DECLARATION

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

Signature: ........................................ Date: ........................................

Lida Mbuya Nyaoke

L50/74044/2012

This research project has been submitted for examination with my approval as the university supervisor.

Signature:........................................ Date:........................................

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DEPARTMENT OF EXTRA-MURAL STUDIES

SCHOOL OF CONTINUING AND DISTANCE EDUCATION

UNIVERSITY OF NAIROBI
DEDICATION

This research project is dedicated to my husband, James Yugi and son, Tukiko Koyo, for being the light in my life.
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DEFINITION OF SIGNIFICANT TERMS AS USED IN THE STUDY

ECONOMICAL: Utilization of resources in a manner that reduces the costs associated with the use and results in some sort of benefit or the other

PARENTING: Is the process of promoting and supporting the physical, emotional, social and intellectual development of a child from infancy to adulthood.

PEER: People who are equal in such aspects as age, education or social class etc

PREVELANCE: The state of being prevalent

SOCIAL: Refers to a characteristic of living organisms as applied to populations of humans and other animals.

COOL: What is considered as trend or fashionable
## LIST OF ABBREVIATIONS AND ACRONYMS

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<td>DNC</td>
<td>Department of Narcotic Control</td>
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<tr>
<td>KMTC</td>
<td>Kenya Medical Training College</td>
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<td>NACADA</td>
<td>National Agency for the Campaign against Drug Abuse’s</td>
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<tr>
<td>UNDCP</td>
<td>United Nations’ Drug Control Programme</td>
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<tr>
<td>UON</td>
<td>University of Nairobi</td>
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ABSTRACT
Drug and substance abuse is one of the major public health issues throughout the world that is causing serious social and economical burden to different nations. Everywhere the target group is the young population between the ages of 18 to 30 years who are preparing, or are already enrolled in various institutions of higher learning. The objective of this study was to explore determinants of the prevalence of drug and substance abuse amongst youth in institutions of higher learning in Mombasa County. The specific objectives were to establish how family factors influence the prevalence of drug and substance abuse, to scrutinize how socio-economic factors influence the prevalence of drug and substance abuse, to assess how peer relationships influence the prevalence of drug and substance abuse and establish how school-related factors influence the prevalence of drug and substance abuse amongst youth in institutions of higher learning in Mombasa County with focus on KMTC-Port Reitz Campus, Mombasa polytechnic University and UON Mombasa campus. The research problem was studied through the use of a descriptive research design. Through random sampling, 340 students from KMTC-Port Reitz Campus, Mombasa polytechnic University and Nairobi University were selected out of a total of 2977. The study employed primary data where data collection was conducted through a self-administered questionnaire. Data was collected quantitatively and it was analyzed by descriptive analysis technique and chi square. The study employed a descriptive survey research design which resulted in the following findings: Lack of direction and purpose in life, lack of monitoring, rejection, isolation and spiritual emptiness, socio-economic status, cost of drugs, parent’s level of education and family size, peer grouping, exposure to drug by friends, low self esteem and exposure to drug by sexual partner, poor labor-market productivity, unconcerned school administrations, general performance in school and potential to increase academic attainment were independent variables that ultimately affected prevalence of drugs and substance abuse. Therefore, the study concluded that indeed family factors, socio-economic factors, peer relationships and school factors were determinants of prevalence of drugs and substance abuse amongst youth in institutions of higher learning in Mombasa County.
CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

Man has been using plant derived drugs and other manufactured drugs for thousands of years. The recorded history indicates that some of these drugs were used not just for their presumed therapeutic effects, but also for recreational purposes to enhance pleasure and relieve stress (Ray & Ksir, 2000). New and often more harmful drugs and patterns of use are replacing traditional practices (Nakajima, 2005). In recent years the consumption of licit (tobacco, alcohol) as well as illicit substances has increased greatly throughout the world. Particularly alarming is the fact that the age of initiation into substance abuse is progressively falling (UNDCP, 2007). Adolescence is the critical period when the first initiation of substance use takes place. Among the youth, students are particularly involved due to increasing academic pressures. The encouragement by peer groups, the lure of popularity and easy availability of many such substances like alcohol, tobacco and other drugs make a teenager an easy prey.

Drug abuse is spreading like mushroom and invading every level of each nation like home, educational institution and affecting individuals of all classes. Everywhere the target group is our young population between the ages of 18 to 30. This is the period of life for exploration and experimentation - the means by which ‘young people learn who they are and what they want to do with their lives’, and trying out new things and making first-time choices (Westermeyer, 2009). These make them vulnerable to experiment drugs. They try to remove depression using drugs as a tool. Failed relationships and broken hearts are also major inducements of drug abuse in young people. Unwanted events and refusal can make one lose confidence resulting into the use of drugs. Young people belonging to the higher class of the society take alcohol and other drugs to maintain their status in the friend circles (Shaftq, 2008). The young people, particularly the youth, are at this particular age more likely to further their education in institutions of higher learning hence the prevalence of drug and substance abuses in such places. Therefore, the study planned to seek the determinants of the prevalence of this form of abuse and focus was put on three major high institutions of Higher learning in Mombasa County.
Rampant Drug abuse in Kenya’s coastal city has been cited as a great challenge and a major threat that poses negative implications to the country’s political, economic, and social stability, hence calling for urgent mitigating measures (Beckerleg, Deveau & Levine, 2006). The vice has been said to create social economic hardships that breed misery which increases crime, violence and a drain on human material resources in the region that has in the recent years experienced an upsurge in the cultivation, consumption and trafficking of illicit drugs.

The problem of drug abuse in coast Province is growing at an alarming rate, the lack of reliable statistics to reveal the scope and magnitude of drug abuse has left many institutions guessing and speculating on the seriousness of the problem (Olatuwara & Odejide, 2011). The commonly consumed drug both legal and illicit in Kenya include cannabis, cocaine, heroin, khat, tobacco and alcohol. A review of related literature was done which focused on khat, cannabis and heroin. The ease of access and availability of cannabis among community members is a contributing factor to its greater use, while the fact that production and consumption of khat is legal it's use has been consistently on the increase worldwide. Peer pressure and curiosity has made heroin a drug of choice to most youth in Mombasa.

According to Masudi (2011) majority of drug users start to use at their youthful age between 15 to 30 years of age and a significant proportion of the users start using at old age. Although male users form the majority the females are not left out. Masudi also revealed that Tobacco and Cannabis are the major drugs that most users started with, however, heroin was found to be the most favorable drug to most users. He further revealed that, Peer pressure and curiosity greatly influences drug use among the youth. In addition to this, availability of drugs and cost plays a major role during inception.

According to Ministry of Education poor performance in national examinations in the coastal region has been as a result of the use of the hard drugs by the youth. According to Mudi (2009) decried falling education standards in the region and urged educationists, parents and leaders to confront retrogressive socio-cultural factors like early marriages, teenage pregnancies, drugs and substance abuse among the youth which he said were impacting negatively to school attendance and examination. In last year’s KCPE exams, Coast region attained a dismal mean score of only
235.65 ways below the average national mean score of 306.4 marks while the same down performance trend was also replicated in the KCSE, the same year when the region registered another dismal performance of D+. Ochami (2009) observed that there was need for collaborative efforts to come up with strategies that will help the Coast region come up with strategies to help improve education standards and bring them at par with other regions in the country.

According to Beckerleg, Telfer and Sadiq (2006) the Mombasa County has in recent years gained a reputation as a transit conduit for hard drugs mainly Hashish and heroin from central Asia en route to Europe and the USA. Although drug abuse has been said to be a silent disaster that claims many lives every year in the country, most youth find it hard to dissociate with the vice that is strongly linkage with violence and currently the HIV/AIDS scourge (Kaguthi, 2006).

Further, most of the students in colleges and technical institution in the Mombasa County are said to engage in drug abuse and substance abuse due to ease access to the commodity. This has raised an alarm for authorities to come up with strategies and applicable means of mitigating drug abuse in the region. KMTC-Port Rietz campus, Mombasa Polytechnic University and UON-Mombasa Campus are not excluded from the colleges that are facing this problem. Hence the need to focus on these 3 major institutions in order to investigate the determinants of prevalence of drugs and substance abuse in Mombasa County. Currently, the KMTC-Port Rietz campus has a total population of 714; Mombasa Polytechnic University has a population of 1015 while UON-Mombasa Campus has a population of 1248.

1.2 Statement of the Problem
Kenyan youth face the greatest risk, being targets for recruitment into the abuse of drugs by drug barons. It is increasingly clear that nearly 92% of the youth experiment with drugs during the growing up process (Olatuwara & Odejide, 2011). Drug abuse is, therefore, an issue that not only involves the secondary school students but is also a National issue. In Kenya, there is evidence of high and rising drug use and abuse of drugs. A report by the Ministry of Health (2000) indicates that 67% of men and 32% of women in Kenya smoked and 45% of those are below 20 years. A report by the United Nations’ Drug Control Programme shows that 60% of students abuse drugs.
The then National Agency for the Campaign against Drug Abuse’s (NACADA) Coordinator, noted that drug and substance abuse is a worse disaster than HIV/AIDS and famine combined (Kaguthi, 2006).

The Kenyan government has formulated drug abuse policies and strategies for prevention and reduction. For instance, in 1994, the Narcotic Drug and Psychotropic Substance Act was enacted to curb drug abuse and trafficking and United Nations designated 1991-2001 as the decode against drug abuse. In March 2001, NACADA was formed with the mandate to initiate public education campaign against drug abuse, develop an action plan aimed at curbing drug abuse by the youth in school and other institutions of learning, sensitize parents on drug use and abuse and this function as role models and initiate rehabilitation programmes for addicts (NACADA, 2011).

As the government is committed to providing education for everyone, poor performance in national examinations in the coastal region has been as a result of the use of the hard drugs by the youth. Mudi (2009) decried falling education standards in the region and urged educationists, parents and leaders to confront retrogressive socio-cultural factors like early marriages, teenage pregnancies, drugs and substance abuse among the youth which he said were impacting negatively to school attendance and examination. In last year’s KCPE exams, Coast region attained a dismal mean score of only 235.65 ways below the average national mean while the same down performance trend was also replicated in the KCSE, the same year when the region registered another dismal performance of D+. This data clearly indicated that Mombasa County is continuously producing youth who are addicted to drugs and substance abuse. Unfortunately, the same youth will eventually end-up in institutions of higher learning with the dangerous drug habit that will ultimately also affect their academic performance. Ochami (2009) stated that there was need for collaborative efforts to come up with strategies that will help the Coast region, in particular Mombasa, come up with strategies to help improve education standards and bring them at par with other regions in the country. In realization to the above the study aimed at investigating the determinants of prevalence of drug and substance abuse amongst institutions of
higher learning in Mombasa County with focus on KMTC-Port Rietz campus, Mombasa Polytechnic University and UON-Mombasa Campus.

1.3 Purpose of the Study
The purpose of the study was to explore determinants of prevalence of drug and substance abuse amongst youth in institutions of higher learning in Mombasa County.

1.4 Objectives of the Study
1. To establish how family factors influence the prevalence of drug and substance abuse amongst youth in institutions of higher learning in Mombasa County.

2. To scrutinize how socio-economic factors influence the prevalence of drug and substance abuse amongst youth in institutions of higher learning in Mombasa County.

3. To assess how peer-relationships influence the prevalence of drug and substance abuse amongst youth in institutions of higher learning in Mombasa County.

4. To establish how school factors influence the prevalence of drug and substance abuse amongst youth in institutions of higher learning in Mombasa County.

1.5 Research Questions
The study sought to respond to the following research questions.

1. How do family factors influence drug and substance abuse amongst youth in institutions of higher learning in Mombasa County?

2. To what extent do socio-economic factors influence drug and substance abuse amongst youth in institutions of higher learning in Mombasa County?

3. How does peer relationships influence drug and substance abuse amongst youth in institutions of higher learning in Mombasa County?

4. How do school factors influence drug and substance abuse amongst youth in institutions of higher learning in Mombasa County?
1.6 Significance of the Study

The study is of great importance to the government as it will apply the findings to ensure the fight against drug and substance abuse, through NACADA, is successful. Furthermore, projects may be established to put mechanisms in place to ensure that factors that lead to prevalence of drug and substance abuse amongst youth in institutions of higher learning in Mombasa County are reduced or totally eliminated.

The study will provide useful information that will help the management of higher learning institutions in Kenya in addressing determinants of prevalence of drug and substance abuse among college students and devise strategies to ensure the institutions remain drug free. The study findings are expected to be of great importance to various researchers involved in policy making. The report of this study will be easily acquired in the library and it will provide the learners with relevant information on determinants of prevalence of drug and substance abuse among college students. The study will further make a myriad contribution to the literature on determinant of prevalence of drug and substance abuse which will be part of articles that will be helpful to researchers who want to further on their study.

1.7 Limitations of the study

This was a case study focusing on determinants of the prevalence of drug and substance abuse amongst youth in institutions of higher learning in Mombasa County with focus on KMTC-Port Rietz campus, Mombasa Polytechnic University and UON-Mombasa Campus. The study was focused on three campuses of which the findings may not reflect the same as in other campuses, which is not a good representation of all types of institutions of higher learning. The study should have involved more institutions of higher learning in Mombasa County so as to give a more realistic picture of the problem.

The questionnaire’s data were based on the students’ response, which could have been untrue. In order to ensure the response was real and met the expectation of the result, respondents were given more time to read and understand the information that the study required. Finally, on the material day the number of the student sampled and those present were slightly less hence affecting sampling size. In order to ensure sampled size is met, research assistance visited the
college frequently until they met at least 96% of the sample size which was adequate for analysis.

1.8 Basic Assumptions of the Study
The researcher made the assumption that the respondents would be cooperative enough to give the required information of the study. The researcher assumed that all information collected from respondents was true to give a clear and true picture. The researcher also assumed that external factors like strike would not arise as this would affect the process of data collection and hence the completion of the project. The researcher assumed that the cited respondents had some knowledge on the subject matter.

1.9 Delimitations of the Study
The survey covered the determinants of prevalence of drug and substance abuse amongst youth in Mombasa County with focus on three major institutions of higher learning: KMTC-Port Rietz campus, Mombasa Polytechnic University and UON-Mombasa Campus. The study interviewed student from various courses and with regard to their year of education where a questionnaire was employed to the sampled respondents. The data for analysis was collected from a population of 340 students within the KMTC-Port Rietz campus, Mombasa Polytechnic University and UON-Mombasa Campus.

1.10 Definition of Significant Terms as Used in the Study

**Economical** Utilization of resources in a manner that reduces the costs associated with the use and results in some sort of benefit for the user.

**Parenting** Is the process of promoting and supporting the physical, emotional, social, and intellectual development of a child from infancy to adulthood

**Peer** People who are equal in such respects as age, education or social class etc

**Prevalence** The condition of being prevalent.
**Social**

Refers to a characteristic of living organisms as applied to populations of humans and other animals.

**Cool**

What is considered as the trend or fashionable?

### 1.11 Organisation of the Study

The study is organized into five chapters. Chapter one contains the introduction to the study. It presents background of the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, delimitations of the study, limitations of the Study and the definition of significant terms. On the other hand, chapter two reviews the literature based on the objectives of the study. It further looked at the conceptual framework and finally the summary. Chapter three covers the research methodology of the study. The chapter describes the research design, target population, sampling procedure, tools and techniques of data collection, pre-testing, data analysis, ethical considerations and finally the operational definition of variables. Chapter four presents analysis and findings of the study as set out in the research methodology. The study closes with chapter five which presents the discussion, conclusion, and recommendations for action and further research.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction
This chapter covers contributions from other scholars on determinants of prevalence of drug and substance abuse and more particularly college students. The chapter was structured into theoretical review, conceptual framework, empirical review, critique of literature and finally summary gap that the study aims to bridge.

2.2 Prevalence of Drug and Substance Abuse
This section focuses on previous studies done on prevalence of drug and substance abuse from a global perspective, regional perspective and finally local perspective.

2.2.1 Global Perspective on Drug and Substance Abuse
Substance abuse is one of the major public health issues throughout the world that is causing serious social and economical burden to different nations. The national co-morbidity survey in the USA found that the one year prevalence for drug misuse and drug dependence (excluding alcohol) is 3.6%, whilst the lifetime prevalence is 11.9% (Kessler, McGonagle & Shanyang 2011). The cost of addictive illness to Americans is currently $144 billion per year in health care and job loss (Galanter & Kleber 2009). In Europe as well as in our neighbor country India, the scenario is almost same. In Bangladesh, drug related problems are gradually becoming a burning issue in context of social, economical and medical perspective. An estimation given by the Department of Narcotic Control of Bangladesh revealed that about 1.5 million people are involved in abusing drugs of various kinds (DNC, 2005).

Drugs seem to avert emotional and physical pain by providing the user with a temporary and illusionary escape from or way to cope with life's realities. The person looks on drugs as a cure for unwanted feelings. The painkilling effects of drugs become a solution to their discomfort. This release is the main reason a person uses drugs second or third time. Drug addiction, then, results from excessive or continued use of physiologically habit-forming drugs in an attempt to resolve the underlying symptoms of discomfort. Drug user starts out as an occasional user, and that initial use is a voluntary and controllable decision. But as time passes and drug use continues
in more subtle ways that can result in compulsive and even uncontrollable drug use (Mahbuba, 2010).

Most studies on drug abuse have fallen short of identifying the root cause of the problem. Results based on the responses to questionnaires completed by adolescents and young adults in the United States of America about their use of cannabis showed that it was used by 19-20% of the students in the study. Nevertheless, the differences in age and gender, the cultural variations, the types of schools attended and the different structures of the self-administered questionnaires had made the results of those studies difficult to compare (Houghton, 2007).

According to self-reported surveys of adolescent students in Nova Scotia in Canada, carried out in 1991 and 1996, over one fifth (21.9%) of the students reported to have used alcohol, tobacco and cannabis (Poulin & Elliott, 2007). The 1995 European Schools Project on Alcohol and other Drugs revealed that, 37% of 10th Grade students in the 30 participating European countries had smoked a cigarette in the past 30 days, 61% had consumed alcohol, 17% had consumed marijuana and 6% had used some illicit drugs other than marijuana (Hibbel, Anderson, Bjarnason, Kokkeri, Morgan & Narusk, 2005). All the above quoted studies show that the issue of drug abuse is not only a problem in Kenya but is also a global issue and thus the needs to involve all countries in drug abuse control efforts.

2.2.2 Status of Drug Abuse and Substance Abuse in Africa

Africa like any other continent is faced by drug abuse as major problem towards economic development among states. Fatoye and Marakinyo (2002) studied drug abuse amongst 567 secondary school students in rural and urban communities in south western Nigeria. They found that the most commonly abused drugs were salicylate analgesics (48.7%), stimulants (20.9%), antibiotics (16.6%) alcohol (13.4%), hypnotic sedatives (8.9%) and tobacco (3.0%). He also was found that the current and lifetime use of alcohol and tobacco was significantly more common among the males, and among those in the rural schools. For the majority of the students, initiation into drug use started at a very early age (under 14 years).
Africa, having constituted of developing country faces a similar problem of drug abuse and substance abuse. In Nigeria, studies have consistently shown that there is considerable prevalence of drugs and substances use; with varying prevalence rates found for both overall and specific drug abuse (Abdulkarim, Mokuolu & Adeniyi, 2005). Factors influencing students to drug use have been identified among them parental influence: children from homes where parents take drugs tend to imitate their parents’ behavior and by modeling they also start using drugs (Ngesu, Ndiku & Masese, 2008). There is evidence of alcohol and cigarettes use not only with college students but also with secondary school students in Nigeria and Senegal (Abasiubong, et al., 2008). A study conducted among high school students in Cape Town, South Africa revealed that the prevalence rates for use of cigarettes and alcohol were 27 and 31% respectively (Flisher et al., 2003).

According to Adelekan, Makanjuola, Ndom, Fayeye, Adegoke and Amusan (2005) did a study from Namibia on factors influencing drug abuse, he found that students may start using illegal drugs because the drugs are easily available from their schools. School related factors can also influence students to drug use (Ngesu et al., 2008). How the school administration manages student affairs may lead to drug abuse. High handedness, lack of freedom and failure to address their grievances creates stress which can lead to abuse of drugs as depressors (Kingala, 2000). Unfortunately, across all continents in the world and throughout time, drug abuse among both the young and adult population has manifested itself in various forms (Grover, 2007).

Two studies carried out among Zambian students found that while up to 10% of the female students experimented with cannabis, only male students tended to become regular users (Guy 2001). In this study 58% of the males and 57% of the females had at sometime taken alcohol, 32% of the males and 10% of the females had at sometimes taken cannabis, and 24% of the males and 26% of the females had at sometimes in their lives taken other drugs, that included petrol sniffing, chlordiazepoxide and other minor tranquillizers, amphetamines and methaqualone (Haworth, 2001). Africa is therefore not spared from the issue of drug abuse in schools.
In Uganda, a study noted that among the youth, 19% of the secondary school students and about 35% of the students in tertiary institutions including the medical school smoked cigarettes (Kanyesigye, Basiraha, Ampaire, Muchura & Kangi, 2007). This was attributed to a lot of tobacco products being advertised in relation to style/fashion; and due to peer influence. The mean initiation age for smoking was 13.4 years with a range from 6 to 22 years in Jinja district (Lukwiya, 2000). In a cross-sectional study carried out among 2789 high school students in Kampala district, Uganda, in 2002 among 13-15 year olds it was found that 17.5% reported to have smoked tobacco, with 37.9% (n = 148) of them trying or starting smoking before the age of 10 (Mpabulungi & Muula, 2011).

2.2.3 Status of Drug Abuse in Kenya

Kenya, like many other developing countries, has limited resources to cover the basic needs of its people. Abuse of the drugs among the youth not only drains the economy because controls of supply and demand reduction are expensive undertakings but also deals a blow to the country as its youth become less productive. The overall picture has shown a steady upward trend in drug peddling as attested by seizure statistics. Kenyan youth face the greatest risk, being targets for recruitment into the abuse of drugs by drug barons. It is increasingly clear that nearly 92% of the youth experiment with drugs during the growing up process. Drug abuse is, therefore, an issue that not only involves the secondary school students but is also a National issue. Several strikes that have occurred in schools in the past have usually been attributed to drugs without any concrete evidence. There is also paucity of sufficient and readily available reliable body of prevalence data, identified as one of the critical issues by NACADA. This study was, therefore, conducted to improve on the data base of drug abuse by generating objective information on the extent and the reasons for drug abuse in order to formulate effective public health policies on prevention.

Further, studies show that more than a fifth (22.7%) of primary school children take alcohol, a figure that rises to more than three-quarters (68%) for university students. A large number of students across all age groups have been exposed to alcohol, tobacco, miraa (khat), glue sniffing, bhang (marijuana) and even hard drugs such as heroin and cocaine. According to a study by
Siringi (2001) on drug abuse, 22% of secondary school students were on drugs and males had a higher exposure to *miraa* and inhalants (Siringi, 2003). In addition the study also found out that the prevalence of drug abuse increased from primary to tertiary institutions. Alcohol was the most frequently abused drug followed by *miraa*, tobacco and bhang. The students staying with friends were most at risk followed by those staying with either a sister or a brother. Students staying in towns were also reported to have a twofold risk of having tasted alcohol, tobacco, *miraa*, bhang and inhalants (glue) compared to those in rural areas. This survey demonstrated that the youth in the urban areas, due to their lifestyles, are more predisposed to drugs compared to those in rural areas.

Twenty percent of youths in Kenya aged between 14 and 18 years smoke cigarettes and another 9% smoke bhang (*Cannabis sativa*) while some 23% drink commercial beer and spirits. This is the age of most youths in Kenyan secondary schools that have in the recent past been hit by a wave of strikes that may have been linked to drug abuse. Empirical evidence show that 92% of youths aged between 16 and 23 years have experimented with drugs as they grew up with about 90% of the respondents taking beer, spirits, cigarettes, local brews and bhang (Siringi & Waihenya, 2001). About 400,000 students in secondary schools in Kenya were addicted to drugs and out of this number, 16,000 are girls and the rest are boys. The frequency, as well as the type of substance abused, varies from province to province. When it came to alcohol, the prevalence among students is highest in western Kenya (43.3%), followed by Nairobi (40.9%), Nyanza (26.8%), Central (26.3 %), Rift valley (21.9%), Coast, Eastern and North Eastern at 21.3%, 17.2% and 1.6% respectively (Siringi, 2003). Findings of a study undertaken by the Child Welfare Association reveal that one in every 15 Kenyan students was abusing bhang or hashish (Mgendi, 2008). Abuse of drugs is, therefore, a major public health problem in our secondary schools. It was therefore important to undertake this study in order to establish the extent of this problem so that preventive public health measures can be undertaken.

The government has formulated drug abuse policies and strategies for prevention and reduction. For instance, in 1994, the Narcotic Drug and Psychotropic Substance Act was enacted to curb drug abuse and trafficking and United Nations designated 1991-2001 as the decade against drug
abuse. In March 2001, NACADA was formed with the mandate to initiate public education campaign against drug abuse, develop an action plan aimed at curbing drug abuse by the youth in school and other institutions of learning, sensitize parents on drug use and abuse and this function as role models and initiate rehabilitation programmes for addicts (NACADA, 2011).

In 2002, 27.7 and 8.3% of students interviewed from primary school to university reported ‘lifetime use’ of alcohol and cigarettes respectively (NACADA, 2011). In the same year in Rift valley province which is one of the eight provinces of Kenya in which Nakuru municipality is located, the NACADA survey indicated that 21.6 and 6.1% of students, reported lifetime use of alcohol and cigarettes respectively. A report by the Ministry of Health (2000) indicates that 67% of men and 32% of women in Kenya smoked and 45% of those are below 20 years. A report by the United Nations’ Drug Control Programme shows that 60% of students abuse drugs. The then National Agency for the Campaign against Drug Abuse’s (NACADA) Coordinator, noted that drug and substance abuse is a worse disaster than HIV/AIDS and famine combined (Kaguthi, 2006).

A preliminary survey of drug abuse was conducted among secondary school students in Kenya and the results of the study confirmed that drug abuse was quite prevalent among secondary school students (Dhadphale, Mengech & Acuda, 2001). For instance, up to 10% of students drank alcohol more than three times a week, 16% smoked cigarettes more than three times a week, and nearly 14% had smoked cannabis (bhang) and 16% admitted taking other drugs especially tranquilizers in order to feel high. The study revealed that the problem was more acute in urban schools compared to rural schools. A cross sectional study to determine the prevalence of smoking and to investigate factors that may influence smoking behavior in 5,311 secondary school students in Nairobi found that a total of 2246 (70.1%) were smokers out of which 38.6% were males and 17.9% females. In this study, experimentation with drugs started at 5 years of age, and regular smoking at 10 years. The majority of the students 72.2% started at between age 12 and 16 years (Kwamanga, Odhiambo, & Amukoye, 2003).
2.3 Family Factors

Breakdown in social structure of society, which includes the family and its role of inculcating morals to young ones, has contributed to drug abuse (Nasibi, 2003). Most families are characterized by issues of immorality, spiritual emptiness, lack of direction and purpose in life among other problems. Coombs et al. (2002) conducted a comparative study on 225 adolescents’ drug users and an equal number of abstainers. Their study reveals that the drug free children not only feel closer to their parents but consider it important to get along with them. The drug users bear such characteristics as loneliness, rejection, isolation and constant punishment. Furthermore, Needle et al. (1990) have shown that youths from disrupted families tend to get involved in substance abuse. On the other hand, Coombs (1990) has observed that abstainer parents have firmer standards regarding curfew, television, schoolwork, use of alcohol and other drugs.

An unstable home life is a contributing factor to teenagers going down the path of substance abuse. This is because parents can be a strong influence in keeping children away from drugs, by being positive role models and showing their children the negative aspects of substance abuse. Thus, a lack of guidance by parents at home can lead to substance abuse. Tied into this is the issue of poverty--if parents have to work long days to make ends meet, they have less influence on their child's development and also, pragmatically, cannot be home often enough to know what activities their kids are engaging in, thus making it easier for the teens to get away with substance abuse.

According to Dekovic, Buist and Reitz (2011) significant changes in problem behavior occur over brief periods in early adolescence, especially during the transition to middle school. The literature addressing gender identity, peer relationships and rural communities indicates that students attending rural, middle schools are particularly at risk for illegal drug use and peers are likely to play a pivotal role in the behavior. Parents also influence adolescent substance use, (Crosnoe, Erickson & Dornbush, 2002). Weak family bonds for youths are said to correlate with adolescent substance use while strong family cohesion is associated with negative attitudes toward substance use (Pilgrim et al., 2011). Positive relationships at home are said to promote peer relationships that do not support substance use. Females are reported to receive more
parental monitoring and be more concerned about maintaining a positive relationship with parents.

Parental relationships are ostensibly linked to adolescent substance use (Webb et al., 2002). As a child moves into adolescence, the primary source of influence moves from parents and families to the peer group (Engels & ter Bogt, 2001). However, parents continue to have an influence. Certain parenting practices affect adolescents’ interactions with peers. According to Crosnoe et al. (2002), parental monitoring is a parenting practice that protects adolescents from participating in deviant behaviors such as substance use.

Although parental monitoring is significant the actual relationship between a parent and an adolescent also influences adolescent substance use (Wills et al., 2011). Mothers influence adolescent female peer relationships by being responsive with responsiveness defined as showing love or expressing praise, being accessible when there is a need and participating in open discussions (Bogenschneider et al., 1998). Higher levels of maternal responsiveness in the study by Bogenschneider et al. were associated with less peer influence, resulting in lower levels of substance use. This pathway was moderated by values regarding substance use; mothers with high levels of responsiveness who also opposed substance use significantly influenced the peer relationships of females.

Unfortunately, research on the influence of parenting on illegal drug use in the rural environment is scarce (Kostelecky, 2005). Students attending rural, middle schools are particularly at risk for substance use; parents (as well as peers) are likely to play a pivotal role in the behavior.

2.4 Socio-Economic Background
The relationship between childhood socioeconomic status (SES) and behavioral health in adulthood has long been of interest to researchers and policymakers. A few studies have found that adolescents with low SES have a greater propensity toward substance use during adolescence. Goodman and Huang (2002) found that having low SES was associated with greater alcohol use and with greater cigarette and cocaine use among white teenagers.
Goodman and Huang (2002) found that lower household income and parental education were associated with greater adolescent depression. Friestad and colleagues (2003) found that low parental education and moderate household income was associated with greater rates of smoking in adolescents. Reinherz and colleagues (2000) examining 360 respondents followed from 1977-2000, found that low family SES and larger family size were associated with increased probability of substance abuse disorders in early adulthood. An analysis by Hamilton and colleagues (2009) found that adolescents (ages 12-19) with college-educated parents were less likely to engage in hazardous or harmful drinking or illicit drug use.

However, there is growing evidence that adolescents with higher SES may also be at risk for developing substance use disorders. There is evidence that substance use in adults, particularly alcohol use, may be sensitive to price, as some studies have shown that consumption decreases as price increases (Farrell, Manning, Finch, 2003). For adolescents with higher SES, having greater financial resources may indicate that the relative cost of substance use, that is the opportunity cost of substance use relative to other consumption, may be lower than for adolescents with lower SES. This is consistent with the usual demand model for goods and services and could indicate a higher demand among wealthier adolescents. This was found in a 2007 study of British adolescents by Bellis and colleagues, which found that adolescents with more spending money were more likely to drink frequently, binge drink and to drink in public (Bellis, Tocque, & Fe-Rodriguez, 2007) as well as in a study of college students in the United States, which found that college students with lower levels of spending money had lower levels of drinking and getting drunk. The socio-cultural factors of valuing autonomy and refraining from discussing personal issues outside the family likely play a role (Anderson & Gittler, 2005).

2.5 Peer Relationships
The biggest factor that influences teenagers to substance abuse is peer pressure (Henry & Kobus, 2007). Teenagers feel extreme pressure to fit in with their peers and often if one "cool" kid begins using drugs or drinking, others will follow in order to gain status or save face. Additionally, there is the pragmatic element. Teenagers are in high school around the age of 14
in the United States, where they will be exposed to more children and thus have a high likelihood of meeting individuals who are already abusing drugs.

Teenagers have an urge to belong, to be loved and liked by those close to them. This can lead to one doing things he/she could not have done to gain group approvals and identity with it. This is more serious when one has low self esteem, sense of lack of security and dependency. The insecure youth finds comfort and approval by conforming to the standards of a peer group. Wills et al. (2011) have conducted a study of 1700 adolescents and assessed them yearly from the seventh to the ninth grade. The findings show that there is a good correlation between the level of alcohol and other drug use in the respondents and the number of the peers who used the drugs. In addition, when children of drinking parents lose parental tie, they tend to be strongly influenced by peers who could also be heavy drinkers. In addition to acting as role models, parents who consume a great deal of alcohol have been shown to exhibit reduced parental monitoring of the activities of the adolescent children and to produce stress and negative effect on their children.

As a child moves into adolescence, the primary source of influence moves away from parents and families to the peer group. There is evidence that adolescent, especially young adolescent, are particularly susceptible to peer influence, which has been linked to adolescent substance use (Killeya-Jones, & Costanzo, 2007). Schulenberg et al. (1999) studied two cohorts of middle school students from southeastern Michigan in a longitudinal study. Schulenberg et al. (1999) found that perceived exposure to peer drinking in seventh grade contributed to overindulgence of alcohol use between seventh and eighth grade in girls but not in boys.

Adolescent are susceptible to peer influence. Adolescent are oriented toward relationships, a fact which suggests that girls may be susceptible to peer pressure, affected by friends with problem behaviors and reactive to peer disapproval or approval of illegal drug use (Pearson & Mitchell, 2000). Adolescent females, according to Walters (2006), do not want to be alienated from a peer group. Ratica and Dunn (1999) stated that drug involvement by an older male sexual partner increases the likelihood a female will initiate drug use. Early maturing females are particularly at
risk; the early maturing female is more likely to associate with an older male sexual partner and the male often introduces substance use into the relationship.

Peer relationships and rural communities indicate that students (particularly females) attending rural, middle schools are particularly at risk for illegal drug use and peers are likely to play a pivotal role in the behavior. When looking at the rural population of adolescent, understanding the factors influencing substance use is important. Adolescent appear susceptible to peer pressure, friends with problem behaviors and peer disapproval or approval of alcohol, tobacco and other drug use (Walters, 2006). The susceptibility is likely due to adolescent orientation toward relationships. Gender identity has recently emerged as a potential factor in drug using behavior (Kulis et al., 2002). Several studies conducted in urban settings link the gender identity of adolescent females to substance use.

If an association between gender identity and the substance use of adolescent females was established in several contexts, prevention scientists could adapt current programs to improve substance abuse prevention programs for adolescent. The concern for substance abuse prevention for adolescent females goes beyond an increase in substance use (Walters, 2006). Adolescent respond in a particular way to substance use and substance abuse (National Center on Addiction and Substance Abuse, 2006). For alcohol, students seem to experience a strong addiction and severe withdrawal symptoms and are likely to experience a relapse. There is also evidence to suggest that once students begin drug use, there is a high risk for developing drug dependence (Dakof; Greenfield, 2002). Additionally, students are at risk for certain mental health problems that are highly correlated with substance abuse (Goodkind, & Huang, 2006).

Specifically, depression, stress, body image dissatisfaction, and a decline in self esteem are all associated with substance abuse. As adults, women experience greater health problems than men resulting from the same level of use. The health problems include cirrhosis of the liver (Goodman, 2002), cardiovascular disease (National Institute on Alcohol Abuse and Alcoholism, 2000), hypertension, cognitive impairment (Greenfield) and bone fractures due to brittle bones (NACADA, 2006).
Duncan et al. (1995) does not agree that peer influence is overestimated. Duncan et al. claimed that of all the social factors influencing adolescent substance use, peer influences prevail, suggesting that peer influences help maintain higher rates of drug use over time. Duncan et al. found that peer influence was related to higher rates of early substance use and higher increases in substance use over an 8-year period.

### 2.6 School Factors

Engagement in substance use can have negative implications for young adults. Previous research has shown that substance use at young ages is associated with decreased educational attainment and labor market productivity (Ray & Ksir, 2000). Binge drinking in particular has been linked to driving under the influence of alcohol (DUI) and accidental deaths in college-age students. As illicit drugs are illegal the use of these substances places young adults at risk of involvement in the criminal justice system. Thus, substance use can have substantial negative consequences for young adults. However, as much previous literature has focused on the substance use of lower income adolescents (Nurun, 2009), it is possible that parents, teachers, policymakers and program administrators may be less focused on the possible long-term implications of substance use on adolescents with higher SES (Houghton, 2007).

Research has shown that marijuana's negative effects on attention, memory, and learning can last for days or weeks after the acute effects of the drug wear off. Consequently, someone who smokes marijuana daily may be functioning at a reduced intellectual level most or all of the time. Not surprisingly, evidence suggests that, compared with their nonsmoking peers, students who smoke marijuana tend to get lower grades and are more likely to drop out of high school. A meta-analysis of 48 relevant studies one of the most thorough performed to date found cannabis use to be associated consistently with reduced educational attainment (grades and chances of graduating).

### 2.7 Theoretical Framework

Social cognitive theory served as one of the two theoretical frameworks for this study. Social cognitive theory supports the belief that each individual develops a personal identity (Bandura & Bussey, 2011). According to social cognitive theory, affective, cognitive, behavioral, biological,
and environmental events interact to direct human functioning (Bandura, 2000). Personal identity, specifically, is advanced by three modes of influence: modeling the behavior of parents, peers, and other significant people in various contexts; discerning possible or gender appropriate behaviors based on the result of personal actions and learning gender appropriate behaviors from others. Social cognitive theory supports the belief that each individual develops a personal identity (Bandura & Bussey, 2011). According to social cognitive theory, affective, cognitive, behavioral, biological, and environmental events interact to direct human functioning (Bandura, 2000).

According to social cognitive theory, personal gender identity develops in early childhood, beginning with an identity that is socially controlled and progressing as a child increases in age to an identity that is self-regulated (Bandura & Bussey, 2011). Stern (2005) studied teen characters to determine the type, rate of occurrence, and consequences of adolescent substance use in movies popular with this age group. Stern used social cognitive theory as the framework, stating that characters in films and other media influence viewers. Stern suggested that powerful and attractive characters are the most influential. According to social cognitive theory, one way adolescents learn about substance use is through observing others, modeling behavior, and watching how others are rewarded and goes unpunished.

According to social cognitive theory, the attributes that contribute to human behavior include: (a) symbolizing capability, (b) vicarious capability, (c) forethought capability, (d) self-regulatory capability, and (e) self-reflective capability (Bandura, 2000). The symbolizing capacity of social cognitive theory says external influences operate through a cognitive process (Bandura, 1989). The human capacity to create symbols to represent the interaction and relationship of events serves as an important mechanism to comprehend and manage the environment. Symbols or mental images serve to store information in memory for use in future behavior. The symbolizing capacity allows human beings to model the behavior of others and to predict the results of future behavior (Stone, 1999). Vicarious capability refers to the human capacity to learn from observing the behavior of others (Bandura, 2000).
2.8 Conceptual Framework

A conceptual definition is an element of the scientific research process, in which a specific concept is defined as a measurable occurrence or in measurable terms; it basically gives one the meaning of the concept. Conceptual framework is a diagrammatic presentation of the relationship between dependent and independent variables (Mugenda and Mugenda, 2003). In this study, the dependent variable was prevalence of drugs and substance abuse while the independent variables were family factors, socio-economic factors, peer relationships and school factors.
2.9 Empirical Literature

The use of alcohol and cigarettes cuts across the whole population strata but at high risk are the youths and often it begins at or even before adolescence (NACADA, 2011). The vast majority of
students in many places in the world experiment at least with alcohol and tobacco but a few will become drug abusers (Papalia, Olds & Feldman, 1999). Drug and alcohol abuse is a major problem that affects school-age youth at earlier ages than in the past. Young people frequently begin to experiment with alcohol, tobacco, and other drugs during the middle school years, with a smaller number starting during elementary school. By the time students are in high school, rates of substance use are remarkably high. Many educators recognize that drug and alcohol abuse among students are significant barriers to the achievement of educational objectives. Furthermore, federal and state agencies and local school districts frequently mandate that schools provide health education classes to students, including content on drug and alcohol abuse.

In USA (2006) 72.7 and 47.1% of American students of 12th grade reported to have used alcohol and cigarettes in their lifetime respectively (Johnston et al., 2006). Another study from United States of America (USA) revealed that excessive illicit drug use rate among high school students and young adults increase with age with a prevalence rate of 19.6% between the ages of 18-20 years as indicated in Kwamanga, et al., (2003) a quotation from the (Substance Abuse and Mental Health Services Administration (SAMHSA), (1997).

In Britain; cross-sectional studies have shown that at least 40% of high school students aged 15-16 years have had used illicit drugs - mainly cannabis sativa, at one of their lifetimes or some time in their lives. Also among those aged 16-24 years, 38% of males and 5% of females regularly drink twice per week which is the recommended save level of taking alcohol (Miller & Plant, 2006).

2.10 Gaps in Literature Review
Worldwide governments have formulated drug abuse policies and strategies for prevention and reduction of drug and substance abuse. For instance, in 1994, the Narcotic Drug and Psychotropic Substance Act was enacted in Kenya to curb drug abuse and trafficking and then United Nations designated the years 1991-2001 as the decade against drug abuse. In March 2001, NACADA was formed with the mandate to initiate public education campaign against drug abuse, develop an action plan aimed at curbing drug abuse by the youth in school and other institutions of learning, sensitize parents on drug use and abuse and this function as role models.
and initiate rehabilitation programmes for addicts (NACADA, 2011). However, despite these efforts and measures, drug abuse is still on the rise because in 2002, 27.7% and 8.3% of students interviewed from primary school to university respectively reported ‘lifetime use’ of alcohol and cigarettes (NACADA, 2011). Furthermore, the overall picture has shown a steady upward trend in drug peddling as attested by seizure statistics. A report by the United Nations’ Drug Control Programme shows that 60% of students abuse drugs. The then National Agency for the Campaign against Drug Abuse’s (NACADA) Coordinator, noted that drug and substance abuse is a worse disaster than HIV/AIDS and famine combined (Kaguthi, 2006). Moreover, several strikes that have recently been occurring in secondary schools is alarming bearing in mind that this is the same group that is supposed to eventually join institutions of higher learning.

As the government is obviously committed to providing education for every child not just for human rights but also as a necessary element for social and economic development, drug use and abuse is identified as one of the problems that hinder students from taking full advantage of educational opportunities and progressing academically especially in institutions of higher learning. Its against this backdrop that the study aimed at bridging the knowledge gap, that is lack of data on why institutions of higher learning contains many youth who abuse drugs and thus focusing on determinants of prevalence of drug and substance abuse amongst youth in Mombasa County with focus on KMTC-Port Rietz campus, Mombasa Polytechnic University and UON-Mombasa Campus.

2.11 Summary of Literature Review

Substance abuse is one of the major public health issues throughout the world that is causing serious social and economical burden to different nations. Kenya, like many other developing countries, has limited resources to cover the basic needs of its people. Abuse of the drugs among the youth not only drains the economy because controls of supply and demand reduction are expensive undertakings but also deals a blow to the country as its youth become less productive.

Breakdown in social structure of society, which includes the family and its role of inculcating morals to young ones, has contributed to drug abuse. Most families are characterized by issues of immorality, spiritual emptiness, lack of direction and purpose in life among other problems. The
relationship between childhood socioeconomic status (SES) and behavioral health in adulthood has long been of interest to researchers and policymakers.

There is growing evidence that adolescents with higher SES may also be at risk for developing substance use disorders. The biggest factor that influences teenagers to substance abuse is peer pressure. Teenagers feel extreme pressure to fit in with their peers and often if one "cool" kid begins using drugs or drinking, others will follow in order to gain status or save face. Peer relationships and rural communities indicate that students (particularly females) attending rural, middle schools are particularly at risk for illegal drug use and peers are likely to play a pivotal role in the behavior. Engagement in substance use can have negative implications for young adults. Previous research has shown that substance use at young ages is associated with decreased educational attainment and labor market productivity.

This study will employ four theories which relate with the theme of the study, that is, primary socialization theory, social cognitive theory, classical theory and social learning theory. The use of alcohol and cigarettes cuts across the whole population strata but at high risk are the youths and often it begins at or even before adolescence. Worldwide governments have formulated drug abuse policies and strategies for prevention and reduction of drug and substance abuse. Moreover, several strikes that have recently been occurring in secondary schools is alarming bearing in mind that this is the same group that is supposed to eventually join institutions of higher learning.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction
This chapter provides an overview of the research methodology. It includes research design, research location, the population to be studied, details of the sample size and sampling procedure, instruments to be used, issues of validity and reliability, data collection and data analysis procedures.

3.2 Research Design
The study employed a descriptive survey research design. According to Kothari (2007) descriptive survey research design is a type of research used to obtain data that can help determine specific characteristics of a group. A descriptive survey involves asking questions (often in the form of a questionnaire) of a large group of individuals either by mail, by telephone or in person. The main advantage of survey research is that it has the potential to provide us with a lot of information obtained from quite a large sample of individuals. By employing this study design, this study focused on obtaining quantitative data from a cross-section of project members. It was also used to collect qualitative data from key informants.

3.3 Target Population
According to Mutai (2001), target population is the entire group a researcher is interested in or the group about which the researcher wishes to draw conclusions. Mugenda and Mugenda (1999) further add that a population is any set of persons or objects that possesses at least one common characteristic. The study targeted a cumulative of 2977 student from KMTC-Port Rietz campus, Mombasa Polytechnic University and UON-Mombasa Campus (Registrars records, 2013). The study targeted youths in institutions of higher learning in Mombasa county in order to give a broad picture of the factors influencing prevalence of drug and substance abuse amongst youth in institutions of higher learning in Mombasa county, bearing in mind that coastal region has been highly reported in instances of drug abuse.
Table 3. 1: Target Population

<table>
<thead>
<tr>
<th>Campus</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>KMTC-Port Rietz campus</td>
<td>714</td>
<td>24.0</td>
</tr>
<tr>
<td>Mombasa Polytechnic University</td>
<td>1015</td>
<td>34.1</td>
</tr>
<tr>
<td>UON-Mombasa Campus</td>
<td>1248</td>
<td>41.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2977</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: Registrars records (2013).

3.4 Sample Size and Sampling Procedures

According to Nachmias (1996), researchers use a relatively small number of cases (a sample) as the basis for making inferences about all the cases (a population). Simple random sampling was used in this study. Through random sampling, 340 students from KMTC-Port Reitz Campus, Mombasa Polytechnic University and UON-Mombasa campus were selected from the total 2977 students. According to Mugenda and Mugenda (1999) from normal distribution the population proportion can be estimated to be

\[ n = \frac{Z^2 \cdot PQ}{\alpha^2} \]

Where: \( Z \) is the Z – value = 1.96

P Population proportion 0.50

Q = 1-P

\( \alpha = level \ of \ significance = 5\% \)

\[ n = \frac{1.96^2 \times 0.5 \times 0.5}{0.5^2} \]

\[ n = 384 \]

Adjusted sample size
\[ n' = \frac{384}{1 + \left(\frac{384}{2977}\right)} \]

Approx = 340 students

Consequently, a sample size of 340 respondents was used which is deemed adequate and in agreement with Orodho (2003), who recommends a sample size of 30% to 50%, where the target population is small. The study ensured the sample frame was accurate, accessible and also less expensive.

Table 3.2: Sampling Frame

<table>
<thead>
<tr>
<th>Campus</th>
<th>Frequency</th>
<th>Ratio</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>KMTC-Port Rietz campus</td>
<td>714</td>
<td>0.114</td>
<td>82</td>
</tr>
<tr>
<td>Mombasa Polytechnic University</td>
<td>1015</td>
<td>0.114</td>
<td>116</td>
</tr>
<tr>
<td>UON-Mombasa Campus</td>
<td>1248</td>
<td>0.114</td>
<td>143</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2977</strong></td>
<td></td>
<td><strong>340</strong></td>
</tr>
</tbody>
</table>

Source: Author, (2013)

3.5 Research Instruments

The instrument used in this research was a questionnaire which was used to collect primary data. The questionnaires were used to collect data from the members of the student body in KMTC-Port Rietz campus, Mombasa Polytechnic University and UON-Mombasa Campus. The questionnaire was divided into two sections; Part A sought to establish personal details of the respondent and Part B contained specific objectives of the study. The questionnaire had both open ended and closed ended questions. The structured questions in a five point likert scale were used in an effort to conserve time and money as well as to facilitate an easier analysis as they are in an immediate usable form. On the other hand, the unstructured questions present the respondent with the opportunity to provide their own answers. These types of questions are easy to formulate and allow the respondent to present their feelings on the subject matter enabling a greater depth of response (Mugenda & Mugenda, 2003).
3.5.1 Piloting the Research Instruments
The questionnaires were reviewed by the researcher’s professional peers and the research supervisor and then tested on a small pilot sample of respondents with similar characteristics as the study respondents. The pilot sample consisted of 30 students who were selected randomly. Mugenda and Mugenda (2003) suggest that the piloting sample should be 1 to 10% of study sample depending on the study sample size. The piloting was done at KMTC-Mombasa campus. Piloting helped in revealing questions that were vague and allowed for their review until they conveyed the same meaning to all the subjects (Mugenda & Mugenda, 2003).

3.5.2 Validity of the Research Instruments
Validity is the quality of a data gathering instrument that enables it to measure what it is supposed to measure. Creswell (2003) notes that validity is about whether one can draw meaningful and useful inferences from scores on the instrument. Validity is therefore about the usefulness of the data and not the instrument. To ensure content validity, the instruments were reviewed by the research supervisor, the researcher’s peers and other research experts. Content validity yields a logical judgment as to whether the instrument covers what it is supposed to cover. Content validity ensures that all respondents understand the items on the questionnaire similarly to avoid misunderstanding. Response options were provided for most of the questions to ensure that the answers given were in line with the research questions they were meant to measure.

3.5.3 Reliability of Research Instruments
Reliability is a measure of the degree to which a research instrument yields consistent results or data after repeated trial (David, 1999). Reliability answers the question “Are scores stable over time when the instrument is administered a second time?” (Creswell, 2003). To ensure reliability, the researcher will use split-half technique to calculate reliability coefficient (Spearman-Brown coefficient) which should be within the recommended reliability coefficient of 0.7-1 (Nachmias and Nachmias 1996). This involved scoring two-halves of the tests separately for each person and then calculating a correlation coefficient for the two sets of scores. The instruments were split into the odd items and the even items.
3.6 Data Collection Procedure
After consent was given by the University of Nairobi and the national institute of science and technology to collect data, the researcher coordinated data collection process. The researcher engaged a research assistant who assisted in data collection. The research assistant was taken through training to clearly understand the research instruments, purpose of the study and ethics of research. The researcher and research assistant administered the questionnaires to the respondents face to face. A youthful tutor was selected as a research assistant because he was deemed best to understand the language mostly used in campus and thus avoiding potential for communication barrier.

3.7 Data Analysis Techniques
Data was cleaned, coded, entered and analyzed using Statistical Package for Social Science (SPSS, Version 21.0). SPSS was used because it was fast and flexible and provides more accurate analysis resulting in dependable conclusions. Technically speaking, data processing implies editing, classification, coding, and tabulation of collected data so that they are amenable to analysis (Kothari, 2007). Data analysis involves computation of certain measures along with searching for patterns of relationships that exist between the dependent variables and independent variables. The data was analyzed according to variables and objectives of the study. Descriptive statistics is be used to analyze, present and interpret data. Descriptive analysis involved use of frequency distribution tables and cross tabulation which was used to generate values between dependent and independent variables used in the study. Content analysis was used for the qualitative data from the open ended questions in the questionnaire.

3.8 Ethical Considerations
While conducting the study, the researcher ensured that research ethics were observed. Participation in the study was voluntary. Privacy and confidentiality was observed. The objectives of the study were explained to the respondents with an assurance that the data provided was used for academic purpose only.

3.9 Operational Definition of Variables
The operationalization of variables as shown in table 3.1 below;
<table>
<thead>
<tr>
<th>Objectives</th>
<th>Variables</th>
<th>Indicators</th>
<th>Scale</th>
<th>Tools of analysis</th>
<th>Type of analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>To establish how family factors influence drug and substance abuse amongst youth in institutions of higher learning in Mombasa county with focus on: KMTC-Port Rietz campus, Mombasa Polytechnic University and UON-Mombasa Campus.</td>
<td>Family factors</td>
<td>- Lack of role model</td>
<td>Nominal</td>
<td>Frequency distribution tables &amp; percentages</td>
<td>Descriptive Regression</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Rejection</td>
<td>Ordinal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Isolation</td>
<td>Ordinal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Lack of monitoring</td>
<td>Nominal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Spiritual emptiness</td>
<td>Ordinal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To scrutinize how socio-economic factors influence drug and substance abuse amongst youth in institutions of higher learning in Mombasa County with focus on: focus to KMTC-Port Rietz campus, Mombasa Polytechnic University and UON-Mombasa Campus.</td>
<td>Socio-economic factors</td>
<td>- Social status</td>
<td>Ordinal</td>
<td>Frequency distribution tables &amp; percentages</td>
<td>Descriptive Regression</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Economic status</td>
<td>Nominal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Parents level of education</td>
<td>Ordinal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Family size</td>
<td>Interval</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Price of drugs</td>
<td>Interval</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To assess how peer relationships</td>
<td>Peer relationships</td>
<td>- Peer groupings</td>
<td>Nominal</td>
<td>Frequency distribution tables &amp;</td>
<td>Descriptive</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Exposure to drug by friends</td>
<td>Ordinal</td>
<td>percentages</td>
<td>Regression</td>
</tr>
</tbody>
</table>

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influences drug and substance abuse amongst youth in institutions of higher learning in Mombasa county with focus on: KMTC-Port Rietz campus, Mombasa Polytechnic University and UON-Mombasa Campus.

<table>
<thead>
<tr>
<th>School factors</th>
<th>- Low self-esteem</th>
<th>Ordinal percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>To establish how school factors influence drug and substance abuse amongst youth in institutions of higher learning in Mombasa County with focus on: KMTC-Port Rietz campus, Mombasa Polytechnic University and UON-Mombasa Campus</td>
<td>- Exposure to drug by sexual partner</td>
<td>Ordinal</td>
</tr>
<tr>
<td></td>
<td>- Performance in school</td>
<td>Nominal</td>
</tr>
<tr>
<td></td>
<td>- Labor market productivity</td>
<td>Ordinal</td>
</tr>
<tr>
<td></td>
<td>- Unconcerned school administration</td>
<td>Ordinal</td>
</tr>
<tr>
<td></td>
<td>- Potential of increasing academic attainments</td>
<td>Ordinal</td>
</tr>
<tr>
<td></td>
<td>Frequency distribution tables &amp; percentages</td>
<td>Descriptive Regression</td>
</tr>
</tbody>
</table>
CHAPTER FOUR
DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction
This chapter presents the data analysis, presentation and the interpretation of the findings of the research. The research aimed at establishing how family factors, social-economic factors, peer relationship and school factors influence drug and substance abuse amongst youth in institutions of higher learning in Mombasa county with focus on KMTC-Port Rietz campus, Mombasa Polytechnic University and UON-Mombasa Campus. The data collected was arranged into categories and interpreted on the basis of each research objective.

4.2 Response Rate
The response rate was 96% of the total respondents. This was significant enough to provide reliable and valid finding for this study. According to Mugenda and Mugenda (1999) a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent; therefore, this response rate was excellent for analysis and reporting.

4.3 Reliability Analysis
Reliability analysis was subsequently done using Cronbach’s Alpha which measured the internal consistency by establishing if certain item within a scale measured the same construct.

Gliem and Gliem (2011) established the Alpha value threshold at 0.6, thus forming the study’s benchmarked. Cronbach Alpha was established for every objective which formed a scale. The table shows that family factors had the highest reliability (α= 0.936), followed by peer relationships (α=0.887), followed by socio-economic factors (α=0.874), and school factor (α=0.801). This illustrates that all the three variables were reliable as their reliability values exceeded the prescribed threshold of 0.6.
Table 4.1: Reliability Analysis

<table>
<thead>
<tr>
<th>Scale</th>
<th>Cronbach's Alpha</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family factors</td>
<td>0.936</td>
<td>4</td>
</tr>
<tr>
<td>socio-economic factors</td>
<td>0.874</td>
<td>5</td>
</tr>
<tr>
<td>peer relationships</td>
<td>0.887</td>
<td>4</td>
</tr>
<tr>
<td>school factors</td>
<td>0.801</td>
<td>4</td>
</tr>
</tbody>
</table>

4.4 Respondent’s demographics

This section presents the respondents classification by gender, age, and respondents’ duration of study in school.

4.4.1 Respondents’ gender

With regard to the respondents’ gender, from the table 4.2 below, majority of the respondents were male as indicated by 53.6% while the rest 46.4% were female. This therefore indicates that majority of the students are male.

Table 4.2: Respondents gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>104</td>
<td>53.6</td>
</tr>
<tr>
<td>Female</td>
<td>90</td>
<td>46.4</td>
</tr>
<tr>
<td>Total</td>
<td>194</td>
<td>100</td>
</tr>
</tbody>
</table>
4.4.2 Respondents’ age

According to the table 4.3, most of the respondents (89.2%) were aged between 18 – 24 years, 8.2% were aged between 25 - 30 years, 1.0% were aged 31 - 34 and 41 – 44 years while 0.5% were aged between 35 – 40 years. It therefore depicts that majority of the students were youths and therefore have a greater propensity toward substance use.

Table 4.3: Respondents’ age

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 – 24 years</td>
<td>173</td>
<td>89.2</td>
</tr>
<tr>
<td>25 - 30 years</td>
<td>16</td>
<td>8.2</td>
</tr>
<tr>
<td>31 - 34 years</td>
<td>2</td>
<td>1.0</td>
</tr>
<tr>
<td>35 – 40 years</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>41 – 44 years</td>
<td>2</td>
<td>1.0</td>
</tr>
<tr>
<td>Total</td>
<td>194</td>
<td>100</td>
</tr>
</tbody>
</table>

4.4.3 Duration of Study in the College

With regard to the duration they had been studying in the college, 99% of the respondents indicated that they had been studying for between 0-5 years while 1.0% of the respondents indicated that they had been studying for between 10-15 years.
Table 4.4: Duration of Study in the College

<table>
<thead>
<tr>
<th>Duration</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5 years</td>
<td>192</td>
<td>99.0</td>
</tr>
<tr>
<td>10-15 years</td>
<td>2</td>
<td>1.0</td>
</tr>
<tr>
<td>Total</td>
<td>194</td>
<td>100</td>
</tr>
</tbody>
</table>

4.5 Family Factors

This section presents the findings on the influence of family factors on the prevalence of drug and substance abuse amongst youth in institutions of higher learning in Mombasa County with focus on KMTC-Port Reitz campus, Mombasa Polytechnic University and UON Mombasa campus.

4.5.1 Facet Relating to Family Characteristics

The respondents were asked to respond to the extent to which the facet relating to family characteristics influenced drug and substance abuse in colleges using the likert scale, where: very great extent = 5, great extent= 4, moderate extent = 3, low extent = 2 and not at all = 1. Table 4.8 shows the results obtained:

The respondents indicated that lack of direction and purpose in life and lack of monitoring influenced drug and substance abuse in institutions of higher learning to a very great extent as shown by a mean score of 4.9588 and 4.9072 respectively. Further, the respondents indicated that rejection, isolation and spiritual emptiness influenced drug and substance abuse in institutions of higher learning to a very great extent as shown by a mean score of 3.7320, 3.5825 and 3.7062 respectively. We can therefore deduce that drug users bear such characteristics as loneliness, rejection, isolation and constant punishment.
Table 4.5: Facet Relating to Family Characteristics

<table>
<thead>
<tr>
<th>Factors</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of direction and purpose in life</td>
<td>194</td>
<td>4.9588</td>
<td>1.62823</td>
</tr>
<tr>
<td>Rejection</td>
<td>194</td>
<td>3.7320</td>
<td>1.31563</td>
</tr>
<tr>
<td>Isolation</td>
<td>194</td>
<td>3.5825</td>
<td>1.26569</td>
</tr>
<tr>
<td>Lack of monitoring</td>
<td>194</td>
<td>4.9072</td>
<td>1.30826</td>
</tr>
<tr>
<td>Spiritual emptiness</td>
<td>194</td>
<td>3.7062</td>
<td>1.41101</td>
</tr>
</tbody>
</table>

4.5.2 Family Factors Influence on Drug and substance Abuse

The study sought to determine the extent to which family factors influenced drug and substance abuse in institutions of higher learning. 24.7% of the respondents indicated that family factor influenced drug and substance abuse in institutions of higher learning to a moderate extent, 21.6% of the respondents indicated that family factor influenced drug and substance abuse in colleges to a very great extent, 21.1% of the respondents indicated that family factor influenced drug and substance abuse in colleges to a great extent, 16.5% of the respondents indicated that family factor influenced drug and substance abuse in colleges to a little extent while 16.0% of the respondents indicated that family factor influenced drug and substance abuse in colleges to a very little extent. From these findings we can therefore deduce that breakdown in social structure of society greatly contributes to drug abuse (Nasibi, 2003).
### Table 4.6: Family Factors Influence on Drug and Substance Abuse

<table>
<thead>
<tr>
<th>Factors</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very great extent</td>
<td>42</td>
<td>21.6</td>
</tr>
<tr>
<td>Great extent</td>
<td>41</td>
<td>21.1</td>
</tr>
<tr>
<td>Moderate extent</td>
<td>48</td>
<td>24.7</td>
</tr>
<tr>
<td>Little extent</td>
<td>32</td>
<td>16.5</td>
</tr>
<tr>
<td>To a very little extent</td>
<td>31</td>
<td>16.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>194</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

#### 4.6 Socio-Economic Factors

In this section, the study sought to scrutinize how socio-economic factors influence the prevalence of drug and substance abuse amongst youth in institutions of higher learning in Mombasa County with focus on KMTC-Port Reitz campus, Mombasa Polytechnic University and UON Mombasa campus.

#### 4.6.1 Facet Relating to Socio-Economic Factors influence on Drug and substance abuse

In determining the extent to which facet relating social-economic factor influenced drug and substance abuse in the college, the respondents indicated that social and economic status influenced drug and substance abuse in the college to a very large extent as indicated by a mean score of 4.5289 and 4.5165 respectively. The respondents also indicated that cost of drugs influenced drug and substance abuse in the college to a large extent as indicated by a mean score of 3.8238. The respondents further indicated that parent's level of education and family size status influenced drug and substance abuse in the college to a moderate extent as indicated by a mean score...
score of 2.5619 and 2.5485 respectively. From these findings we can therefore deduce that low socioeconomic status contributes to drug abuse.

**Table 4.7: Facet Relating to Socio-Economic Factors**

<table>
<thead>
<tr>
<th>Category</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social status</td>
<td>194</td>
<td>4.5289</td>
<td>1.30320</td>
</tr>
<tr>
<td>Economic status</td>
<td>194</td>
<td>4.5165</td>
<td>1.34840</td>
</tr>
<tr>
<td>Parent's level of education</td>
<td>194</td>
<td>2.5619</td>
<td>1.22529</td>
</tr>
<tr>
<td>Family size</td>
<td>194</td>
<td>2.5485</td>
<td>1.25501</td>
</tr>
<tr>
<td>Cost of drugs</td>
<td>193</td>
<td>3.8238</td>
<td>1.43616</td>
</tr>
</tbody>
</table>

**4.6.2 Socio-Economic Factor Influence on Drug and Substance Abuse**

With regard to the extent to which socio-economic factors influenced drug and substance abuse in the college, 24.7% of the respondents indicated that social-economic factor influenced drug and substance abuse in colleges to a little extent, 22.7% of the respondents indicated that social-economic factor influenced drug and substance abuse in colleges to a very little extent, 20.1% of the respondents indicated that socio-economic factors influenced drug and substance abuse in colleges to a very great extent, 19.1% of the respondents indicated that socio-economic factors influenced drug and substance abuse in colleges to a moderate extent while 13.4% of the respondents indicated that socio-economic factors influenced drug and substance abuse in colleges to a great extent. We can therefore infer that both high and low childhood socioeconomic status lead to abuse.
Table 4.8: Socio-Economic Factors Influence on Drug and Substance Abuse

<table>
<thead>
<tr>
<th>Factors</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very great extent</td>
<td>39</td>
<td>20.1</td>
</tr>
<tr>
<td>Great extent</td>
<td>26</td>
<td>13.4</td>
</tr>
<tr>
<td>Moderate extent</td>
<td>37</td>
<td>19.1</td>
</tr>
<tr>
<td>Little extent</td>
<td>48</td>
<td>24.7</td>
</tr>
<tr>
<td>To a very little extent</td>
<td>44</td>
<td>22.7</td>
</tr>
<tr>
<td>Total</td>
<td>194</td>
<td>100.0</td>
</tr>
</tbody>
</table>

4.7 Peer Relationships

This section presents findings on how peer-relationships influence the prevalence of drug and substance abuse amongst youth in institutions of higher learning in Mombasa County with focus on KMTC-Port Reitz campus, Mombasa Polytechnic University and UON Mombasa campus.

4.7.1 Peer Relationships Influence Drug and Substance Abuse

In response to whether peer relation influenced drug abuse, 75.8% of the respondents indicated that peer relation influenced drug and substance abuse in colleges while 24.2% of the respondents indicated that peer relation didn’t influence drug and substance abuse in colleges. We can therefore conclude that peer pressure influences teenagers to substance abuse.
Table 4.9: Peer Relationships Influence on Drug and substance Abuse

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>147</td>
<td>75.8</td>
</tr>
<tr>
<td>No</td>
<td>47</td>
<td>24.2</td>
</tr>
<tr>
<td>Total</td>
<td>194</td>
<td>100.0</td>
</tr>
</tbody>
</table>

On the question on how peer relation influenced drug and substance abuse. The respondents indicated that it was through the desire to emulate others, desire to feel like the rest, in order not to look odd, difficult to withstand drug abuse if you relate to a drug user, lack of personal stand, addiction, and for friend satisfaction.

4.7.2 Facet Relating to Peer Relationships

The study sought to establish the extent to which facet relating peer relationship influenced drug and substance abuse in the college. The respondents indicated that peer grouping and exposure to drug by friends influenced drug and substance abuse in the college to a large extent as indicated by a mean score of 3.5928 and 3.5670 respectively. The respondents also indicated that low self esteem and exposure to drug by sexual partner influenced drug and substance abuse in the college to a moderate extent as indicated by a mean score of 2.9588 and 2.9793 respectively. We can therefore conclude that teenagers feel extreme pressure to fit in with their peers and often if one "cool" kid begins using drugs or drinking, others will follow in order to gain status or save face.
Table 4.10: Facet Relating to Peer Relationships

<table>
<thead>
<tr>
<th>Category</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer grouping</td>
<td>194</td>
<td>3.5928</td>
<td>1.40471</td>
</tr>
<tr>
<td>Exposure to drug by friends</td>
<td>194</td>
<td>3.5670</td>
<td>1.22502</td>
</tr>
<tr>
<td>Low self esteem</td>
<td>194</td>
<td>2.9588</td>
<td>1.31091</td>
</tr>
<tr>
<td>Exposure to drug by sexual partner</td>
<td>194</td>
<td>2.9793</td>
<td>1.38051</td>
</tr>
</tbody>
</table>

4.8 School Factors
The study also sought to establish how school factors influence the prevalence of drug and substance abuse amongst youth in institutions of higher learning in Mombasa County with focus on KMTC-Port Reitz campus, Mombasa Polytechnic University and UON Mombasa campus.

4.8.1 Academic Performance
The study sought to establish whether academic performance influenced drug and substance abuse among students. From the respondents, 69.6% indicated that academic performance influenced drug and substance abuse among students while 30.4% indicated that academic performance didn’t influence drug and substance abuse among students. We can therefore infer that engagement in substance use can have negative implications in academic performance.

Table 4.11: Academic Performance influence on Drug and substance abuse

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>135</td>
</tr>
<tr>
<td>No</td>
<td>59</td>
</tr>
<tr>
<td>Total</td>
<td>194</td>
</tr>
</tbody>
</table>
4.8.2 Facet Relating to School Factors
The study sought to establish the extent to which facet relating school factor influenced drug and substance abuse in the college. The respondents indicated that labor market productivity and unconcerned school administration influenced drug and substance abuse in the college to a very large extent as indicated by a mean score of 4.7216 and 4.7835 respectively. The respondents also indicated that performance in school influenced drug and substance abuse in the college to a large extent as indicated by a mean score of 3.9021. The respondents further indicated that potential to increase academic attainment influenced drug and substance abuse in the college to a moderate extent as indicated by a mean score of 2.4948. From these findings we can therefore that substance use at young ages is associated with decreased educational attainment and labor market productivity.

Table 4.12: Facet Relating to School Factors

<table>
<thead>
<tr>
<th>facet</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>performance in school</td>
<td>194</td>
<td>3.9021</td>
<td>1.34114</td>
</tr>
<tr>
<td>labor market productivity</td>
<td>194</td>
<td>4.7216</td>
<td>1.30159</td>
</tr>
<tr>
<td>unconcerned school administration</td>
<td>194</td>
<td>4.7835</td>
<td>1.33294</td>
</tr>
<tr>
<td>Potential to increase academic attainment</td>
<td>194</td>
<td>2.4948</td>
<td>1.30462</td>
</tr>
</tbody>
</table>

4.8.3 School Factors Influence on Drug Abuse
With regard to the extent to which school factor influenced drug and substance abuse in the college, 36.6% of the respondents indicated that school factor influenced drug and substance abuse in colleges to a moderate extent, 22.2% of the respondents indicated that school factor influenced drug and substance abuse in colleges to a little extent, 18.0% of the respondents indicated that school factor influenced drug and substance abuse in colleges to a great extent, 14.0% of the respondents indicated that school factor influenced drug and substance abuse in colleges to a little extent.
extent, 11.9% of the respondents indicated that school factor influenced drug and substance abuse in colleges to a very little extent while 11.3% of the respondents indicated that school factor influenced drug and substance abuse in colleges to a very great extent. We can therefore deduce that substance use can have substantial negative consequences for young adults.

Table 4.13: School Factor Influence on Drug Abuse

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very great extent</td>
<td>22</td>
</tr>
<tr>
<td>Great extent</td>
<td>35</td>
</tr>
<tr>
<td>Moderate extent</td>
<td>71</td>
</tr>
<tr>
<td>Little extent</td>
<td>43</td>
</tr>
<tr>
<td>To a very little extent</td>
<td>23</td>
</tr>
<tr>
<td>Total</td>
<td>194</td>
</tr>
</tbody>
</table>

4.9 Drug and Substance Abuse

This section focuses on the symptoms of drug and substance abuse among the students in Mombasa County.

4.9.1 Rating of drug abuse Symptoms

From the findings the respondents rated low memory, loose parental tie, and high risk of developing drug dependence and depression and stress as symptoms related to drug and substance to a large extent as indicated by a mean of 3.6598, 3.5969, 3.5567 and 3.6443 respectively. The respondents further indicated that lack of attention and body image dissatisfaction as symptoms related to drug and substance to a moderate extent as indicated by a mean of 3.0309 and 3.3918 respectively.
<table>
<thead>
<tr>
<th>Symptom</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>lack of attention</td>
<td>194</td>
<td>3.0309</td>
<td>1.36919</td>
</tr>
<tr>
<td>low memory</td>
<td>194</td>
<td>3.6598</td>
<td>1.24685</td>
</tr>
<tr>
<td>loose parental tie</td>
<td>194</td>
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<td>1.21399</td>
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<td>High risk of developing drug dependence</td>
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<td>1.24234</td>
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<td>Depression and stress</td>
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</tr>
<tr>
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<td>194</td>
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<td>1.36997</td>
</tr>
</tbody>
</table>
CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction
This chapter offers summary, the discussion of key data findings, conclusions and recommendations of the research on the determinants of prevalence of drug and substance abuse amongst youth in Institutions of higher learning in Mombasa County.

5.2 Summary of the Findings
The study found out that lack of direction and purpose in life, lack of monitoring, rejection, isolation and spiritual emptiness influenced drug and substance abuse amongst youth in institutions of higher learning in Mombasa County.

The study established that socioeconomic status, cost of drugs, parent's level of education and family size status influenced drug and substance abuse amongst youth in institutions of higher learning in Mombasa County.

The study revealed that peer grouping, exposure to drug by friends, low self esteem and exposure to drug by sexual partner influenced drug and substance abuse amongst youth in institutions of higher learning in Mombasa County.

The study also found out that labor market productivity, unconcerned school administration, performance in school and potential to increase academic attainment influenced drug and substance abuse amongst youth in institutions of higher learning in Mombasa County.

5.3 Discussions of key findings

5.3.1 Family Factors
The study found out that lack of direction and purpose in life, lack of monitoring, rejection, isolation and spiritual emptiness influenced drug and substance abuse in institutions of higher learning in Mombasa County. According to Nasibi (2003), breakdown in social structure of society, which includes the family and its role of inculcating morals to young ones, has contributed to drug abuse. Coombs et al. (2002) conducted a comparative study on 225
adolescents’ drug users and an equal number of abstainers. Their study reveals that the drug free children not only feel closer to their parents but consider it important to get along with them. The drug users bear such characteristics as loneliness, rejection, isolation and constant punishment. Furthermore, Needle et al. (1990) have shown that youths from disrupted families tend to get involved in substance abuse. On the other hand, Coombs (1990) has observed that abstainer parents have firmer standards regarding curfew, television, schoolwork, use of alcohol and other drugs.

5.3.2 Socio-economic Factors
The study established that social, economic status, cost of drugs, parent's level of education and family size status influenced drug and substance abuse in institutions of higher learning in Mombasa County. The relationship between childhood socioeconomic status (SES) and behavioral health in adulthood has long been of interest to researchers and policymakers. Goodman and Huang (2002) found that lower household income and parental education were associated with greater adolescent depression. Friestad and colleagues (2003) found that low parental education and moderate household income was associated with greater rates of smoking in adolescents. Reinherz and colleagues (2000) examining 360 respondents followed from 1977-2000, found that low family SES and larger family size were associated with increased probability of substance abuse disorders in early adulthood. An analysis by Hamilton and colleagues (2009) found that adolescents (ages 12-19) with college-educated parents were less likely to engage in hazardous or harmful drinking or illicit drug use.

5.3.3 Peer Relationships
The study revealed that peer grouping, exposure to drug by friends, low self esteem and exposure to drug by sexual partner influenced drug and substance abuse in institutions of higher learning in Mombasa County. Henry & Kobus, (2007) argue that the biggest factor that influences teenagers to substance abuse is peer pressure. Teenagers have an urge to belong, to be loved and liked by those close to them. This can lead to one doing things he/she could not have done to gain group approvals and identity with it. This is more serious when one has low self esteem, sense of lack of security and dependency. The insecure youth finds comfort and approval by
conforming to the standards of a peer group. Wills et al. (2011) have conducted a study of 1700 adolescents and assessed them yearly from the seventh to the ninth grade. The findings show that there is a good correlation between the level of alcohol and other drug use in the respondents and the number of the peers who used the drugs.

5.3.4 School Factors
The study also found out that labour market productivity, unconcerned school administration, performance in school and potential to increase academic attainment influenced drug and substance abuse in institutions of higher learning in Mombasa County. Research has shown that substance use at young ages is associated with decreased educational attainment and labor market productivity (Ray & Ksir, 2000). Binge drinking in particular has been linked to driving under the influence of alcohol (DUI) and accidental deaths in college-age students. As illicit drugs are illegal the use of these substances places young adults at risk of involvement in the criminal justice system. Thus, substance use can have substantial negative consequences for young adults. Houghton (2007) on the other hand argues that parents, teachers, policymakers and program administrators may be less focused on the possible long-term implications of substance use on adolescents with higher SES.

5.4 Conclusions
The study concluded that family factors were a major determinant on the prevalence of drug and substance abuse amongst youth in institutions of higher learning in Mombasa County. This means that an unstable home life is a contributing factor to teenagers going down the path of substance abuse. This is because parents can be a strong influence in keeping children away from drugs, by being positive role models and showing their children the negative aspects of substance abuse. The study also concluded that socio-economic factors influenced drug and substance abuse in colleges. College students with lower levels of spending money have lower levels of drinking and getting drunk. The socio-cultural factors of valuing autonomy and refraining from discussing personal issues outside the family likely play a role.

The study further concludes that peer relationships influenced drug and substance abuse in institutions of higher learning because youth are susceptible to peer influence. Peer relationships
and rural communities indicate that students (particularly females) attending rural, middle schools are particularly at risk for illegal drug use and peers are likely to play a pivotal role in the behavior. When looking at the rural population of youth, understanding the factors influencing substance use is important. Moreover, drug abuse is associated with reduced educational attainment.

5.5 Recommendations

Based on the findings and conclusions, the following recommendations are made from the study: The study recommends that parents need to ensure that children form appropriate bonds and learn age appropriate behaviors. This is because it will lead to acceptance and reinforcement which form the basis for learning age appropriate behaviors as the child develops. The study also recommends that parents need to have a strong influence in keeping children away from drugs, by being positive role models and showing their children the negative aspects of substance abuse. Moreover, the study also recommends that since strong family cohesion is associated with negative attitudes toward substance use, Positive relationships at home should be established to promote peer relationships that do not support substance use. Females are reported to receive more parental monitoring and be more concerned about maintaining a positive relationship with parents.

In conclusion, projects should be set up to ensure that determinants of the prevalence of drug and substance abuse amongst youth in Mombasa County are addressed and consequently eradicated.

5.5 Suggestion for Further Studies

The study recommends that to add weight to this study, another study should be done to investigate on the determinants of prevalence of drug and substance abuse in other institutions of higher learning that exist in Mombasa county so as to allow for generalization. Furthermore, studies should be done on the challenges facing the fight against drug and substance abuse in other counties in Coast region.
REFERENCES


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APPENDICES

Appendix 1: Letter of Transmittal

UNIVERSITY OF NAIROBI
COLLEGE OF EDUCATION AND EXTERNAL STUDIES
SCHOOL OF CONTINUING AND DISTANCE EDUCATION
DEPARTMENT OF EXTRA-MURAL STUDIES

Your Ref:

Our Ref: UON/CEES/MECN/1

Telephone: Mombasa 020/2026100

Off Moi Avenue
Uni Plaza Building
Mombasa Campus
P.O. Box 83732-80100
MOMBASA, KENYA

22ND JULY, 2013.

TO WHOM IT MAY CONCERN

RE: DATA COLLECTION

This is to introduce LIDA MBUYA NYAOKE, student Registration Number L50/74044/2012 is pursuing a MASTERS OF ARTS COURSE IN PROJECT PLANNING AND MANAGEMENT at the School of Continuing and Distance Education of the University of Nairobi.

As part of her course, she is required to prepare a research project. She is therefore collecting data which is related to her research topic: DETERMINANTS OF THE PREVALENCE OF DRUG AND SUBSTANCE ABUSE AMONGST INSTITUTIONS OF HIGHER LEARNING IN MOMBASA COUNTY. FOCUS ON:
1. KMTC-PORT REITZ CAMPUS
2. MOMBASA POLYTECHNIC UNIVERSITY
3. UON-MOMBASA CAMPUS

The information she is gathering is purely for academic purposes and will be treated with utmost confidentiality.

Any assistance extended to her will be highly appreciated.

Regards,

JOHNBOCO M. KISIMBII
RESIDENT LECTURER – EXTRA MURAL CENTRE
MOMBASA CAMPUS

[Signature]
REPUBLIC OF KENYA
MINISTRY OF EDUCATION, SCIENCE
AND TECHNOLOGY

COUNTY DIRECTOR OF EDUCATION,
MOMBASA COUNTY,
P. O. BOX 90204 – 80100,
MOMBASA.

12th August, 2013

Vice-Chancellor,
Technical University of Mombasa,
MOMBASA.

Director,
University of Nairobi,
MOMBASA CAMPUS.

Director,
Kenya Medical Training College,
Port Reitz Campus,
MOMBASA.

RESEARCH AUTHORIZATION
LIDA MBUYA NYAOKE – L50/74044/2012

The above named is pursuing a Master of Arts Course in Project Planning and Management at the School of Continuing and Distance Education of the University of Nairobi.

She has been granted authority to collect data for her Research topic: DETERMINANTS OF THE PREVALENCE OF DRUG AND SUBSTANCE ABUSE AMONGST INSTITUTIONS OF HIGHER LEARNING in Mombasa County.

The purpose of this letter is to request you to allow her carry out the intended study in your institution(s).

It is expected that she will comply with all the professional ethics related to research undertaking and she will co-operate fully with your bylaws.

Thank you for your continued support.

Newton E. Okwatsa
For: COUNTY DIRECTOR OF EDUCATION
MOMBASA COUNTY

cc.

Resident Lecturer
EXTRA MURAL CENTRE
MOMBASA CAMPUS
**Appendix 3: Research Questionnaire**

**DETERMINANTS OF PREVALENCE OF DRUG AND SUBSTANCE ABUSE AMONGST YOUTH IN INSTITUTIONS OF HIGHER LEARNING IN MOMBASA COUNTY.**

Kindly fill in the following questionnaire. Information obtained will be used for academic purposes only and will therefore be handled with the highest level of confidentiality. Your corporation will be highly appreciated.

**SECTION A: General Information**

Kindly answer all the questions to the best of your ability. Indicate with a tick or filling in the space(s) provided.

**PART A: GENERAL INFORMATION**

1. Indicate the campus your studying at

2. What is your gender?

   Male [ ] Female [ ]

3. Your age bracket (Tick whichever appropriate)

   18 – 24 Years [ ] 25 - 30 Years [ ]
   31 - 34 years [ ] 35 – 40 years [ ]
   41 – 44 years [ ] 45 – 50 years [ ]
   Over 51 years [ ]

4. How long have you been studying in this college?

   0-5 yrs [ ] 5-10 yrs [ ]
   10-15 [ ] Over 15 yrs [ ]

5. Which course are you perusing (include whether diploma, degree etc)?

   ........................................................................................................................................
Section B: Determinants of Prevalence of Drug and Substance Abuse Among College Students

PART A: Family Factors

1. To what extent does the following facet relating family characteristic influence drug and substance abuse in your college? Use a scale of 1 to 5 where 1= no extent, 2= little extent, 3= moderate extent, 4= great extent and 5 is to a very great extent

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of direction and purpose in life</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rejection</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Isolation</td>
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<td></td>
</tr>
<tr>
<td>Lack of monitoring</td>
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<td></td>
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<tr>
<td>Spiritual emptiness</td>
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</tr>
</tbody>
</table>

2. To what extent does family factor influence drug and substance abuse in your college?
   - To a very great extent [ ]
   - To a great extent [ ]
   - To a moderate extent [ ]
   - To a little extent [ ]
   - To a very little extent [ ]

PART B: Socio-Economic Factors

1. To what extent does the following facet relating social-economic factor influence drug and substance abuse in your college? Use a scale of 1 to 5 where 1= no extent, 2= little extent, 3= moderate extent, 4= great extent and 5 is to a very great extent

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social status</td>
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<td></td>
</tr>
<tr>
<td>Economic status</td>
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<tr>
<td>Parent’s level of education</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Family size</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of drugs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. In general, to what extent does social-economic factor influence drug and substance abuse in your college?
   - To a very great extent [ ]
   - To a great extent   [ ]
   - To a moderate extent [ ]
   - To a little extent   [ ]
   - To a very little extent [ ]

**PART C: Peer Relationships**

1. In your own opinion does peer relation influence drug and substance abuse?
   - Yes [ ]
   - No [ ]
   If, yes explain……………………………………………………………………………………

2. To what extent does the following facet relating peer relationship influence drug and substance abuse in your college? Use a scale of 1 to 5 where 1= no extent, 2= little extent, 3= moderate extent, 4= great extent and 5 is to a very great extent

<table>
<thead>
<tr>
<th>Facet</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer groupings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exposure to drug by friends</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low self-esteem</td>
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<td></td>
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<tr>
<td>Exposure to drugs by sexual partner</td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

3. To what extent does peer relationship influence drug and substance abuse in your college?
   - To a very great extent [ ]
   - To a great extent   [ ]
   - To a moderate extent [ ]
   - To a little extent   [ ]
   - To a very little extent [ ]
PART D: School Factors

1. Does education performance influence drug and substance abuse among students?
   Yes [ ] No [ ]

2. To what extent does the following facet relating school factor influence drug and substance abuse in your college? Use a scale of 1 to 5 where 1= no extent, 2= little extent, 3= moderate extent, 4= great extent and 5 is to a very great extent

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance in school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Labor market productivity</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Unconcerned school administration</td>
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<td></td>
</tr>
<tr>
<td>Potential to increase academic attainment</td>
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<td></td>
</tr>
</tbody>
</table>

3. To what extent does school factor influence drug and substance abuse in your college?

   To a very great extent [ ]
   To a great extent [ ]
   To a moderate extent [ ]
   To a little extent [ ]
   To a very little extent [ ]

PART E: Drug and Substance Abuse

1. How would you rate the following symptoms in regards to drug and substance abuse among users? Use a scale of 1 to 5 where 1 = no extent, 2 = little extent, 3 = moderate extent, 4 = great extent and 5 is to a very great extent.

<table>
<thead>
<tr>
<th>Symptom</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of attention</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low memory</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loose parental tie</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>High risk of developing drug dependence</td>
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<td>Depression and stress</td>
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<tr>
<td>Body image dissatisfaction</td>
<td></td>
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</table>

THANK YOU!!

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