 1 indicated,

‘Some students in my school engage in miraa business activities. Some students assist their parents in weeding and picking and thus lose a lot of time at the expense of school activities’. School principal 1, [Key Informant Interviewee, 2019].

Involving students in miraa business activities takes most of students' time that entails participating in school related activities. Students are also involved in picking miraa and transporting miraa to business centres. This results to students missing school, missing lessons, failing to do homework, failing to revise for exams and lack of concentration in class. The results concur with Patel (2018) who conducted a study to determine the influence of Khat chewing on school participation among Somali immigrants in Britain and noted that chewing khat took up a significant portion of students study time, chatting as they chew khat with some dropping out of school completely. The results also concur with Njeru

(2013) that miraa economic activities interfere with daily school attendance by students. According to Mworira (2018), engaging students in miraa economic activities takes much of their school time. However, Ageely (2009) argues that miraa has beneficial effects for students preparing for examination.

#### **4.5.3 Regression analysis on miraa business activities and students' participation**

Regression analysis was conducted between miraa business activities and students' participation in secondary school education. Responses from teachers were employed to determine the influence of miraa business activities on students' participation in secondary school education. The model summary results between miraa business activities and students' participation are presented in Table 4.10.

**Table 4.10: Model Summary for miraa business activities and students' participation**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
	.775	.601	.561	.31290

Table 4.10 present the fitness of model used for the regression model in explaining the study phenomena. Miraa business activities were found to be satisfactory in explaining students' participation in secondary school education. This is supported by coefficient of determination also known as the R square of 60.1 percent. This means miraa business activities explain 60.1 percent of the variations in students' participation in education.

The analysis of variance results are presented in Table 4.11.

**Table 4.11: Analysis of variance for miraa business activities and students' participation**

<b>Model</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Regression	7.507	5	1.501	15.335	.000
Residual	4.993	51	.098		
Total	12.500	56			

Table 4.11 gives the outcomes on the analysis of the variance. The results indicate that the overall model was statistically significant. Further, the results imply that miraa business activities is a good predictor of students' participation in education. This was supported by an F statistic of 15.335 and the reported p value (0.000) which was less than the conventional probability of 0.05 significance level. The findings for F calculated (15.335) was also compared against the F critical value ( $F_{5, 51}$ ) of 2.40 calculated from the F tables. Since the F calculated was greater than F critical ( $15.335 > (2.40)$ ), the model was significant.

Multiple regression model is presented in Table 4.12.

**Table 4.12: Regression analysis of miraa business activities and students' participation**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.969	.188		5.157	.000
i. Picking miraa	-.189	.077	.116	2.455	.033
ii. Packing miraa	-.199	.062	-.187	-3.210	.017
iii. Transporting miraa	-.255	.065	.088	3.923	.012
iv. Selling miraa	-.357	.058	.112	6.155	.002
v. Weeding miraa	-.179	.087	.692	2.057	.043

The multiple regression showed that picking miraa and students' participation in education have a negative and significant relationship ( $r=-.189$ ,  $p=.033$ ). The results therefore imply that picking miraa inhibits students' participation in secondary school education. Further, the regression results also showed that there is negative and statistically significant relationship between packing miraa and students' participation in secondary school education. The results therefore imply that packing miraa inhibits students' participation in secondary school education.

It was also noted that there is a negative and statistically significant relationship between transporting miraa and students' participation in secondary school education. The results therefore imply that transporting miraa inhibits students' participation in secondary school education. The regression results further showed that there is a negative and statistically significant relationship between selling miraa and students' participation in secondary school education. The results

therefore imply that selling miraa inhibits students' participation in secondary school education. Finally, regression result showed that there is a negative and statistically significant difference between weeding miraa and students' participation in secondary school education. The results therefore imply that weeding miraa inhibits students' participation in secondary school education. In an interview with principals, school principal 3 indicated,

‘Wide cross section of students engages in miraa activities at home especially during school holidays. Students are mostly involved in picking, weeding, packing and transporting miraa to the market. The time lost in picking, weeding, packing and transporting miraa to the market undermines students' school participation’. School principal 3, [Key Informant Interviewee, 2019].

Engaging students in miraa economic activities takes much of their school time. As a result of too much engagement in miraa business activities, chronic absenteeism is common among school going children. School children are involved in harvesting, sorting, packing, transporting, loading and unloading miraa. The results are in line with Njeru (2013) in a study on miraa activities of secondary school boys in Meru County Kenya and established that secondary school boys 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. According to Kithao (2015) school going pupils are involved in buying and selling miraa thus resulting into truancy, failure to do homework, failure to revise for examinations and lack of concentration in class whenever they were able to attend school. This results to



students missing school, missing lessons, failing to do homework, failing to revise for exams and lack of concentration in class.

Further the study sought to illustrate how demanding miraa business activities is. Miraa business activities may be very involving demanding a lot of time. The results of the demanding nature of miraa business activities are presented in Table 4.13.

**Table 4.13: Demanding nature of miraa business activities**

<b>Demanding nature of Miraa business activities</b>	<b>Frequency</b>	<b>Percent</b>
i. Very demanding	29	50.9
ii. Demanding	24	42.1
iii. Fairly demanding	4	7.0
Total	57	100.0

Majority of the parents indicated that miraa business activities are very demanding. The results imply that miraa business activities are intense and require a lot of time. As a result, the demanding nature of the business forces parents to involve school going children in weeding, picking and packing hence undermining their daily school attendance.

Further, the study sought to illustrate the effectiveness of school governance strategies in enhancing students' participation. Results of the effectiveness of school governance strategies in enhancing students' participation are presented in Table 4.14.

**Table 4.14: Effectiveness of school governance strategies in enhancing students' participation**

<b>Effectiveness of school governance strategies in enhancing students' participation</b>		<b>Frequency</b>	<b>Percent</b>
i.	Very effective	9	15.8
ii.	Effective	38	66.7
iii.	Ineffective	10	17.5
Total		57	100

Majority of the parents indicated that school governance strategies are effective. The results imply that school governance strategies are effective in enhancing students' participation in secondary school education. However, students' participation in secondary school education is still low. As a result there may be need to conduct more inquiry on the how the school governance strategies in curbing the involvement of students in miraa business activities are implemented and if implementation is satisfactory, why students' participation in secondary school education in the Sub-County is still low. It was further noted that majority of parents are involved in miraa business.

Table 4.15 show results of parental involvement in miraa business activities.

**Table 4.15: Parental involvement in miraa business activities**

<b>State whether you are involved in Miraa business activities or not</b>	<b>Frequency</b>	<b>Percent</b>
Involved	25	43.9
Not involved	32	56.1
Total	57	100.0

Results in Table 4.15 show that majority of parents engage in miraa business activities. Parental involvement is paramount for daily smooth student attendance. Parents need to maintain close monitoring of their children. In the case of this study, parents tend to engage their children in miraa business. Young children who are students are involved in picking, packaging, transporting and selling miraa (Bade, Muturi & Samantar, 2017). At times, children who indulge in miraa chewing tend to prioritize miraa sessions over time spent on their studies (Jamin, 2012). Parents should help students' complete education by discouraging them from engaging in miraa activities.

#### **4.6 School governance strategies and students' participation in secondary school education**

The study sought to establish the various school governance strategies and their influence on students' participation in secondary school education. The results of the study are presented in the subsequent sub-sections.

##### **4.6.1 Teachers' responses on school governance strategies and students' participation in secondary school education**

Teachers were asked to respond on whether school governance strategies influence students' participation in secondary school education. The responses were rated on a five Likert scale (1 –no extent, 2 – little extent, 3 – not sure, 4 – great extent and 5 – very great extent). The results of school governance strategies and students' participation in secondary school education are presented in Table 4.16.

**Table 4.16: School governance strategies and students' participation**

School governance strategies			No extent	Little extent	Not sure	Great extent	Very great extent	Mean	SD
i.	Involvement of parents in containing miraa business activities among students.	f	14	30	11	34	13		
		%	13.5%	29.4%	10.5%	33.5%	13.0%	3.5	1.1
ii.	Involvement of Board of management in containing miraa business activities among students	f	7	15	26	50	4		
		%	7.0%	15.0%	25.0%	49.0%	4.0%	3.7	1.3
iii.	Engaging students through a guiding and counselling session on miraa use.	f	10	18	8	52	14		
		%	9.9%	17.8%	7.9%	50.5%	13.9%	3.5	1.2
iv.	Engaging all students in enforcing school policies on miraa use.	f	14.38	17.54	9.28	43.25	17.54		
		%	14.1%	17.2%	9.1%	42.4%	17.2%	3.5	1.3
v.	Daily call registers to monitor students' daily attendance.	f	5	2	8	35	52		
		%	5.0%	2.0%	7.9%	34.7%	50.5%	4.2	1
vi.	Clear disciplinary guidelines on students' involved in miraa use.	f	12	11	9	47	22		
		%	11.9%	10.9%	8.9%	46.5%	21.8%	3.6	1.3

Table 4.16 shows that majority of teachers agreed that involving parents in containing miraa business activities among students influences students' participation in secondary school education, with mean score of 3.5 and standard deviation is 1.1 implying that majority of teachers were agreeing to the statement.

Parents are expected to oversee over students' academic activities which however,

was not the case because students spent lots of their time in the miraa farms and selling miraa products. Some parents engage their children in picking and packing miraa at home at the expense of going to school. By involving children in miraa business activities, parents breach government laws and Ministry of education policies on child labour. According to Njeru and Mwangi (2013), parents tend to engage their children in miraa business at the expense of being in school.

The results also showed that majority of the teachers agreed that involving Board of management in containing miraa business activities among students influences students' participation in secondary school education with mean score of 3.7 and standard deviation is 1.3 implying that majority of teachers agreed to the statement. The Basic Education Act (2013) outlines the guidelines to manage schools. The Board of management is mandated to formulate school policies to guide day to day management of school. The policies may entail disciplinary issues that may relate to miraa engagement by students in school.

The results also showed that majority of the teachers agreed that engaging students through a guiding and counselling session on miraa use influences students' participation in secondary school education with mean score of 3.5 and standard deviation of 1.2. The intervention of school management on student' participation is important. School governance strategies play a very important role in guiding students about miraa adverse effects. By involving children in miraa business activities, parents breach government laws and Ministry of education

policies on child labour. According to Njeru (2013) school governance strategies need to create awareness on the dangers of miraa use among students.

Further, teachers agreed that engaging all students in enforcing school policies on miraa use influences students' secondary school participation with mean score of 3.5 and standard deviation of 1.3. According to Ministry of education policies school age children are supposed to be in school and not engaging any commercial labour activity. The government is required to regulate by passing policies to safeguard school going children from being exploited (Klein, Beckerleg & Hailu, 2009). The government on the other hand should play her noble role to sensitize the entire community on the effects of engaging students in miraa business activities (Mailutha & Kikechi, 2014). The Basic Education Act (2013) outlines the guidelines to manage schools. The Board of management is mandated to formulate school policies to guide day to day management of school.

The study established that majority of the teachers agreed that conducting daily call registers to monitor students' daily attendance influences students' participation with mean score of 4.2 and standard deviation of 1.0. Majority of the teachers agreed that clear disciplinary guidelines on students' involved in miraa use influence students' secondary school participation with mean score of 3.6 and standard deviation of 1.3. The Basic Education Act (2013) outlines the guidelines to manage schools. The Board of management is mandated to formulate school policies to guide day to day management of school. The policies may entail

disciplinary issues that may relate to miraa engagement by students in school. The results concur with Mutunga (2017) that school governance organs intervene in mitigating effects of miraa business activities on students' school participation by tightening school disciplinary policies and rules in order to curb frequent students' absenteeism.

#### **4.6.2 Parent representatives' responses on school governance strategies and students' participation**

Parents were asked whether they are involved in containing miraa business activities in case their child was involved in them. Majority of the 63.7 percent of parents indicated that they were involved implying that school going children are largely involved in miraa business by their parents.

Majority of the parents 66.7 percent further indicated that school governance strategies are effective in enhancing students' participation in secondary school education. The results imply that parents rely on school governance strategies in regulating students from over engaging in miraa business activities, yet at home they actively involve them. School governance strategies play a very important role in guiding students about miraa adverse effects. These school governance strategies are written to support the development of effective governance in schools, to promote high standards, and drive school improvement to ensure that all pupils attend without failing (Cheloti & Gathumbi, 2016). School governance strategies need to be clear that they are accountable for the policies and

procedures within their school and for the strategic direction. In an interview with principals, school principal 4 & 5 noted,

‘There is sensitization of parents and students during school functions on miraa use and its effects. Free guidance and counselling are also offered to students in school. In case of extreme cases, offenders are punished in form of suspensions or even handed over to security authorities. There are also school policies that bar students from chewing and participating in miraa business while in school and even outside’. School principal 4 & 5, [Key Informant Interviewee, 2019].

School governance strategies play a very important role in guiding students about miraa adverse effects. School governance strategies need to create awareness on the dangers of miraa use among students. Some of school governance strategies include use of prefects in overseeing school management and in enforcing school rules and regulations, parents meeting, guidance and counselling of students and mentorship programmes. According to Cheloti and Gathumbi (2016), school governance strategies are written to support the development of effective governance in schools, to promote high standards, and drive school improvement to ensure that all pupils attend without failing. School governance strategies need to be clear that they are accountable for the policies and procedures within their school and for the strategic direction. Some of school governance strategies include checking things students carry, punishing (suspension) when found, motivational speakers organized by Board of management, advisory speeches during morning assemblies and speeches from NACADA officers. According to Njeru (2013) school governance strategies creates awareness on the dangers of miraa use among students.



### **4.6.3 Regression analysis on school governance strategies and students' participation**

Regression analysis was conducted between school governance strategies and students' participation in secondary school education. Responses from teachers were employed to determine the influence of miraa business activities on students' participation in secondary school education. The model summary results between school governance strategies and students' participation are presented in Table 4.17.

**Table 4.17: Model summary for school governance strategies and students' participation**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
	.685	.526	.508	.62138

Table 4.17 present the fitness of model used of the regression model in explaining the study phenomena. School governance strategies were found to be satisfactory in explaining students' participation in secondary school education. This is supported by coefficient of determination also known as the R square of 52.6 percent. This means that school governance strategies explain 52.6 percent of the variations in students' participation in education.

The analysis of variance results are presented in Table 4.18.

**Table 4.18: Analysis of variance for school governance strategies and students' participation**

<b>Model</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Regression	13.363	6	2.227	5.768	.000
Residual	35.137	91	.386		
Total	48.500	97			

Table 4.18 gives the outcomes on the analysis of the variance. The results indicate that the overall model was statistically significant. Further, the results imply that school governance strategies are good predictor of students' participation in education. This was supported by an F statistic of 5.768 and the reported p value (0.000) which was less than the conventional probability of 0.05 significance level. The findings for F calculated (5.768) was also compared against the F critical value ( $F_{5, 91}$ ) of 2.40 calculated from the F tables. Since the F calculated was greater than F critical ( $5.768 > 2.40$ ), the model was significant.

Multiple regression model is presented in Table 4.19.

**Table 4.19: Regression analysis of school governance strategies and students' participation**

School governance strategies	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
(Constant)	1.939	.356		5.444	.000
i. Involvement of parents in containing miraa business activities among students.	.179	.067	.279	2.666	.009
ii. Involvement of Board of management in containing miraa business activities among students	.130	.062	.051	2.097	.026
iii. Engaging students through a guiding and counselling session on miraa use.	.182	.080	.117	2.275	.006
iv. Engaging all students in enforcing school policies on miraa use.	.218	.061	.347	3.579	.001
v. Daily call registers to monitor students' daily attendance.	.158	.072	.212	2.201	.030
vi. Clear disciplinary guidelines on students' involved in miraa use.	.042	.075	.062	.555	.580

The multiple regression showed in Table 4.19 showed that involving parents in containing miraa business activities among students and students' participation in secondary school education. The output of the regression coefficients shows that there is a positive and statistically significant relationship between involving parents in containing miraa business activities among students and students' participation in secondary school education. The results therefore imply that involving parents in containing miraa business activities among students influences students' participation in secondary school education.

The regression coefficients result also showed that there is positive and statistically significant relationship between involving Board of management in containing miraa business activities among students' and students' participation in secondary school education. The results therefore imply that involving parents in containing miraa business activities among students influences students' participation in secondary school education. It was also noted that there is a positive and statistically significant relationship between engaging students through a guiding and counselling session on miraa use and students' participation in secondary school education. The results therefore imply that engaging students through a guiding and counselling session on miraa use influences students' participation in secondary school education.

The output of the regression coefficients show that there is a positive and statistically significant relationship between engaging all students in enforcing school policies on miraa use and students' participation in secondary school education. The results therefore imply that engaging all students in enforcing school policies on miraa use influences students' participation in secondary school education. It was also noted that there is a positive and statistically significant relationship between daily call registers to monitor students' daily attendance and students' participation in secondary school education. The results therefore imply that daily call registers to monitor students' daily attendance influences students' participation in secondary school education. Finally, the output of the regression coefficients show that there is a statistically significant difference between clear disciplinary guidelines on students' involved in miraa use and students' participation in secondary school education. The results therefore imply that clear disciplinary guidelines on students' involved in miraa use influences students' participation in secondary school education. In an interview with principals, school principal 6 indicated,

‘School rules and regulations categorize miraa as illicit drugs. There are also guidance and counselling sessions on dangers of miraa use. Guest speakers from NACADA are invited in school to talk about drugs and their harmful effects. Miraa is also talked about since it is common in this region’. School principal 6, [Key Informant Interviewee, 2019].

Engaging students through a guiding and counselling session on miraa use and engaging all students in enforcing school policies on miraa use has greatest effects on students' participation in educational activities. School governance strategies

play a very important role in guiding students about miraa adverse effects. School governance strategies need to create awareness on the dangers of miraa use among students. In most occasions, students fail to report to school in order to work in miraa farms. The school governance organs should be vigilant in monitoring daily students' attendance and include BoM, parents association, school administration and prefects' body. This is possible when there is a proper coordination among the school management, teachers and students.

School governance strategies should advocate for students' friendly learning environment and safe learning environment that is drug free. The welfare of the students in school should be clearly outlined. The intervention of school governance organs on students' participation is important. Some students miss to attend school while participating in miraa economic activities that include picking, transporting and selling. The results concur with Mutunga (2017) that school governance organs intervene in mitigating effects of miraa business activities on students school participation by tightening school disciplinary policies and rules in order to curb frequent students' absenteeism. According to Njeru (2013) school governance strategies creates awareness on the dangers of miraa use among students.

#### **4.7 Parental involvement in miraa business management and students' participation in secondary school education**

Parental involvement was examined and their influence on students' participation in secondary school education. The results of the study are presented in the subsequent sub-sections.

##### **4.7.1 Teachers responses on parental involvement in miraa business management and students' participation in secondary school education**

Teachers were asked to respond on whether parental involvement in miraa business management influence students' participation in secondary school education. The responses were rated on a five Likert scale (1 – no extent, 2 – little extent, 3 – not sure, 4 – great extent and 5 – very great extent). The results of parental involvement in miraa business management and students' participation in secondary school education are presented in Table 4.20.

Table 4.20 shows that majority of teachers noted that counselling students on miraa use enhances students' participation in secondary school education to great extent, with mean score of 3.5 and standard deviation is 1.2. The results also showed that majority of the teachers noted that guiding students on miraa use enhances students' participation in secondary school education with mean score of 3.7 and standard deviation is 1.1. Counselling programmes in schools help mitigate miraa usage among students in school. Because of addiction issues some students miss school in order to participate in miraa activities. Astin (1984) emphasizes the importance in counselling students on moral behaviours.

**Table 4.20: Teachers responses on parental involvement in miraa business management and students' participation**

Teachers responses on parental involvement in miraa business management			No extent	Little extent	Not sure	Great extent	Very great extent	Mean	SD
i.	Counselling students on miraa use	f	15	14	14	53	6		
		%	14.7%	14.1%	13.7%	51.6%	5.9%	3.5	1.2
ii.	Guiding students on miraa use	f	16.6	4.8	21.8	54.6	4.2		
		%	16.3%	4.7%	21.4%	53.5%	4.1%	3.7	1.1
iii.	Involving school going children in picking miraa	f	20	41	10	17	14		
		%	19.8%	39.8%	9.8%	16.7%	13.9%	2.3	1.4
iv.	Ensuring that their children attend school every day	f	4	19	12	49	18		
		%	4.0%	18.6%	11.9%	47.6%	17.9%	3.6	1.1
v.	Disciplining a child especially when he/she indulges on miraa use	f	12.04	54.37	4.59	22.03	8.98		
		%	11.8%	53.3%	4.5%	21.6%	8.8%	2.4	1.2

The results also showed that majority of the teachers noted that involving school going children in picking miraa enhances students' participation in secondary school education to little extent with mean score of 2.3 and standard deviation is 1.4 implying that involving school going children in picking miraa inhibits students' participation in secondary school education. Some parents engage their children in picking and packing miraa at home at the expense of going to school. Thus students fail to attend school while participating in miraa economic activities that include picking. The results concur with Rafiq, Fatima, Sohail,



Saleem and Khan (2013) that students' spend time in miraa farming at the expense of being in school.

Further, teachers noted ensuring that their children attend school every day enhances students' secondary school participation with mean score of 3.6 and standard deviation is 1.1. Miraa business activities have been found to be a contributor to reduced school participation amongst school going children. Students' participation in school predicts class attendance. Miraa farming and related trade activities often deter students from participating in class work (Gebiresilus, *et al.*, 2014). More students participating in miraa business management activities have limited time to attend classes.

The study established that majority of the teachers noted that disciplining a child especially when he/she indulges on miraa use enhances students' secondary school participation to little extent with mean score of 2.4 and standard deviation is 1.2. The school governance may be forced to intervene by tightening school disciplinary policies and rules in order to curb frequent students' absenteeism. However, corporal punishment in schools was abolished in Kenya and so parents and teachers are left with only option of guiding and counselling students against miraa use and other related activities.

#### 4.7.2 Parent representative responses on parental involvement in miraa business management and students' participation

Parents were further asked to indicate the level of involvement as a parent in regard to miraa business management. Table 4.21 shows the result of the study.

**Table 4.21: Parents responses on parental involvement in miraa business management and students' participation**

Parents responses on parental involvement in miraa business management			not at all	small extent	large extent	Mean	SD
i.	Counselling my child	f	1	32	15	9	
		%	1.8%	56.1%	26.3%	15.8%	2.3 0.8
ii.	Participating in guiding my child	f	0	33	19	5	
		%	0.0%	57.9%	33.3%	8.8%	2.2 0.7
iii.	Ensuring my child attends school every day	f	2	23	12	20	
		%	3.5%	40.4%	21.1%	35.1%	2.1 0.9
iv.	Advising my child on miraa chewing	f	3	25	14	15	
		%	5.3%	43.9%	24.6%	26.3%	2.4 0.9
v.	Disciplining my child in case he/she misses school without concrete reason	f	3	20	9	25	
		%	5.3%	35.1%	15.8%	43.9%	2.3 1.0

Table 4.21 showed that majority of parents counselled their children to small extent, with mean score of 2.3 and standard deviation is 0.8. Parents must be involved offering pieces of advice for their children regarding dangers of miraa use and other miraa business activities. Parents need to maintain close monitoring of their children. Parents should help students' complete education by

discouraging them from engaging in miraa activities. Ensuring that their children attend school every day and disciplining a child especially when he/she indulges in miraa use influences students' participation in secondary school education. However, some parents engage students in miraa business activities.

The results also showed that majority of the parents noted that they participated in guiding their children to small extent with mean score of 2.2 and standard deviation is 0.7. Guidance on miraa use and its related business activities may help mitigate the miraa adverse effects among students. Some parents engage their children in picking and packing miraa at home at the expense of going to school. Thus students fail to attend school while participating in miraa economic activities that include picking. Parents must be all time involved through proper parenting which generates conducive home environment for studying.

The results also showed that majority of the parents' ensured that children attended school every day to small extent with mean score of 2.1 and standard deviation is 0.9. Miraa business activities have been found to be a contributor to reduced school participation amongst school going children (Thiharu, 2015). Students' participation in school predicts class attendance. Miraa farming and related trade activities often deter students from participating in class work. According to World Drug Report (2005) miraa use is not illegal but has negative consequences to students' school attendance.

Further, parents were advising their children on miraa chewing to small extent with mean score of 2.4 and standard deviation is 0.9. The study established that majority of the parents disciplined their children when they miss school without concrete reason noted that disciplining a child especially when he/she indulges on miraa use enhances students' secondary school participation to small extent with mean score of 2.3 and standard deviation is 1.0. In some cases, students apart from engaging in miraa business activities, engage in chewing miraa affecting their daily school attendance. According, Kim, Hussein and Saitz (2012) noted students school participation has been harmed leading to irregular school attendance. School going children tend to prioritize miraa sessions over time spent on their studies and school activities. They also miss school to engage in chewing miraa and selling them (Jamin, 2012).

The need for parental involvement is relatively related to academic performance and that in order for students to excel academically, parents must be all time involved through parenting which generates conducive home environment for studying. However, some parents actively engage students in miraa business activities in picking and transporting to the market centres. Moreover, parents engage their children in providing labour required at the expense of going to school. This undermines student school attendance as students spent most of their time in miraa business activities at the expense of being in school. Thus, the more time parents engage children, the more school time is lost. The results are in line with Gichovi (2016) engaging school going children in miraa business activities

by parents and guardians encourages loss of school time for the students and hence poor student participation.

#### **4.7.3 Regression coefficients on parental involvement in miraa business management and students' participation**

Regression coefficients between parental involvement in miraa business management and students' participation in secondary school education was conducted. Responses from teachers were employed to determine the influence of miraa business activities on students' participation in secondary school education. The model summary results between miraa business activities and students' participation are presented in Table 4.22.

**Table 4.22: Model summary for parental involvement and students' participation**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
	.679	.549	.508	.65546

Table 4.22 present the fitness of model used of the regression model in explaining the study phenomena. Parental involvement was found to be satisfactory in explaining students' participation in secondary school education. This is supported by coefficient of determination also known as the R square of 54.9 percent. This means parental involvement explains 54.9 percent of the variations in students' participation in education.

The ANOVA results are presented in Table 4.23.

**Table 4.23: Analysis of variance for parental involvement and students' participation**

<b>Model</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Regression	6.429	5	1.286	2.658	.027
Residual	43.530	90	.484		
Total	49.958	95			

Table 4.23 gives the outcomes on the analysis of the variance. The results indicate that the overall model was statistically significant. Further, the results imply that parental involvement is a good predictor of students' participation in education. This was supported by an F statistic of 2.658 and the reported p value (0.000) which was less than the conventional probability of 0.05 significance level. The findings for F calculated (2.658) was also compared against the F critical value ( $F_{5, 51}$ ) of 2.40 calculated from the F tables. Since the F calculated was greater than F critical ( $2.658 > 2.40$ ), the model was significant. Multiple regression model is presented in Table 4.24.

**Table 4.24: Regression analysis of parental involvement and students' participation**

Parental involvement in miraa business management	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
(Constant)	2.926	.299		9.786	.000
i. Counselling students on miraa use	.149	.073	.237	2.040	.044
ii. Guiding students on miraa use	.100	.031	.152	3.226	.021
iii. Involving school going children in picking miraa	-.123	.056	-.218	-2.186	.031
iv. Ensuring that their children attend school every day	.144	.040	.223	3.600	.016
v. Disciplining a child especially when he/she indulges on miraa use	-.103	.076	-.164	-1.346	.182

The regression coefficient results in Table 4.24 showed that counselling students on miraa use and students' participation in secondary school education. The output of parental involvement shows that there is a positive and statistically significant relationship between counselling students' on miraa use and students' participation in secondary school education. The results therefore imply that counselling students enhances students' participation in secondary school education.

Further, the regression coefficient results also showed that there is positive and statistically significant relationship between guiding students on miraa use and students' participation in secondary school education. The results therefore imply

that guiding students enhances students' participation in secondary school education. It was also noted that there is a negative and statistically significant relationship between involving school going children in picking miraa and students' participation in secondary school education. The results thus imply that involving school going children in picking miraa hinders students' participation in secondary school education.

The output of regression coefficient analysis shows that there is a positive and statistically significant relationship between ensuring that their children attend school every day and students' participation in secondary school education. The results therefore imply that ensuring that their children attend school every day enhances students' participation in secondary school education. It was also noted that there is a statistically insignificant relationship between disciplining a child especially when he/she indulges on miraa use and students' participation in secondary school education. However, some parents engage students in miraa business activities in picking and transporting to the market centres. Moreover, parents engage their children in providing labour required at the expense of going to school. The results therefore imply that disciplining a child especially when he/she indulge on miraa use does not enhance student's participation in secondary school education. In an interview with principals, school principal 7 noted,



‘Parents often engage their children in miraa business activities. Some are involved in planting and selling of the miraa. Students engage in miraa business like transporting them to the market centres over the holiday and hence indulge deeper in miraa practices’. School principal 7, [Key Informant Interviewee, 2019].

Parental involvement is paramount for daily smooth student attendance. Parents need to maintain close monitoring of their children. Young children who are students are involved in picking, packaging, transporting and selling miraa. At times, children who indulge in miraa chewing tend to prioritize miraa sessions over time spent on their studies. Since miraa business is lucrative, parents in most instances engage their children in providing labour required at the expense of going to school. This undermines student school attendance. Parents should help students complete education by discouraging them from engaging in miraa activities According to Njeru and Mwangi (2013) parents tend to engage their children in miraa business.

#### **4.8 Ministry of education policies and students’ participation in secondary school education**

The study sought to establish the various Ministry of Education policies and their influence on students’ participation in secondary school education. The results of the study are presented in the subsequent sub-sections.

##### **4.8.1 Teachers’ responses on Ministry of education policies and students’ participation in secondary school education**

Teachers were asked to respond on whether Ministry of Education policies influence students’ participation in secondary school education. The responses

were rated on a five Likert scale (1 – no extent, 2 – little extent, 3 – not sure, 4 – great extent and 5 – very great extent). The results of Ministry of Education policies and students’ participation in secondary school education are presented Table 4.25.

**Table 4.25: Teachers’ responses on Ministry of Education policies and students’ participation**

Teachers’ responses on Ministry of Education policies		No extent	Little extent	Not sure	Great extent	Very great extent	Mean	SD
i.	Free Day Secondary Education initiative	f %	12	18	13	36	23	
			11.8%	17.5%	12.7%	35.3%	22.7%	3.5 1.3
ii.	Government policy on 100% transition rate to secondary school	f %	7	21	8	43	22	
			7.0%	21.0%	8.0%	42.0%	22.0%	3.6 1.1
iii.	The initiative by the Ministry of Education initiatives to regulate miraa business.	f %	27	32	21	20	1	
			26.7%	31.8%	20.7%	19.8%	1.0%	2.4 1.1
iv.	The initiative by the Ministry of Education initiatives on miraa use	f %	27	33	20	19	3	
			26.0%	32.0%	20.0%	19.0%	3.0%	2.4 1.2
v.	The initiative by the Ministry of Education initiatives disciplinary action on perpetrators	f %	26	36	10	24	5	
			25.7%	35.7%	9.8%	23.8%	5.0%	2.3 1.2
vi.	The initiative by the Ministry of Education on child labour policies	f %	14	7	11	41	29	
			14.0%	7.0%	11.0%	40.0%	28.0%	3.5 1.3

Table 4.25 showed that majority of teachers noted that Free Day Secondary Education initiative enhances students' participation in secondary school education, with mean score of 3.5 and standard deviation is 1.3 implying that majority of teachers were agreeing to the statement. The free primary initiative has been key in enhancing access, retention and quality at the primary level. However, the problem that emerged for the government was to ensure that pupils graduating from primary school access secondary education. To address this challenge, the government introduced Free Secondary Education (FSE) in 2008. The launch of FSE in 2008 was meant to address illiteracy, low quality education and low completion rates at the secondary level, high cost of education and poor community participation. The FSE was meant to increase students' transition to secondary schools. However, other factors may have come to limit the initiative like miraa business activities.

The results also showed that majority of the teachers noted that government policy on 100% transition rate to secondary school enhances students' participation in secondary school education with mean score of 3.6 and standard deviation is 1.1. Transition is defined as 'the flow of students between different stages in the school system: from one level to the next, between grades within a given level, and out of and back into schools. The government has been committed to ensure the efficient provision of basic education with guaranteed transition and progression of all children from one grade and level of basic education to another. The National Education Sector Plan (NESP) 2013-2018, has

been developed through an all-inclusive stakeholder consultative process. Through NESP, Kenya strives to provide globally competitive quality education and training for development. The purpose is to reduce illiteracy, increase access, realize 100% progression and transition in all levels of basic education as well as raise the quality and relevance of education with an emphasis on Science, Technology and Innovation.

The results also showed that majority of the teachers noted that the initiative by the Ministry of Education initiatives to regulate miraa business enhances students' participation in secondary school education to little extent with mean score of 2.4 and standard deviation of 1.1. The Basic Education Act (2013) outlines the guidelines to manage schools. The Board of management is mandated to formulate school policies to guide day to day management of school. The school community intervention strategies from the MoE create students' awareness of the health effects of miraa. Miraa farming and any other miraa related commercial activity should be banned for minors (school going age) and surveillance of child labour for its eradication be done through the provincial administration hierarchy and heavy penalties should be administered on those found to encourage it.

Further, the study established that majority of the teachers noted that the initiative by the Ministry of Education initiatives on miraa use enhances students' participation in secondary school education to little extent with mean score of 2.4 and standard deviation of 1.2. The government, through the MOE has emphasized

provision of guidance and counselling programmes in schools to help miraa usage among students in school. Because of addiction issues some students miss school in order to participate in miraa activities. The government policies should emphasize on public awareness, liaison activities and support service, and targets students in and out of learning institutions (Maithya, 2009).

Majority of the teachers agreed that the initiative by the Ministry of Education initiatives disciplinary action on perpetrators use enhances students' secondary school participation to little extent with mean score of 2.3 and standard deviation of 1.2. The government is also against perpetrators who engage school going children on miraa and other labour activities that interfere with students' engagement in school activities. The school governance organs are forced to intervene by tightening school disciplinary policies and rules in order to curb frequent students' absenteeism (Mutunga, 2017). In some instances, miraa chewing has formed a sub-culture within the schools in where teachers consume miraa in the presence of students. According to Kyalo (2010) miraa chewing has become a problem of significant proportion to student school participation. Majority of the teachers also noted that the initiative by the Ministry of Education on child labour policies influenced students' participation in school activities to great extent with mean score of 3.5 and standard deviation of 1.3.

#### 4.8.2 Parent representatives' responses on Ministry of education policies and students' participation in secondary school education

Parents were further asked to indicate the extent to which Ministry of Education Policies on miraa usage influence students' participation in secondary school education. The results are presented in Table 4.26.

**Table 4.26: Parents' responses on Ministry of Education policies and students' participation**

Parents' responses on Ministry of education policies			No extent	Little extent	Not sure	Great extent	Very great extent	Mean	SD
i.	Free Secondary Education initiative	f	0	35	2	16	4	3.8	1.1
		%	0.0%	61.4%	3.5%	28.1%	7.0%		
ii.	Government policy on 100% transition rate to secondary school	f	4	24	8	17	4	3.5	1.1
		%	7.0%	42.1%	14.0%	29.8%	7.0%		
iii.	The initiative by the MoE initiatives to regulate miraa business.	f	27	20	8	1	1	1.8	0.9
		%	47.4%	35.1%	14.0%	1.8%	1.8%		
iv.	The initiative by the Ministry of Education initiatives on miraa use	f	18	25	7	5	2	2.1	1.1
		%	31.6%	43.9%	12.3%	8.8%	3.5%		
v.	The initiative by the MoE initiatives disciplinary action on perpetrators	f	7	23	7	18	2	2.3	1.1
		%	12.3%	40.4%	12.3%	31.6%	3.5%		
vi.	The initiative by the Ministry of Education on child labor policies	f	10	29	4	9	5	3.5	1.2
		%	17.5%	15.8%	7.0%	50.9%	8.8%		

Table 4.26 showed that majority of parents noted that free Secondary Education initiative enhances students' participation in secondary school education, with mean score of 3.8 and standard deviation is 1.1 implying that majority of parents were agreeing to the statement. The Government and other development partners have endeavoured to provide facilities for the realization of free secondary education.

The results also showed that majority of the parents noted that government policy on 100% transition rate to secondary school enhances students' participation in secondary school education with mean score of 3.5 and standard deviation is 1.1. The government is also against perpetrators who engage school going children on miraa and other labour activities that interfere with students' engagement in school activities. The school governance organs are forced to intervene by tightening school disciplinary policies and rules in order to curb frequent students' absenteeism (Mutunga, 2017). In some instances, miraa chewing has formed a sub-culture within the schools in where teachers consume miraa in the presence of students.

The results also showed that majority of the parents noted that the initiative by the Ministry of Education initiatives to regulate miraa business enhances students' participation in secondary school education to little extent with mean score of 1.8 and standard deviation of 0.9. The Board of management is mandated to formulate school policies to guide day to day management of school. The school

community intervention strategies from the MoE create students' awareness of the health effects of miraa. Miraa farming and any other miraa related commercial activity should be banned for minors (school going age) and surveillance of child labour for its eradication be done through the provincial administration hierarchy and heavy penalties should be administered on those found to encourage it.

Further, the study established that majority of the parents noted that the initiative by the Ministry of Education initiatives on miraa use enhances students' participation in secondary school education to little extent with mean score of 2.1 and standard deviation of 1.1. The government, through the MOE has emphasized provision of guidance and counselling programmes in schools to help miraa usage among students in school. Because of addiction issues some students miss school in order to participate in miraa activities. The government policies should emphasize on public awareness, liaison activities and support service, and targets students in and out of learning institutions (Maithya, 2009).

Majority of the parents agreed that the initiative by the Ministry of Education initiatives disciplinary action on perpetrators enhance students' secondary school participation to little extent with mean score of 2.3 and standard deviation of 1.1. The government is also against perpetrators who engage school going children on miraa and other labour activities that interfere with students' engagement in school activities. The school governance organs are forced to intervene by tightening school disciplinary policies and rules in order to curb frequent



students' absenteeism (Mutunga, 2017). In some instances, miraa chewing has formed a sub-culture within the schools in where teachers consume miraa in the presence of students.

The study also noted that the study established that majority of the teachers noted that the initiative by the Ministry of Education on child labour policies to great extent with mean score of 3.5 and standard deviation of 1.2. The government policies should emphasize on public awareness, liaison activities and support service, and targets students in and out of learning institutions. The government policies should emphasize on public awareness, liaison activities and support service, and targets students in and out of learning institutions (Maithya, 2009). In an interview with principals, school principal 8 noted,

‘Ministry of Education has some policies to regulate miraa use in school including government policies that discourages child labour. The policies criminalize miraa business by students, however no adequate mechanisms to check compliance. The ministry of education does not allow a learner to involve in miraa business’. School principal 8, [Key Informant Interviewee, 2019].

The Board of management is mandated to formulate school policies to guide day to day management of school. The government, which has the sole responsibility to enhance law and order within the society, should be vigilant to discourage child labour. The school community intervention strategies from the MoE create students' awareness of the health effects of miraa. Miraa farming and any other miraa related commercial activity should be banned for minors (school going age) and surveillance of child labour for its eradication be done through the provincial administration hierarchy and heavy penalties should be administered on those

found to encourage it. Education goals have to be achieved through good academic performance, however, miraa chewing among students has played the reverse role where majority of students are less interested in school life. The government, through the MOE has emphasized provision of guidance and counselling programmes in schools to discourage miraa usage among students in school. Because of addiction issues, some students miss school in order to participate in miraa activities.

#### **4.8.3 Regression analysis on ministry of education policies and students' participation**

Regression analysis was conducted between ministry of education policies and students' participation in secondary school education. Responses from teachers were employed to determine the influence of miraa business activities on students' participation in secondary school education. The model summary results between ministry of education policies and students' participation are presented in Table 4.27.

**Table 4.27: Model summary for ministry of education policies and students' participation**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
	.664	.506	.498	.62348

Table 4.27 present the fitness of model used of the regression model in explaining the study phenomena. Ministry of education policies were found to be satisfactory

in explaining students' participation in secondary school education. This is supported by coefficient of determination also known as the R square of 50.6 percent. This means ministry of education policies explains 50.6 percent of the variations in students' participation in education.

The analysis of variance results are presented in Table 4.28.

**Table 4.28: Analysis of variance for ministry of education policies and students' participation**

<b>Model</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Regression	14.382	6	2.397	6.166	.000
Residual	34.208	88	.389		
Total	48.589	94			

Table 4.28 gives the outcomes on the analysis of the variance. The results indicate that the overall model was statistically significant. Further, the results imply that ministry of education policies are good predictor of students' participation in education. This was supported by an F statistic of 6.166 and the reported p value (0.000) which was less than the conventional probability of 0.05 significance level. The findings for F calculated (6.166) was also compared against the F critical value ( $F_{5, 51}$ ) of 2.40 calculated from the F tables. Since the F calculated was greater than F critical ( $6.166 > 2.40$ ), the model was significant. Multiple regression model is presented in Table 4.29.

**Table 4.29: Regression analysis of ministry of education policies and students' participation**

Ministry of Education policies	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.052	.295		6.949	.000
i. Free Secondary Education initiative	.027	.072	.045	.380	.705
ii. Government policy on 100% transition rate to secondary school	.029	.076	.043	.381	.704
iii. The initiative by the Ministry of Education initiatives to regulate miraa business.	.195	.070	.300	2.781	.007
iv. The initiative by the Ministry of Education initiatives on miraa use	.189	.078	.303	2.429	.017
v. The initiative by the Ministry of Education initiatives disciplinary action on perpetrators	.111	.054	.020	2.056	.039
vi. The initiative by the Ministry of Education on child labour policies	.142	.045	.059	3.156	.005

Regression coefficient results in Table 4.29 show that Free Secondary Education initiative and students' participation in secondary school education. The output of the regression results shows that there is a statistically insignificant relationship between Free Secondary Education initiative and students' participation in secondary school education. Further, the regression coefficient results also

showed that there is statistically insignificant relationship between government policy on 100% transition rate to secondary school and students' participation in secondary school education.

It was also noted that there is a statistically significant relationship between the initiative by the Ministry of Education initiatives to regulate miraa business and students' participation in secondary school education. The results therefore imply that the initiative by the Ministry of Education initiatives to regulate miraa business influences students' participation in secondary school education. The output of the regression coefficient shows that there is a statistically significant relationship between the initiative by the Ministry of Education initiatives on miraa use and students' participation in secondary school education. The results therefore imply that the initiative by the Ministry of Education initiatives on miraa use influences students' participation in secondary school education.

It was also noted that there is a statistically significant relationship between the initiative by the Ministry of Education initiatives disciplinary action on perpetrators and students' participation in secondary school education. The results therefore imply that the initiative by the Ministry of Education initiatives on disciplinary action against perpetrators influences students' participation in secondary school education. Finally, the output of the regression coefficient analysis shows that there is a statistically significant relationship between the initiative by the Ministry of Education on child labour policies and students'

participation in secondary school education. The results therefore imply that the initiative by the Ministry of Education on child labour policies influences students' participation in secondary school education. As a result of negative effects associated with miraa farming on school activities, the government through the Ministry of Education, National Authority for the Campaign against Drug Abuse and Ministry of Agriculture may need to intervene by regulating the production, consumption and the supply chain of miraa. In an interview with principals, school principal 8 & 9 noted,

‘Ministry of Education has some policies to regulate miraa use in school including government policies that discourages child labour. The policies criminalize miraa business by students, however no adequate mechanisms to check compliance. The ministry of education does not allow a learner to involve in miraa business’. School principal 8 & 9, [Key Informant Interviewee, 2019].

However, principal 10 noted,

‘There are no clear policies to regulate miraa business activities among students. There are no policies in place nor am I aware of any specific policy. Government policies do not specify miraa but it is mostly treated as indiscipline not sure what the policy is.’ School principal 10, [Key Informant Interviewee, 2019].

Too much engagement of school going children in miraa activities undermines their school participation. As a result of negative effects associated with miraa farming on school activities, the government through the Ministry of Education, National Authority for the Campaign against Drug Abuse and Ministry of Agriculture may need to intervene by regulating the production, consumption and the supply chain of miraa. In most instances, school going children are engaged in picking, packing, transporting and selling miraa. Involving students in miraa

production interferes with normal school participation. The government is required to regulate by passing policies to safeguard school going children from being exploited. According to Klein, Beckerleg and Hailu (2009), the government on the other hand should play her noble role to sensitize the entire community on the effects of engaging students in miraa business activities. The government is required to regulate by passing policies to safeguard school going children from being exploited.

Further, the study sought to illustrate the effectiveness of ministry of Education policies in mitigating the use of Miraa among students thus promoting students' participation. Results of the study are presented in Table 4.30.

**Table 4.30: Effectiveness of the Ministry of Education policies in mitigating the use of miraa among students**

<b>Effectiveness of the Ministry of Education policies in mitigating the use of miraa among students</b>	<b>Frequency</b>	<b>Percent</b>
i. Very effective	3	2.9
ii. Effective	49	48.0
iii. Ineffective	50	49.0
<b>Total</b>	<b>102</b>	<b>100.0</b>

Majority of the teachers indicated that the Ministry of Education policies in mitigating the use of Miraa among students are fairly effective. The results imply that Ministry of Education policies in mitigating the use of Miraa among students need to be reviewed. Involving students in miraa production interferes with normal school participation.

The government is required to regulate by passing policies to safeguard school going children from being exploited. The government on the other hand should play her noble role to sensitize the entire community on the effects of engaging students in miraa business activities (Mailutha & Kikechi, 2014). The government policies should emphasize on public awareness, liaison activities and support service, and targets students in and out of learning institutions.



## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter discusses the findings and conclusions of the study. Brief recommendations from the study are also outlined. Finally, areas for further research and summary of the study are presented.

#### **5.2 Summary of study**

The variables of the study were miraa business activities, school governance strategies, parental involvement and Ministry of Education Policies and were related to the dependent variable (students' participation in secondary school education). The study employed descriptive survey design. The study target population comprised 72 parent representatives, 3000 students, 144 teachers and 12 principals of secondary schools and sample consisted of 106 teachers, 61 parent representatives and 353 students in Marsabit central Sub-County. Stratified random sampling was used to select teachers, parent representatives and students from the respective sample sizes while census technique was used to select all the principals.

Primary data were collected through the use of structured questionnaires and interview guide. Content validity was done by pretesting instruments by subjecting to pilot group and reviews by supervisors. Reliability was computed using Cronbach alpha coefficient and the values were .836 for teachers, .816 for

students and .786 for parents. Quantitative data was analyzed using descriptive statistics that include frequency, percentages, mean, and standard deviation and inferential analysis that included regression tests.

### **5.3 Discussion of findings**

The study considered it important to establish the background information of the respondents which included gender, age, level of education, designation and years of working. This was inspired by the need to establish whether there exists any close relationship among respondents' demographic characteristics, miraa business activities and students' participation.

Descriptive results identified picking miraa, packing miraa, transporting miraa, selling miraa and weeding miraa as main miraa business activities engaged in by students in Marsabit Central Sub-County. Regression coefficient was also employed to determine the influence of miraa business activities on students' participation in secondary school education. The output of the regression coefficients showed that there is a negative and statistically significant relationship between miraa business activities and students' participation in secondary school education. The results therefore imply that miraa business activities that include picking, packing, transporting, selling miraa and weeding miraa inhibits students' participation in secondary school education. Students are involved in picking miraa and transporting miraa to business centres. This results

to students missing school, missing lessons, failing to do homework, failing to revise for exams and lack of concentration in class.

Various school governance strategies were identified and include involvement of parents in containing miraa business activities among students, involvement of Board of management in containing miraa business activities among students, engaging students through a guiding and counselling session on miraa use, engaging all students in enforcing school policies on miraa use, daily call registers to monitor students' daily attendance and clear disciplinary guidelines on students involved in miraa use. A regression coefficient was also used to determine the influence of school governance strategies on students' participation in secondary school education.

The results of the regression output showed that there is a positive and statistically significant relationship between school governance strategies and students' participation in secondary school education. The results therefore imply that school governance strategies that include involving parents in containing miraa business activities among students enhances students' participation in secondary school education, involving Board of management in containing miraa business activities among students, engaging students through a guiding and counselling session on miraa use, engaging all students in enforcing school policies on miraa use, conducting daily call registers to monitor students' daily attendance and clear disciplinary guidelines enhances students' participation in secondary school

education. School governance strategies play a very important role in guiding students about miraa adverse effects. This is possible when there is a proper coordination among the school management, teachers and students.

Descriptive results identified counselling students on miraa use, guiding students on miraa use, involving school going children in picking miraa, ensuring that children attend school every day and disciplining a child especially when he/she indulges in miraa use as mechanism in which parents are involved as far as miraa business activities is concern. Regression analysis was developed to determine the influence of parental involvement on students' participation in secondary school education. The output of the regression analysis showed that there is a statistically significant relationship between parental involvement and students' participation in secondary school education. The results therefore imply that parental involvement that include counselling students on miraa use, guiding students on miraa use, involving school going children in picking miraa, involving school going children in packing miraa, ensuring that their children attend school every day and disciplining a child especially when he/she indulges on miraa use influences students' participation in secondary school education.

Different Ministry of Education policies were identified aimed at enhancing students' participation in secondary education and include Free Secondary Education initiative, government policy on 100% transition rate to secondary school, the initiative by the Ministry of Education initiatives to regulate miraa

business, the initiative by the Ministry of Education initiatives on miraa use, the initiative by the Ministry of Education initiatives on disciplinary action against perpetrators and the initiative by the Ministry of Education on child labour policies. Regression results helped determine the influence of Ministry of Education Policies on students' participation in secondary school education.

The output of the regression results showed that there is a statistically significant relationship between Ministry of Education Policies and students' participation in secondary school education. The results therefore imply that Ministry of Education Policies that include the initiative by the Ministry of Education initiatives to regulate miraa business, the initiative by the Ministry of Education initiatives on miraa use, the initiative by the Ministry of Education initiatives of disciplinary action against perpetrators and the initiative by the Ministry of Education on child labour policies influences students' participation in secondary school education.

#### **5.4 Conclusions**

Conclusions of this study were based on the findings of the study. They are:

Miraa business activities that include weeding, picking, packing, transporting and selling miraa reduce students' participation in secondary school education.

Governance strategies that include involving parents in containing miraa business activities among students enhances students' participation in secondary school education, involving Board of management in containing miraa business activities

among students and engaging students through a guiding and counselling session on miraa use enhance students' participation in secondary schools.

Parental involvement that include counselling students on miraa use, guiding students on miraa use and involving school going children in picking miraa reduces students' participation in secondary education. Ministry of Education Policies that include the initiative by the Ministry of Education initiatives to regulate miraa business, the initiative by the Ministry of Education initiatives on miraa use, the initiative by the Ministry of Education initiatives of disciplinary action against perpetrators and the initiative by the Ministry of Education on child labour policies positively influence students' participation in secondary school education.

### **5.5 Recommendations for study**

The following recommendations were made;

1. Board of Management need to create awareness on dangers of engaging students in picking miraa and transporting miraa to business centres.
2. The head teachers should have strategies that include guiding and counselling, disciplinary and corrective measures and other school policies that minimize miraa effects among students.
3. Teachers need to be strict on students' class attendance and counselling.

4. Parents need to be vigilant on how their children go about their daily school activities and discourage miraa business activities and check school attendance. They should be actively involved in counselling students against miraa use and their harmful effects.
5. Ministry of education should enforce the policies in place on miraa and school attendance.
6. Students should be aware of miraa use and its harmful effects on student school participation. There is need for periodic students' awareness seminars and motivation talks by experts.
7. Though there are Ministry of Education Policies on drug use, there are no clear laws on miraa use. There is need for the creation of policies in support by the Ministry of Education to mitigate use of miraa among students by enforcing policies on regular class attendance and miraa use.
8. There is need for the Ministry of Education, National Authority for the Campaign against Drug Abuse and Ministry of Agriculture to intervene by regulating the production, consumption and the supply chain of miraa.

## **5.6 Suggestions for further study**

Based on the study findings, the study made suggestions for future research on;

1. To determine the effects of miraa business management on students' academic performance.
2. To establish a comparison study on benefits of miraa business activities and its harmful effects on educational outcome
3. To determine the relationship between miraa use, use of other drugs and substance and students' delinquency in school.



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## APPENDICES

### APPENDIX I: INTRODUCTION LETTER

University of Nairobi,

School of Education,

P.O. Box 92, Kikuyu.

To the principal,

\_\_\_\_\_Secondary School,

P.O. Box \_\_\_\_\_

Dear Sir/Madam,

#### **Re: PERMISSION TO CARRY OUT RESEARCH**

I am a postgraduate student at the University of Nairobi pursuing a Master of Education degree in Corporate Governance. I am conducting an academic research to investigate the influence of miraa business management practices on students' participation in secondary school education in Marsabit Central Sub-County, Kenya. The purpose of this letter is to kindly request you to allow me collect data from the school. This is purely an academic exercise and the results will not be used for any other purpose. Respondents are therefore asked not to indicate their names or any other form of identification. Respondents' identity will be kept secret.

Yours faithfully,

Guyo Jattani Halakhe

## APPENDIX II: QUESTIONNAIRE FOR TEACHERS

Please fill in by ticking (√) all the required information as precisely as possible and do not write your name.

### Section A: Demographic data for Teachers

Please fill in the demographic data by ticking (√) as appropriate in the choices provided.

1. What is your designation? a) HOD  b) class teacher   
c) Guiding and counselling teacher  d) Deputy Principal   
e) Teacher
2. What is your gender?  
a) Male  b) Female
3. What is your highest level of education?  
a) Diploma  b) Bachelors   
c) Masters  d) PhD
4. How many years have you been working in this school?  
a) less than 2 years  b) 3 to 5 year   
c) 6 to 8 years  d) More than 8 years
5. What is your age bracket?  
a) Less than 30 years  b) 31-40 years   
c) 41-50 years  d) 51 years and above



**Section B: School governance strategies and students’ participation**

6. Indicate the extent to which school governance strategies on miraa activities enhance students’ participation in secondary school education in Marsabit Central Sub-County, Marsabit County, Kenya by ticking (√) as appropriate in the choices provided. The choices are given as 1 – no extent, 2 – little extent, 3 – not sure, 4 – great extent and 5 – very great extent.

<b>School governance strategies</b>	No extent	Little extent	Not sure	Great extent	Very great extent
i. Involvement of parents in containing miraa business activities among students.					
ii. Involvement of Board of management in containing miraa business activities among students					
iii. Engaging students through a guiding and counselling session on miraa use.					
iv. Engaging all students in enforcing school policies on miraa use.					
v. Daily call registers to monitor students’ daily attendance.					
vi. Clear disciplinary guidelines on students’ involved in miraa use.					

**Section C: Ministry of Education policies on miraa use and students' participation**

7. Indicate the extent to which Ministry of Education Policies on miraa usage influence students' participation in secondary school education in Marsabit Central Sub-County, Marsabit County, Kenya by ticking (√) as appropriate in the choices provided. The choices are given as 1 – no extent, 2 – little extent, 3 – not sure, 4 – great extent and 5 – very great extent.

<b>Ministry of Education initiatives</b>	No extent	Little extent	Not sure	Great extent	Very great extent
i. Free Secondary Education initiative					
ii. Government policy on 100% transition rate to secondary school					
iii. The initiative by the Ministry of Education initiatives to regulate miraa business.					
iv. The initiative by the Ministry of Education initiatives on miraa use					
v. The initiative by the Ministry of Education initiatives disciplinary action on perpetrators					
vi. The initiative by the Ministry of Education on child labour policies					

8. How effective are the Ministry of Education policies in mitigating the use of Miraa among students' miraa and its influence on students' participation in secondary school education? Tick (√) as appropriate.

- a) Very effective [ ]      b) Effective [ ]      c) Ineffective [ ]

**Section D: Parental involvement in miraa business management and students' participation**

9. Indicate the extent to which parental involvement in miraa business management influence students' participation in secondary school education in Marsabit Central Sub-County, Marsabit County, Kenya by ticking (√) as appropriate in the choices provided. The choices are given as 1 – no extent, 2 – little extent, 3 – not sure, 4 – great extent and 5 – very great extent.

Statement	No extent	Little extent	Not sure	Great extent	Very great extent
i. Counselling students on miraa use					
ii. Guiding students on miraa use					
iii. Involving school going children in picking miraa					
iv. Ensuring that their children attend school every day					
v. Disciplining a child especially when he/she indulges on miraa use					

**Section E: Students’ participation in academic activities**

10. Rate students’ participation in secondary school education in Marsabit Central Sub-County, Marsabit County, Kenya by ticking (√) as appropriate in the choices provided. The choices are given as 1 – very poor, 2 – poor, 3 – not sure, 4 – good and 5 – very good.

Statement	very poor	poor	Not sure	Good	Very good
i. Daily attendance.					
ii. Exam attendance.					
iii. Absenteeism with reason.					
iv. Absenteeism without reason.					
v. participation in co-curricular activities					
vi. general performance					

11. In your opinion how has miraa business management activities influenced student participation in academic activities?

.....  
 .....

**“THANK YOU FOR YOUR PARTICIPATION”**

### APPENDIX III: QUESTIONNAIRE FOR PARENT REPRESENTATIVES

In this section, translator is employed to translate the questions into language understandable by some parents who do not understand the language used to write the questionnaire. Please fill in by ticking (√) all the required information precisely and do not write your name.

#### Section A: Demographic data for Parents

Please fill in the demographic data by ticking (√) as appropriate in the choices provided.

1. What is your gender? a) Male  b) Female
2. What is your highest level of education? a) None  b) Primary  c) Secondary  d) College  e) University
3. What is your age bracket?
  - a) Less than 30 years
  - b) 31-40 years
  - c) 41-50 years
  - d) 51 years and above

#### Section B: Miraa business activities and students' participation

4. To what extent do you engage your child in the following miraa economic activities? Rate students' participation in secondary school education in Marsabit Central Sub-County, Marsabit County, Kenya by ticking (√) as appropriate in the choices provided. The choices are given as 1 – no extent, 2 – little extent, 3 – not sure, 4 – great extent and 5 – very great extent.

Statement	not at all	small extent	moderate extent	large extent
i. Picking miraa				
ii. Packing miraa				
iii. Transporting miraa				
iv. Selling miraa				
v. Weeding miraa				

5. How demanding is Miraa business activities? Tick (√) as appropriate in the choices provided.
  - a) Very demanding
  - b) Demanding
  - c) Fairly demanding
  - d) Not demanding

**Section C: School governance strategies and students’ participation**

6. Are you involved as a parent in containing miraa business activities in case your child is involved in them? Yes [ ] no [ ].
7. How effective are school government strategies in enhancing students’ participation in secondary school education? Tick (√) as appropriate in the choices provided.
- a) Very effective [ ]      b) Effective [ ]      c) Ineffective [ ]
8. Are there any school governance strategies employed to enhance students’ participation? Yes [ ] No [ ]

If yes enumerate them.

- i. ....
- ii. ....
- iii. ....
- iv. ....
- v. ....

**Section D: Parental involvement in miraa business management and students’ participation**

9. Indicate your involvement as a parent in regard to miraa business management by ticking (√) as appropriate in the choices provided. The choices are given as 1 – no extent, 2 – little extent, 3 – not sure, 4 – great extent and 5 – very great extent.

Statement	not at all	small extent	moderate extent	large extent
i. Counselling my child				
ii. Participating in guiding my child				
iii. Ensuring my child attends school every day				
iv. Advising my child on miraa chewing				
v. Disciplining my child in case he/she misses school without concrete reason				

10. State whether you are involved in Miraa business activities or not.

a) Involved [ ]

b) Not involved [ ]

**Section E: Ministry of Education policies on miraa use and students' participation**

11. Indicate the extent to which Ministry of Education Policies on miraa usage influence students' participation in secondary school education in Marsabit Central Sub-County, Marsabit County, Kenya by ticking (√) as appropriate in the choices provided. The choices are given as 1 – no extent, 2–little extent, 3–not sure, 4–great extent and 5 – very great extent.

<b>Ministry of Education initiatives</b>	No extent	Little extent	Not sure	Great extent	Very great extent
i. Free Secondary Education initiative					
ii. Government policy on 100% transition rate to secondary school					
iii. The initiative by the MoE initiatives to regulate miraa business.					
iv. The initiative by the Ministry of Education initiatives on miraa use					
v. The initiative by the Mo initiatives disciplinary action on perpetrators					
vi. The initiative by the Ministry of Education on child labor policies					

**Section F: Students’ participation in academic activities**

12. Rate students’ participation in secondary school education in Marsabit Central Sub-County, Marsabit County, Kenya by ticking (√) as appropriate in the choices provided. The choices are given as poor, fair and good. The choices are given as 1 – poor, 2 – fair and 3 – good.

<b>Statement</b>	<b>Poor</b>	<b>Fair</b>	<b>Good</b>
i. Transition rate			
ii. Completion rate			
iii. Daily attendance.			
iv. Exam attendance.			
v. Absenteeism with reason.			
vi. Absenteeism without reason.			
vii. participation in co-curricular activities			
viii. General performance			

**“THANK YOU FOR YOUR PARTICIPATION”**



## APPENDIX IV: QUESTIONNAIRE FOR STUDENTS

Please fill in all the required information as precisely as possible and do not write your name.

### Section A: Demographic data for Students

Please fill in the demographic data by ticking (√) as appropriate in the choices provided.

1. What is your gender? a) Male  b) Female
2. Which class are you? Form 1  Form 2  Form 3  Form 4
3. What is your age bracket? a) Less than 13 years  b) 14-15 years  c) 16 and above

### Section B: Miraa business activities and students' participation

4. Have you ever engaged in miraa business activities? Yes  No
5. If yes, to what extent has the following miraa business activities affected your school attendance? Fill in the boxes by ticking (√) as appropriate in the choices provided. The choices are given as 1 – no extent, 2 – little extent, 3 – not sure, 4 – great extent and 5 – very great extent.

Miraa business activities	No extent	Little extent	Not sure	Great extent	Very great extent
i. Picking miraa					
ii. Packing miraa					
iii. Transporting miraa					
iv. Selling miraa					
v. Weeding miraa					
vi. Chewing miraa					

### Section C: School participation in academic activities

6. Rate your participation in school academic activities by ticking (√) as appropriate in the choices provided. The choices are given as 1-very poor, 2-poor, 3-not sure, 4-good and 5-very good.

School participation in academic activities	very poor	poor	Not sure	Good	Very good
i. Daily attendance.					
ii. Exam attendance.					
iii. Absenteeism with reason.					
iv. Absenteeism without reason.					
v. participation in co-curricular activities					
vi. General performance					

**“THANK YOU FOR YOUR PARTICIPATION”**

**APPENDIX V: PRINCIPALS INTERVIEW GUIDE**

This interview guide was used to gather information about the influence of miraa business management on students’ participation in secondary school education in Marsabit Central Sub-County, Marsabit County, Kenya.

Code: \_\_\_\_\_ Date of Interview: \_\_\_\_\_ Interviewee: \_\_\_\_\_

1. What is the category of your school?  
.....
2. How are students in your school engage in miraa business activities (probe on: weeding, picking, transporting, selling or chewing)  
.....
3. What are the school governance strategies enacted to prevent and mitigate against involvement of students in miraa activities?  
.....
4. (a) How are parents in your school involved in the management of miraa business activities?  
.....  
  
(b) How is parental involvement in miraa business activities influencing students’ participation in your school?  
.....
5. How do miraa business activities affect students’ participation in your school?
  - i. Transition  
.....  
.....
  - ii. Enrolment  
.....  
.....

iii. Retention

.....  
.....  
.....

iv. Completion

.....  
.....

6. What is your assessment of ministry of education policy in regards to students' involvement in miraa business activities?

.....

7. How is the overall student school attendance? State what you feel is responsible for this state of affairs?

.....

**“THANK YOU FOR YOUR PARTICIPATION”**

**APPENDIX VI: SAMPLE OF MIRAA PLANTATION IN QILTA  
LOCATION**



## APPENDIX VII: AUTHORIZATION LETTER



### NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471,  
2241349, 3310571, 2219420  
Fax: +254-20-318245, 318249  
Email: dg@nacosti.go.ke  
Website: www.nacosti.go.ke  
When replying please quote

NACOSTI, Upper Kabete  
Off Waiyaki Way  
P.O. Box 30623-00100  
NAIROBI-KENYA

Ref. No. **NACOSTI/P/19/19311/31679**

Date: **25<sup>th</sup> July, 2019**

Guyo Jattani Halakhe  
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 management on students’ participation in Secondary School education in Marsabit Central Sub County Marsabit County Kenya.”* I am pleased to inform you that you have been authorized to undertake research in **Marsabit County** for the period ending **23<sup>rd</sup> July, 2020.**

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

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit a **copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

  
**GODFREY P. KALERWA., MSc, MBA, MKIM**  
**FOR: DIRECTOR-GENERAL/CEO**

Copy to:

The County Commissioner  
Marsabit County.

The County Director of Education  
Marsabit County.

*National Commission for Science, Technology and Innovation is ISO9001:2008 Certified*


## APPENDIX VIII: NACOSTI LETTER

**THIS IS TO CERTIFY THAT:**  
**MR. GUYO JATTANI HALAKHE**  
**KIKUYU, has been permitted to conduct**  
**research in Marsabit County**

**on the topic: INFLUENCE OF MIRAA**  
**BUSINESS MANAGEMENT ON STUDENTS**  
**PARTICIPATION IN SECONDARY SCHOOL**  
**EDUCATION IN MARSABIT CENTRAL**  
**SUB-COUNTY MARSABIT COUNTY KENYA**

**for the period ending:**  
**23rd July, 2020**

**Permit No : NACOSTI/P/19/19311/31679**  
**Date Of Issue : 25th July, 2019**  
**Fee Received :Ksh 1000**

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


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

**THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013**

**The Grant of Research Licenses is guided by the Science, Technology and Innovation (Research Licensing) Regulations, 2014.**

**CONDITIONS**

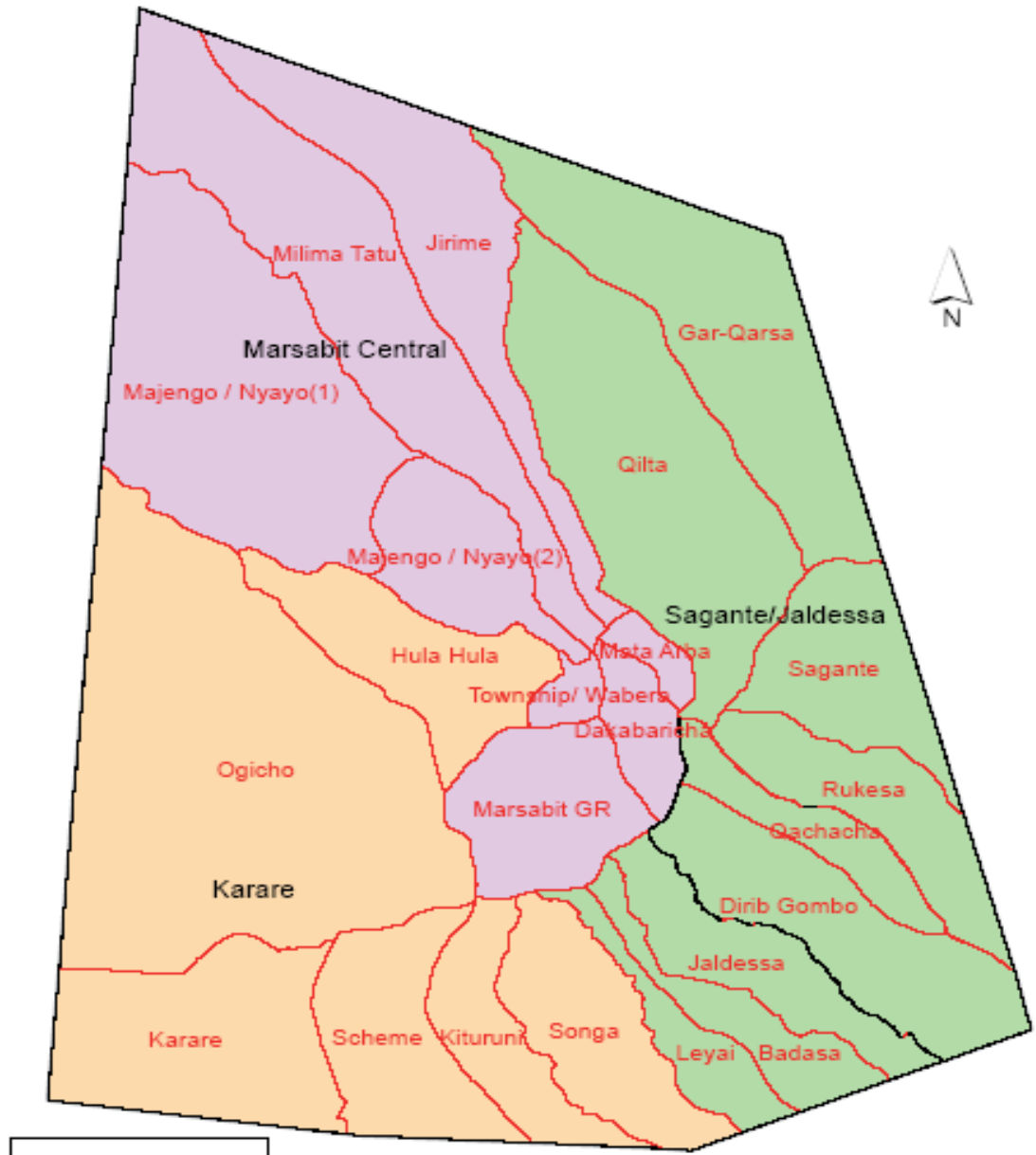
1. The License is valid for the proposed research, location and specified period.
2. The License and any rights thereunder are non-transferable.
3. The Licensee shall inform the County Governor before commencement of the research.
4. Excavation, filming and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
5. The License does not give authority to transfer research materials.
6. NACOSTI may monitor and evaluate the licensed research project.
7. The Licensee shall submit one hard copy and upload a soft copy of their final report within one year of completion of the research.
8. NACOSTI reserves the right to modify the conditions of the License including cancellation without prior notice.

  
**National Commission for Science,**  
**Technology and Innovation**  
**RESEARCH LICENSE**

**Serial No.A 26039**  
**CONDITIONS: see back page**

**National Commission for Science, Technology and innovation**  
**P.O. Box 30623 - 00100, Nairobi, Kenya**  
**TEL: 020 400 7000, 0713 788787, 0735 404245**  
**Email: dg@nacosti.go.ke, registry@nacosti.go.ke**  
**Website: www.nacosti.go.ke**

**APPENDIX IX: MAP OF MARSABIT CENTRAL SUB COUNTY**



Scale 1:1,550,000

Source: Google Maps