PREVENTATIVE STRATEGIES INFLUENCING DRUG ABUSE REDUCTION AMONG UNDERGRADUATE STUDENTS IN PUBLIC UNIVERSITY CAMPUSES IN NAIROBI COUNTY, KENYA

BY:

JOYCE G. PERE

A DISSERTATION SUBMITTED TO THE FACULTY OF EDUCATION IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF DOCTOR OF PHILOSOPHY DEGREE IN EDUCATIONAL RESEARCH AND EVALUATION

THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

NAIROBI, KENYA

JULY, 2018
DECLARATION

I hereby declare that, this dissertation is my original work and that it has never been presented to any other university or institution for academic credit. All information used in this dissertation from other sources has been acknowledged.

Signature... Date 23rd July 2018

Joyce G. Pere
Reg. No. 1021507

This dissertation has been submitted for examination with our approval as the University Supervisors.

Signature... Date 25th July 2018

Dr. Ann Rita Njageh
Senior Research Fellow
Centre for Social Justice and Ethics
The Catholic University of Eastern Africa

Signature... Date 25/07/2018

Dr. Jared Anyona
Lecturer
Department of Research and Evaluation
The Catholic University of Eastern Africa
ABSTRACT

The study sought to examine the preventative strategies influencing drug abuse reduction among the undergraduate students enrolled in public university campuses in Nairobi County. The reviewed literature indicated that there were some researches done on drug abuse among students in universities but little was done on the influence of preventative strategies on drug abuse reduction among undergraduate students in public universities campuses in Nairobi County. The study used Triangulation mixed methods design that adopted convergent parallel mixed method model. Cross-sectional survey research design was used for quantitative data while phenomenological design for qualitative data. Stratified random sampling and purposive sampling was used to select the sample. The sample consisted of one thousand, five hundred and twenty four (1524) participants who included 1500 students, 20 peer counsellors, two university counsellors and two deans of students. Questionnaires, interview and Focus Group Discussions (FGD) guides were used to collect data. Content and construct validity was obtained by ensuring items in the questionnaires were constructed based on the research topic and questions. Validity of qualitative instruments was obtained through member’s check and triangulation methods. Cronbach’s coefficient alpha (CCA) formula was used to obtain reliability. Statistical Package for Social Science (SPSS) version 21 was used to analyse quantitative data while NVIVO was used to analyse qualitative data. Descriptive statistics were used in analysis of quantitative data while thematic and content analysis techniques were used to analyse qualitative data. The findings of the study revealed that the preventative strategies in public university campuses greatly influenced drug abuse reduction among students; various factors hinder the implementation of drug abuse policies; guidance and counselling had helped to reduce drug abuse among students. The conclusion was that most of university campuses have put in place preventative strategies to reduce drug abuse among student; preventative strategies have reduced drug abuse to some extent in different university campuses; some factors have hindered effective reduction of drug abuse among students in university campuses. The study recommended that the policy makers in collaboration with the ministry of education should formulate policies that guide on suitable environment in which university campuses should be situated. Further studies should be carried out to establish the role of the university support staff in the fight against drug abuse among students.
DEDICATION

The study is dedicated to my family, particularly to my understanding husband, David Gitau who has always supported my academic progress, to my children, Mary, Paul, Mark and Joseph who have kept on encouraging and praying for me. The study is also dedicated to my mother who has dedicated her old age to intercede for me as I went through this programme. God bless you all.
ACKNOWLEDGEMENT

I want to thank the Almighty God for His sufficient grace, unconditional love and protection which enabled me to carry out this study to its completion. Indeed God you are Ebenezer over my life. My sincere appreciation goes to my two supervisors, Dr. Ann Rita Njageh, and Dr. Jared Anyona for their guidance, encouragement, support and patience. Without your mentorship, professionalism and intellectual counsel I would not have successfully completed this study.

Special thanks go to the directors of academics, deans of students and university counsellors in the selected university campuses, who not only authorized this study in their respective jurisdictions but also provided valuable responses required in this study. I am equally grateful to the various lecturers who gladly organized their lecture time to give room for students to fill in the questionnaires. I am indebted to the students of the selected campuses who voluntarily shared their knowledge that enriched this study.

Field work for this study involved extensive interviewing and administration of questionnaires. My special appreciation goes to my two research assistants- Morgan Odhiambo and Mohammed Ali for working tirelessly with me during the piloting of this study and during the data collection phase.

My sincere thanks go to Timothy Wambua and his proficient team of data entry clerks, whose diligence and professionalism enabled me to complete and classify data within my schedule. In addition I am thankful to Joel Kinyua for his input in editing and proof-reading this work.

My heartfelt appreciation goes to my dear husband, David, who provided me with emotional, moral and financial support throughout the entire period of my research. To my beloved children- Mary, Paul, Mark and Joseph, thank you for withstanding my absence while I was
away carrying out this study. You all provided me with love, encouragement and peaceful environment that made the writing of this dissertation possible.

Finally special thanks go to my friends, Felistas, Celine and Eleen particularly for the motivation and technical support you gave me. Without your encouragement I would have given up. And to all who contributed towards the completion of this work in different ways and whose names I have not mentioned here, I say thank and may God Almighty bless you all.
TABLE OF CONTENTS

DECLARATION ................................................................................................................ii

ABSTRACT ...................................................................................................................iii

DEDICATION ................................................................................................................iv

ACKNOWLEDGEMENT .............................................................................................v

TABLE OF CONTENTS ............................................................................................vii

LIST OF TABLES .......................................................................................................xiii

LIST OF FIGURES .....................................................................................................xiv

LIST OF ACRONYMS AND ABBREVIATIONS .........................................................xv

CHAPTER ONE .........................................................................................................1

INTRODUCTION .......................................................................................................1

1.1 Background of the Study ..................................................................................1

1.2 Statement of the Problem .................................................................................14

1.3 Research Questions ..........................................................................................15

1.4 Hypotheses .........................................................................................................16

1.5 Significance of the Study ..................................................................................17

1.6 Scope and Delimitation of the Study .................................................................18

1.7 Theoretical Framework .....................................................................................20

1.7.1 The Social Learning Theory ........................................................................20
1.7.2 Strengths of Social Learning Theory ................................................................. 24

1.7.3 Weaknesses of Social Learning Theory .......................................................... 25

1.7.4 Application of the Theory ................................................................................. 26

1.8 Conceptual Framework ....................................................................................... 27

1.9 Operational Definition of Key Terms ................................................................. 30

CHAPTER TWO ......................................................................................................... 33

REVIEW OF RELATED LITERATURE ........................................................................ 33

2.1 Introduction .......................................................................................................... 33

2.2 Review of Related Theories ................................................................................ 33

2.2.1 Freudian Theory in Drug Abuse ..................................................................... 34

2.2.2 The Cognitive Affective Pharmacogenic (CAP) Control Theory of Drug Abuse ... 37

2.2.3 An Availability-Proneness Theory of Drug Abuse ......................................... 39

2.2.4 Self-Efficacy Theory (Bandura, 1986) ........................................................... 41

2.2.5 Ecological Systems Theory (Bronfenbrenner, 1944) ..................................... 43

2.3 Current State of Drug Abuse among Undergraduate Students ......................... 47

2.4 Influence of Drug Abuse Awareness on Drug Abuse Reduction ....................... 63

2.5 Factors Hindering Effective Implementation of Drug Abuse Policies ............... 88

2.6 Influence of Guidance and Counselling Services on Drug Abuse Reduction ...... 102

2.7 Influence of Positive Personal Image on Drug Abuse Reduction ..................... 110
### 2.8 Challenges Hindering Effective Reduction of Drug Abuse .............................. 114

### 2.9 Critique of the Reviewed Related Literature and Identification of the Gap ....... 129

#### CHAPTER THREE ................................................................................................................. 132

#### RESEARCH DESIGN AND METHODOLOGY ............................................................... 132

3.1 Introduction ....................................................................................................................... 132

3.2 Research Design .............................................................................................................. 132

3.3 Target Population .......................................................................................................... 134

3.4 Description of the Sample and Sampling Procedures .................................................. 135

3.4.1 Sample and Sampling Procedures of University Campuses ................................. 136

3.4.2 Sample and Sampling Procedures of the Students .................................................... 137

3.4.3 Sample and Sampling Procedures of Peer Counsellors .......................................... 138

3.4.4 Sample and Sampling Procedures of Deans of Students ....................................... 139

3.4.5 Sample and Sampling Procedures of University Counsellors ............................... 139

3.5 Description of Data Collection Instruments ................................................................. 140

3.5.1 Questionnaire for Students (Appendix C) ................................................................. 141

3.5.2 Focus Group Discussions Guide for Peer Counsellors-FGD (Appendix D) ........ 141

3.6 Reliability and Validity of Research Instruments (Appendix G) ......................... 143

3.6.1 Validity of Research Instruments .............................................................................. 144

3.6.2 Pilot Testing of the Instruments ................................................................................ 146
3.6.3 Reliability of Research Instruments .............................................................. 147

3.7 Description of Data Collection Procedures ...................................................... 149

3.8 Description of Data Analysis Procedures ....................................................... 151

3.8.1 Description of Quantitative Data analysis ................................................... 151

3.8.2 Qualitative Data Analysis ............................................................................. 152

3.9 Ethical Considerations ....................................................................................... 153

CHAPTER FOUR .................................................................................................... 155

DATA PRESENTATION AND DISCUSSION OF RESEARCH FINDINGS .......... 155

4.1 Introduction ......................................................................................................... 155

4.2 Return Rate of Research Instruments .............................................................. 156

4.3 Demographic Information of Participants ....................................................... 157

4.3.1 Demographic Information of Students ......................................................... 158

4.3.2 Demographic Information of Peer Counsellors ............................................ 159

4.3.3 Demographic Information of University Counsellors ................................ 162

4.3.4 Demographic Information of Deans of Students ....................................... 162

4.4 Current State of Drug Abuse among the Undergraduate Students ............... 163

4.4.1 Commonly Abused Drugs in Public University Campuses ....................... 163

4.4.2 Introducing Students to Drug Abuse ............................................................ 165

4.4.3 Students’ Source of Drugs ........................................................................... 167
4.4.4 Places Where Students Abuse Drugs ................................................................. 171

4.4.5 The Time Students Abuse Drugs ................................................................. 173

4.5 Influence of Drug Abuse Awareness on Drug Abuse Reduction .................. 175

4.6 Factors Hindering Effective Implementation of Drug Abuse Policies .......... 179

4.7 Influence of Guidance and Counselling on Drug Abuse Reduction ............ 184

4.8 Influence of Building Positive Personal Image on Drug Abuse Reduction ..... 189

4.9 Challenges Hindering Effective Drug Abuse Reduction ............................. 193

4.10 Test of Hypotheses ....................................................................................... 196

CHAPTER FIVE ....................................................................................................... 204

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS ........................................ 204

5.1 Introduction ..................................................................................................... 204

5.2 Summary of the Study .................................................................................... 204

5.3 Current State of Drug Abuse among Undergraduate Students .................... 208

5.4 Influence of Drug Abuse Awareness on Drug Abuse Reduction ............... 208

5.5 Factors Hindering Effective Implementation of Drug Abuse policies .......... 209

5.6 Influence of Guidance and Counselling Services on Drug Abuse Reduction .... 210

5.7 Influence of Building Positive Personal Image on Reduction of Drug Abuse .... 210

5.8 Challenges Hindering Effective Reduction of Drug Abuse ...................... 211

5.9 Conclusions .................................................................................................... 211

xi
5.10 Recommendations ........................................................................................................ 213
5.11 Recommendations for Further Studies ......................................................................... 215

REFERENCES ...................................................................................................................... 216

APPENDICES ...................................................................................................................... 243

Appendix A: Letter of Introduction ..................................................................................... 243
Appendix B: Informed Consent Form .................................................................................. 244
Appendix C: Questionnaire for Students ............................................................................. 245
Appendix D: FGD Guide for Peer Counsellors .................................................................... 253
Appendix E: In-Depth Interview Guide for Dean of Students .............................................. 256
Appendix F: In-depth Interview Guide for University Counsellors ...................................... 260
Appendix G: Reliability Tests, Cronbach's Alpha ................................................................. 264
Appendix H: Map of Nairobi County .................................................................................... 269
Appendix I: Introduction Letter from the University ............................................................... 270
Appendix J: Research Authorization Letter .......................................................................... 271
Appendix K: Research Permit ............................................................................................... 272
LIST OF TABLES

Table 1: The Target Population, Sample Size and the Sampling Techniques ........................................140

Table 2: Return Rate of Research Instruments by Participants ..........................................................157

Table 3: Demographic Information of Students ..................................................................................158

Table 4: Demographic Information of the Peer Counsellors ...............................................................160

Table 5: Commonly Abused Drugs in Public University Campuses .....................................................164

Table 6: Distribution of the Source of Drugs to Students ...................................................................168

Table 7: Places students abuse drugs ..................................................................................................171

Table 8: Time of Abusing drugs by Students ......................................................................................174

Table 9: Influence of Drug Abuse Awareness on Drug Abuse Reduction ............................................176

Table 10: Factors Hindering Effective Implementation of Drug Abuse Policy .....................................180

Table 11: Influence of Guidance and counselling on drug abuse reduction .........................................185

Table 12: Influence of Personal Image on Drug Abuse Reduction among Students ...............................190

Table 13: Challenges Hindering Effective Reduction of Drug Use ......................................................194
LIST OF FIGURES

Figure 1: Conceptual Framework on Interactions of Preventative Strategies..........................28

Figure 2: Introducing Drug Abuse to Student ........................................................................166
# LIST OF ACRONYMS AND ABBREVIATIONS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACAN</td>
<td>Action Committee Against Narcotics</td>
</tr>
<tr>
<td>AIDS</td>
<td>Acquired Immune Deficiency Syndrome</td>
</tr>
<tr>
<td>AOD</td>
<td>Alcohol and Other Drugs</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
</tr>
<tr>
<td>INCB</td>
<td>International Narcotics Control Board</td>
</tr>
<tr>
<td>LSD</td>
<td>Lysergic Acid Diethylamide</td>
</tr>
<tr>
<td>MTF</td>
<td>Monitoring The Future</td>
</tr>
<tr>
<td>NACADA</td>
<td>National Agency for Campaign Against Drug Abuse</td>
</tr>
<tr>
<td>NDLEA</td>
<td>National Drug Law Enforcement Agency</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organisation</td>
</tr>
<tr>
<td>NIDA</td>
<td>National Institute on Drug Abuse</td>
</tr>
<tr>
<td>NSDUH</td>
<td>National Survey on Drug Use and Health</td>
</tr>
<tr>
<td>OSAP</td>
<td>Office for Substance Abuse Prevention</td>
</tr>
<tr>
<td>STD</td>
<td>Sexually Transmitted Diseases</td>
</tr>
<tr>
<td>St.</td>
<td>Saint</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>UNDCP</td>
<td>United Nations Drugs Campaign Programme</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organisation</td>
</tr>
<tr>
<td>ABBR</td>
<td>FULL NAME</td>
</tr>
<tr>
<td>------</td>
<td>-----------</td>
</tr>
<tr>
<td>UNODC</td>
<td>United Nations Office on Drugs and Crime</td>
</tr>
<tr>
<td>USA</td>
<td>United States of America</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organisation</td>
</tr>
</tbody>
</table>
CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Drug abuse has been on the increase and of global concern particularly in developing countries where there are few interventions towards its prevention (United Nations Drug Campaign Programme - UNDCP, 2010). The World Health Organisation (WHO, 2011) estimated that between 149-272 million people accounting for 3.3% to 6% of the world total population aged 15-64 years abuse drugs annually. According to this report a significant percentage (45%) of this population comprise of students in colleges and universities. The same report indicated that 2.5 million people die each year from alcohol related complications and that university students accounted for 30% of this population. The rate of drug abuse is considerably high in universities as indicated by various researchers worldwide (Atwoli, Mungla, & Ndungu, 2011; UNDCP, 2010). A study by UNDCP (2010) revealed that the most widely abused drugs among students are alcohol, tobacco, marijuana, opium and its derivatives, cocaine and heroin. Riley-Cook (2012) and UNDCP (2010) revealed that alcohol abuse leads with 95% of the participants having reported to have abused alcohol at least twice in a year, followed by tobacco with 65% and cannabis derivatives accounting for 45%.

According to Masudi (2016) majority of drug abusers start to abusing drugs at their youthful age between 15 to 30 years of age and a significant proportion of the abusers start abusing at old age. Although male users form the majority the females are not left out. Masudi (2011) also revealed that tobacco and cannabis are the major drugs that most abusers started with, however, heroin was found to be the most favourable drug to most abusers. He further
revealed that, Peer pressure and curiosity greatly influences drug abuse among the youth. In addition to this, availability of drugs and cost plays a major role during inception.

According to Beckerleg, Telfer and Sadiq (2016) 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 United States of America (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 had to dissociate with the vice that is strongly linked with violence and currently the human immunodeficiency virus (HIV) and acquired immune deficiency Syndrome (AIDS) scourge (Kaguthi, 2006).

Further, most of the student in colleges and technical institution in Kenya are said to engage in drug 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 among campus students. USA was found to have citizens who were four times more likely to report using cocaine in their lifetime than the next closest country, New Zealand (16% vs. 4%), Marijuana abuse was more widely reported worldwide, and the USA also had the highest rate of abuse at 42.4% compared with 41.9% of New Zealanders (Warner & Sullivan, 2017).The problem of alcohol and illicit drug abuse on college and university campuses is significant. Among college and university students, specific problems identified include binge-drinking, underage drinking, underage binge-drinking, and drug use. Estimates of prevalence of these behaviours range from 25 to 44%. American researchers have identified an upward trend for these problems, with increased percentages of students self-reporting these behaviours between 1993 and 2001 (Wilson & Kolander, 2010). Abuse of drugs is considered as one of the most critical problems in public health in the American colleges (Vicary & Karshin, 2013).
Pakistan had an approximately 25 to 44% of students reporting alcohol or illicit drug abuse, and prevalence rates on the incline, this problem is a significant concern for Pakistani colleges and universities (Wyatt 2010). Binge drinking, alcohol abuse, and illicit drug abuse is associated with a number of consequences on students. Webster, Lewis and Brown (2013) indicate that binge drinking is associated with significant consequences to students, including employment, educational, and relationship problems. In addition, Wechsler (2009) indicate that, in comparing underage with legal age students, underage students who drink are more likely to experience consequences related to their alcohol use. Researchers in Pakistan have identified an increasing prevalence of drinking and drug abuse among college students, an increasing trend of self-reported alcohol-related consequences, including arrests, has also been noted between 1993 and 2001 (Singh, 2008; Webster et al., 2013). In accordance with present research related to alcohol and drug abuse among college and university students, the currently proposed research seeks to examine the extent at which the preventative strategies have influenced drug abuse reduction among the undergraduate students in public universities campuses.

In Africa, the problem of drug abuse among students has been a constant presence for years. In Nigeria for instance, abuse of drugs such as alcohol, tobacco, bhang and Khat have been on the increase among college and university students with varying prevalence rates found for both overall and specific drug of abuse (Oshodi, Aina & Anajole, 2010; Abasiubong, Alphonsus, & Uwemendimbuk, 2012). A study carried out at the Ilorin University of Nigeria showed that, the lifetime prevalence rate of drug abuse among university students was found to vary between 5.0% for tobacco, 47% for alcohol, 3.5% for bhang while cocaine and heroin varied at 1.5% (Oshikoya & Alli, 2006). In Sokoto, a cross-sectional study by Sue (2014) among the undergraduate students in Usmanu Danfodiyo University revealed an increase in prevalence
rates of drug abuse from 10.9% to 17.8%. On the other hand, Cromer (2009) reported prevalence rates of between 19.5% to 50.7% in Rivers State College of Science and Technology in the Niger Delta region of Nigeria.

A study carried out by National Institute on Drug Abuse- NIDA (2010) revealed that the East African region has become the central point for drug dealers due to the increased control of traditional routes through Netherlands and Spain. This has led to increase in drug abuse among students in the region. For example in Uganda a study done by Wood, Nagoshi, and Dennis (2013) among Ugandan undergraduate students revealed that 17% of students were currently abusing cannabis, 5.5% abused inhalants, 2.0% opiates, 1.2% cocaine and 2.5% abused hypo-sedatives. In Tanzania a study by Simbee (2012) revealed that in Dar es Saalam, the prevalence of current drug abuse among students was 5.1% and that the abuse was higher by 6.2% among male students compared to female students (3.9%). The same study revealed that 39.7% of students abused drugs daily, 10.8% once in a month and 8.6% abused drugs more than three times in a year.

A study in South Africa by Ghodse (2010) found an alcohol abuse prevalence rate of 39.1% and a cigarette abuse prevalence rate of 10.6% among high school adolescents. Other drugs that are commonly abused in these settings included cannabis, inhalants, tranquilizers, heroin and cocaine, among others. The drug problem in South Africa is extremely serious, with drug abuse reported as being at twice the world norm. Over 15% of their population has a drug problem. The study showed that people who start drinking before the age of 15 are four times more likely to become alcoholics. School children who abuse alcohol or drugs are three times more likely to get involved in violent crimes. Frighteningly the average age of drug dependency in South Africa was 12 years old and dropping (Ghodes, 2010).
Tanzania, is the second country after Kenya in East Africa with an increasing number of drug abusers mainly being school going teenagers (Mwakyus, 2015). The drug control commission (DCC) Report (2011) stated that the actual number of drug addicts in general was estimated to be at between 150,000 and 500,000 nationwide. Statistics issued by Mirembe Hospital in Dodoma region that were incorporated in the DCC report showed that the number of young people who abused drugs and attended clinics at the hospital increased from 290 in 2000 to 569 in 2005, equal to a 96.2 % increase.

In Kenya, drug abuse among college and university students remains an important area of concern due to the implications of early drug dependence on the future of the youth (Atwoli et al., 2011). Other studies (Chesang, 2013; Rintaugu, Ngetich & Kamande, 2012; Rintaungu, Mwisukha & Mundia, 2011) have reported high rates of drug abuse among students in Kenyan public universities, with rates as high as 84% for alcohol abuse and 54.7% for tobacco abuse. According to national agency for campaign against drug abuse (NACADA, 2012) drug abuse continues to emerge as a strategy for most students to cope with their prevailing problems such as sexual abuse, poor academic performance, and financial difficulties. In addition, statistics from the rapid situation assessment of drug and substance abuse in Kenya (NACADA, 2010) showed that 11.7% of students aged 15 to 24 years are current abusers of alcohol, 6.2% abuse tobacco, 4.7% khat and 1.5% abuse cannabis.

Although drug abuse has affected all people regardless of their age, sex, educational background, race or socio-economic status, national survey on drug use and health (NSDUH, 2010) asserted that, students of between 16-25 years of age are mostly affected. Most of these students start by experimenting on drugs such as alcohol and tobacco and slowly they graduate to using other potent drugs such as khat, marijuana, kuber, then eventually they get into hard drugs
such as heroin and cocaine (Muango, Ogutu, Amusala & Abwao, 2012). The UNDCP (2010) report indicated that a substantial proportion of undergraduate students abused drugs regularly and that the most commonly reported drugs of abuse included alcohol, tobacco, marijuana, miraa, cigarette, shisha and sedatives.

Heroin and Cocaine are reported to be on the increase especially among the elite young people from families with higher socio-economic status. Studies (Oshikoya & Alli, 2006; Sue, 2014) have revealed that students abuse drugs because of different reasons which include; the fact that drugs are easily available and accessible, curiosity, parental influence, availability of cash to buy the drug of choice, peer pressure, academic demands and societal transitions for example leaving home, developing autonomy and interacting with new friends who abuse drugs (Larimer, Kilmer & Lee, 2010). These factors also play an important role in influencing the effectiveness of preventative strategies in reducing drug abuse among students in the public universities.

Drug abuse has been associated with a broad range of high-risk behaviour such as relating closely with deviant peer groups, unprotected sexual intercourse, interpersonal violence, destruction of property and poor academic performance (Sean, Morales, Cranford, & Delva, 2007). Drug abuse causes adverse social, health and economic implications where economic cost is estimated at between 0.5 to 1.3% of gross domestic product in many countries (UNODC, 2006). The cost has been incurred through treatment and rehabilitation of drug abusers. Further, drug abuse has made many countries worldwide to incur substantial costs as noted during the International Day against Drug Abuse and Illicit Trafficking of 26th June 2013. During this day, the then United Nations Secretary General Ban Ki–Moon lamented that drug abuse and drug trafficking had already claimed millions of lives, weakened national economies, undermined the
integrity and stability of governments and endangered the human society as a whole (UNDCP, 2013). Ban Ki-Moon further noted that drug abuse had escalated dramatically among young people in colleges and universities who are the future world population.

Besides decline in economy, drug abuse has destroyed lives through spread of HIV/AIDS, fatal accidents both on roads and at homes, suicides and other health complications (Sean et al., 2007). It has also led to university riots, family dysfunction, poverty and other malaise in the country (Njeru & Ngesu, 2014). The National Agency for Campaign Against Drug Abuse (NACADA, 2010) categorises the effects of drug abuse as covering the individual, the family, the community and the nation as a whole. To the individual, drug abuse affects vital body organs (liver, heart, kidney and lungs) and eventually leads to so many deaths among Kenyan students (Onyango, 2011). Most university riots (characterised by destruction of property), road accidents, suicides, spread of sexually transmitted diseases, poor academic performance and university dropouts have been associated with drug abuse (Kimilu, 2010).

Further, a study by WHO (2008) has stated that by the year 2020, both mental and drug abuse disorders will be the major cause of disability worldwide while the WHO (2013) revealed that at least 15.3 million people have drug use disorder while drug abuse is highly associated with health and social problems. In addition, NACADA (2012) found that drug abuse is causing dependency among young adults, increasing health care needs amongst the youth abusing alcohol and drugs as well as rendering most young and energetic people jobless. The reviewed studies (Kimilu, 2010; Njeru & Ngesu, 2014; Onyango, 2011) indicate that drug abuse is a major problem which cannot be ignored since it has social, political, economic, medical and legal effects.
Various institutions of learning have responded to the problem of drug abuse by developing different preventative strategies which are meant to reduce drug abuse among students. Such preventative measures include; drug abuse policies which work within the international and national drug policies, counselling and health education programmes as well as imposing strict administrative policies among others (Perkins, 2010). The United Nations Educational, Scientific and Cultural Organisation (UNESCO, 2009) and the United Nations Office on Drug and Crime (UNODC, 2010) agreed that the main focus of these strategies is to reduce the supply, consumption and demand of alcohol and other drugs among the students from elementary to the university levels.

The drug abuse prevention units of UNESCO and UNODC asserted that there are three approaches to drug abuse reduction. These include; demand reduction strategies, supply reduction strategies and strategies to mitigate the negative health and social consequences of drug abuse (UNESCO, 2009 & UNODC, 2010). Despite having the preventative strategies students continued to abuse drugs at a very high rate. A study by Holloway and Bennet (2012) indicated that 33% of students in United Kingdom were abusing drugs. In Kenya, a study by Atwoli et al. (2011) revealed that lifetime prevalence rate of any drug abuse among students was 69.8%. This led to major concerns on whether the preventative strategies have really influenced drug abuse reduction among students.

The United Nations Drug Abuse Control (UNODC, 2013) came up with peer to peer drug abuse drug abuse preventative strategies. According to this organisation, peer educators work by endorsing healthy norms, beliefs and behaviours within their own peer group or community and challenging those who are unhealthy. In addition, peer education can be one of the most effective and empowering methods of working with young people across a range of social issues like drug
abuse prevention and that such peer groups such as Australian youth for youth project, Georgia students together against negative decisions (STANDS), healthy Oakland teens (HOT), HIV/AIDS prevention and respect protect connect, violence prevention among others have been effective in drug abuse reduction.

WHO (2013) defines peer education as an approach, a communication channel, a methodology, a philosophy and a strategy that is often used to effect change at the individual level by attempting to modify a person’s knowledge, attitudes, beliefs or behaviours. It has also been noted that peer education effect change at the social changes in programmes and policies (UNAIDS, peer education and HIV AIDS, 1999). According to WHO (2013) there are three major reason why peer to peer drug abuse prevention strategy is effective. First it is an effective way of sharing knowledge. This implies that that peer educators are not only able to get information to “hard to reach peers” but are also able to convert any information into useful knowledge because they are able to to understand the context in which their peers are best able to use that information. It is also based on real experiences. WHO (2013) asserted that peer to peer provides an opportunity for participants to get to know each other, to share their stories and experiences. This type of sharing leads to the formation of enduring relationships between peers as people develop a strong sense of connection with the other. On the other hand peer to peer education provided a good way of communicating ideas. Drug abuse information can be communicated in a number of different ways, depending on which group of peers and peer educators are involved. WHO (2013) asserted that peer education is a very natural and traditional way in which information and knowledge is created and disseminated by societies.

The United Nations Drug Conventions strongly asserts that the central objective of the organisation is to prevent drug abuse among the youth particularly students who form the future
population worldwide. Likewise, the commision on narcotic drugs (CND) called for the prevention of drug abuse among the students to be the core business of National Drug policy. According to this body the world governments should expand their contribution to the prevention of drug abuse among the young people guided by the UNODC (2013) technical document on prevention. In addition UNODC (2013) add to the body of United Nations documents intending to translate the scientific evidence into programme guidance of drug abuse prevention including technical papers on family skill training on drug abuse prevention of 2010, UNODC guidance on school based prevention programmes, International Labour Organisation (ILO) documents on drug abuse at places of work, and a summary of effectiveness of drug abuse prevention interventions by World Health Organisation (WHO, 2013).

In the United States of America (USA), efforts to control the abuse of drugs were virtually non-existent through much of history. However, the passing of a city ordinance in San Francisco in USA marked the beginning of control of drug abuse (Sonnedecker, 1962). This was followed by the Harrison Narcotic Tax Act of 1914, which regulated and taxed the production, importation and distribution of opiates and coca products. In addition, the USA government established the first national agency to combat drug sales in 1930, which evolved into today’s drug enforcement administration (Mc Williams, 1990). In 1937 the marijuana tax act was passed so as to raise the prices of marijuana hence making it difficult for people to buy it (Bercher, 1972).

Drug control enforcement grew rapidly during the 1970s and 1980s, and by 1990 specialised enforcement programmes were in place in all fifty States of America (Mc Williams, 1990). Although these enforcement efforts led to increasingly high levels of interdiction and seizure of drug trafficking, drug abuse by students particularly the university students continued
to expand. For instance, Brechting and Giancola (2010) found out that about 61% of the students in American high schools and colleges reported to have abused drugs at some time in their lives and about 5% had reported abusing marijuana and alcohol on a daily basis. The study further revealed that there was a consistent pattern of decreasing grades, absence from lectures and declining academic motivation due to drug abuse.

The revelation by different empirical studies (Brechting & Giancola, 2010; Holloway & Bennet, 2012) prompted anti-drug abuse campaign agents in USA to design other preventative strategies. This led to establishment of different preventative programmes which were designed to deter individuals who have never used alcohol or drugs from experimenting with them, as well as target those individuals who were already abusing alcohol and drugs (National Institute on Drug Abuse -NIDA, 2010). Therefore strategies such as drug abuse resistance program (DARE) were established in elementary and secondary schools and later in universities and colleges to prevent the onset of the use of violence, alcohol, drugs and nicotine. Based on the theory that educating students about the dangers and consequences of drug abuse would have a lasting effect on a student’s attitudes towards drugs and alcohol abuse, DARE was founded in 1983 by the Los Angeles police department and Los Angeles unified school district (Ross & Dejong, 2010).

In the United Kingdom (UK), drug abuse reduction among university students involved formulation of drug abuse legislations such as Criminal Justice Act of 2000 and Drug Acts of 2005 (UNODC, 2010). These Acts introduced compulsory drug testing on any student who was found with a criminal offence. Consequently, the analysis of the UK drug report (2012) showed a 10% decrease in alcohol and drug abuse among the university students’ population compared to 35% prevalence rate in 2011 (UNODC, 2012).
Universities in Nigeria (Abia State University, Anambra State University and Adamawa State University) adopted the policy established by the National drug law enforcement agency (NDLEA) in order to deter university students from drug possession, trafficking and consumption. The policy advocated that trafficking of cocaine, lysergic acid diethylamide (LSD), heroin and similar drugs is punishable by life imprisonment (NDLEA, 1990). The universities also employed strategies such as psycho-education on drug abuse, peer involvement and students’ empowerment strategies. However a study by Cockayne and Williams (2012) reveals that most university students in Nigeria (35%) have reported having health problems related to drug abuse, thus raising the question on how the preventative strategies have influenced reduction of drug abuse among the undergraduate university students.

The Kenyan government established National agency for campaign against drug abuse (NACADA) in March 2001. The organisation was given the mandate to provide drug abuse education, develop an action plan and sensitise parents on drug abuse among students all over the country (NACADA, 2010). Universities in Kenya have also joined NACADA in the fight against drug abuse among the students. For example, The Catholic University of Eastern Africa signed a memorandum of understanding (MoU) with the Teachers’ Service Commission (TSC) in May 2015 to fight against drug abuse among the education fraternity in the country.

The combined effort by the Catholic University of Eastern Africa (CUEA) administrators, students, parents, NACADA, and Teacher Service Commission (TSC) to eradicate drug abuse among students led to the alcohol and drug abuse awareness walk that was held on the 20th February 2016. The main aim was to sensitise the students, lecturers, teachers, administrators, and the society as a whole on the harmful effects of drug abuse in the education sector. Psycho-education programmes on drug abuse have also been established. The
Programmes have contributed to individual students understanding of drug abuse which has enhanced self-initiative to stop the abuse. The programmes have also reached the vast majority of young people attending colleges and universities (Muriungi & Ndetei, 2013).

Drug abuse university policy that forbids possession, trafficking and consumption of drugs of abuse within the university premises have also been established (Larimer, Kilmer & Lee, 2010). Almost all universities in Kenya have well established guidance and counselling departments that deal with students’ personal issues as well as issues related to drug abuse (Otingi, 2012). Personal and social skills training in forms of workshops, seminars and open-air campaigns are held frequently in order to equip students with social skills and empower personal responsibility (Muriungi & Ndetei, 2013). These skills are meant to strengthen individual students to withstand peer pressure, social problems and academic challenges that make most of them to indulge in drug abuse.

Despite numerous attempts to reduce drug abuse, little change has occurred over the past two decades (Oteyo, 2013). Since the 1990s, national reports and epidemiological research have revealed an increase in drug abuse among undergraduate students worldwide (Lartey, Watkins & Chahal, 2011). Findings from the National Survey for Drug Use and Health (NSDUH, 2010) revealed that the rate of the current abuse of illicit drugs among young adults aged 18 to 25 years increased from 19.6% in 2008 to 21.2% in 2009 and 21.5% in 2010. In addition Maxwell (2009) asserted that drug abuse rate had increased with age with a prevalence rate of 19.6% between 18 to 20 years old students. Increase and devasting effects of drug abuse among undergraduate university students have raised major concerns on how the various preventative strategies put in place have contributed to the reduction of drug abuse among students. It was from this
background that this study sought to establish how drug abuse preventative strategies have influenced drug abuse reduction in public university campuses in Nairobi County.

1.2 Statement of the Problem

Universities in Kenya have been struggling with the problem of drug abuse like other universities in developed and developing countries worldwide (Atwoli et al., 2011). Preventative strategies have been put in place to lower drug abuse prevalence rate, reduce drug abuse related indiscipline cases, and improve academic performance and lower riots, which were characterised by destruction of property. However, drug abuse seems to be increasing among the university students. According to a national survey on rapid situation assessment of drug and substance abuse in Kenya (2012), 11.7% of the youth aged 15-24 years are current abusers of alcohol, 6.2% tobacco, 4.7% miraa and 1.5% cannabis. The age bracket in this study shows that majority of these abusers are students in secondary schools and in the universities.

In Nairobi the undergraduate students have continued to abuse drugs. Statistics indicate that 37.7% of students in learning institutions in Nairobi are abusers of drugs. The proportion of the students who abuse bhang, khat and inhalants was 44.9%, 35.2% and 50.1% respectively while alcohol accounted for 66.5%. These indications are scary given that majority of Kenyan population is aged between 12-35years (Wambua, 2014). The risks caused by drug abuse among students have also been evident in the recent past. In some instances, students have dropped out of universities; others have constantly performed poorly in their academic while others have been involved in fatal road accidents after abusing drugs. Suicidal cases, violence, HIV/AIDS, and also killings have also risen. This has caused a great public outcry from the parents, ministry
of health, university administrators, lecturers and other ant-drug abuse agencies questioning the
effects of preventative strategies in reducing drug abuse among students.

Recent studies (Mazuri, 2014; Mwali, 2014; & shirazy, 2013) on drug abuse have paid
key attention to Mombasa County and little seems to have been done in Nairobi. Yet Okwarah,
Gakunju, & Thungu, (2013) found that Nairobi ranked second highest in drug abuse prevalence
rates among the undergraduate students after Mombasa County. In addition Nairobi being a
capital city holds more students than Mombasa. Equally, little attention has been paid on how the
preventative strategies influenced the reduction of drug abuse among undergraduate students.
Thus the opinions and attitude of the students towards influence of preventative strategies on
drug abuse reduction has not being explored.

In view of these discrepancies, there was need to examine the influence of preventative
strategies in reducing drug abuse among the undergraduate students in public university
 campuses in Nairobi County. If these problems remained unattended, most young, educated and
energetic Kenyans would continue to abuse drugs which would make them unable to provide
manpower needed for the growth of the country. As a result the country would experience
political, social and economic decline.

1.3 Research Questions

The study was guided by the following research questions:

i. What is the current state of drug abuse among the undergraduate students in public
    university campuses in Nairobi County?
ii. To what extent does drug abuse awareness influence drug abuse reduction among the undergraduate students in public university campuses in Nairobi County?

iii. What hinders effective implementation of drug abuse policies in public university campuses in Nairobi County?

iv. To what extent does guidance and counselling services influence reduction of drug abuse among undergraduate students in public university campuses in Nairobi County?

v. To what extent does building positive personal image influence drug abuse reduction among undergraduate students in public university campuses in Nairobi County?

vi. What are the challenges hindering effective reduction of drug abuse among undergraduate students in public university campuses in Nairobi County?

1.4 Hypotheses

The study tested the following four research hypotheses:

i. $H_{01}$: There is no statistical significant association between the drug abuse awareness and drug abuse reduction in public university campuses in Nairobi County.

ii. $H_{03}$: There is no statistical significant association between guidance and counselling and drug abuse reduction in public university campuses in Nairobi County.

iii. $H_{04}$: There is no statistical significant association between positive personal image and drug abuse reduction in public university campuses in Nairobi County.
1.5 Significance of the Study

The study has led to generation of new knowledge on drug abuse. This knowledge could be used to create awareness to the Ministry of Education, university administrators, anti-drug abuse campaign agents; the parents, lecturers and students on the influence of the preventative strategies in reducing drug abuse among students in public universities. The study has also created awareness on factors hindering the effective reduction of drug abuse among university students. Establishing the influence of preventative strategies on drug abuse reduction could help students to know the strategies they can adopt in order to stop or reduce drug abuse. The study has also provided information to the parents on different ways they could help in reducing drug abuse among students. Likewise the information could be useful to counsellors, community workers, psychiatrics, and other therapists who engage in campaigns against drug abuse.

The Ministry of Education is a policy making body therefore the findings of this study has created awareness on how drug abuse policies have influenced drug abuse reduction and the factors that are hindering effective implementation of these policies. This would help the policy makers to either modify the drug abuse policies that have been put in place or come up with new policies that could help in reduction of drug abuse among students. The study may provide information to the Commission for University Education (CUE) on how university campuses are highly affected by the drug abuse menace and how the location that they are situated hinders the effectiveness of preventative strategies. This would help them to make informed decisions concerning whether such campuses should be relocated to more suitable locations for studies or not.

The findings of the study have created awareness to students on some of the factors that have made them to continue abusing drugs. In addition, the study has provided opportunity for
the students to contribute to the reduction of drug abuse in universities as well as suggest the alternative preventative strategies that can effectively reduce drug abuse in university campuses. This may make students to get committed in the fight against drug abuse.

To NACADA and other anti-drug abuse agencies, the study is significant since it provides information that would help these agencies to review the existing preventative strategies and come up with new and more efficient strategies that can reduce drug abuse among students. To the university counsellors, the findings of the study have provided awareness on the most effective strategies of handling the students who abuse drugs in the university thus helping the counsellors to improve in their counselling skills.

The findings of the study have filled the knowledge gap left by other studies on drug abuse. Moreover, the study has provided recommendations that laid foundation for further studies in the reduction of drug abuse at the university level thus promoting a drug-free environment in learning institutions. Further, the study has confirmed and increased the understanding of the social learning theory that posits that human behaviour is determined by the interaction of the environment, personality and behaviour. Thus changing the university environment would definitely change the drug abuse behaviour among the students.

1.6 Scope and Delimitation of the Study

The focus of this study was to examine the influence of preventative strategies in reducing drug abuse among undergraduate students in public university campuses in Nairobi County. The study focused on strategies such as drug abuse awareness training, university drug abuse policies, enhancing positive personal image and social skills that help to reduce drug abuse
together with guidance and counselling services. Otingi (2012) indicated that these strategies are the major preventative strategies employed by most public universities in Kenya to reduce drug abuse among students. The study was carried out in Nairobi County since the County has been ranked second highest in drug abuse prevalence rates among the undergraduate students after Mombasa County (Okwarah, Gakunju, & Thungu, 2013).

According to national council for population and development (NCPD, 2010) it is estimated that 3.36 million people live in Nairobi. This population represents all the forty two communities in Kenya and people from other countries in Africa as well as other races from all over the world. Nairobi County therefore is a cosmopolitan County and the capital city of Kenya. Thus public university campuses in Nairobi have not only countrywide representation but also worldwide representation which made it possible for the researcher to generalise the findings of this study.

The study delimited itself to students undertaking their first degrees. Further, the study was delimited to third year full time students (students attending classes from 8:00am to 5:00pm). The full time students were preferred because majority of them spend most of their time within the university campuses. Moshe (2010) found out that most of full time students adapted to the university life easily and interacted more with university policies than students who only attend classes in the evening. Further, the third year students are assumed to have already adapted to the university life fully, and are familiar with the university’s drug and substance abuse policy (Moshe, 2010). Postgraduate students were not involved in this study because they considered busy trying to balance between their responsibilities at the workplace, family obligations and academic requirements and as such they were excluded from the study (Otingi, 2012).
1.7 Theoretical Framework

The current study was anchored on the social learning theory, which was put forward by Albert Bandura (1986). This section describes the utility of the social learning theory as the basis of the framework for explaining the influence of preventative strategies on drug abuse reduction among undergraduate students in public university campuses.

1.7.1 The Social Learning Theory

The social learning theory rests on the assumption that behaviours are learnt and since they are learnt they can as well be unlearnt. Social learning theory was an improvement of the behavioural views of learning which overlooked important elements of social influences on learning. Such elements include the cognitive processes of the behaviour or information observed. According to Bandura (1986) learning takes place through observation. Observational learning is a cognitive process that takes place in a social context. According to Bandura’s argument observational learning takes four major cognitive processes which include; attention, retention, reproduction or performance of the observed behaviour and motivation or reinforcement.

Bandura (1986) asserts that, for learning to take place, an individual must pay attention to the modelled behaviour. This is mainly determined by individual’s personality, which involves perception, past experience and how much the modelled behaviour arouses the interest of the observer. Another factor that influences a person’s attention is the nature of the behaviour or event being modelled. Here an individual tends to ask whether the modelled behaviour is relevant or of any value to the observer.
The other cognitive process involves retention; the theory posits that for an individual to perform or reproduce what has been observed, the storing of the modelled behaviour is of great importance. Moshe (2010), in his analysis of social learning theory asserted that retention involves representation of the behaviour to be learned in verbal or image form for long term memory. The third stage is the reproduction or performance stage. The stage involves physical ability to perform the observed or desired behaviour.

The final cognitive process of observational learning involves the motivation or reinforcement that one gets from performed behaviour. According to Bandura (1986), the decision to reproduce or refrain from performing the observed behaviour depends on the motivation and expectations of the observer. According to Moshe (2010) reinforcement forms the basis for understanding and predicting what individuals do or will do. Bandura (1986) adds that positive reinforcement (reward) increases the probability that the same action or behaviour will be repeated in similar circumstances while negative reinforcement (punishment) will deter the repeat of the same behaviour.

The theory further held that most of new behaviours are learned by observing of models. Bandura (1986) argues that there are three ways of modelling: the live model where a person demonstrates the desired behaviour, verbal instruction modelling in which an individual describes behaviour in detail and instructs the participant on how to engage in the behaviour, and symbolic modelling where modelling occurs through media in form of movies, television, internet, literature and radio. In agreement with Bandura, Hill (2013) observed that many of the stimuli that influence human behaviour are those from other people which were normally acquired through modelling.
Sonnedecker (1992) defines modelling as behavioural, cognitive and affective changes derived from observing one or more models. His definition concurs with Bandura’s argument that observational learning involves cognitive processes. Okul (2010) adds that modelling is not only a simple imitation of one person by another; rather it involves more pervasive processes often referred to as identification in which a person tries to be the same kind of a person as another.

The implication here was that imitation of models is greatly influenced by the reinforcement that the models receive. If the modelled behaviour is positively reinforced (rewarded) there will be high probability of that behaviour being imitated by the observer. However, if the modelled behaviour is negatively reinforced (punished) then the chances of the modelled behaviour being imitated is reduced. Hill (2013) asserts that the process by which consequences to the model influence the behaviour of the observer is called vicarious conditioning or reinforcement.

Bandura (1986) believed in reciprocal determinism which implies that learning and behaviour have a triadic reciprocal relationship with environment. This means that through learning new knowledge, a person’s behaviour is changed. This implies that just as an individual’s behaviour is influenced by the environment, the environment and personal qualities all reciprocally influence each other. Therefore when students are sensitised on the danger of abusing drugs and how to avoid drug abuse there is likelihood that some of them will avoid engaging or stop abusing drugs. According to the theory, the environment in which one lives shapes the behaviour of that particular individual. Thus the environmental features such as role models who are abusing drugs, availability of drugs and cultural norms will determine whether students will abuse drugs or not. In addition, how people behave determines the kind of
environment in which they live in. For instance, if people in a particular environment abstain from drug abuse, then the environment will definitely be a drug free environment since there will be no market for the drugs.

Bandura (1986) asserts that human behaviour is continuously and reciprocally influenced by the interaction between cognitive and environmental factors. The theory further states that people’s behaviours determine the environment in which they live in. This means that both people and their environments are determinants of each other. It is important to note that environment consists of a series of interacting variables which contribute either negatively or positively to learning of new behaviour.

Gorful (2010), in agreement, argued that when the nature of a social environment adequately provide towards the social and personal needs of a growing child, the child will develop into a balanced, well-adjusted and emotionally stable person who is ready to learn and lead a full life in the society. However, when the social environment is one of difference, ignorance, social discord, improper family care, permissiveness, lacking guidance or condoning deviant behaviour, then a growing child is bound to become an ill-behaved, socially maladjusted and feeble minded person who is an uncaring, indifferent or irresponsible member of the society. This simply tells us that there must be some balance of different variables in the society for a child to develop responsible and socially acceptable behaviours.

According to Bandura (1977) self-efficacy comprise of a person’s attitude, abilities and cognitive skills. The social learning theory therefore holds that self-efficacy determines how people perceive situations and how they behave in response to different situations. Bandura (1977) defines self-efficacy as the belief in one’s capabilities to organize and execute the courses
of action required to manage prospective situations. This refers to a person’s belief in his or her ability to succeed in a particular situation.

According to this theory, self-efficacy determines how people think, behave and feel in relation to a particular situation in life. The theory argues that people with a strong sense of self efficacy view challenging problems as tasks to be mastered, develop deeper interest in the activities in which they participate, form a strong sense of commitment to their interest and activities, and they recover quickly from setbacks and disappointments.

This is totally opposite to people with a weak sense of self-efficacy, who avoid challenging tasks, believe that difficult tasks and situations are beyond their capabilities, focus on personal failings and negative outcomes and quickly lose confidence. The theory outlines four major sources of self-efficacy as vicarious experiences, social modelling, verbal persuasion and psychological responses which is also referred to as emotional arousal.

1.7.2 Strengths of Social Learning Theory

Akers and Sellers (2004) asserted that one of the strengths of social learning theory is that it encompasses four main variables that explain how behaviour is learned and maintained. The main variables include; associations (interactions), interpretations, reinforcement and imitation. The four variables are crucial in explaining why the university students will continue abusing drugs despite the preventative measures having been put in place. In addition, Blair, Jones, and Simpson (1968) contended that a highly significant contribution of the social learning theory to the change of behaviour is contained in the careful details with which it presents the role of the
environment in the behavioural change. They added that transformation of behaviour as a result of experience is a crucial consideration for any adequate theory of personality development.

Bee (1992) argued that, the theory can easily handle inconsistencies in the child’s behaviour that is reinforced at school but not at home. This implies that given the right environment, any behaviour can be changed thus one would not write anyone off with this theory. In relation to this study it means that there is opportunity to improve in the preventative strategies of drug abuse among the university students.

A further strength of Bandura’s theory is the cognitive element, which offers a way of integrating the social learning theory and cognitive development approaches. Pajares (1996) asserted that cognition plays a critical role in people’s capability to construct reality, self-regulate, encode information and perform behaviours. Thus how the students process information when they experience the reinforcement or punishment, determines whether they will continue abusing drugs or not. This means that, how student’s process drug abuse information may either deter or create curiosity to abuse drugs. Likewise through personal and social skills training students may develop ability to regulate themselves even in the midst of peer pressure or challenges in life.

1.7.3 Weaknesses of Social Learning Theory

The theory places more weight on the people and community that the child is part of, and not enough weight is put on how the child handles and processes new information (Moshe, 2010). This therefore means that the theory does not place any responsibility on the individual student. Thus, it neglects the student’s accountability to his/her own behaviour. The researcher
overcame this weakness by engaging the students to come up with alternative ways in which the problem of drug abuse can be prevented.

1.7.4 Application of the Theory

The study involved examining the influence of preventative strategies in reducing drug abuse among undergraduate students in public university campuses in Nairobi County. The influence of these strategies could only be determined by behaviour change or modification, which forms the central part of this theory. Furthermore preventative strategies applied in universities usually take into consideration variables such as reinforcement, role modelling and self-efficacy addressed by this theory. In addition the theory suggests that given the right environment, any behaviour can be changed for the better. This calls for the families, universities and the society in general to reflect on the environment in which young people are living in, in order to prevent drug abuse. To come up with responsible students who are equal to the challenges faced at the university, there must be organisation and coordination of the interacting variables right from home, primary and secondary schools and eventually at university levels.

According to social learning theory young people particularly at adolescence stage learn a great deal by observing other people. Parents, administrators, lecturers, peers and other adults in the society are vital models to be imitated by the university students. This means that when the adults within the university environment observe the preventative strategies then a bigger percentage of students would follow suit.

The establishment of anti-drug abuse policies both at national and at university levels help to create awareness of what is expected of the students and the consequences that follow if
the policies are not adhered to. Peltzer, Davids, and Njuho (2011) asserted that, reinforcement influences response only when the learner is aware of the connection between the consequences that follow certain behaviour. In this study, students are expected to be aware of the anti-drug abuse policies and what follows if one does not adhere to them. According to Anderson (2009) the observed consequences are used as reference standards that can influence behaviour negatively or positively.

The theory also focuses on the development of a sense of self-efficacy (beliefs about one’s own effectiveness and competence which guide one’s ability to cope with particular situations such as difficult academic problems in university). This made social learning theory relevant to the current study since the researcher sought to understand how personal factors such as the ability to cope and solve problems amicably enhanced the influence and the effectiveness of preventative strategies on drug abuse reduction.

Further, social learning theory talks about the principle of triadic reciprocal determinism, which states that environment and personality traits influence human behaviour and vice versa. This study attempted to establish how the variables (availability of drugs of abuse, peer pressure, gender, role models and cultural norms) in the environment make the implementation of drug abuse preventative strategies a challenging task. The study relied on the premise of this theory to make recommendations on how the Kenyan universities could counteract these challenges in order to reduce drug abuse among the university students.

1.8 Conceptual Framework
The conceptual framework shows how the preventative strategies interacted with personal factors and the environmental factors in relation to drug abuse reduction. The interaction of these variables will translate into either reduction or increase of drug abuse among undergraduate students. The reduction of drug abuse among students results in decrease in the drug abuse prevalence rates, better academic performance, reduced cases of health problems associated with drug abuse and low cases of drop out from campus.

Figure 1: Conceptual Framework on Interactions of Preventative Strategies

Figure 1 demonstrates the interaction of independent and dependent variables.

The independent variables in the current study included the preventative strategies put in place by public university campuses to reduce drug abuse among undergraduate students. These
strategies included; Drug abuse awareness training, drug abuse policies, building positive personal image and use of guidance and counselling services. These variables were expected to improve academic performance, lower dropout rate, and reduce death rates as well as health problems associated with drug abuse.

The environments in which people live highly influence their behaviour. Social learning theory asserts that people learn from their environmental settings through association, interpretation of behaviour, reinforcement and imitation. Likewise the principle of triadic reciprocal in social learning theory stresses that, the interaction between the environment and individual factors (personality) leads to behavioural change. The preventative strategies (independent variable) are meant to create a drug free environment and consequently change the students’ attitude and behaviour towards drug abuse. This change was expected to lead to improved academic performance, lower dropout rate and improve health among students.

Students’ personal factors such as high self-esteem, high sense of self-efficacy and ability to make independent decisions are vital in determining the behavioural change. Students with high self-esteem and high sense of self-efficacy are able to stand their ground when it comes to decision-making that is contrary to the rest of their friends. This means that such students are hardly influenced to abuse drugs. The influence of these strategies in reducing drug abuse (dependent variable) was indicated by the decrease in drug abuse prevalence rates among students, improved academic performance, low cases of dropout rates, reduced drug abuse health related cases and low death rates.

In this study it was expected that the preventative strategies (independent variables) would interact with some elements in the environment (intervening variables) which include factors such as availability of drugs of abuse within the university premises, peer influence and
role models, cultural norms, family background and availability of drugs of abuse in the neighbourhoods. This interaction was expected to negatively or positively affect how preventative strategies influenced drug abuse reduction among students.

The social learning theory holds that behaviour is repeated if it is positively rewarded and deterred if it is negatively rewarded. The drug abuse policies stipulated the consequences that follow when a student was found in possession, abusing or trafficking drugs of abuse within the university as well as in the country. What happens to a student when caught in possession, consuming or trafficking drugs of abuse in the university would either encourage or discourage other students from copying or repeating that particular behaviour. This implied that, if such a person was severely punished, then most students would be discouraged from repeating or copying the behaviour (vicarious learning).

The family background of the individual students was of great importance in determining how the preventative strategies influenced drug abuse reduction. The family forms the first environment in which the students learned and developed attitude towards drug abuse. Children learn more from observing their role models (parents, elder siblings or caregivers). This implied that if the models abused drugs, then chances were high that the children would abuse drugs in their adolescence or adulthood.

1.9 Operational Definition of Key Terms

Availability of drugs of abuse: This refers to how easy and affordable it is for a student to access drugs while in lecture halls, hostels or university shopping centres. This was measured by identifying the people who sell drugs within the campuses, identifying the area where drugs are normally abused, and how much drugs cost.
Drug abuse: This refers to misuse of legal drugs such as alcohol, cigarettes, and miraa. It also refers to use of illegal drugs such as cocaine, heroin, bhang and hashish. Abuse of these drugs is indicated by absenteeism from lectures, cases of accidents related to drug abuse and indiscipline cases related to drug abuse.

Drug abuse awareness: The phrase was used to refer to knowledge of the causes, effects, prevalence and ways to prevent drug abuse. It was measured by asking students to identify reasons, causes and ways of preventing drug abuse.

Drug abuse policies: The phrase was used to refer to rules that regulate possession, consumption or selling of illegal drugs in the university premises. Their effective implementation were indicated by; their availability, application, attitude and awareness on their existence.

Drug abuse reduction: This term was used to refer to decrease in the abuse of drugs. It was measured by reduction in prevalence rate, decrease in indiscipline cases related to drug abuse, decrease in health problems, accidents and mortality cases related to drug abuse.

Guidance and counselling: were used to refer to individual counselling, group counselling, anti-drug abuse seminars as well as open air campaigns against drug abuse. It was measured using the number of times individual students have attended drug abuse counselling sessions compared to the number of times students have abused drugs after the visit.

Positive personal image: The phrase was used to refer to internal and external characteristics of a student such as self-esteem, values, ability to make decision and solve problems amicably. It was measured using social relationships, self-esteem, self-confidence, and problem solving skills, and ability to make independent decisions.
**Preventative strategies:** The term preventative was used interchangeably with the term preventive. These are measures that may be used to help students abstain or reduce the abuse of illicit drugs, like drug and substance abuse education, guidance and counselling services in the universities.

**Public university campuses:** The term was used to refer to the branches of Nairobi University, Kenyatta University, Egerton, and Moi universities in Nairobi County.

**Undergraduate students:** The term undergraduate student was used in this study to refer to students undertaking their first degree in public universities and campuses.
CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

The literature was reviewed according to the independent and dependent variables identified in the conceptual framework and the research questions. The independent variables were Drug abuse awareness training, drug abuse policies, Positive personal image, guidance and counselling services while dependent variable was the drug abuse reduction. Literature in this section was reviewed under the following headings: The review of the related theories, the current state of drug abuse among the undergraduate students, influence of drug abuse awareness on drug abuse reduction, factors hindering effective implementation of drug abuse policy, influence of guidance and counselling on drug abuse reduction, influence of building positive personal image on drug abuse reduction and the challenges hindering effective reduction of drug abuse. Critique of the reviewed literature and identification of the gap is also featured. The review of the related literature sought to provide studies and reports related to the influence of preventative strategies on drug abuse reduction among the undergraduate students. The review also helped to identify the research gap that necessitated to this study.

2.2 Review of Related Theories

The influence of drug abuse preventative strategies on drug abuse reduction among students is mainly influenced by the environment and the social group that one associates with (Gerald & Kometsky, 2005). Most of what is experienced and observed by an individual goes through different levels of cognitive development such as attention, recognition, retention and
production (Gerstein, 2009). Although there are several theories of drug abuse, this section reviewed Freudian theory of drug abuse, the CAP control theory of drug abuse and an availability-proneness theory of drug abuse due to the fact that they focus on how the interaction between the environmental factors and the structure of human mind influence human behaviour that leads to reduction or increase of drug abuse. This section also discussed the strengths, limitations and the application of this theory to the influence of preventative strategies in drug abuse reduction.

2.2.1 Freudian Theory in Drug Abuse

Sigmund Freud’s structural model of the human psyche divided the human brain into three hypothetical parts namely; the id, the ego and the super-ego. Freud (1990) describes the id as the unorganised part of the human personality that contains basic, instinctual drives that acts on the “pleasure principle” and is indiscriminatively seeking to avoid pain or displeasure. Therefore, during stress or encounters with situations similar to the original conflicts, symptoms such as anxiety, depression, and hostility may occur. Since according to this theory it is human nature to avoid unpleasant or stressing situations, students will run to drug abuse to avoid any stressing situations or experiences in their lives. Thus drug abuse becomes their defence mechanism.

The theory states that the human mind is like an iceberg of an ocean comprising of conscious, subconscious and unconscious parts and that what is in the conscious is just a tip of an iceberg. According to Freud (1990) displeasing experiences are normally sent into the subconscious through various defence mechanisms. Abusing drugs may be one of the defence mechanisms that most students adapt to avoid stressing situations in the university. Freudian
theory asserts that childhood experiences are normally stored in the unconscious and influence how the child will behave in adulthood. When such displeasing situations are brought to the conscious, tendencies are that students will run to drug abuse in order to avoid such displeasure.

The super-ego is the critical, moralising part that argues based on cultural and social grounds. Freud asserts that as the human mind learns and absorbs cultural and social norms, the super-ego starts to develop itself. An individual whose personality is dominated by super-ego becomes a perfectionist and when things do not happen according to the expected standards such a person gets frustrated and stressed. Consequently the individual may abuse drugs in order to do away with the unpleasant feelings. The ego plays the balancing act of fulfilling id’s desires in a realistic manner without crossing boundaries laid down by the super-ego. This is applicable to this theory in that by building positive personal image, the student’s ego is strengthened. The ego will help the student to reason on the consequences of engaging in drug abuse in order to avoid unpleasant experiences.

Ford (1973) as quoted in Ondieki and Mokua (2012) believed that drug abuse is important in satisfying archaic, oral longing including sexual satisfaction, the need for security and self-esteem. Freud argues that drug abuse tendency is a regression behaviour that results from the unsuccessful relationship with the opposite sex. Thus drug abuse among students is understood as intolerant of tension, pain and frustration. Freud further argues that students will abuse drugs so as to remove instinctual inhibitions with an aim of fulfilling id demands.

The theory has been applauded for its strengths. Forman (2002) argued that the theory focuses on how the past or the childhood experiences influence the current behaviour. This is relevant to this study in that interactions with parents who abuse drugs may influence students to abuse drugs in adulthood. This will affect the effectiveness of any drug abuse preventative
strategies because the student may have already developed positive attitude towards drug abuse, which makes it difficult to have behavioural change. In addition, the theory asserts that most of unpleasant experiences are stored in the subconscious and have an impact on present adulthood behaviour. This explains why students will continue to abuse drugs despite the laid down strategies to prevent drug abuse in learning institutions.

Further strength of Freudian theory is that it takes both nature and nurture into account, thus emphasising on the importance of both in relation to human behaviour (Harkness & Super, 1996). For example Freud’s assumption of childhood experiences focuses on nurture whereas the id, ego and superego focus on nature. Azmitia (1988) states that the theory is deterministic thus it increases the likelihood of being able to treat people with abnormal behaviour and provides explanations about the causes of their behaviour.

The interaction between nurture and nature in an individual therefore determines the effectiveness of the preventative strategies in drug abuse reduction. For instance, a student who is full of id and in a depressing environment will tend to find quick ways of getting out of these stressing situations without minding whether these ways are morally right or not. Thus such a student will quickly engage in drug abuse whether there are preventative strategies put in place or not. Likewise, a person who is full of super-ego will expect every environment to have the same beliefs of moral uprightness as he/she has. If this does not happen, the person ends up being frustrated and depressed as he/she tries to perfect the environment. Frustrations and depression cause unpleasant feelings which the individual will eventually want to avoid through drug abuse. Thus the ego will struggle to reason with id on other means of avoiding stressing situations and with super-ego on the need to be flexible and appreciate other people’s way of life.
This theory emphasises on the need to strengthen the ego, which gives an individual ability to reason and weigh on whether abusing drugs really solves problems or not. The concept of reasoning calls for an individual responsibility to make the rightful decision in life without laying blame on the environment. Therefore Freudian theory tends to supplement a major weakness of the social learning theory which tends to blame the people and the community in which the students live in for drug abuse. Despite having its strengths, the theory has several limitations thus the researcher has found the theory limiting in guiding this study. First, it emphasises on past experiences that influence human behaviour in adulthood but ignored the biological components of drug abuse. Bornstein (2002) argues that there may be a biological or genetic predisposition towards drug abuse. Bornstein argues that Freud’s analysis depends on therapist’s interpretation of the past experiences in order to explain the current behaviour.

To overcome this weakness the researcher found out from the participants whether in their family background there is history of drug abuse. This enabled the researcher to identify students who abuse drugs because of genetically motivated reasons and those who abuse drugs because of other factors. Secondly the theory does not take into account current issues that could be leading to continuous drug abuse among undergraduate students. The researcher explored in details how preventative strategies have influenced drug abuse reduction among the undergraduate students and challenges that hinder drug abuse reduction in public university campuses.

2.2.2 The Cognitive Affective Pharmacogenetic (CAP) Control Theory of Drug Abuse

The theory was developed by Gold (1980) and attempted to explain both drug use and abuse. The theory puts emphasis on the interaction of the individual style and the affective
experience of drug abuse with the drug’s pharmacogenic effect. These are the basic ingredients of the cognitive-affective pharmacogenic (CAP) control theory (Coghlan, Gold, Dohrenwend & Zimmerman, 1973; Gold & Coghlan, 1976). The theory views the cognitive style of the drug abuse as a crucial factor that makes an individual to move from drug experimentation to drug abuse. According to the theory, drug abuse process begins with mental conflict as a predisposing factor. The theory posits that people who are people having difficulty in meeting demands or expectations placed upon them by the society or by themselves are in conflict, and a consequence of the stress or conflict is anxiety.

According to the experience of anxiety, the individual’s interpretation of the anxiety is crucial to the theory. Anxiety is a universal feeling, something most of us experience to some degree each day. The theory argues that it is not the experience of anxiety but the individual’s interpretation of the anxiety that is crucial to the theory. The theory asserts that the anxiety of drug abusers is a belief that they cannot alter or control the situation; that they are powerless to change their environment and decrease or eliminate the sources of stress. The beliefs that they are powerless to cope with the stress is the major cognitive distortion of drug abusers. The result of this belief is the intense feeling of low self-esteem that is a well-known clinical identity among drug users and abusers (Krystal & Raskin, 1970).

Feelings of self-depreciation, which form the belief that one is powerless, represent the effective component of the CAP theory. The experience of anxiety causes discomfort thus a means of anxiety reduction is necessary. The experience of anxiety causes discomfort and thus the drug abuser will find the primary pharmacogenic effect of drugs in anxiety reduction as necessary. The theory posits that drug abuse provides relief from anxiety, makes the abuser obtain a temporary ecstatic feeling as well as temporarily experience an increased sense of

38
power, control and wellbeing. This means that the sense of powerlessness is replaced by an exaggerated sense of being all powerful in that no task is seen as too great to be tackled. What this implies is that drugs can do for drug abusers what they believe they cannot do by themselves. This instead increases drug abuse among students rather than decreasing it. It therefore implies that drug abuse preventative strategies may fail to reduce drug abuse with this kind of mentality.

However, the drug effects are short-lived and any temporary gain is turned into long-term losses since after the influence of drugs is over, some internal and external sources of stress rekindle the stress and anxiety. Thus, not only do the old feelings of lack of control return but they are likely stronger than before. It is this increasing sense of powerlessness that increases drug abuse among many undergraduate students. Every time drug abusers rely on drug to relieve tension and feel good about them, they become less capable of coping on their own. By using drugs to cope, the individual is cut off from learning other more adaptive coping mechanisms and becomes less tolerant of the pain of anxiety. The drug abuser now knows that anxiety does not have to be tolerated because drug abuse has been successful in the past in removing tension and producing good feelings. Thus, the reliance on drugs to cope with stress creates a vicious cycle and the more the individual believes the drugs are necessary.

### 2.2.3 An Availability-Proneness Theory of Drug Abuse

An availability-proneness theory of drug abuse posits that, drug abuse occurs when a prone individual is exposed to a high level of availability. The theory asserts that the availability of or easy access to all drugs varies enormously, as does proneness to the abuse of these drugs for social or psychological reasons. According to this theory, tendencies to abuse drugs should
vary directly with both availability and proneness and the two should sum to create an addiction tendency (Smart, 1980). This implies that both availability and proneness need not to be high for all drug abusers. That is where availability is excessively high; the level of proneness required among abusers could be lower than in situations of low availability. On the other hand where an individual’s psychological or social proneness is very high, an individual may abuse drugs in situation in which availability is low.

Although this theory is similar to the vulnerability-acceptance theory of alcoholism adopted by Jellinek (1960), availability-proneness theory has not had a large-scale independent test and has some weaknesses as well as strengths. Availability-proneness theory uses only two factors that is availability and proneness to explain the initiation, continuation and relapse of drug abuse. The famous story of Robinson Crusoe families who set disconsolately on a desert island with no pharmaceuticals or plant-origin drugs available tends to support this theory. No matter their desires or previous habits, there was no drug abuse. This means that only available drugs can be abused.

Frank (2003) argued that availability has several different meanings. First, it refers to the set of physical, social and economic circumstances surrounding the ease or difficulty of obtaining drugs especially with respect to their costs and amount of physical effort required to obtain them. When the costs are high or the effort required is great, the tendency to abuse drugs will be low but this can be overcome by a high level of proneness in the abuse. It is also argued that availability may refer to some social aspects especially where drugs are more available in some social groups than in others. For instance in some colleges, universities, neighbourhood and in other learning institutions where drugs are easily available, many students tend to abuse drugs than in institutions where there is low availability.
The theory accounts for many research findings concerning the habits and lives of drug abusers and can make specific predictions about a variety of phenomena. The theory makes predictions about beginning, continuing, ceasing and relapsing into drug abuse. The theory has some linkages with a theory of alcoholism and could be applied to other social problems such as criminality. It also helps to explain multi-drug abuse in an individual, family or peer groups. However, the theory has been criticised on grounds that the theory is essentially a post hoc analysis and integration of ideas and research findings. This means it has not received an independent empirical validation for most of its propositions.

2.2.4 Self-Efficacy Theory (Bandura, 1986)

This theory was proposed by Albert Bandura, a Psychologist born in 1925 at Alberta, Canada. Bandura (1995) and Bandura (2004) perceived self-efficacy as beliefs in one’s capacity to organise and execute the courses of action required to manage prospective situations. Other researchers advance this point that, Self–efficacy, or the confidence in personal ability, has been shown to predict a variety of health behaviour outcomes (Ormrod, 2003; Margolis & McCabe, 2006; Conner & Norman, 2009). Bandura (1977) states that people’s level of motivation affects their affective states and actions are based more on what they believe than what is objectively true and for this reason, how people behave can often be better predicted by the beliefs they hold about their capacities than by what they are actually capable of accomplishing. According to him therefore, self-efficacy perceptions help determine what individuals do with the knowledge and skills they have.

Bandura’s theory is a pointer to an important situation that could emerge in universities in which established prevention programmes may either be utilised by students or not. This
dichotomous position is determined by the beliefs and attitudes they hold about the impact prevention programmes create in their lives. Theory of Planned Behaviours (Fishbein & Ajzen, 2010) describes attitude as a disposition to respond favourably or unfavourably to an object, behaviour, person, institution or event. Zimmermann (2008) argues that an elemental support of the effect of attitude on self-regulation is a dynamic process in which the individual engages as he or she works toward a goal. Without feedback or reflection, adjustments cannot be made and regulation of behaviours does not take place. He views the environment as an influencer to self-regulation in either a positive or negative direction. If the environment provides no feedback or social cues, it is difficult for effective self-regulation to take place. This assertion indicates a complementary relationship between attitude and factors within the environment. If students positively appraise prevention programmes, they are most likely to utilise them for their benefit. Conceptualization of student self-efficacy dynamics plays a big role in student positive responsiveness and participation in prevention activities. In this regard, student participation plays a key role in the implementation and effectiveness of prevention programs.

Self-efficacy theory further postulates that, virtually all people can identify goals they want to accomplish, things they would like to change, and things they would like to achieve. However, most people also realise that putting these plans into action is not quite simple. Bandura (2004) found that an individual’s self-efficacy plays a major role in how goals, tasks, and challenges are approached. He argues that people with a strong sense of self-efficacy form a stronger sense of commitment to their interests and activities. Bird, Conrad, Fremont and Timmermans (2010) argue that personal control depends on one’s choices and actions that they can master, control or effectively alter the environment. Luszczynska and Schwarzer (2005) assert that choices affecting health are dependent on self-efficacy which determine whether
health behaviour change will be initiated, how much effort will be expended, and how long it will be sustained in the face of obstacles and failures. West (2006) in his cognitive bias theories argues that addiction is maintained by biases in the cognitive system, including beliefs, expectancies, self-efficacy, attributions and attention.

Batholomew (2006) argue that behaviour change occurs in capability to perform the behaviour or under a number of different circumstances like perceived self-efficiency and perceived behavioural control. The presuppositions provide insight to prevention programmes on the crucial need to develop self-efficacy among students. In universities, the success of prevention programmes’ implementation is regulated by self-efficacy of individual students who are abusers of these programmes. It is essential for prevention programmes to access student cognitive dynamics for synchronisation with techniques and strategies being used as this could contribute to effectiveness of substance abuse prevention.

2.2.5 Ecological Systems Theory (Bronfenbrenner, 1944)

The proponent of ecological theory is Urie Bronfenbrenner, a Russian American Psychologist born in 1917. Ecological systems theory provides a behavioural, environmental and socio-ecological approach to health promotion and prevention. This theory postulates that individuals, families and communities are not isolated entities but rather are an interrelated ecological system with each adapting to change that occurs in other parts of the organisation (Guttmacher, Kelly, & Ruiz-Janecko, 2010). Bronfenbrenner (1944) proposes five systems which contain roles, norms and rules which play a big role in shaping individual development namely, Microsystems, Mesosystem, Exosystem, Macro system and Chronosystem.
Microsystem refers to the immediate environment the individual comes from such as the peers, family and the neighbourhood. A person's closest social circle consisting of peers, partners and family members do influence their behaviour and contributes to their range of experience. Prevention strategies at this level may include mentoring and peer programmes designed to reduce conflict, foster problem solving skills, and promote healthy relationships. Mesosystem refers to the interactions between and among different Microsystems and the contexts that form them such as relationships among university prevention programmes and the neighbouring community (Brofenbenner, 1944). Exosystem demonstrates connection between social settings and the individual’s immediate context. Individual Prevention strategies at this level are often designed to promote attitudes, beliefs, and behaviours that ultimately prevent drug abuse. Specific approaches may include education and life skills training. At macro system level, culture plays a crucial role in determining the way people exchange their relationships. Prevention strategies at this level are typically designed to impact the climate, processes, and policies in a given system. Social norm and social marketing campaigns are often used to foster community climates that promote healthy relationships (Brofenbenner, 1944).

Chronosystem refers to the patterning of environmental events and transitions over the life of an individual. These factors include social and cultural norms. Other large societal factors include the health, economic, educational and social policies that help to maintain economic or social inequalities between groups in society. In a university setting, interactions exit at all the diverse levels mentioned by Brofenbenner (1944). Relationships exist among individual students, neighbouring communities and the members of the entire university community. These relationships are determined by values, practices, beliefs, norms and regulations that deter or
encourage drug abuse. It is necessary to approach drug abuse prevention from all these interacting factors so that thoroughness is achieved in reducing the abuse.

Botvin and Griffin (2007) summarises this concept concerning campus environment that, perceptions of campus abuse, campus climate, availability of drugs of abuse, awareness of campus policies and enforcement and students' family histories of drug abuse impact the extent of drug use and abuse on any given campus. He emphasises that the campus and surrounding community exert profound influence on innumerable facets of student life. Recognition of the environment in shaping and maintaining individuals' behaviour is important in addressing individuals and the policies, practices, and social norms that affect them on campus or in the community. This is in line with Margolis and McCabe (2006), and Conner and Norman (2009) postulation of complementary interaction of aspects in ecological system. The researchers enlisted these factors as; intrapersonal factors consisting of characteristics of individuals themselves, such as knowledge, attitudes, behaviour, self-concept, learning history, and skills; interpersonal processes and primary groups which constitute formal and informal social network and social support systems, including family, work group, living group, and friendship networks; institutional factors composing of social institutions to which individuals belong with particular organisational characteristics and formal and informal rules and regulations for operation; community factors which entail relationships among organisations, institutions, and formal and informal networks within defined boundaries and lastly, public policy on levels of local, state, and national laws and policies.

Coreil (2010) suggests analysis within a social ecological framework at intrapersonal level which includes characteristics of individual such as knowledge, attitudes, behaviour perceptions of risk and self-concept. He further advances that adolescent peer culture plays a key
role in the development and maintenance of health risk behaviours. Proponents of systems theory (Ludwig, 1968; Bronfenbrenner, 1944) advance several ideas through their basic concepts namely; a system interfaces with other systems that may be of a similar or different type, the functioning of a system affects multiple other systems and is effected by multiple other systems and that there is a constant interaction between systems resulting in a constant state of change.

They contended further that time is a significant dimension and different effects occur over time. This is relevant to a typical university setting which goes through several changes as social and intellectual demands dictate. Ecological systems theory suggests fundamental principles underpinning multi-faceted person-focused and environmentally based components in establishing prevention programmes. In view of ecological systems theory, prevention programmes need perceive high impact leverage points and intermediaries that can facilitate successful implementation of prevention programmes. It is essential as well for prevention programs to measure the scope, key players and sustainability of the outcome of prevention programs due to societal interactions and functionalism (Weiss & Lonnquist, 2012). Rogers (2006) in support of these facts argues that when assessing and developing an intervention, there is need to consider all the factors that fall in the individual’s life at all levels.

The concept of individualism and collectivism hold relevance in community interaction (Myers, 2010). These precepts suggest that, prevention programmes need to consider various student’s psychosocial, behavioural and environmental characteristics which influence different levels of drug abuse prevention from the onset of drug abuse to addiction and recovery on individual and social basis at the university since individual health and behaviour are influenced by their social and physical environment (Issel, 2004). This also covers the various changes that occur in availability, course and abuse of drugs at the university. Prevention strategies ought to
give adequate consideration to the impact being created by drug abuse dynamism. This is practically possible if all the above mentioned concepts of interacting systems are examined to comprehend their role in drug abuse correlates. Changes take place in terms of entry, course and outcome of drug abuse. Attention on new ways in which drugs get accessed, abused and camouflaged by students is important in determining prevention approaches useful to students who have not started abusing, or those already in abuse and those addicted to the problem. Attention needs to focus on the influence of drug abuse preventative strategies in drug abuse reduction.

2.3 Current State of Drug Abuse among Undergraduate Students

Drug abuse is the most disturbing problem among the youth particularly in Kenya. Incidences of drug abuse and related anti-social behaviour have tremendously increased in recent years despite the various measures having being put in place. Students’ persistence in drug abuse has been evidenced by the raise in drug abuse prevalence rates as indicated by various studies. The United Nations Office for Drugs Control and Prevention estimated that between 155 and 250 million people or 3.5% to 5.7% of the world’s population aged 15-64 has used drugs at least once in the last 12 months (UNODC, 2010). According to this report for most of European and Asian countries, opiates continue to be the main drug of abuse and account for 62% of all treatment demands. The report also revealed that in South America, drug related treatment continues to be mainly linked to the abuse of cocaine of which account for 59% of all treatment demand.

A study by Bogle (2009) revealed that experimenting with illegal drugs was considered to be normal by many students who appear to overlook the negative consequences drugs and
alcohol abuse may have. The study also revealed that there is lack of information about the extent of the damage that drug and alcohol abuse causes in UK’s university and college students. The researcher asserted that binge drinkers have an increased risk of accidents and alcohol poisoning and that around 1.2 million violent accidents are alcohol related. It was also evident that 18% of students killed in road accidents have traces of abuse of illegal drugs in their blood.

The findings showed that over 1,400 students aged 18-24 years died in 2015 from alcohol related causes, including fatal motor vehicle crashes. The same survey showed that over 500,000 full time fourth year students were unintentionally injured under the influence of alcohol and over 600,000 were physically hit or assaulted by another student who had been drinking. According to the study, alcohol was the most popular drug abused by students. It was found that a significant number of male and female students drink more than the recommended alcohol consumption and binge drinking (UNODC, 2010).

A survey by Young (2014) in ten UK universities showed that 60% of male and 40% of female students reported having abused cannabis. The study showed that 20% reported abusing cannabis on a regular basis while approximately one third of the sample had experimented with other drugs such as LSD and ecstasy. The study revealed that more students abused illicit drugs as compared to their age group in the general population. In this study, 45% of 16-24 year olds in the general population had abused one or more illicit drugs in their lifetime, 25.2% had abused one or more illicit drugs in the last year, 15.1% had abused drugs in the last one month while 16.9% of 16-24 year olds had abused a Class A drugs at least once in their life time.

The study found that staying in hostel and non-satisfactory intra-familial relationship favoured drug abuse while curiosity about drugs, academic and peer pressure, and family problems were the major initiating factors. The researcher concluded that continuing abuse of
these drugs in spite of knowledge of hazards associated with them reflected lack of health consciousness and need of proper health education. The researcher suggested that proper counselling with well-planned policies should be implemented to root out the evil of drug abuse among the future doctors which will help in providing better health care services to the people.

Maja and Maja (2013) studied on the prevalence of drug abuse among first year students at the University of Mostar, Bosnia and Herzegovina. The study was conducted by teaching assistants at the department of social work students who were previously trained to conduct the study. The study included 420 participants from six faculties. The results showed that the most frequently abused drugs among students were alcohol, cigarettes and Marijuana.

A study by Johnstone, O’malley, Bachman and Schulenberg (2011) revealed that 71% of students in USA drink alcohol while another study done in U.S.A indicated that nearly two-thirds of students who acquire sexually transmitted diseases (STDs) abuse drugs and other substances of abuse (Hops, Ozechowsk & Holly, 2012). Tobacco use has also been in the rise in both developed and developing countries. According to tobacco Free Initiative (2008) there are one billion smokers in the world but most of them are in developing countries. Johnstone et al. (2011) showed that 52% of students in USA had tried cigarettes, 21% had used cigarettes and 7% are current users of cigarettes. In Nigeria, cigarette smoking prevalence rates were 18.1%, of which 23.9% are males and 17.0% are females (Global Youth Tobacco Survey, 2002) and in South Africa, 46.7% youth reported that they ever smoked cigarettes while 23% were current smokers.

In Africa, the bulk of all treatment demand is linked to cannabis which accounts for 64%. The report by UNODC (2010) showed that there is an increasing trend in psychoactive substance abuse in many African countries (UNODC, 2010). Nalwa (2003) studied on the prevalence and
causes of drug abuse among undergraduate students in three universities in South Africa. The sample size was 1178 of the medical colleges. The data was collected using a protested structured questionnaire constructed by the researchers. Compilation and analysis of data was done subsequently using proportion and chi square test as statistical test. The findings showed prevalence of drug abuse among students was 45.8% with male students accounting for 74.03%. The predominance drugs included cigarette at 72%, followed by alcohol with 68%, bhang 24% and cocaine and heroin accounting for 23%.

Chikere (2011) carried out a cross- sectional survey on the drug abuse among inter-college students in Owerri District of Nigeria. A multistage random sampling was used for the selection of two inter colleges. The overall 1094 students from first and second year students were included in the study. The findings indicated that the overall prevalence of drug abuse for ever abusers was 58.7% while for regular abuse of drugs was found to be 31.3%. The study also revealed that drug abuse was more significantly more among urban students as compared to rural students. The study also found the prevalence of drug abuse was significantly more in the students who were living away from their homes. Only 29.7% of the students living with their parents were found to be abusing drugs regularly while 66.7% of students living away from their parents were abusing the mentioned drugs. According to the researcher the discrepancy was because living at their homes the students are within the supervision and care of their parents hence drug abuse in this population was limited compared to those who were living away from the homes.

A survey by the national agency for the campaign against drug abuse (NACADA) in 2004 targeting Kenyan youth aged between 10 to 24 years revealed that the use of illegal drugs was becoming a culture amongst Kenyan youth (NACADA, 2004). The same study revealed that
hard drugs, such as heroin, cocaine and mandrax were commonly abused by students both in secondary and universities in Kenya. The study also found out that students were widely abusing legal drugs such as alcohol, tobacco and khat and incidences of violence in most learning institutions were highly associated with use of these drugs. According to this study, 41% of students in Western Kenya and 41% in Nairobi, 27% in Nyanza, 26% in Central and 17% in Eastern Kenya abused drugs once in their school life. Other previous studies done in universities and colleges in Kenya reported high rates of drug abuse among students. For instance Odek-Ogunde et al. (1999) studying on drug and substance abuse prevalence rate at a private university in Kenya reported a prevalence of 84% for alcohol abuse and 54.7% for tobacco.

The availability of drugs through cheap and local suppliers encourages students to abuse or indulge into drugs abuse (Obiayo, 2013). Gacacio (2013) asserts that of late students are exposed to other drugs such as opium, cocaine and heroin which are harder drugs. They also use sleeping pills, tranquillisers, cough mixtures, eye drops and inhalants such as glue and petrol fumes, which are readily available to them. Availability of readily cash to the youths as pocket money or travel allowances, especially if excess may be redirected into purchasing of illegal drugs (Okech, 1997)

According to the Daily Nation, (July 17, 2012) students who get a lot of money are tempted to buy illegal drugs. The availability of drugs will make it possible for accessibility. Ninety percent of campus students claim that they can get drugs within school environment. This has led to the shocking statistics of drug abuse among university students. The non-drug abusers among teenager admit that drugs are easily accessible to them within the school environment (Johnston, Bachman & Schulenberg, 2009). Another interesting fact is that 38.4 percent of youth
in public universities believe they can access drugs compared to only 22.4 percent of those in private universities (Teen Help, 2013).

According to Atemi and Ondiek (2012), International drug peddlers have invaded Kenya so that all sorts of drugs are in our country. Cannabis Sativa (bhang), which is commonly abused, is locally available in Kenya. It is grown on the slopes of Mt. Kenya and also comes from Uganda through Lake Victoria and Tanzania through Namanga and Kuria boarders. It is cheap and therefore most students can afford. Miraa is also accessible and affordable as it is grown in Meru parts of Kenya. Its open use and the powerful "drug culture" where drug use is considered normal by communities. Most parents give their children a lot of money in terms of pocket money which enables them to buy drugs. Those not given involve themselves in criminal acts like robbery and prostitution to get money. Maithya (2009) states that availability and cost of drugs is associated with drug abuse.

According to Kaguthi (2014), availability of illegal drugs such as heroin, cocaine and mandrax and legal substances such as cigarettes and alcohol encouraged drug abuse among the student in universities. The abuse of drugs leads to social insecurity and wastage of man power in our country. When these youths mature, they form the core of criminal syndicate (Refoli & Heweitt, 1994). The united nation international drug control programme (UNDCP, 2000), ranked Kenya among the nations notorious for either consumption or manufacturing of narcotic while Mombasa is the major transit point of the drug trafficking in Africa (Onyango, 2002).

Njeru and Ngesu (2014) carried out a study on the causes and effects of drug abuse. The study employed survey research design and was conducted in secondary school students in Dagoretti division. The researchers used questionnaires to collect data. The study established that majority of students’ abuse drugs to feel high and as result of peer pressure. The study also
revealed that poor academic performance was the greatest effect of drug abuse among students. The study recommended heavy punishment of drug abusers as well as guidance and counselling sessions to minimise the vice.

Atwoli et al. (2011) did a study on the prevalence of substance use among college students in Eldoret, Western Kenya. Their findings were as follow; the lifetime prevalence rate of any substance use was 69.8%, lifetime prevalence rate of alcohol use was 51.9% and 97.6% of alcohol users had consumed alcohol in the week prior to the study. Other drugs used included cigarette at 42.8%, cannabis 2% and cocaine at 0.6%. Further studies focusing on primary and secondary schools reveal high rates of substance use among school going children. Oteyo (2013) studying on drug prevalence rate among secondary school student in Kiambu and Nairobi Counties found out that 47.6% of students were alcohol users, 33.1% chewed Khat and 26.6% smoked cigarette/bhang. This implies that prevalence rates would continue to rise among students in institutions of higher learning since early exposure to substance use often predicts future substance dependence.

Various risk factors have contributed to drug abuse among university students in most of Kenyan public universities. For instance Positive attitude of students towards drug abuse has contributed to continuous abuse of drugs by most of the undergraduate students. According to Social cognitive theory by (Bandura, 1977) behavioural change occurs when there is change in the way one thinks and perceive things. If the preventive measures are perceived positively then it becomes possible to have change in behaviours related to drug and substance abuse. The findings of a survey study by Kyalo (2010) revealed that perception of the students on drug abuse contributed to their behaviours toward drug abuse. Perception involves psychological process that allows students to attain meaning to information and then exhibits certain
behaviours. According to Kyalo, students’ perception was formed through people’s immediate environment that is peers, parents, media and neighbours.

A study by Perkins (2010) indicates that factors such as friendship affiliation needs, social comparison processes, pressures towards peers among other factors influence how individuals perceive their world as the group does, adopt peer group attitudes or act in accordance with peers expectations and behaviours. At the college and university levels it is expected that students would develop individuality kind of life, however research has shown that young people are especially prone to adopt peer attitudes and behaviours (Perkins, 2010). In most cases the peer influence during the college and university level extends to young adulthood period where young people continue with the same behaviours. Thus if a student adopts drinking and drug abuking behaviours; the same behaviours are likely to be continued with after the university life. It is also important to note that abuse of alcohol and illicit drugs is addictive.

The transition to college life brings new pressures and uncertainties particularly to the first- year students (Ross & Dejong, 2010). This can be explained by the fact that most of the students find themselves in a new environment away from the shelter of their parents and the strictures of tightly scheduled school days. In this environment as Ross and Dejong (2010) expressed it they become their own masters. The entry to the university therefore marks the beginning of independence which is sometimes characterized by temptation to celebrate the new found freedom, test limits and perhaps escape from new pressures through alcohol and other drugs (Ross & Dejong, 2010). In agreement with Ross and Dejong (2010), Maithya, Muola and Mwinzi, (2011) surveying on the motivational factors for drug abuse among secondary school and university students in Kenya revealed that 16% of students abused substances to enable them to deal with relationship issues.
According to this study students abused alcohol and drugs in order to gain courage to meet with members of the opposite sex. A scientific study done by Muango et al. (2012) indicates that alcohol and drug abuse reduces social inhibitions enabling one to talk freely with new colleagues or other people. Maithya et al. (2011) added that some students confessed that they felt polite and nice to others while intoxicated. Apart from the relational issues, joining university calls for increase in responsibility and stress, as students are forced to make major decisions that will direct the course of their academic, professional and personal lives (Ross & Dejong, 2010). In order to overcome all these challenges, most students turn to alcohol and other drugs posing a major challenge in the fight against the abuse of drugs and other illegal substances in the both colleges and universities in Kenya.

The risk factors associated with this high prevalence rates include availability of drugs and other substances. Actually drugs are available everywhere, anytime, in neighbouring university kiosks, bars, social gatherings and even over counters. Drugs are also available in streets where they are sold by the street people and other specialised drug peddlers. Sometimes the anti-narcotics squad which is a unit within the police force find it difficult to contain this problem because of sophistication in the mode of transportation and packaging as well as the cartel that is involved in its sale.

Illicit drugs are worldwide problem hence are readily available (Ntembi, 2010). Related literature in Ntembi, (2010) indicated that bhang is grown in different regions in Kenya. These regions include, Western Kenya, South Nyanza, along Athi River, Mount Kenya region and other areas including among small scale farmers. Alcohol for example is commonly used among the traditional African communities. Kenya is made up of 42 communities which are closely tied to their traditional practices. Every community has a type of beer that is locally brewed and
abused (Ntembi, 2010). Most of the traditional rituals involve brewing and use of alcohol. Such practices include birth day celebrations, initiation, dowry payment, marriage and even burials. Most of the university students are therefore introduced to alcohol early before they join university. Thus alcohol and drug abusers who decide to stop alcohol and drug abuse may be tempted to relapse to alcohol drinking immediately they break for long university holidays. This lowers the effectiveness of drug abuse preventive strategies in reducing drug abuse among the undergraduate students.

According to preventive health education (1991), the community has a role to play in preventing alcohol and drug abuse. In agreement with this sentiment; Ntembi (2010) argues that all different groups that constitute a community can provide support in the fight against alcohol and drug abuse by modifying attitudes, values and behaviours. Further the community should help the youth to develop problem solving skills and coping mechanisms so as to avert them from turning to alcohol and drugs whenever they face difficulty life challenges. In addition, illicit drugs are easily bought from Kenyan markets, for instance gum and glue are easily attained from retail shops. Others like bhang, cocaine and heroin are also secretly sold in small kiosks that neighbour various universities (Ntembi, 2010). The availability of alcohol and other drugs becomes a major challenge to the effectiveness of any drug and substance abuse preventive strategy. This implies that to be able to assess the effectiveness of any drug and substance abuse preventive strategies the researcher has to take into account the various variables that interact with the preventive strategies that have been put in place.

In Kenya drinking of *kumikumi*, *busaa* and *chang’aa* (locally made alcohol brand) is dominant in low income earners. Public university in Kenya comprise of students from all social classes. Students from low income families face frustrations as they struggle to look for
university fees, food, shelter and other necessities and at the same time cope with their academic performance. Due to such frustrations some of these students end up engaging in alcohol and drug abuse businesses while others result to drinking cheap brands of alcohol that is locally brewed.

However, the affluent also engage in alcohol and drug abuse due to the ability to buy the bottled beer, wine and spirit. According to a study by Okwarah et al (2013) parents from financially well to do families give a lot of pocket money to the students. This prompts the students to indulge in alcohol consumption as well as abusing of other drugs. The researchers found that during weekends and holidays, those with high income converge for drinking with their friends. This eventually becomes a routine since they have enough money to spend. This has posed threat to the effectiveness of drug and substance abuse prevention strategies as students will always look for means to either spend or get money for use.

Pudo (2012) stated that the presence of drug abuse disorders among parents or other family members poses both genetic and social risks for children. Other family risk factors include parental or sibling use of alcohol, tobacco, and other drugs; positive family attitudes toward and acceptance of substance use; lack of attachment to parents at any developmental stage; sexual or physical abuse; economic instability; and poor family management. Pudo (2012) noted that children who come from homes where parents take drugs tend to imitate the behaviour of their parents by engaging in taking of illegal drugs. Some parents deny their children the basic necessities such as food, shelter and education. Frequent harassment with insults among other forms of abuse may turn children to substance of abuse in a bid to escape frustration and depression. O’Neil (2011) further states that with regard to alcohol use, the most important family related risk factor for a child’s drinking is parental drinking.
The majority of research on the genetic or family history influences on drug abuse has focused on alcohol. Students with a family history of alcoholism are at particular risk for heavy drinking and alcohol-related consequences during college. This is confirmed by Merikangas (2008) who states that studies of adopted children and of twins who have grown up in different environments have established that genetic factors play a role in the transmission of alcohol use patterns from parent to child. Genetic factors are more significant in situations of drug use or abuse than in situations of casual use among the children of alcoholics (COAs) compared to non-COAs. Children of alcoholics are at increased risk for alcohol problems; they tend to be initiate into alcohol use earlier and engage in problem drinking at a younger age. West and Prinz (2012) further concludes that COAs are approximately four times likelier than non-COAs to become alcoholics or alcohol dependent.

A study done by Jackson (2010) found that a family history of alcoholism also was predictive of tobacco dependence and chronic or lifetime alcohol abuse or dependence in college students. Researchers hypothesize that parental alcoholism has a greater effect on children’s alcohol use than may be exhibited among college students because only the most successful children of alcoholics tend to go to college. Growing up in a family that emphasizes getting "high" from legal or illegal substances can cause an adolescent to think drug use is acceptable. Mayo (2013) explains that this unhealthy family influence may be a factor in a teen's initial drug experimentation. Exposure to family members who reach for a substance to cure every pain or ailment can cause a teen to do the same. Teens get many of their values from parents and other adult influences, and often mimic what they see.

Brook (2010) argue that, many students complain that their parents are physically absent from home. While it is true that the parents ought to make an effort to be available, students
should understand that in some cases the parents must be away to look for some finances for the basic needs of the family. However, parents should be available, especially during school holidays in the evening and at supper time. The parent’s absence from home means that they are not able to give their children advice or counsel them on social life. Protective family factors can moderate the effects of risk factors.

Protective factors in the family include consistent and contingent discipline; a strong parent-child bond; high levels of supervision and monitoring; and parental warmth, affection, and emotional support. Brook (2010) found that the risk of associating with peers who use drugs was offset by protective family factors such as parent conventionality, maternal adjustment, and strong parent-child attachment. Their research stresses the importance of the ongoing role of the family in the socialization of children well into the adolescent years. Therefore enhancing parenting behaviours that have been shown to be protective can have a positive influence on the child (Hawkins, 2012). Dishion (2008) demonstrated the importance of the family as an intervention context by showing, in longitudinal and cross-sectional analyses of prevention interventions.

A study by Teichman (2011) demonstrated the importance of the family as an intervention context. The study involved longitudinal and cross-sectional analyses of prevention interventions. According to the researcher, good parenting behaviours have a positive influence on how children will respond to drug abuse. The researcher demonstrated that skill in parental monitoring could be taught and that this skill was a viable method of preventing early on-set of drug abuse in children. This was in agreement with Moses (2013) who asserted that the intervention mainly used behavioural, affective, and cognitive approaches to target variety of
family behaviours such as parent-child interaction strategies, communication skills, child management practices, and family management skills.

The abuse of drugs has caused a serious threat to students’ health (wheeler, Rymer & Tamama, 2018). In the past several years, the incidence of drug abuse and drug overdose death has rapidly increased reaching epidemic levels. According to the study the number of deaths caused by drug abuse has surpassed that caused by motor vehicles accidents and firearms since 2008, becoming the leading cause of injury death.

The global drug survey report (2014) indicated that most young people below the age of 30 years had abused alcohol, tobacco and cannabis in the previous year preceding the survey (Winstock, 2014). The UNODC (2014) report estimated that 3.5% to 7.0% of the world population aged between 15 and 64 years had abused drugs. Consequently, psychoactive drug abuse continued to exert a significance toll on valuable in lives as well as destroying productive years of many young people. This is primarily because drug abuse can result in a wide range of health and social problems for individual, their families and the wider society (WHO, 2007).

In addition the WHO (2012) drug abuse management and the UNODC (2014) reports indicated that many countries were facing an increase in alcohol and drug consumption among young people aged 15 to 29 years. The report by WHO (2009) also showed that two million people abused illicit drugs which accounted for about 4.5% and 3.8% of all deaths worldwide. The report also showed that the rates are highest in Europe and USA and are seen to be rising in other regions. This was an indication that drug abuse among students has become a major concern for not only the developed but also developing countries (WHO, 2008). A report by the Centers for Disease Control and Prevention (CDC) reported that 52,404 deaths, an 11.4% increase from 2014 as a result of unintentional over dose with more than 60% (33.09) attributes
to opioids. The same study found that the number of deaths involving heroin overdose increased between 2007 and 2014, this was explained partly by the increasing availability of heroin in the USA and consequently some prescription drug abusers convert to heroin as a cheaper alternative.

According to the 2016 Drug Enforcement Agency (DEA), emerging threat report, 2,679 identifications of psychoactive compounds were made among college and university students. The study seized and analysed drugs in the DEA’s laboratory system. In this report, 48.4% of the students agreed that opioids was mainly abused, 36.7% pointed synthetic cannabinoids while 13.0% were in agreement that synthetic cathinones was abused by students in colleges and universities. This was an indication that drug abuse is particularly problematic during adolescent development.

In Kenya, this development is experienced when most of young people are in colleges and universities. So drug abuse becomes a function of the negative pro-drug social influences and exposure, together with individual development and vulnerabilities. From theoretical lenses drug abuse is conceptualised as the interplay between social-environmental and personal factors. Drug abuse behaviour, like other types of behaviour maybe learned through a process of modelling and reinforcement, mediated by personal factors such as cognitions, attitudes and beliefs (Kaplow, Curran & Dodge, 2009). The social learning theory, the Freudian theory in drug abuse, The CAP control theory and an availability-proneness theory suggest that the problem of drug abuse may manifest itself initially in the consumption of the socially accepted drugs (alcohol, miraa, cigarettes). However, many students are not able to discontinue the abuse after a brief period of experimentation without drug abuse disorders and dependency (Kandel, 2002).
A study by NSDUH (2014) in USA showed growing evidence that alcohol, tobacco, marijuana and other drugs of abuse increased from early to late adolescents peaking when adolescents enter adulthood. The study indicated that the rate of current drug abuse varied by age among youths aged 12 to 17 years, the rate increased with age from 3.5% at ages 12 to 13 years to 18.2% at ages 14 or 15 to 16.6% at ages 16 or 17 years. The study found that the highest rate of drug abuse 23.9% was among 18 to 20 year olds while the next highest rate was among the 21 to 26 year olds. This was an indication that drug abuse increased as young people progressed in age chronologically up to 26 years. This information is important to this study because most of the undergraduate students are between 16 to 26 years of age. It therefore implies that when a student start abusing drugs in first year there is likelihood of continuing abusing drugs despite having preventative strategies having been put in place.

The study also revealed that most of the students (42.5%) get drugs of abuse mainly from their friends and relatives who abuse drugs. In addition most of students (37.6%) abused drugs during weekends and during examination time. Most students (52.1%) revealed that students prefer to abuse drugs when in their social groups in parties or their hostels. United nations office on drugs and crime regional trends in drug abuse report (2014) revealed that there was limited information available on drug abuse situation in Africa. However, the report indicated that there was 12.4% cannabis abuse in West and Central Africa which was higher than the reported global average of 3.85%. Cannabis remained the most commonly abused drugs among undergraduate students in Africa aside from alcohol. The situation is similar in Sub-Saharan Africa where drug abuse is not well documented (Acuda, Othieno, Obondo & Crome, 2011). However, there is consensus on the types of drugs abused with alcohol being on the lead, followed by tobacco, cannabis, khat and solvent within the East African region.
According to a national baseline survey carried out by the NACADA (2012) and the Ministry of Education (MoE, 2012), drugs abused for the first time by students include cigarettes 20%, bhang 30%, miraa 30%, kuber 6% cocaine and heroin 2% band 3% respectively. The study further indicated that Nairobi and Kiambu Counties were leading in majority of callers seeking help through the toll free call number 1192 for alcohol and drug abusers, followed by Nyanza, Western, Eastern and Coastal regions. The same report revealed that alcohol abuse is prevalent in Central and Western regions, tobacco in Central region, bhang at the coast and Western, Miraa in North Eastern while Coast led in heroin and cocaine abuse.

A drug survey in Kenya by NACADA (2012) showed that one in three students reported abusing one or more drugs. According to the survey alcohol was the most commonly abused drugs with 36.3% of students reporting a lifetime abuse. Miraa comes second with usage reported among 31.5% of students, cigarettes was abused by 20.2%, bhang by 9.8%, Kuber by 5.5%, heroin 3.1%, inhalants by 2.7% while cocaine was abused by 2.2% of students. This indicated the dynamics drug abuse has taken in our context thus there is need to be concerned about various preventative strategies that can help reduce drug abuse among students.

2.4 Influence of Drug Abuse Awareness on Drug Abuse Reduction

The most worrying aspect of drug abuse is that it has overpowered quite a number of youth in most countries worldwide (Larimer et al., 2010). This has made most of governments to engage in drug abuse campaigns in their respective countries. Several drug abuse programmes which include programmes on drug abuse awareness, resistance skills, peer support and life skills programmes have been established.
The USA launched the higher education centre for alcohol and other drug abuse and violence prevention to help campuses and communities develop strategies for changing campus culture; foster environments that promote healthy lifestyles and prevent high risk alcohol and other drug use and violence among students. This centre has encouraged colleges and universities to initiate a number of activities which are aimed at helping students successfully transition into campus life and at reducing a range of problems related to student drinking. In universities where programs have been established, drug abuse cases and consequences associated with it have lessened. Criteria used by USA department of education (NIDA, 2008) on award-winning prevention programs have helped identify some of the campuses whose prevention programs have demonstrated effectiveness. Examination of these programs would be important for benchmarking in Kenyan universities.

Vicary and Karshin, (2012) observed that social marketing campaigns are popular interventions in reducing binge drinking in USA universities and seems to have some effectiveness in influencing students’ beliefs and behaviour towards drug abuse. Western Washington University has incorporated several programmes such as social marketing campaign, health opinion leaders, and community-health service learning programme. It would help universities in Kenya if students are engaged in campaigning against drug abuse so that they may persuade their colleagues who may otherwise be using drugs.

At the Auburn University, the programme being used is brief alcohol screening and intervention for college students (BASICS) founded in 1997. It is a supportive programme to enhance motivation and make students learn how they might benefit from not engaging in drug abusing behaviours. This has reduced enthusiasm among some students to avoid taking drugs. However, this needs to be applied in Kenyan Universities with caution through amiable
approaches to avoid misinterpretation that they are being compelled and for students to see the beneficial effect it has on them.

University of Boston employs a comprehensive community-based programme involving encouragement and law enforcement on drug abuse prevention. This was done through a task force which ensures students make healthy decisions and exercise a sense of responsibility with use of drugs. Feedback on what students think about alcohol is through e-checkups which enable students to develop self-awareness on their drug status. Other programmes in this university include e-TOKE, CHOICES and BASICS (Larimer et al., 2010). An enhanced involvement of students is likely to contribute to effectiveness hence these programs offer a good example to universities in Kenya.

Prevention programme at Bowling Green state university is called bowling green state university peer-based alcohol prevention. It targets misperceptions, attitudes and behaviours that discourage drug abuse. It was based on study findings that perceived drinking norms and the actual norms do not tally therefore the programmes were established to address this gap. The program at Rutgers University applied a similar strategy of targeting misperceptions though their RU SURE programme which encourages students to review their behaviours (D’Amico & Edelen, 2011). This is a strategy geared towards introspection which ideal for encouraging individual ownership of prevention amongst students. Based on the theoretical framework highlights above, these programs have strong lessons to offer Kenyan universities on the crucial role individual initiative plays in comprehending accurate norms to be encouraged in the university.

At the university of Virginia, a student body called Alcohol and Drug Abuse Prevention Team (ADAPT) promotes awareness, provides educational outreach, and serves as accessible
resources for their fellow students. These are meant to encourage the students, faculty and staff involvement in environmental change and community collaboration. Tarter (2012) reiterates the significance of these practices that intensive individualized prevention is required to effectively reduce or more expectantly ameliorate the risk of abuse. Social marketing has shown great promise in addressing a wide range of problems including adolescent drug abuse (Denniston, 2004 in Coreil, 2010).

At Berkshire Community College, a programme called Leadership in education about alcohol and drugs (LEAD) operates a range of activities mainly to create positive reinforcement and Peer leadership, with emphasis on civic and individual values and responsibilities. The programmes assess the environment and contribute to written policies and procedures for the college community; promote education, prevention, and intervention efforts that include curriculum adaptations, student-peer participation, staff orientation, and training; and provide activities to motivate students and generate positive publicity. These programmes are supported as good approaches to drug treatment due to their ability to address certain aspects of drug addiction and its consequences for the individual, family and society (Medina-Mora, 2015; NIDA, 2009).

Health Entrepreneurship is a programme started at the Montana State University to redefine drug and alcohol norms on campus through the development of autonomous "micro businesses" that focuses on health. Thus, the role of the health promotion staff becomes that of health entrepreneurs who teach students to apply environmental strategies into their daily operations (Deas, 2010). A similar program is in George Mason University where transformation of campus cultures is done through healthy expectations program which promotes positive expectations, norms, skills and proactive life healthy planning. The healthy life planning is
founded on seven principles namely; optimism, values, self-care, relationships, community, nature and service. These principles have been integrated in an initiative dubbed COMPASS which handles topics appropriate for healthy life planning on many aspects of life. They are distributed to first year students so that a culture of healthy living may be established (Deas, 2010).

Attesting to these practices NIDA (2013) and Ghodse (2015) argue that if prevention programmes were incorporated into a wider perspective of healthy lifestyles rather than emphasising on what was forbidden or dangerous, they would become more effective. Compass programme spreads tentacles of dissemination on drug abuse so that students may view the reduction from the perspective of health benefits. This programme sets a good example which can be embraced by university students without necessarily feeling being coerced into not abusing drugs. It could lead to effective reduction of drug abuse among students if well implemented.

At the University of Scranton, The drug and alcohol information centre and educators (DICE) is a programme geared towards encouraging students to consume alcohol in legal, low-risk ways, and in ways which abstinence from the abuse of drugs and alcohol is acceptable. Students are encouraged to make informed decisions supporting responsible alcohol use and make it a habit to participate in organised activities emphasising responsible use of alcohol and non-use of illegal drugs. In support of these programs (Dusenbury & Falco, 1995; Botvin, 2015) contend that life skills training is the most effective and rigorously tested school-based prevention programme which has been proven to cut alcohol, tobacco and drug use by up to 87%. They recommend programmes which help students develop strong decision-making skills, goal-setting abilities, stress management techniques, communication skills, social skills, and
assertive skills so that they can make and defend their sobriety decisions. These skills enhance student efficacy in drug abuse prevention which has demonstrated its crucial significance for effective implementation (Botvin & Griffin, 2012).

In USA, increase in drug abuse among students led to the establishment of drug abuse reduction programmes many of which were educational in nature (Stead & Agus, 2010). For instance the Drug Abuse Resistance Education (DARE) was created by the Los Angeles Unified School District in 1983 as a drug abuse prevention programme for grades K12. Through this programme students were prepared to recognize the pressures that might influence them to abuse drugs and were provided with the skills needed to resist those pressures using self-esteem, communication skills, decision making skills, and positive alternatives to drug abuse (Sigler & Talley, 2007).

An evaluation by Stead and Agus (2010) showed that since the programme was established, it had expanded to encompass programmes for middle and high school students. The programme also focussed on conflict resolutions, gang prevention, parent education, and after-school recreation and learning. Ross and Dejong (2010) compared seventh graders who had been exposed to the DARE programme with seventh graders who had not been exposed to the DARE programme. The findings revealed that seventh graders who had been exposed to the DARE programme reported lower usage of alcohol, cigarettes and other substances during their seventh grade year compared to those who had not been exposed to the same programme. This was followed by training of the first year students in Illinois (USA) to say “no” to tobacco smoking. According to Ringwalt, Curtin, and Rosenbaum (2010) there was an increase in abuse of tobacco among students who did not attend the training while those who attended displayed decrease in tobacco abuse.
In Russian colleges, school-based drug abuse reduction programmes were led by tutors. The programmes involved school health and alcohol harm reduction project (SHAHRP), Botvin’s LST and protecting you (PY) and protecting me (PM) programmes and targeted young people of between 19-24 years. A study by Tsvetkova, Natalia, and Antonova (2013) revealed that these programmes were able to reduce drug abuse in the short period. The researchers found that interventions using the life skills approach or focusing on harm reduction through skill-based activities (SHAHRP) produced long-term reductions in drug abuse as well as risky drinking behaviours such as drunkenness and binge drinking. However, the researcher noted that the applicability and transferability of these programmes required further study. The study was done in Russian colleges while the current study was done in public university campuses in Nairobi County.

Apart from the school-based interventions in reduction of drug abuse among students which include social, decision making, communication and refusal skills, research showed that other contexts within the social ecology were appropriate and important points of drug abuse reduction (Adams, Ryan & Keeting, 2012). Such contexts included the family, recreational and religious settings, the community and the workplace. Family-based intervention targets the risk and protective factors that are specific to the family context as well as interactions between the family and other contexts (Sindabi, 2013).

Studies (Gerdes, 2009; Trink & Storr, 2011) showed that the presence of drug abuse disorders among parents or other family members caused both genetic and social risks for young people. Other family risk factors include positive attitude and acceptance of drug abuse, lack of attachment to parents at any developmental stage, sexual or physical abuse, economic instability and poor family management (Haladu, 2013). Protective factors in the family include consistent
and contingent discipline, a strong parent-child bond, high levels of supervisions and monitoring, parental warmth, and emotional support (Brody, 2011).

On examining these programmes, one realizes that most universities have established programmes based on research findings. Winters (2014) argue that, behavioural and psychosocial interventions can be effective in treating adolescent drug abuse and other associated problems. On the same note, Epstein and Mc Crady, (2009) postulate that, cognitive-behavioural and behavioural therapy approaches are based on operant behavioural principles such as, rewarding behaviours because they provide a constructive reinforcement system for the students. Social learning-based drug prevention programmes have positive long-term effects on tobacco, alcohol, and marijuana use (Newton & Barrett, 2012). Additionally, programs mentioned above produce similar improvements in substance related behaviour, such as reductions in antisocial behaviour and school behaviour problems, and in areas of social functioning, such as improvements in academic skills, greater commitment to school, improved drug refusal skills, and reduced affiliation with deviant peers (Epstein & Mc Crady, 2009).

A study by NIDA (2013) found that life skills training (LST), a thoroughly tested, school-based, universal prevention programme, significantly reduced initiation of drug abuse among urban, minority middle school students who were doing poorly academically and had substance abusing friends. Previous research has linked these academic and social factors to increased risk of subsequent substance abuse. Yet one year after the LST program, these high-risk youths reported lower rates of cigarette, alcohol, and inhalant use than a comparable group of nonparticipation students. Moreover, LST participants who reported using these substances used them in lower amounts than nonparticipants. Resistance skills programmes as a whole have generally been successful.
Botvin (2010) states that a comprehensive review of resistance skills studies published from 1980 to 1990 reported that the majority of prevention studies (63%) had positive effects on drug use behaviour, with fewer studies having neutral (26%) or negative effects on behaviour (11%) with several in the neutral category having inadequate statistical power to detect programme effects. Furthermore, several follow-up studies of resistance skills interventions have reported positive behavioural effects lasting for up to three years, although longer term follow-up studies have shown that these effects gradually decay over time, suggesting the need for ongoing intervention or booster sessions.

Mihalic, Fagan, and Argamaso (2008) in their appraisal of this programme argue that although most sites faced common barriers, such as finding room in the school schedule for the programme, gaining full support from key participants, ensuring teacher participation in training workshops, and classroom management difficulties, most schools involved in the project implemented LST with very high levels of fidelity. According to this study life skills training should be promoted amongst students to teach them resistance techniques. Evaluation studies of DARE by Dennis, Rosenbaum and Gordon (2013) examined the most scientifically rigorous published evaluations of DARE and concluded that DARE has little or no impact on drug use behaviour, particularly beyond the initial post test assessment. Some of the possible reasons why DARE is ineffective may be that the programme is targeting the wrong mediating processes, that the instructional methods are less interactive than more successful prevention programmes, and that teenagers may simply "tune out" what may be perceived as an expected message from an ultimate authority. This raises a cautionary note to Universities in Kenya to dissuade programmes which may appear fanciful but may not appeal to users as evidenced by Botvin and Griffin (2015) who argue that the aetiology of drug and alcohol abuse is complex and prevention
strategies that rely primarily on information dissemination are not effective in changing behaviour.

A study in United Kingdom (UK) by Boneli, Dew, Koenig, Rosmarin and Vasegh (2012) sought to assess the degree of drug abuse reduction as a result of drug abuse awareness among students of Kingston University. The study sample was composed of 423 year three students who were selected through simple random sampling technique. A pre-tested semi-structured anonymous questionnaire was used to collect data. Three major themes that emerged in the study in relation to the research questions were: the causes; the effects and the prevention measures of drug abuse among the students.

In UK, colleges are using a variety of methods to educate students around drug abuse and to challenge their perceptions and attitudes (Polymerou, 2015). This has been organised and delivered in a wide health promotion network (Dunne & Summerset, 2014). McCambridge and Strang (2004) examined the influence of drug abuse awareness in ten educational colleges across inner London. The study involved 2,578 undergraduate students in five faculties. The sampling procedure employed included stratified random sampling and purposive sampling. The data was collected using both questionnaires and in-depth interview guides. The raw data was analysed using descriptive data and thematic analysis. The findings of the study revealed that students that received the Motivational Interviewing intervention reduced the abuse of alcohol, cannabis, cigarettes and other drugs at three months follow up compared to students who received education as usual. This was indicated 69.5% of the students who agreed that since they received the training they had reduced their abuse of drugs while 15% of the students reported to have continued with drug abuse even after receiving the training.
Miller (2013) examined the effectiveness of motivational and skill-training in drug abuse reduction among students in the Bedfordshire University College. The study involved lecturers and students in their second year of study in computer science and technology department. The data was collected during the winter period using online questionnaire. Only 2500 participants responded to the questionnaire. According to the findings of the study older youth at university (56%) continued with a pattern of heavy drug abuse which they had begun in their respective former secondary schools. It was also revealed that students (45%) who began drug abuse in their first year of study would easily stop drinking if drug abuse education was appropriately offered. The study further discovered that most students (65%) abuse drugs when they are stressed. The students’ report on abuse of drugs to cope with pressure became a concern, because it led to intoxication and thereby risking accidents or, particularly in the case of alcohol, violence. The study continued to reveal that 63% of the students who received motivational and skill-training admitted that the training had helped to reduce drug abuse among the students. The implied that motivational and skills-training approaches were proving effective in reducing drug abuse problems in university settings.

Another most well-known campaign in London was ‘study safely’. This campaign was targeted at further and higher education students aged over 18 across London and was run jointly by London drug action teams (DATs). It was based on a non-judgmental, harm-minimization strategy. The materials produced were received very positively and the national union of students (NUS) encouraged their alcohol and drug prevention in colleges and universities making a positive impact (Branigan & Wellings, 2011). The role of students’ active participation and dissemination of information on drug abuse prevention enhances effectiveness as they embrace drug abuse prevention programs. Social norms interventions are strategies targeting students’
misperceptions about drug abuse and its consequences. Research demonstrates that students don’t accurately perceive the nature and use of alcohol and drugs amongst their peers (Hollands & Myer, 2016).

Polymerou (2014) carried out a study on the effect of extra-curricular activities on drug abuse reduction. The researcher adopted a cross-sectional research design and questionnaires were used to collect data from the Middle East Technical University students, the deans of students, games masters and the lecturers. The study found that extracurricular activities were very effective in reduction of drug abuse students. The findings found the role of extracurricular drug free activities among college and university students have potential implications for drug abuse prevention programmes in universities and colleges. According to the study adolescents who participate in extracurricular activities such as pro-social activities, team sports and performing arts have not only better academic performance and college attendance but also lower risk of dropping out of colleges and universities. Further the study revealed that participation in sports activities predicted reduced involvement of risk taking behaviours, including alcohol and drugs and better self-esteem. The study also discovered that different types of extra-curricular activities were related to different types of academic performance. In the study pro-social and performance activities predicted lower increase in alcohol abuse. However participation in sports has produced mixed results in students’ drug abuse. According to Fredrick & Eccles (2016) some students engage in drug abuse when they join some extra-activities’ groups. The researchers asserted that it is important for learning institutions to ensure that the environment in which the extra-curricular activities are held is drug free.

Additional support for the role of sport in drug prevention comes from the Positive Future Programme, a social inclusion programmer in England that engages young people in sport
activities. There is evidence that the programme may have a positive influence on participants' substance misuse, physical activity and offending behaviour (Eccles, 2013). Beneficial role of extracurricular activities in students attending university is supported by research that shows the important reinforcing role that student activities have on reducing drinking in the campus. Murphy (2005) found that students who decreased their drinking showed increased reinforcement from drug free activities.

The FRANK campaign is a partnership programme amongst department of Health and education units in the UK. The programme provides information on drug abuse risks as an endeavour to discourage students from engaging in drug abusing behaviours. It has helped in reducing drug abuse cases amongst young people ((Weichold, 2011). In Germany, a programme called information and psychosocial competence (IPSY) established by psychologists and psychiatrists in the university of Jena teaches students life skills making them less susceptible to peer pressure and drug abuse habits. This is supported by a study conducted earlier by the global youth network that positive peer pressure should be encouraged through art, music and sports in order to encourage self-esteem and self-confidence (Weichold, 2011). In Romania, a programme called our ‘measure your lifestyle’ encourages students to enjoy alcohol in moderation and so avoid personal, social and health costs to themselves, their families and society as a whole. This means that establishment of personal values can be an effective strategy to preventing drug abuse amongst university students since art and sporting activities are popular.

A study conducted by Jenaro (2014) in the University of Wuhan in China suggested that preventative strategies only developed attention among young drug abusers. The study found that educating students about the dangers of drug intake as well as its moral and religious implications was likely to be more effective than increased policing. The study further emphasise
integration of addiction medicine into the undergraduate medical curriculum. According to the study, integration of addiction medicine in the university curriculum was more effective in reaching out to drug abusing students. In the Philippines, the youth life enrichment programme (YLEP) was implemented in the college level through the psychological societies of different colleges and universities in Metro Manila (Cornelio, Banaag, & Jesus, 2010). The programme was committed to providing education and advocacy activities on drug abuse prevention among the youth. These programmes had contributed to drug abuse reduction. At the Philippine Women’s University, drug prevention, recovery and post-recovery care programme consisted of three components of prevention, recovery and post-recovery care which all aim at helping students not to abuse drugs.

At Trinity University of Asia, a project called HEALS encourages student volunteers and community clients to observe wellness and busy themselves with worthwhile social activities or services in order to prevent them from engaging in drug abuse (Ebuen, 2016). These projects have helped students participate in preventing drug abuse amongst their colleagues through dissemination of information and an inclination to prevent drug abuse. Participation of students in positive various activities makes them meaningfully occupy their time and plays a big role in making prevention programmes effective. A study carried out in Japanese universities indicated that drug abuse prevention programmes for college students address the health effects of risky drinking behaviours and train students on how to avoid submission to peer pressure (Shimane, 2011). In Australia, response to the drug problem was an integrated approach, involving law enforcement, health, prevention, education and treatment services. In universities, Peer educator programme, youth sport and recreation programmes play an important role in prevention. From a law enforcement perspective, the focus is on prevention and partnerships with colleagues.
nationally and internationally (Lockwood & Saunders, 1991). Strengthening policy implementation is an important value addition to prevention programmes effectiveness.

The findings of the studies indicated that the main objective of drug abuse awareness was to empower individual student’s initiative to prevent getting into drug abuse as well as create positive attitudes towards preventative strategies that had been put in place. The study revealed that drug abuse awareness reduced the rate of drug abuse among students. The conclusions reached showed the importance of continuous drug abuse awareness campaigns in institutions of higher learning. This involves holding of drug abuse awareness seminars, workshops and peer discussion groups. The reviewed study sought to assess the influence of drug abuse awareness on drug abuse reduction while the current study went further to explore how other preventative strategies such as drug abuse policies, guidance and counselling as well as personal drive influence drug abuse reduction in higher learning institutions. The study also used simple random sampling to sample its participants which may have created biases on the representation of gender and various faculties in the study. The current study used stratified random sampling, simple random sampling and purposive sampling techniques to avoid biases. Further the reviewed study employed a cross-sectional design but the researcher in the current study employed both cross-sectional and phenomenological study designs so as to capture the opinions and attitudes of undergraduate students towards the influence of drug abuse awareness in drug abuse reduction.

Most of the prevention programmes in African Universities entail those offered by Nongovernmental and Governmental organizations whose fundamental objective is to empower students on prevention of substance abuse. Drug control strategy in the sub region of West Africa hinges on a combination of supply control and demand reduction programs (Adelekan, 2016).
Through these programmes, dissemination on drug abuse causes, course and effects has been done to enable students acquire appropriate information necessary for effective prevention of drug abuse.

In South Africa, Twala (2010) carried out an evaluation on primary reduction of drug abuse education amongst young people at Tembisa. A sample of thirty eight college learners was systematically selected. The data was collected by means of a questionnaire based on background information of respondents’ attitude, knowledge and behaviour of drug abuse. The findings of the study indicated that drug abuse education had an effect on knowledge but there was no statistical significance effect on attitude and behaviour towards drug abuse. The researcher concluded that information given to young people could not determine change in behaviour and attitude, and that increasing their knowledge meant they will not abuse drugs in the future. From this conclusion, the current study examined whether such findings and conclusions would be reached in Kenyan public universities using both quantitative and qualitative paradigm.

Burnhams, Myers, and Parry (2012) in their study in learning institutions in South Africa reported that prevention programs in Cape Town mostly take the form of educational programs (91%) which aim to raise awareness by providing knowledge about drug abuse and their consequences. It encompasses comprehensive survey of substance abuse to identify those with the most serious drug and alcohol problems in order to offer psychosocial support, over and above awareness and education (McDonald, 2010). Another program established under the partnerships of students, university authority and Miller Company used three educational channels consisting of poster positioned on campus pubs, banners with taxi information
displayed during orientation week events encouraging drinkers not to drive drunk and disposable breathalyzers carrying a responsible message given out at various events.

The global initiative on primary prevention of drug abuse by World Health Organization and United Nations on Drug and Crime (2013) initiated comprehensive drug abuse prevention programmes involving various projects in South Africa, Zambia and Bagamoyo, Tanzania for young people in schools and universities. Activities include broad-based interventions that give equal weight to supply and demand reduction; improve young people’s living conditions; and ensure that community agencies are mobilised towards preventive action. Comprehensiveness of prevention programmes to include individual and environmental related approach is significant in adequately addressing drug and substance abuse. In Namibia, ‘The Suzie and Shafa Show’ is a lifestyle’s variety show created by youth for youth between the ages of 15 and 24. The programmes addresses different types of lifestyle issues faced by youth in Namibia which include; alcohol and drug abuse, dating, rape, staying healthy and avoiding and preventing sexually transmitted infections (STIs), and HIV infection. Radio programmes that accurately targets youth oriented activities would be a strong avenue through which drug abuse information is effectively passed to them.

Oshikoya and Alli (2006) carried out a cross-sectional and descriptive study among second year university students in Lagos. The study aimed at establishing the level of awareness on the causes and effects of drug abuse among students. A total of 402 students were studied. Among them 43.5% (n=175) were males and 56.5% (n=227) females. The findings indicated that 25% of males and 37.5% of females had little knowledge on the causes and effects of drug abuse.
The study also revealed that more female participants (15%) than male participants were aware of how to reduce drug abuse. The report from this study shows that despite being a worldwide pandemic and education about drug abuse being integrated in educational curricular, majority of students have limited awareness of drug abuse adverse consequences and means of preventing getting into drug abuse. Thus majority of students (65%) continued to abuse drugs. Although the study revealed that there is need for more drug abuse awareness campaigns among university students in Lagos, Oshikoya and Alli failed to establish why despite drug abuse education and drug abuse awareness campaigns there was still a significant percentage of students abusing drugs. The current study was carried out in Kenya and attempted to establish whether drug abuse education and awareness campaigns have effectively reduced drug abuse among the university students. The study also attempted to establish some of the challenges that hinder effective drug abuse reduction among students.

The Ministry of Education in Kenya (GoK, 2003) mandated universities in the performance contracting to initiate drug abuse prevention. This resulted in universities’ networking and linkages with the Ministry of Education, Science and Technology, and NACADA (Hagembe, & Simiyu, 2016). Through these surveys, dissemination of information and training of trainer (TOTs) on drug abuse has been carried out. These are important processes that unveil pillar themes to target in order to upgrade drug abuse prevention effectiveness.

Larimer, Kilmer and Lee (2010) conducted a review on college student drug prevention focusing on individually-oriented prevention strategies in Kenya. The study revealed that high risk consumption of alcohol and other illicit drugs develop in the late teenage years and persist during the young adulthood. This marks the period when most of students are either in secondary schools, colleges or universities in Kenya. The findings of the study indicated that, although the
students who received the individually-oriented intervention were more knowledgeable and communicated more with their parents about alcohol, they continued to drink alcohol and experienced alcohol related harms just like those students who did not receive the intervention. The study failed to address the question why the students would continue to drink alcohol even after receiving the individually-oriented interventions. The study also concentrated on students in the first year of study.

The researcher in the current study sought to establish the effectiveness of alcohol education at university level targeting students who are in their third year of study. Larimer et al. (2010) concentrated on the report by other scholars who had carried out studies before this study. However, the social learning theory asserts that people keep on learning from what they observe and experience as they interact in the environment they live in. This therefore implies that the opinions and attitudes of students in the year 2010 may have changed their attitude towards drug abuse today. This made it difficult for the researchers to capture what the students felt about drug abuse in the time of their study. The current study used both quantitative and qualitative paradigms in order to be able to reach to as many students as possible through the questionnaires as well as explore current experiences, opinions and attitudes of the respondents towards drug abuse preventative strategies.

Maithya, Muola, and Mwinzi (2010) carried out a quantitative and qualitative study focusing on drug abuse education as a preventative strategy in the fight against drug abuse among secondary schools and university students in Kenya. The study involved 360 secondary school students and 340 students from three Kenyan public universities. The study revealed that drug abuse prevention education in both secondary and university levels were inadequate in relation to instructional approaches, content and personnel skills. The current study sought to
establish whether instructional methodology, content and personnel skills in drug abuse education have reduced drug and substance abuse.

From the perspective of social learning theory, drug abuse is conceptualised as a socially learned, purposive and functional behaviour which is the result of the interplay of environmental and personal factors (Okul, 2010). While studying on the emerging challenges faced by stakeholders in the implementation of discipline strategies in public schools, Okul (2010) found out that enhancing general personal competence and teaching students the specific skills and knowledge increased their ability to resist the various forms of pro-drug abuse social pressures. According to Okul (2010) effective change always come from within the person thus through discussions of feelings, values and self-awareness towards drug abuse, individual students are able to develop resistance skills which include social skills such as decision-making, problem solving skills, goal setting and assertiveness. Although the findings by Okul (2010) seemed to confirm the effectiveness of personal and social traits in reducing drug abuse, the study was done in secondary schools but not at university or college level. This therefore calls for an examination of the effectiveness of this strategy in reducing drug abuse among university students.

At Kenyatta University, Kamanja (2010) reports that the peer education programme aims to reduce irresponsible sexual behaviour, unwanted pregnancies, sexually transmitted infections (STIs) including HIV/AIDS and drug abuse by enhancing the quality of counselling and service delivery for students. Kamanja (2010) argued that peer outreach and extension programme trains university students to promote responsible behaviour among their peers. Through peer counselling programme, students obtain information on drugs and referrals for better help from trained counsellors are done for students with complicated drug abuse cases. Other drug abuse
prevention programmes are done through dissemination of information about the onset, course, effects and intervention approaches to drug abuse through University newsletter and radio station (99.9 FM). Student clubs such as Kenyatta University youth against drug abuse (KUYADA) spearhead drug abuse prevention activities through talk show (Kamanja, 2010). The student body carries out dissemination of activities on drug abuse amongst the students. Participation of many student bodies in prevention promotes reduction of drug abuse through positive student responsiveness.

At The University of Nairobi, a programme called students campaign against drugs (SCAD) discourages students from using drugs in the campus. Peer counsellor programme has been active through the assistance of Pathfinder International. A survey carried out by Ndetei (2011) established that Nairobi University association for a drug-free society (NUADS) had done some advocacy work and was planning to extend it through cooperation with students in other Kenyan public and private universities. Through these student organisations, networking links within and outside the university has been made possible hence improving effectiveness through diversification of approaches to prevention (Ndetei, 2011).

At Jomo Kenyatta University of Agriculture and Technology, REPACTED-Kenya in collaboration with other Nongovernmental organisations such as, the MTV staying alive foundation, the raising global voices Online, the Nakuru players theatre, APHIA II Rift Valley, partners for progress, act Alive, vices of roses, national organisation of peer educators, Kenya and the national AIDS control council provide information on drug abuse causes and prevention. The programmes also train peer educators who help in helping their fellow youth to find solutions to issues affecting them (Boneli, 2012). Complementary approach amongst university
service providers and outside agencies to drug abuse prevention could enhance effectiveness due to joint material, human and financial resources (Boneli, 2012).

According to Okul (2010) Daystar University was one of the first universities to involve NACADA in their drug abuse prevention campaigns against smoking, gambling, use of intoxicating liquor, use of illegal drugs, and use of obscene or pornographic materials. This led to September 2005 declaration of Daystar University as a drug abuse free institution. Kenya Methodist university prevention programmes were implemented through Kenya Methodist University campaign against drug abuse (KEMUCADA). It disseminates information on the effects of drug abuse amongst students and staff (Oshikoya & Alli, 2012). It also carries out campaigns against drug abuse in the neighbouring communities of the campus to counteract drug of abuse getting within the university compound.

While a number of studies (Boneli, 2012; Okul, 2010; Oshikoya & Alli, 2006) have been done on the drug abuse awareness in schools and universities, studies on how preventative strategies influence drug abuse reduction among university students remained silent. To reduce drug abuse among students, it is important to establish whether the various strategies put in place are effective or not. This would help to either modify or formulate new strategies that would facilitate the fight against drug abuse in our universities. Likewise all stakeholders (administrators, students, lecturers, university support staffs and parents) should be involved in the reduction of drug abuse among students. This involvement would provide some sense of ownership of the entire fight against drug abuse. It is imperative that students are given the opportunity to come up with strategies that they think are effective in reducing drug abuse as well as help in the implementation of such strategies.
Perception is an essential concept in understanding why drug abuse awareness training can reduce or not reduce drug abuse among students. This is because perception is believed to influence individual’s thoughts, feelings and behaviours (Sue, 2014). According to Sue perception on drugs determines individual’s decisions and views towards them. Researchers (Tsvetkova, Natalia & Antonovra, 2013; Vicary & Karshin, 2013) have found out that the earlier and the more students are told about the harmful effects of drug abuse, the less they will be inclined to try drugs. Thus programmes such as DARE in USA, NDLEA in Nigeria, Prevention of Alcohol and Drug Abuse (PADA) in Uganda and NACADA in Kenya are expected to develop negative perception towards drug abuse, hence making students refrain from abusing drugs. According to a study by Perkins (2010) these drug abuse educational programmes are aimed at informing students about the most commonly abused types of drugs and their harmful effects and to make the students aware of the serious consequences of drug abuse. A further objective is to increase students’ awareness of the influence of their friends and the media in drug choices. The researcher adds that, lectures, exercises and roll with resistance counselling techniques found in these programmes help students to say no to drugs. It is therefore expected that this kind of awareness would reduce the rate of drug abuse among students.

Tsvetkova, Natalia and Antonova (2013) investigated the relationship between drug abuse awareness training and drug abuse prevalence rates among students in Sweden. The study revealed a strong association between drug prevention education and students’ drug habits. In addition, the study showed that there is a positive long term correlation between drug abuse education and the proportion of students who have tried to abuse drugs. According to this study the larger the numbers of students who attended drug abuse education programmes, the larger the number of drug abusers. This study was done in Sweden but the current study was carried out in
Kenya and sought to establish the influence of drug abuse awareness in reducing drug abuse prevalence rates among undergraduate students.

Bundy (2010) carried out a study to determine the effects of an academic drug education course on drug-related attitudes and behaviours among college students. The participants were consenting volunteers from three upper-level psychology courses at a Midwestern state university. One hundred and forty six (146) students completed a pre-test survey during the first week of class. A post-test survey was completed by two hundred and eleven students during the last week of class, sixteen weeks later. A fifteen item true-false quiz on material discussed in the drugs and behaviour was developed and administered at pre-and post-test.

The findings suggested that exposure to the drug abuse curriculum did not increase drug abuse; rather, it resulted in increased knowledge and more accurate normative perceptions of the prevalence of drug abuse. The study also revealed that normative re-education is one of the approaches that have demonstrated some success in drug abuse reduction. It was also revealed that the characteristics of those students who attended drug abuse education courses differed from those students who did not attend the courses in that drug abuse among those who attended reduced significantly compared to those who did not attend.

Although the study seemed to suggest the potential benefit of drug abuse awareness, it was limited by the fact that it employed quasi-experimental design which relies heavily on self-report which means it had limited diversity of the sample including the unequal proportions by gender. The study was carried out in Midwestern State University in USA. The current study employed both quantitative and qualitative research approaches in order to incorporate participants’ opinions and experiences as they interact with the various drug abuse preventative
strategies in their natural environments. The study was also carried out in public university campuses in Nairobi County in Kenya.

In Australia, drug abuse awareness in schools, colleges and universities aimed primarily to reduce the demand for drugs of abuse among students (Ringwalt, Curtin & Rosenbaum, 2010). A study by Schmigt and Brown (2012) indicated that almost three in four students had received drug abuse education. The purpose of this education was to make students understand that they should always say no and should never try abusing drugs. Although there are various drug prevention programmes, all having the same common aim of changing the attitude of students towards drugs of abuse, the study focussed on the attitudes of students towards drug abuse awareness revealed that 54% of students had developed negative attitude towards experimenting on drugs.

The study indicated that 52.6% of students had developed negative attitudes towards drug abuse while 47.4% of students had developed positive attitudes towards drug abuse after receiving drug abuse education. In addition, the study found out that 26% of students who perceived risk of abusing drugs and acknowledged that abusing drugs is not dangerous were the most vulnerable. According to Schmigt and Brown (2012) the risk perception is established through the students’ reasonable decisions on whether to get involved in the abuse of drugs or not; beliefs; expectations; emotional values; perception of expectations by significance people and self-efficacy.

A study by Agbonghale and Okaka (2014) examined the perception of drug abuse awareness amongst Nigerian undergraduates living off-campus. Students were surveyed at the Lagos State University, Ojo, allowing for a diverse sample that included a large percentage of students from different faculties and departments. A self-reporting anonymous questionnaire
was used. The study found out that 86.5% of student claimed they were aware of the effects of drug abuse and that television, radio, and billboard advertisements were the students’ major sources of awareness about drug abuse. The study revealed that although many students were aware of the negative consequences of drug abuse, there was no reduction in the abuse of drugs. It was therefore concluded that the awareness, knowledge, practices and attitudes towards drug abuse awareness training is very poor and that more research is needed to develop effective preventative strategies that will combine school-based interventions with those affecting the family, social institutions and the larger community.

In addition, the researchers found out that the high level of awareness of drug abuse claimed by the students did not correlate well with both their ability to classify and identify those drugs. This might have resulted from a deficiency in or deviation from the theme of the subject of drug abuse during awareness training. Similarly, the students demonstrated poor knowledge of the predisposing factors to abusing drugs and risks associated with the abuse. The researchers asserted that, in spite of all the listed factors that could predispose one to drug abuse, only family and peer influence was fairly identified by 46.0% of the undergraduates. Although the study demonstrated poor correlation between drug abuse awareness and the knowledge of undergraduate students on drug abuse, it failed to investigate the effectiveness of drug abuse awareness on reducing drug abuse among students. The current study investigated the extent to which creating drug abuse awareness influences drug abuse reduction among students.

2.5 Factors Hindering Effective Implementation of Drug Abuse Policies

Drug abuse policies are important in drug abuse reduction particularly in learning institutions. However, the development, implementation and evaluation of drug abuse policies
have been given little attention based on available empirical studies (Bingham, Barreto, Walton, Bryant, Shope, & Raghunathan, 2012). According to Yiu Chung (2011) policies influence the social environment of an institution by playing a crucial role in setting behavioural norms and establishing guidelines for students’ behaviour control. The National studies of drug abuse policies in many developed countries show that majority of learning institutions have adopted written drug abuse policies (NSDUH, 2010).

Throughout the world there are various measures of what constitutes successful policy implementation (Agunlana, 2009). Several challenges however have been cited as hindrances to effective implementation of drug abuse policy in most public universities. These challenges range from lack of commitment of policy implementers, the institutional environment, lack of committed and skilful leadership, lack of sufficient financial resources as well as political interference (Ajala, 2012).

Stolle, Stappenbeck, Wendell, and Thomasius (2011) conducted a study on family-based prevention against drug abuse and behavioural problems. The study aimed at establishing the effectiveness of The strengthening families programme (SFP) which was established in 1993 at the Iowa State University as universal family-based programme against drug abuse and behavioural problems among undergraduate students aged 18-24 years. Focus group meetings were held with experts from family assistance and drug prevention as well as parents of the youth in the target group. Group members discussed the effects of the programme, their experiences, attitudes and acceptability of the programme.

The findings from the study showed major challenges in the application of the program due to socioeconomic status, family structure and in terms of culturally dependent norms about parent’s and children’s role model behaviour. It was also found that the program lacked adequate
incorporation into the conditions of the local support system. However it was not clear the research design the researchers used in their study. They also failed to specify the participants who composed the focus groups. Therefore, the findings of this study could only be used with a lot of caution or by adding more data. The current research used scientific methods of research which involved quantitative and qualitative methods and the target population included the students, Deans of students, university counsellors, and peer counsellors.

A study by Wagenaar, Harwood, Toomey, Denk and Zander (2013) sought public opinion on a wide range of alcohol control policies that were under consideration in a number of states in USA revealed that most of the public had a high support of the policies. Policies touching on advertising and marketing of alcohol, high alcohol taxes, ban of drinking alcohol in public places, ban on home delivery of alcohol received high approving from the public. While policies on state ownership of liquor stores and minimum restriction age of 21 received little public approval. The study interviewed 7,021 individuals by telephone across USA. This study is informative when it comes to public involvement in drafting of alcohol control, though it does not talk on corruption and enforcement of ADA policies. The study was carried between April and October 1997. A similar study (Becker, 2014) on public opinion towards underage drinking policies found out that there is a strong support from the public on restriction of sale of alcohol to persons under the age of 21. The study conducted a telephone survey of 900 adults aged 21 years or older across the United States between March and April in 2001 (Richter, Vaughan and Foster, 2013).

Lenk, Maggs and Williams (2013) examined the effectiveness of alcohol control policies at professional stadium in USA. The study established that a numbers of sports stadium had implemented policies that restricted sell of alcoholic drinks to underage persons, no more than
two alcoholic beverages was to be sold to a person. Other policies prohibited selling of alcohol to person under the age of 21 years, while others prohibited alcohol selling to already intoxicated persons, and finally some policies required that one third of their stadium section is designated to be free from alcohol. The study utilised telephone surveys of food and beverage managers of 66 USA professional stadiums majoring in hockey, football, baseball and basketball. The findings revealed that a number of common alcohol control policies were observable across all the stadiums. Others policies were uncommon for example only sell of alcohol to persons under the age of 21 years. The study was important and useful in evaluating and determining effectiveness of the policies in reducing alcohol related injuries at sporting events. The study suggested that federal composition of USA may also allow each federal state to come up with its own alcohol control policies and methods of implementation different from the others which may be different in the Kenyan context.

In a study conducted by Maclennan, Lown, and Greenfield (2014) on how local government in three New Zealand communities’ responded to alcohol-related problems by identify factors influencing the development and adoption of certain alcohol policies. The study reviewed history of policy papers and utilised key informant from the communities. The findings revealed that policies are likely to change based on where they are applied for example some policies works better in rural areas than in cities. The study also showed that each community had their own type of policies that should be adopted different from the others based on the needs of the society. It was also revealed that the political class was not favourable to the adoption of alcohol restrictions in the provincial cities. This study pointed out how each community was willing to adopt its alcohol policies based on the community needs and social problems coming from alcohol consumption which is likely to be different from the other areas.
Harris (2010) examined whether college alcohol policy enforcement levels influences the students drinking and related behaviours. The study focused on public colleges and universities in USA. This study was a follow up after stricter polices had been introduced in colleges and universities. The study conducted from 1999-2001 but published in 2010. Using surveys with a sample size of 1,252. The findings of the study suggested that stronger enforcement of a stricter alcohol policy leads to reductions in student heavy drinking rates over time. Therefore aggressive enforcement of alcohol policies by the university leadership is important in reducing alcohol consumption level. This study was relevant as it points out on the importance of strict enforcement of drug abuse preventative strategies which are likely to produce positive results over time in drug abuse reduction.

Paschall (2012) investigated the relationship between local alcohol policies enforcement, alcohol outlet density, adult alcohol use, and underage drinking in 50 California cities. The study revealed that heavy drinking by adolescent appears to be influenced by enforcement of underage drinking laws, alcohol outlet density, and adult alcohol use. The study utilised eight local alcohol policies such as conditional use permit, social host ordinance, billboard advertising which were rated for each city based on their comprehensiveness. A survey of 8,553 adults and underage drinking surveys of 1,312 were utilised between 2009 and 2010. The study highlights a number of policies aimed to control alcohol use among adults and underage, but does not mention on the reduction of drug abuse.

A study conducted by Lenk et al (2014) to assess state and law enforcement agency and their strategies for enforcing laws prohibiting alcohol sales to intoxicated patrons at licensed alcohol establishments showed sales to intoxicated patrons were on the increase in licensed alcohol establishments. In the study 1,631 local agencies were randomly sampled while 1,082
participated. The researcher surveyed all 49 state-wide agencies that conducted alcohol enforcement policies. It was concluded that enforcement of laws prohibiting alcohol sales to obviously intoxicated patrons is an underutilised strategy to reduce alcohol-related problems, especially among local law enforcement agencies. This study was informative as it highlighted how it may be difficult to enforce some policies, the case may be similar in Kenya, since even the easiest policies to enforce tend to be difficult to realise.

A study by Fell (2014) measured levels of enforcement and to investigated whether increases in police activities such as checkpoints, driving-while-intoxicated [DWI] special patrols) are associated with reduced crashes and fatalities in Russia. The study analysed the effectiveness of different enforcement strategies and measures; such as specific deterrence-annual number of driving-under-the-influence (DUI) arrests per capita, general deterrence - frequency of sobriety checkpoint operations stops per capita; enforcement presence - number of enforcement officers per capital. Data was taken from the local prevalence of impaired driving from the 2007 National Roadside survey. Results revealed that high numbers of DUI arrests per 10,000 driving-aged populations was associated with a lower ratio of drinking-driver crashes to non-drinking-driver crashes.

A study conducted by Cook (2014) examined two alcohol control policies which included alcohol availability and underage drinking in four regulatory domains with alcohol consumption in low and middle income countries. The findings showed alcohol policies that regulates the physical availability of alcohol, especially business operating restriction on alcohol advertising and marketing and legal minimum drinking age were associated in alcohol drinking while those touching on drunken driving random breath testing had no significant association with consumption. The study utilised a cross-sectional design using analysis of individual-level
alcohol consumption survey data and country-level alcohol policies using multi-level modelling. The study was informative as it examined on effectiveness of policy but did not talk about factors hindering effective reduction of drug abuse.

In college of Charleston, Wagenaar (2014) studied on the effectiveness of using student’s identification cards in drug abuse reduction. The study found that training on how to identify fake identity cards (Ids) and signage helped to reduce the use of fake Ids in colleges and universities. Thus strangers who were likely suspected to sell drugs to students were restricted from getting into the university premises. Wagenaar (2005) reported improvements in ID checking after training. At Eastern Illinois University, free training in English and Spanish for bar owners, followed by regular compliance checks by enforcement officers led to 40% decrease in underage drinking, indicating bars personnel and students had responded to training as an intervention. The study also revealed that training programmes and enforcement strategies combined with compliance checks had successfully reduced binge among students. This meant that the strategy had helped to reduce student’s access to alcohol. The study suggested that servers, owners and managers of alcohol-selling establishments needed training in all aspects of responsible alcohol service, including how to check and handle false age identification.

Miswazeddie and Michael (2012) reports that, the problems emanating from the abuse of alcohol and drugs in the family set up in Kangemi informal settlement are devastating. According to the study alcohol has created a sense of selfishness and pride in the individual to the point that, nothing else matters other than alcohol. The study also reported an increase in alcohol related problems such as domestic violence, divorce, lack of communication, lack of responsibility on the part of alcoholics and increased crime in the area to the point that Kangemi residents have embraced it as the normal way of life. Miswazeddie and Michael’s study
highlighted the impact resulting from alcohol consumption in Kangemi but the factors hindering the effectiveness reduction of drug abuse remained untouched hence portraying conceptual gap that required to be filled.

The reviewed studies (Fell, 2014; Cook, 2014; Miswazeddie & Michael 2012) showed that commitment to the implementation of drug abuse policies was very crucial in drug abuse reduction among the undergraduate students. It was also evidenced that the fight against drug abuse involves all stakeholders in every society. According to Singh (2008) commitment refers to the ability to maintain the focus on an initiative from its inception through to its delivery. Naskar (2012) adds that to enhance commitment to a policy initiative, political backing is needed, which implies that commitment is mainly a top-down issue. However Ashton and Kamali (2013) argued that commitment has to be developed from the bottom up thus focusing on the attitude of the employees who have to implement the initiative at the ground level. He asserted that the visibility of a policy tends to build commitment among both the officials who have to implement the policy from the bottom up and the politicians who need to support it from the top down. In support Ashton and Kamali (2013) adds that the higher the visibility and profile of a policy, the greater the pressure for change. Commitment to a particular policy must reach as many stakeholders as possible thus policy leaders must be actively involved in the implementation. Commitment often fails because decisions are postponed or not made or when they are taken, they are taken too late and are ineffective. Thus commitment implies timeous, action-oriented activity.

Agrawal, Everett, and Sharma (2010) studied medical students’ views on what hinders effective implementation of anti-drug abuse policy in USA. The longitudinal survey was carried out among a cohort of students in major American urban medical schools. The survey was
administered in the spring semester among the first to third years’ students of the curriculum. The study evaluated the degrees of support for drug abuse policy in the university and the challenges that faced its implementation. The findings revealed that 97% of learning institutions had written drug abuse policies prohibiting possession and abuse of illegal and legal drugs such as tobacco and alcohol within the schools.

The study further revealed that 40% of the participants agreed that drug abuse policies were hardly known and were ineffective and 45% of the students cited lack of political and administrative commitment to the implementation of drug abuse policy as the major hindrance. However, Agrawal et al. (2010) study was limited by its longitudinal survey design because as the social learning theory asserts, students’ attitudes towards any policy may change with time and as the environment changes. Thus the researcher in the current study used both cross-sectional survey and phenomenological methodology to examine the effectiveness of drug policies and some of the factors that hinder its effective implementation. This methodology helped to capture the attitude of students and their opinions towards drug abuse preventative strategies at one point in time.

Tsering (2014) carried out a study on the students’ involvement in policy making in learning institutions in India. The study involved 350 students from university of Calcutta in Kolkata. A survey design was employed while stratified random sampling was used to select the students. The study revealed that although the students remained the key stakeholders and beneficiaries of all the policies made in learning institutions, there was no effort directed towards involving them in key decision making. The study further noted that this makes students feel less important and demotivated in implementing institutional policies.
Universities in Nigeria (Abia State University, Anambra State University, and Adamawa State University) adopted the policy established by the National Drug Law Enforcement Agency (NDLEA) in order to deter university students from drug possession, trafficking and consumption. The policy advocated that trafficking of cocaine, lysergic acid diethylamide (LSD), heroin and similar drugs is punishable by life imprisonment (NDLEA, 1990). The universities also employed strategies such as psycho-education on drug and substance abuse, peer involvement and students’ empowerment strategies.

The expectation here was that the drug abuse policies would reduce the rate of drug abuse among undergraduate students drastically. However, Cockayne and Williams (2012) carried out a study on the international strategy of dealing with drug trafficking throughout West African institutions of higher learning. They revealed that although strategies have been put in place to curb drug trafficking and abuse in colleges and universities, corruption has hindered the implementation of these strategies. As a result most university students in Nigeria (35%) have reported having health problems related to drug abuse. Corruption is a worldwide problem that could be hindering the fight against drug abuse in various universities. Cockayne and Williams restricted their study to West Africa. The current study was done in Kenyan public universities and sought to find out the influence of preventative strategies in drug abuse reduction among the university students.

Ochando (2015) carried out a study on students’ participation in drug abuse policy implementation and its implications on reduction of drug abuse. This survey study was done in Aluka Education zone of Anambia state, Nigeria. The study was guided by four research questions and it involved two university colleges. A sample size of 265 students was selected through stratified random sampling procedure and a twenty item researcher-developed
instrument was used to collect the data. Mean ratings were used to answer the research questions.

The findings indicated that students were rarely allowed to participate in decision making. According to the study 57.2% of the students agreed that involving students in policy making made them more accountable to themselves, independent in thoughts and responsible in their behaviour. The study further revealed that involving students in policy making had reduced the drug abuse prevalence rate among students. In the study, 35.7% of the students attributed lack of self-esteem and commitment of students to college policies partly to lack of participatory management styles which made the policies to be poorly understood and applied in most colleges. According to the study the students seemed to be mostly recipients of decisions and instructions made either at national or institutional levels.

Lack of training of implementers has negatively affected the implementation of drug abuse policy in most public universities. Substantial research has demonstrated the value of training in successful policy implementation. Wyatt (2010) carried out a study on education in respect to drug abuse policy among high school teachers in Singapore. The study targeted 2000 teachers from where a sample of 300 teachers was drawn. A cross-sectional survey was done with teachers responding to a self- administered online questionnaire. About 45% of the teachers confirmed that the training of teachers is indeed one of the strongest predictors of successful implementations of policy. While 85% agreed that training of teachers on drug abuse policy would improve the implementation of drug abuse policy and raise awareness among the teachers about the problem and the importance of responding to it.

The study further revealed that training of teachers on the drug abuse policy increased their self-efficacy as implementers. The researchers asserted that implementers are more likely to
succeed if they feel confident in their ability to overcome possible barriers to transforming an intention into practices. In agreement with this study Gerdes (2009) asserted that government’s attitude towards the value of training was critical for successful implementation of policy; however, training is often neglected in developing countries. Thus there seems to be no doubt that insufficient training in a country has deleterious effect on development in general and on the success of policy implementation in particular. This study was done in Singapore and among the high school teachers and although extensive research on drug abuse among Kenyan students has been done, there is a paucity of research on the challenges that are hindering effective implementation of drug abuse policies in Kenyan public universities.

According to Moses (2013) the institutional environment can either enhance or hinder effective implementation of drug abuse policy. Agunlana (2009) divides institutional environment into the academic and social climate. The academic environment refers mainly to the learner’s willingness to learn, the efforts by the teachers to get the learners to learn and the expectations of the staff that learners will do well academically and that such good academic performance will lead to a successful life. On the other hand the social environment refers to the parents and the community involvement in the life of the school, the equal treatment of learners regardless of ethnicity or gender, the appropriateness of learner behaviour and the appearance of the school buildings. From this argument it is clear that effective implementation of drug abuse policy will involve the cooperation of the students, the lecturers, university administration, parents and the community as a whole.

In Kenya, both private and public institutions of higher learning have developed anti-drug policies prohibiting drug abuse production, possession and abuse by students, staff and visitors within the university premises and at all university events (Muango et al., 2012). Examples of
such policies are Jomo Kenyatta University of Agriculture and Technology drug abuse policy of 2012, Kenyatta University drug abuse policy of 2011 and Nairobi University drug abuse policy of 2003. These policies are in line with the national drug abuse policy formulated by NACADA (Masese, Nasongo, & Ngesu, 2012).

Most of the drug abuse policies are accompanied by consequences in case of policy violation. Some of these consequences include referring the violators to the university counsellors, suspension from the university, encouraging the student to participate in a student assistance programme for rehabilitation or referring the students to the legal authorities (Otingi, 2012). Despite the presence of some form of drug abuse policy, there appears to be variation in the degree of restrictions imposed and the actual drug abuse rate in our learning institutions (Kimilu, 2010). In this study, the researcher sought to establish the influence of drug abuse policies in reducing the prevalence rate of drug abuse in institutions of higher learning.

Partanen (2011) observes that Kenya’s alcohol control can be traced to the colonial and postcolonial period where legislation on alcohol was comprehensive. It covered all the relevant aspects of production, distribution and consumption. The provincial administration was in charge of enforcing alcohol policies from the village level of administration to the provincial level. When president Moi came to power in 1978, he maintained his firm support on abstinence from alcohol consumption. He closed the traditional beer halls everywhere and also strengthened the laws against distillation and attacked unlicensed bars in urban residential areas claiming they encouraged public officers to drink during working hours. According to Partanen, (1991), Moi’s strict laws did not bear much fruits on regulating alcohol consumption. Massive corruption among the enforcement officers scuttled the whole process of alcohol control. Stiffer penalties were levied among alcohol offenders as a deterrence measures but this only meant ‘bigger
bribes’ into the hands of poorly paid police officers. From the above observations Partanen (1991), argues that efficient control of alcohol and drug abuse presupposes well-functioning policy making machinery which needs good enforcement practices.

Achieng' (2013) observes that despite Alcohol and Drinks Control Act of 2010, there is increased alcohol consumption before noon which is the most productive hours of the day, meaning that alcohol drinking hours are not adhered to which range from 2pm to 11 pm. In her study on the Alcoholic Drinks Control Act 2010, she points out lack of enforcement as the weakest link. She also notes that the implementation of the Act has been faced with many legal bottlenecks from major players in the alcohol industry which has seen the act being challenged in court by members of the public.

Gathura (2015) observes that despite alcohol and drinks control act of 2010 commonly known as “Mututho laws”, being in place, Kenyans are drinking more and even exposing children’s, this is easily facilitated by the availability of non-returnable bottles and cans. To beat the Mututho laws beer manufacturing companies have come up with innovative packaging of alcohol products in tins which has encouraged home consumption thereby leading to high sales.

Bodewes (2010) observes that in Kibera slums, chang’aa has been identified as the root cause of the community’s main health and social problem. People are spending the little they earn on alcohol leaving their family hungry. Children end up sleeping hungry because parents are too drunk to take care of the family needs. On the other side, well educated youths who end up lacking formal employment resort to drinking as a sole consolation. Bodewes study identifies that police and low level government officials partake in the illegal trade by protecting the sellers after taking bribes from them. While Bodewes study focuses on the harmful effects of
contemporary changes in the production and consumption of traditional brew Chang’aa in Kibera slums. It doesn’t address challenges hindering effective reduction of drug abuse.

The reviewed studies (Partanen, 2011; Achieng’, 2013; Bodewes, 2010) show that anti-drug abuse policies have been established in most universities worldwide to prevent student’s abuse of drugs within the universities and its surroundings. However, it is clear that these policies have not been effectively implemented and as a result students have continued to abuse drugs and alcohol in our universities. It is further revealed that for these policies to be effective there must be corporation between the university administrators, the lecturers, students and the community as a whole. From the reviewed studies it is evident that little has been done to examine the influence of preventative strategies in reduction of drug abuse and factors that hinder effective implementation of these policies in Kenyan universities.

2.6 Influence of Guidance and Counselling Services on Drug Abuse Reduction

Personal, social and emotional challenges contribute a great deal to students’ drug abuse (Leong, Kim, & Gupta, 2011). The researchers have found that such challenges require counselling and therapeutic attention mainly offered through guidance and counselling services in the universities. However, different studies (Lee, 2012; Midford, 2011; Wesley & Smith, 2010) have shown that only a small percentage of students actually make use of guidance and counselling services.

Schertzer and Stone (1990) described guidance and counselling as a preventative force. To them optimum development of individuals came through providing an emotional climate and environment that assist positive healthy attitudes and feelings. This implied that people with
healthy attitudes and feelings were not likely to involve themselves in behaviour that was not acceptable. They argued that a person who suffered emotional depression or frustrations would find life generally miserable and experience adjustment problems. The researchers added that unpleasant emotions could upset a person’s mental and physical wellbeing and that a healthy emotional climate could be created by assisting new students arriving in colleges and universities to adjust to their new environment. Considering that most students in universities and colleges are in their adolescent stage, emotional stability is a central issue. According to Shertzer and Stone (1990), emotional changes in this period include frequent mood shift leading to anger, hostility, frustrations, emotional stress, embarrassment and anxiety. They added that such problems could be prevented if students in colleges and universities could be guided and counselled on how to deal with such emotions, meaning that a healthy emotional climate could be achieved through guidance and counselling.

Flansburg (2012) carried out a study on the factors involved in college students’ use of counselling services in Atlanta Georgia. In this study factors such as stigma, gender, culture, experience, knowledge, fear and accessibility were identified as key in determining the effectiveness of guidance and counselling services as a strategy to reduce drug abuse among the undergraduate students in universities. Flansburg (2012) asserted that the experience and knowledge of the counsellor played a crucial role in developing the positive attitude of the students towards counselling services. The study found that 65% of college students viewed counselling and psychotherapy as uncomfortable, upsetting, risky and tough for students to engage in. It also revealed that most students feared to disclose personal information to strangers while others feared that their social circle would become aware that they were seeing a therapist.
In the study 45% of students agreed that college counselling centres needed to increase hours of availability of counselling services as well as offering more information about counselling services online. The study however did not look into the influence of preventative strategies in drug abuse reduction holistically; rather, it limited itself to guidance and counselling services only. The current study went further to establish the influence of various preventative strategies (drug abuse policies, drug abuse awareness, guidance and counselling services, and personality and social skills training) in reducing drug abuse among undergraduate students. Further the reviewed study was carried out in Australia and therefore the context and the participants were different from the environment and the participants that were involved in the current study.

Lalliope (2011) carried out a study on drug abuse by Greek university students and the effectiveness of prevention actions. The sample consisted of 1,778 university students attending a Greek business university. The gender of the students involved included 44.5% males and 55.5% female students. Data were collected using self-report questionnaire which mainly focused on the frequency and the effectiveness of prevention actions. The study sought to establish students’ knowledge concerning the hazardous effects of drug abuse. The findings of this study revealed that a great percentage of students believed that cannabis and tranquillizers were harmless and a small percentage believed that club drugs such as cigarettes, alcohol and cocaine were harmless. The findings were taken under serious consideration, since university students were considered old enough to be aware of the bodily damage that drug abuse can cause. For this reason, guidance and counselling services of the university in cooperation with the national organisation against drugs offered drug abuse information to the students in software
and hard copy. The information comprised of the hazardous effects of drug abuse on short and long term basis.

According to Lalliope (2011), prevention against drug abuse is one of the major tasks that the university authorities need to focus on and that guidance and counselling services of the universities are the services that are responsible and competent to promote students’ psychological health and therefore prevent drug abuse. The study further revealed that peer influence on students’ vulnerability to drug abuse has been on the increase. Therefore counselling interventions oriented to the establishment of peer bonding is vital in the fight against drug abuse. In addition, the researcher recommended that counselling services in cooperation with national authorities responsible for drug abuse prevention could offer training both in counselling and communication skills. This would enrich the knowledge concerning drug abuse prevention to students.

A study done by Amedeker (2010) focussed on the use of guidance and counselling services in Kwame Nkrumah University of Science and Technology. The study employed a cross-sectional research design which involved 240 students and five university counsellors purposively sampled from other universities. The sample was selected using stratified random sampling and purposive sampling technique. Questionnaires were used to collect the data. One of the question that the participants were asked was whether the students sought guidance and counselling services as a way of dealing with problems resulting from drug abuse. In response 46.1% of the students admitted to have sought counselling services while 53.9% of the students had not gone for any counselling. This was an indication that students needed professional help from outside the university to enable them to come out of the drug abuse problem.
The study further revealed that personnel working in learning institutions including counsellors, administrators, and teachers are often faced with challenges associated with drug abuse among students. Yet, they are not adequately prepared to identify, address, or assist drug abusing students. For example, Burrow-Sanchez, Lopez, and Slagle (2008) found that middle school counsellors perceived themselves as lacking competence in specific areas related to drug abuse, such as individual and group counselling interventions as well as screening and assessment. Finn and Willert (2006) on the other hand found that few school teachers had knowledge about or training in how to respond to drug use among students. Personnel, teachers and the whole school staff needed to be trained on alcohol and drug education and prevention, health education and health promotion as it has been clearly and frequently mentioned in the literature. Therefore a draft policy should include provision for training of staff involved in alcohol and drug abuse education.

Coggans (2011) in their review of drug education in Scotland found that teachers who had attended two levels of training had greater confidence in their adequacy for the role of drug educator. The first level was in-service training on drug abuse education, drugs and drug use; the second was staff development in the school. However, they found that while teachers who had attended only first level training felt more confident in their role, it did not necessarily mean they were more expert in the role. There were indications that experience of using drug education materials was better predictor of high levels of drug related knowledge than was experience of in-service training. Coggans (2011) also found that the extent of training had no simple relationship with the teachers’ involvement in drug education, pointing to the need for advanced planning as well as adequate training to ensure that those who have received training will be in a position to use what they have learnt. In the sample of 103 middle school and high school
teachers, only 16% reported that their school had a training program specific to drug prevention. In addition to inadequate in-service substance abuse training opportunities, some counselling graduate programs lack substance abuse courses in their curriculum.

In a national study, Burrow-Sanchez and Lopez (2009) surveyed a sample of 286 high school counsellors about their preparation and training needs for working with student drug abuse problems. On average, the participants disagreed that their counselling graduate education had provided them with adequate training related to substance abuse. In addition, 50% of the school counsellors indicated not taking a course in drug abuse in graduate school, 31.8% reported taking one course, 12.6% indicated reporting taking two courses, and 5.2% indicated taking three or more courses. The researchers concluded that a more comprehensive and thorough understanding will allow professional school counsellors to play an active and vital role in responding to the needs of substance abusing adolescents.

According to Pede (2011), in a case study of collegiate alcohol education, argues that training is a key piece of alcohol education and the prevention of alcohol abuse. It is not limited to the training of students but should also include faculty and staff. Training can include topics like emergency response, policy enforcement, referral strategies, and problem identification (Pede, 2011). The researcher further argued that good training of university staff may increase the effectiveness in which problems involving alcohol could be identified and resolved. Training could therefore help to increase the effectiveness and efficiency in which alcohol related emergencies are handled. This implied that appropriately trained personnel will know how to deescalate situations and at what point professional services and university administrators need to become involved.
The university counsellors too expressed their view that indeed there was need for professional counselling of students to be sought from outside the university. Sixty percent of the counsellors admitted that on several occasions they invited counsellors from outside to counsel on drug abuse because majority of the students feared victimization even after being assured of confidentiality. The counsellors revealed further that the university either suspended or expelled students who were found in possession, consuming or trafficking drugs of abuse within the university. Though this study provides valuable information that can help policy makers, university administrators and counsellors in Kenyan universities in coming up with policies that can reduce drug abuse among students, the study was done in Ghana where the situation could be different from Kenya. Likewise, the focus on guidance and counselling services only was not sufficient to reduce drug abuse in our universities. Thus there is need to examine the influence of preventative strategies in drug abuse reduction.

Nabunya (2012) conducted a study on the role of guidance and counselling in management of student discipline in learning institutions in Kenya. The study found out that optimum development of individuals comes through providing an emotional climate and environment that assists positive healthy attitudes and feelings. This confirms the argument brought out by Bandura (1986) that the environment in which an individual lives in, gradually shapes his or her behaviour. The study found out that people with healthy attitudes and feelings were not likely to involve themselves in socially unacceptable behaviour. On the other hand, a person who suffers emotional depression or frustrations will find life generally miserable and experience adjustment problems. Guidance and counselling therefore is crucial in achieving a healthy emotional climate. However, the study did not address the reasons why even with well-established counselling and guidance departments in public universities in Kenya, drug abuse
among undergraduate students is on the rise. The current study went further than establishing the role of guidance and counselling in management of students’ discipline in learning institutions. The study also sought to establish the contribution of drug abuse preventative strategies in reducing drug abuse among students.

Karugu (2010) studied on the influence of guidance and counselling services on prevention of drug abuse among students in secondary schools in Kenya. The study adopted an ex-post facto research design and targeted all 47 secondary schools in Nakuru County with a population of 7,767 students and 472 teachers. A random sample of 120 students, ten teacher counsellors and ten head teachers was done. Data were collected using questionnaires only. The findings indicated that cheap and easily available drugs were the most commonly abused types of drugs among secondary school students. It further revealed that the common drugs abused included alcohol and cigarettes which were considered legal and generally accepted in the society.

The study found that the implementation and utilization of guidance and counselling services had positive effect in the management of drug abuse among secondary school students. The study further found that guidance and counselling services were related to low level of drug abuse in schools and that male students were the most vulnerable group to drug abuse thus they were more targeted for guidance and counselling on drug abuse. This study however does not focus on drug abuse among university students and neither does it zero in on other specialised preventative strategies which were the focus of the current study. In addition, the focus on Nakuru Province was not sufficient enough to give an impression of the effectiveness of guidance and counselling services in reducing drug abuse among students in Kenya as would be the case of Nairobi County which was the focus of the present study. Nairobi being the capital
city of Kenya comprise of students from all over the country as well as from outside Kenya, therefore it gives a good representation of what is happening within the country and globally.

From the observation of the reviewed studies (Karugu, 2010; Nabunya, 2012) it is evident that guidance and counselling influence students’ decision to abuse or not abuse drugs while in universities. Factors such as stigma, fear and poor accessibility of guidance and counselling services make some students to persist in drug abuse as they try to fight frustrations and stress during their academic years in the universities. The studies also revealed that students who adequately utilise guidance and counselling services are emotionally healthy and are able to deal with their life challenges without involving themselves in drug abuse. Therefore establishing the effectiveness of guidance and counselling services in drug abuse prevention and highlighting some of the factors that make it not to be effective were of great importance.

2.7 Influence of Positive Personal Image on Drug Abuse Reduction

According to Lanier, Graham, and Farley (2010) the initiation to drug abuse typically begins during adolescence and appears to be the result of the complex interplay of social, personality, cognitive, attitudinal, behavioural and developmental factors. Personal and social development of students has been enriched through affective education. The affective mode of drug education assumes that those who abuse drugs have personal problems such as low self-esteem, inadequate social skills and unclear values (Dun, Kitts & Lewis, 2010).

A review of literature by Otingi (2012) on the effectiveness of drug abuse prevention methods and strategies in Finland and Kenya revealed that Kenya needs to adopt self-esteem enhancement programmes in alcohol and drug abuse prevention. According to Otingi, self-
esteem acts as a social vaccine that empowers individuals and inoculates them against socially undesirable behaviours. Wesley and Smith (2010), studying on the prevention of drug abuse in juvenile delinquents, found that focusing on individual, peer, family and community factors over the course of development may be beneficial for preventing serious substance abuse.

However, according to some researchers (Larimer et al., 2010; Dun et al., 2010) affective model of drug abuse prevention seems not to be very effective. Dun et al. (2010) stated that there was danger in relying on developing resistance skills as the only part of preventative measures against drug abuse among the students. His argument was that it was not the peer pressure that led to drug abuse but rather peer preference. According to Dun et al. (2010), most adolescents were socially incompetent and lacking in self-esteem yet these played an important role in decisions of the first abuse, in which they had already the intentions or readiness to experiment and tended to select abusers as peers.

Further Donaldson, Graham, and Harsen (1994) in an experiment to compare the effectiveness of resistance skill training versus the normative education, found that resistance skill development had little effects on prevention. The argument is that the affective model of drug abuse prevention tends to place little emphasis on the acquisition of the kind of skills that are likely to increase general personal competence and enable students to cope with the various interpersonal and intrapersonal pressures that will help to prevent them from abusing tobacco, alcohol and drugs.

From these studies (Otingi, 2012; Donaldson, et al., 1994) it is imperative to suggest that when formulating and implementing any preventative strategy to the university students a good percentage of the students should be involved in order for them to own it. This is with the understanding that effective change always come from within the person. Through discussions of
feelings, values and self-awareness towards drug abuse, individual students are able to develop resistance skills which include social skills such as decision making, problem solving, goal setting and assertiveness. Thus as Dun et al. (2010) indicated the main objective of personal and social skills training is to improve students’ self-image and ability to interact socially.

Anderson (2009) defines individual factors as internal factors that exist or occur at the individual level. The internal factors include; attitudes, self-perceptions, wellbeing and personality traits, beliefs, self-esteem and health related behaviours. According to Bandura’s (1977) social learning theory, an individual’s behaviour is determined by their attitudes and self-efficacy to that behaviour. In this theory (Bandura, 1977), self-efficacy comprises of a person’s attitude, abilities and cognitive skills. The theory therefore holds that self-efficacy determines how people perceive situations and how they behave in response to different situations. Lartey, Warkins, and Chanal (2011) defined attitudes as internal, learned through experience, response related and object-orientated feelings. This means that an individual’s attitude to a specific action, such as drug abuse, and the intention to adopt it are influenced by beliefs, motivation and perceptions of social norms.

The beliefs that an individual holds will determine whether the person will abuse drugs, stop abusing or will continue abusing drugs. Agrawal et al. (2010) asserted that beliefs are based on the information that a person has about an object or action; but information alone is neither necessary nor sufficient for behaviour change. The study found out that majority of university students disagreed that all alcohol was bad and that many associated drinking alcohol with having fun, which was a major incentive to abusing alcohol. Self-esteem is another individual factor that may influence the effectiveness of preventative strategies in reducing drug abuse among university students. Kumwenda, Kambala, Mwendera, and Kalulu (2011) examined how
low self-esteem influenced students in drug abuse. The findings indicated that self-esteem has to do with an individual’s sense of value or worth, and that students with low self-esteem reported to have abused drugs more than those with high self-esteem.

Several studies (Gorful, 2010; Lee, 2012; Tavolacci, Ladner, Grigioni, Richard, Villet & Dechelotte, 2013) have been conducted to establish the association between self-esteem and drug abuse but the results have varied widely. This may reflect the methodological complexities associated with measuring this construct. For instance some researchers, Dun, Kitts, and Lewis (2010) and Gebreslassie, Feleke, and Melese (2013) suggested that drug abuse was mainly associated with higher self-esteem, increased confidence and a greater tendency towards risk-taking. Others, Abasiubong, Alphonsus, and Akinade (2013) and Lee (2012) suggested that health-damaging behaviour such as drug taking might result from low self-esteem reinforced by poor social relationships.

Lee (2014) looked at the predictors of smoking among Swedish adolescents. The longitudinal cohort study involved 649 Swedish adolescents from low to upper secondary schools. The researcher examined several factors, which included intra and interpersonal factors. The findings of the study indicated that poor self-rated health, poor self-esteem and negative attitudes towards self led to smoking among many Swedish students. The researcher stressed the importance of strengthening adolescents’ self-esteem and promoting anti-smoking attitudes among the adolescents. The researcher in the current study sees high self-esteem as an effective preventative strategy that can mostly be used to prevent drug abuse among undergraduate students and the youth in general. The personal and social skills traits outlined in the conceptual framework involve empowering an individual’s self-perception, ability to make decisions and a sense of self-belief (self-efficacy).
2.8 Challenges Hindering Effective Reduction of Drug Abuse

The effectiveness of drug abuse preventative strategies depends on various factors. This study concentrated on environmental factors that are divided into environmental and personal factors as well as the individual factors that hinder the effectiveness of drug abuse preventative strategies. According to Delk and Meilman (2014) effective preventative strategies are critically important in the efforts to reduce drug abuse among students. Extensive research (Allen et al., 2013; Globetti, 2012; Trink & Storr, 2012) found that in the past two decades preventative strategies reduced drug abuse tremendously. These strategies shared a common goal which included strengthening protective factors such as; well-developed social skills, strong family bonds, attachment to school, and active involvement in the community and religious organisations, while reducing risk factors that increase vulnerability to drug abuse. According to Gledhill-Hoyt (2013) resilience was also an important factor in reducing drug abuse among students. Drug abuse by parents, lack of parental guidance, disruptive and abusive family environment was very strong predictors of drug abuse. Others were school failure, early experimentation with drugs and living in a community where drug abuse are available (Foo, 2012).

According to Emmanuel (2010) the major context for drug abuse reduction was the school environment. School-based interventions generally focussed on increasing academic achievements and social skills training which included, decision making, communication and refusal skills. Despite the use of school based interventions, research demonstrated that other contexts within the social ecology are appropriate and important points for contact for drug abuse reduction; these included the family, recreational and religious settings, the community and the work place.
The federal center for substance abuse prevention (CSAP) identified six basic approaches to reduction of drug abuse. These approaches included; information dissemination, critical personal and social skills which promote health and well-being among youth, problem identification and referral, community-based process and environmental approaches (Khalid, 2014). Perkins (2010) summarised the preventative strategies into creating drug abuse awareness, establishing university drug abuse policies, strengthening guidance and counselling services as well as enhancing individual personal drive.

The united nations educational, scientific and cultural organization (UNESCO, 2009) and united nations office on drugs and crime (UNODC, 2010) agreed that the main focus of these preventative strategies was to reduce the supply, consumption and demand of alcohol and other illicit drugs among students at the university level. This study concentrated on determining how creating drug abuse awareness, university drug abuse policies, guidance and counselling services and building positive personal image as preventative strategies influenced drug abuse reduction in public university campuses in Kenya. According to Otingi (2012) these were the commonly used preventative strategies in drug reduction among undergraduate students in Kenyan universities.

A study done by Leong, Kim, and Gupta (2011) in USA revealed that students will always abuse drugs because of their ready availability. According to the study this normally promotes the interest of those who are in a position to benefit financially from their sale. The availability and accessibility of drugs of abuse involve students being able to get ready to abuse drugs as well as having the money to buy the drugs. The availability of cash to the youth as pocket money and travel allowances, especially if excessive, can be redirected into purchasing of drugs. The researchers stated that youth from rich families abuse drugs because they can afford
them while those from poor families abuse cheap drugs due to frustrations. It is clear that the environment in which children grow up plays a great role in shaping their character. Thus students who have grown in environments where drugs of abuse are easily available are likely to start abusing drugs in their early childhood.

In UK, Holloway and Bennett (2012) did a survey of motives, nature and extent of prescription drug misuse among staff and students. The study found out that friends or peer groups were good sources of information about the effects of drugs as well as their availability. It also revealed that there was a significant relationship between the subject’s drug abusing behaviour and the involvement of their friends in drugs.

A study by Wesley and Smith (2010) on the factors leading to drug abuse among students in colleges in Mexico indicated that peer pressure is another factor that is known to facilitate drug abuse within learning institutions. According to Wesley and Smith (2010) relatively few people start using drugs on their own. According to the researchers, the interest and expectations of peer groups greatly influence whether or not a student will try to abuse drugs. Each peer group has its own social norms which each member must meet in order to fit in and to be accepted by the other members. Such groups offer emotional, psychological and sometimes material rewards for certain behaviour. Bandura’s (1986) social learning theory postulates that behaviour is repeated or deterred by positive or negative consequences that follow that behaviour. The theory adds that some forms of behaviour are adopted when they are observed in persons who are accepted as role models or if the model is observed while being rewarded for the behaviour. Thus a peer group becomes an environment which generates stimuli, rewards and penalties towards drug abuse (Peltzer, Davids, & Njuho, 2011).
Ajayi and Ayodele (2013) examined the influence of college and family environment in relation to drug abuse among college students. The study adopted descriptive research design and an inventory was used for the study. The population comprised of students from ten (10) tertiary colleges in Ondo State of Nigeria. Purposive sampling was used to select ten (10) students each from the ten colleges. A self-designed questionnaire called drug abuse questionnaire (DAQ) and an inventory were used to collect data. The data were analysed using pearson moment correlation analysis and four hypotheses were tested at the confidence level of 0.05.

The findings of the study revealed that there was significant relationship between college and family environments and drug abuse among students. The study also found that most students (54.6%) abused drugs when they were preparing to sit for examinations particularly at the end of the term. The study further revealed that most of students who were married were at a very high risk of abusing drug compared to students who were single. This was associated with the frustrations encountered as they tried to meet family’s obligations as well as academic requirements.

Although the study targeted college students, Ajayi and Ayodele (2013) used a very small sample size that makes it difficult to generalise the findings to the entire university students’ population. The researchers also failed to clearly state the research method adopted in their study. This makes the validity and reliability of the study to be questionable. Preventative strategies mainly address different levels of risk. For instance universal prevention efforts, like drug education, target all youth without identifying those at particularly high levels of risk. Selective interventions concentrate on those who are particularly vulnerable to drugs because of personal, family and community risk factors (Foo, 2012).
Onifade, Somoye, Ogunwobi and Fadipe (2013) carried out a cross-sectional study on drug abuse’s consequences and perceived accessibility in three Nigerian universities. Five hundred and forty nine students participated. Fifty five percent were female and among them ninety four percent were not married. Their mean age was twenty years. The study revealed that drugs such as amphetamine types, solvents, heroin, tranquilizers and cannabis were perceived as easy to get by 58.1%, 57.3%, 38.7%, 29.4% and 22.7% of the participants respectively. The study further revealed that some students work in cahoots with watchmen, cooks and cleaners to peddle drugs into the universities. In addition small shops and kiosks built near the universities were in booming business of selling drugs to students.

Further Makanjuola, Abioden, and Sajo (2014) carried out a study on alcohol and psychoactive substance abuse of the medical students. A self-administered interview schedule consisting of WHO students drug abuse survey questionnaire and the general health questionnaire were administered to a weighted proportional sample of the participants. The findings of this study revealed that drug abuse experimentation was common among second and third year students. The study further found out that some factors associated with undergraduate students’ drug abuse included drug abuse availability and accessibility (25.1%), poor mental health (18.6%), and high social class accounting for 21.4%.

A study to assess the propensity for alcohol sale to underage persons and intoxicated customers at community festivals revealed that intoxicated customers were able to buy alcohol in 89% of 95 attempts also underage persons were in a position to buy alcohol in 50% of 82 attempts. The study also sought to assess the prevalence of alcohol control policies at the community festivals and it was established that all event planners at least to be in possession of two out of ten policies that were assessed. The study established that having more alcohol control
policies was associated with a lesser likelihood of illegal sales to intoxicated customers and to underage persons (Toomey, 2014).

Another study by Adeoti and Edward (2010) investigated on the factors influencing drug abuse among undergraduate students in Osun State, Nigeria. A sample of 1,200 undergraduate students were randomly selected from three tertiary institutions in Osun State. A factors influencing substance abuse (FISA) questionnaire was developed by the researcher to collect the relevant data. The findings of the study showed that peer influence was the major factor that influenced substance abuse among undergraduate students. The participants (56%) indicated that most parents have become extremely busy looking for finances so that they are not able to know when their children start abusing drugs.

Ondieki, and Mokua (2012) carried out a study on drug abuse among the youth. According to the findings of this study relatively few people start using drugs on their own. The study further revealed that the interests and expectations of a peer group have an important bearing on whether or not a person will try a dependence producing drug. The study also revealed that a friend or peer group was likely to be the source of information for drug abusers about the availability of drugs and their allegeable effects. It was also found out that peer pressure influenced the youth to use substances under the false impression that some drugs stimulate appetite for food, increase strength and give wisdom as well as courage to false life.

Masese, Nasongo and Ngesu (2012) carried out a study on the extent and panacea for drug abuse and indiscipline in Kenyan learning institutions. The study revealed that most of the students who participated in the study used illegal drugs because of their availability. It also revealed that availability of illegal drugs promoted the interests of those who are in a position to
benefit financially from selling them. The researchers argued that if there is easy access of drugs, a student may decide to abuse them despite the governing rules that prohibit the abuse of drugs.

According to the findings of the study, drugs are available locally and students need not to struggle to get them, and that most students stay in private residential places where parents have rented for them. According to the study most of these places have become common places where students abuse drugs freely. The study further revealed that students have secret ways of obtaining drugs and selling them to fellow students. The study found out that in some cases, members of the public or day scholars from other learning institutions easily walk into learning institutions with drugs. The researchers revealed that some students have secret ways of obtaining drugs and selling them to fellow students.

The study further indicated that petty traders like shoe shiners and vendors, cobblers, maize roasters and matatu touts are deeply involved in drug trafficking. In other cases some students work in cahoots with watchmen, cooks and cleaners in peddling drugs into the institutions of learning. Although the study revealed important information on how illegal drugs are made available to students in various learning institutions, it failed to address the reasons why drug abuse policy which prohibits possession, use and supply of illegal drugs in learning institutions has failed to curb the availability of illegal drugs through these methods. The current study sought to establish the influence of preventative strategies in drug abuse reduction.

The studies by Onifadeet al. (2013), Makanjuola et al. (2014), and Masese et al. (2012) established that students’ drug abuse is highly associated with availability and accessibility of drugs in the learning institutions and their surroundings. However the studies left several questions unanswered. First, they did not establish reasons why students and other university workers would possess sell and consume drugs despite having the anti-drug abuse policies in
universities that forbid possession, trafficking and abuse of drugs within the universities. Secondly they failed to establish the actions taken by the university administration on those who failed to adhere to the university anti-drug abuse policies. The current study attempted to find out some reasons as to why these policies have failed to curb possession, selling and consumption of drugs of abuse and some of the actions that the university administration take on those who go against them. All these studies focussed on peer pressure, availability of drugs, poor mental health and others factors related to drug abuse among students; however, none of the studies addressed the influence of preventative strategies in reducing drug abuse among university students. Holloway and Bennett (2012) used survey methodology while Ondieki and Mokua (2012) did a phenomenological study. The current study used validating quantitative data model which is a type of triangulation mixed methods so as to address all quantitatitve and qualitative variables related to the influence of preventative strategies in drug abuse reduction among the undergraduate students.

The age at which a person is introduced to drug abuse determines the future abuse of these drugs. Previous studies (Ngesu, 2012; NSDUH, 2010; Riley-Cook, 2012) revealed that most of the college and university students are usually at ages between 18-25 years while Masese et al. (2012) found out that majority of students in colleges and universities are adolescents. The researchers described adolescence stage as a momentous period of life filled with changes, difficulties and special problems. Their findings showed that adolescence is a period that is characterized by “storms”, “stress”, “turbulence” and “instability”. In addition, the studies revealed that it is a time of self-discovery and self-assertion. As such most students will tend to go against any institutional policy as they discover the world around them.
Atwoli, Mungla, Ndungu, Kinoti, and Ogot (2011) carried out a cross-sectional survey on the prevalence of substance abuse among college students in Eldoret. The researcher used a self-administered World Health Organisation (WHO) core questionnaire to collect information on use of various drugs among students in colleges and university campuses. Four tertiary learning institutions were randomly selected for inclusion in the study. Five hundred students of the mean age of 22 years participated as respondents. The study found out that the youth tend to experiment a lot and in the process of experimentation, they tend to encounter drugs.

The study also revealed that at this age, when the adolescents are torn between the world of childhood and adulthood, they revert to either world from time to time and eventually some of them end up turning to drugs and other substances of abuse. This study’s statistical findings revealed that majority of students (51.9%) turn to alcohol abuse while 97.6% of alcohol abusers consumed alcohol on weekly basis, 42.2% abused cigarettes and 28.1% abused khat. The study concentrated on finding out the prevalence rates of drug abuse among students but the question as to whether preventative strategies are effective or not drug abuse in reducing remained unaddressed.

Several studies (Adeoti & Edward, 2010; Anderson, 2009) have shown that there is a positive correlation between students’ drug abuse and family factors. Bandura (1989) in his social learning theory asserted that people learn from observation and imitating the behaviours displayed by others in the community. The first people that students interact with and learn from are the parents, siblings and close relatives with whom he/she lives with. In most cases what is learned in childhood tends to be practised later in life and especially at adolescence period. This implies that students whose parents are drug abusers are likely to engage in drug abuse. This is in
agreement with Beckerleg, Telfer, and Handt (2010), and Bhullar, Simon, and Joshi (2012) who carried out a study on the rise of injecting drug abuse in East Africa.

The studies indicated that students from homes where parents or guardians abuse drugs tended to imitate the behaviour of their parents by taking illegal drugs and that having a parent with a drug problem increased the chances of developing the same problem in the offspring. It was also noted that the attitude of parents towards tobacco, alcohol and other drugs played a major role in students’ behaviour towards drug abuse. The researchers further revealed that the nature of parent-child interaction or the general atmosphere within the home is consistently related to delinquency among the students. The studies found out that most parents are either completely absent from home looking for finances or when at homes they are busy watching television or interacting with their friends in social media.

Pudo (2012) stated that the presence of drug abuse disorders among parents or other family members poses both genetic and social risks for children. Other family risk factors include parental or sibling use of alcohol, tobacco, and other drugs; positive family attitudes toward and acceptance of substance use; lack of attachment to parents at any developmental stage; sexual or physical abuse; economic instability; and poor family management. Pudo (2012) noted that children who come from homes where parents take drugs tend to imitate the behaviour of their parents by engaging in taking of illegal drugs. Some parents deny their children the basic necessities such as food, shelter and education. Frequent harassment with insults among other forms of abuse may turn children to substance of abuse in a bid to escape frustration and depression. O’Neil (2011) further states that with regard to alcohol use, the most important family related risk factor for a child’s drinking is parental drinking.
The majority of research on the genetic or family history influences on drug abuse has focused on alcohol. Students with a family history of alcoholism are at particular risk for heavy drinking and alcohol-related consequences during college. This is confirmed by Merikangas (2008) who states that studies of adopted children and of twins who have grown up in different environments have established that genetic factors play a role in the transmission of alcohol use patterns from parent to child. Genetic factors are more significant in situations of problem use or abuse than in situations of casual use. Children of alcoholics (COAs) compared to non-COAs, are at increased risk for alcohol problems; they tend to initiate alcohol use earlier and engage in problem drinking at a younger age. West and Prinz (2012) further concludes that COAs are approximately four times likelier than non-COAs to become alcoholics or alcohol dependent.

A study done by Jackson (2010) found that a family history of alcoholism also was predictive of tobacco dependence and chronic or lifetime alcohol abuse or dependence in college students. Researchers hypothesize that parental alcoholism has a greater effect on children’s alcohol use than may be exhibited among college students because only the most successful children of alcoholics tend to go to college. Growing up in a family that emphasizes getting "high" from legal or illegal substances can cause an adolescent to think drug use is acceptable. Mayo (2013) explains that this unhealthy family influence may be a factor in a teen's initial drug experimentation. Exposure to family members who reach for a substance to cure every pain or ailment can cause a teen to do the same. Teens get many of their values from parents and other adult influences, and often mimic what they see.

Brook (2010) argue that, many students complain that their parents are physically absent from home. While it is true that the parents ought to make an effort to be available, students should understand that in some cases the parents must be away to look for some finances for the
basic needs of the family. However, parents should be available, especially during school holidays in the evening and at supper time. The parent’s absence from home means that they are not able to give their children advice or counsel them on social life. Protective family factors can moderate the effects of risk factors.

Protective factors in the family include consistent and contingent discipline; a strong parent-child bond; high levels of supervision and monitoring; and parental warmth, affection, and emotional support. Brook (2010) found that the risk of associating with peers who use drugs was offset by protective family factors such as parent conventionality, maternal adjustment, and strong parent-child attachment. Their research stresses the importance of the ongoing role of the family in the socialization of children well into the adolescent years. Therefore enhancing parenting behaviours that have been shown to be protective can have a positive influence on the child (Hawkins, 2012). Dishion (2008) demonstrated the importance of the family as an intervention context by showing, in longitudinal and cross-sectional analyses of prevention interventions.

The reviewed studies (Pudo, 2012; Jackson, 2010; Brook, 2010) revealed clearly that prevention of alcohol and drug abuse at the university level is a continuous process right from the home environment to the university. The office for substance abuse prevention (OSAP, 2012) indicated effective parenting is the most powerful way to reduce or prevent adolescents from abusing drugs. This is an indication that parents need to be proactive in modelling the appropriate behaviour as well as monitoring their children’s life even at the university level.

According to Frank, Rummel-Kluge, Berge, Bitzer, and Holzel (2014), the initiation to drug abuse typically begins during adolescence and appears to be the result of the complex interplay of social, personality, cognitive, attitudinal, behavioural and developmental factors.
Personal and social development of students has been enriched through affective education. The affective mode of drug education assumes that those who abuse drugs have personal problems such as low self-esteem, inadequate social skills and unclear values (Midford, 2011). Bandura (1986) in his social learning theory asserts that personal characteristics such as strong self-efficacy, high self-esteem and positive self-perception determines how people think, behave and feel in relation to a particular situation in life.

Parry, Brook, and Kekwaletswe (2010) studied the effectiveness of motivational interviewing and cognitive behavioural therapy approaches in reducing drug abuse. The study focused on college and university students. The researcher found that psychological factors such as depressive symptoms, low self-esteem, and poor decision-making together with poor social interactions were highly associated with drug abuse among university students.

The study further revealed that those students (35%) who received motivational interviewing and restructuring of thought patterns through cognitive behavioural therapy showed reduction in drug abuse. However, the researchers recommended that there is need for regular assessment of drug abuse preventative strategies particularly in assessing motivational interviewing and cognitive behavioural therapy approaches used in colleges and universities drug abuse prevention. Based on this recommendation, the present study sought to examine the effectiveness of personal and social skills traits which mainly involve use of motivation and cognitive behavioural restructuring, in reducing drug abuse among undergraduate public university students.

A study by Kimilu (2011) revealed that psychological factors such as patterns of thought, behaviour, personality trait, self-esteem and coping skills among others contributed immensely to students’ drug abuse. Other studies (Kasundu et al., 2012; Kumwenda et al., 2012) found out
that mental stress caused by academic performance and unachievable expectations from the parents and the society as a whole make most students to turn to drug abuse. In addition, hand students who witness or experience physical and sexual assaults are at a greater danger of developing alcohol and drug abuse disorders. The studies further showed that psychiatric disorders such as anxiety and post-traumatic stress disorder (PTSD) may be related to alcohol and drug abuse among students.

Kimilu (2011), Kasundu et al. (2012), and Kumwenda et al. (2012) focused on the psychological factors that influence the pattern of drug abuse among students. However, they did not explore the influence of preventative strategies in reducing drug abuse among students. The researcher in the current study investigated the influence of preventative strategies and factors hindering drug abuse reduction among university students. Breakdown in social structure of society, which includes the family and its role of inculcating morals to young ones has contributed to drug abuse among students (Moshe, 2010). A study by Parry et al. (2010) indicated that most families in Britain are characterised by issues of immorality, spiritual emptiness, lack of direction and purpose in life among other problems. While a comparative study by Pasche et al. (2010) on 325 undergraduate students’ drug abusers and an equal number of abstainers found out that the drug free students were feeling closer to their parents and highly considered important their parents’ guidance, drug abusers were found to have characteristics such as loneliness, rejection, isolation and constant punishment.

Another study Tavolacci et al. (2013), done among the undergraduates in Australia, revealed that students from disrupted families tend to get involved in drug abuse more easily than those students from functional families. In addition, Sue (2013) in his study found out that parents who do not abuse drugs are likely to have firmer standards regarding curfew, television,
academic work, use of alcohol and other drugs. The studies tend to agree with the social learning theory which postulates that the environment in which children grow determines their behaviour in their adulthood. Children learn more from their parents in the home environment thus the home environment is vital in determining whether the children will abuse drugs or not in adolescence stage.

A cross-sectional study conducted by Kimilu (2011) in a Kenyan public university targeting the second year students, revealed astonishing cases of drug abuse. In the study a total of 550 students (285 males and 265 females) were interviewed using a closed-ended questionnaires. The results showed that 265 (57.9%) of the respondents had consumed alcohol because of social-cultural factors. It was noted that some cultures recommended taking of stimulants, depressants and hallucinogens such as beer, liquor, wine, tobacco and cannabis sativa during cultural functions. Some students confessed that some liquor and drugs are culturally accepted and are taken during cultural ceremonies and festivities according to age groups. In addition, Owoaje and Bello (2010) in their study found out that unhealthy family background, perceived adult drug abuse, peer group’s abuse of drugs, poor academic achievements and the desire to remain awake at night contributed a great deal to drug abuse among the university students.

The reviewed studies show that parents play an important role in students’ decision making towards drug abuse. The studies revealed that students from homes where parents abuse drugs tend to imitate the behaviour of their parents by abusing drugs. It is equally noted that the attitude of parents towards drug abuse play a major role in their children behaviour. The studies tend to agree with the social learning theory that posits that young people learn from what they see and imitate what their parents and other people in the community do. It has also been
revealed that students who have a close relationship with their parents are likely to avoid drug abuse even when they face challenges in life. Family stability act as a support system to students who face stressing situation at the university. The studies indicated that students from disrupted families tended to abuse drugs more than students from stable families.

Bandura (1986) in his social learning theory asserted that the environment in which a child grows influences the perception and the behaviour of that particular child. The cultural norms and practices shapes the life of the child in adulthood. Some cultural norms allow use of substances such as alcohol, tobacco, khat and bhang during cultural festivals such as initiation, child naming and marriage ceremonies. This acts as a gateway to drug abuse and addiction to most children who continue with the same behaviour even in the university. Thus to ensure drug abuse preventative strategies are effective, families should tackle issues that may lead to students getting into drug abuse, and the community need to modify or do away with cultural practices that may introduce our students to drug abuse.

2.9 Critique of the Reviewed Related Literature and Identification of the Gap

The studies reviewed indicate that the effectiveness of preventative strategies used to reduce drug abuse among the undergraduate students remain questionable all over the world. The studies revealed that drug abuse is a global problem that is affecting all people regardless of age, age, gender, race or socioeconomic status (Larissa et al., 2013; Masese et al., 2012; Moshe, 2010).

From the reviewed studies, it is clear that much has been done in relation to drug abuse in learning institutions. Studies (Riley–Cook, 2012; Ross Dejong, 2010; UNDCP, 2010 & WHO,
2011) addressed issues related to prevention of drug abuse in schools. However, they adopted different methodological approaches with different sample sizes and were carried out in different research areas from the current study. The studies were carried out using qualitative methodology thus exploring the experiences, opinions and attitudes of the participants on various drug abuse issues. Besides, they failed to address the reasons why preventative strategies put in place to reduce drug abuse were not effective. The current researcher conducted a study on the influence of preventive strategies in reducing drug abuse among undergraduate students in public universities and campuses. The current study employed both qualitative and quantitative approaches where qualitative data was used to validate quantitative results.

In addition, most of the studies (Bundy, 2010; Foo, 2012) focused on the factors that contributed to drug abuse, effects of drug abuse on students’ health and academic performance as well as the prevalence rate among students. The studies failed to address the issues related to the influence of preventative strategies in reducing drug abuse among the university students. It is evident that some of the strategies used to prevent students from abusing drugs have not being effective. Twala (2012) revealed that drug abuse education in both secondary and university levels were inadequate in relation to instructional approaches, content and personnel skills and that anti-drug abuse policy did little to deter students from abusing drugs. This study was carried out in South Africa and investigated on the effectiveness of drug abuse preventative strategies among secondary school students. The current study was carried out in the public university campuses in Kenya, Nairobi County where the context and the participants are different from Twala’s study.

Studies done in Kenya (Ondieki & Mokua, 2012; Onyango, 2011; Oteyo, 2013) on drug abuse concentrated more on the causes, effects and the prevalence rate of drug abuse among
students. Most of these studies (Maithya et al., 2010; Wyatt, 2010) were carried out in primary and secondary schools. Few studies (Otieno & Ofulla, 2009; Otingi, 2012) focused on the influence of preventative strategies in drug abuse reduction among university students. These studies employed qualitative or quantitative research methodology and their findings indicated that most of students continued abusing drugs despite the implementation of drug abuse preventative strategies. By employing mixed method design, the current study was able to capture information from participants in their natural environment as well as capture their opinions and feelings about drug abuse preventative strategies.

Therefore from the reviewed literature, the major deficiency noted is the limited empirical research available on the influence of preventative strategies in reducing drug abuse among the university students in the context of Kenyan public universities. The current study focused on the commonly used preventative strategies in Kenyan university campuses and the factors that are hindering their effectiveness in reducing drug abuse among the university students.
CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter outlines and justifies the research design and methodology that was employed in this study. The chapter is organised under the following sub-headings: The research design, target population, sample and sampling procedures, research instruments, the validity and reliability of the research instruments, data collection procedures, data analysis procedures as well as ethical issues related to the study.

3.2 Research Design

The researcher used a triangulation mixed methods design so as to obtain different but complementary data on the same topic to best understand the research problem (Creswell & Clark, 2007). Convergent parallel mixed method model was used, which involved collecting and analysing quantitative and qualitative data separately on the same phenomenon and then the different results are converged during the interpretation (Creswell & Clark, 2007). Convergent parallel model as a method focuses on collecting, analysing, and mixing both quantitative and qualitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches, in combination, provides a better understanding of research problems than either approach alone. In addition, one data resource may not be enough, initial results need to be further explained and a second method is needed to enhance a primary method. Therefore, in this design the researcher merges quantitative and qualitative data in order maximise the strength and minimise the weaknesses of each of them (Creswell, 2014). Adopting
a mixed research method was necessitated by the research problem under investigation which required the researcher to collect and analyse both quantitative and qualitative data and provide findings about the influence of preventative strategies on drug abuse among undergraduate student in Nairobi.

The quantitative research design used was cross-sectional survey, which was an appropriate strategy for obtaining information on the nature, opinion and characteristics of people (Kerlinger, 2002). In addition, Ogula (2006) asserts that survey design is used to collect descriptive data regarding the current practices, conditions or needs and performance of specific programmes. Cross-sectional design was favourable for this study because of its ability to describe and document an aspect of a situation. On the same opinion, Kothari (2010) adds that it has been identified as being the most popular methods of research studies in humanities and social science, including educational studies due to its exploratory nature on a problem.

In cross sectional survey design, a researcher selects a sample of participants from a population and administer standardised questionnaire to them. Also, using cross sectional survey, it is relatively inexpensive. In this study cross sectional design made it possible for the researcher to collect data from a large sample making the results statistically significant, reliable and also valid.

Various questions were asked about the influence of preventative strategies to drug abuse reduction giving considerable flexibility to the analysis of standardised questions. This made measurement more precise by enforcing uniform definitions upon the participants. Standardisation ensured that similar data was collected from students then interpreted comparatively and finally, high reliability was easy to obtain by presenting all subjects with a standardised stimulus and therefore observer’s subjectivity was greatly eliminated.
For qualitative research, phenomenology design was used. Phenomenological research seeks essentially to describe rather than explain and starts from a perspective free from hypotheses or preconceptions (Creswell, 2014). This research design aims to gain a deep understanding of the nature of the meaning of every day experiences. It also allows participants through in-depth interviews to elicit their own meaning of their experiences. It further examines the particular experiences of unique individuals in a given situation, thus exploring not what is reality, but what it is preconceived to be (Groenewald, 2004).

As a naturalistic design it enabled the researcher to interact deeply with the studied group in order to obtain detailed and holistic data from the natural settings. In this case, the peer counsellors, university counsellors and the deans of students described their experiences in regard to the influence of preventative strategies in reducing drug abuse among undergraduate students in public university campuses in Nairobi County.

### 3.3 Target Population

The target population in this study included twenty one public university campuses in Nairobi County. The study targeted all full time third year students (students who attend lectures from 7am to 5pm daily) who were 15,000 in total. Majority of the full time students spend most of their time within the campuses and as Moshe (2010) found, the third year students are assumed to have already adapted to the university life fully, and are familiar with the university’s drug abuse policy. According to Moshe (2010) the first year university students are naive and are busy trying to familiarise with university life thus they may not know drug abuse preventive strategies used in the university therefore they will be excluded in this study.
Otingi (2012) revealed that there was no significant difference in life experience between the second and the third year students in Kenyan Universities thus the second year students were excluded since they were likely to give the same responses as the third year students. Students in their final year of study (fourth year students) were also excluded because they were busy preparing for life outside the universities and most of them were not be interested in engaging in the study.

The peer counsellors and university counsellors also formed the study’s target population due to their in-depth involvement in the social life of students during their counselling duties. The deans of students were also targeted since they assist in the development, implementation, and in evaluation of intervention programmes that address the social welfare of the students (Otingi, 2012). Thus, they are in a better position to provide accurate and adequate information on how preventative strategies influence reduction of drug abuse among undergraduate students.

### 3.4 Description of the Sample and Sampling Procedures

The study used both probability and non-probability sampling procedures to select samples for the study. Borg and Gall (2007) contend that in probability sampling, participants have a known probability or equal chance of being selected while in non-probability sampling participants are not selected by chance but based on some considerations best known to the researcher. In probability, stratified random sampling was used to ensure that proportional allocation was done and that participants were selected from each area and with a proportional size. Thus stratified sampling technique was used to select students. In non-probability, purposive sampling was used to select two university campuses and the peer counsellors. The peer counsellors had key information concerning the problem under investigation while the
university campuses were within reach. The deans of students and university counsellors were automatically included since each university campus had one dean of students and one counsellor.

3.4.1 Sample and Sampling Procedures of University Campuses

To obtain a sample for this study, the researcher used a list of 21 public university campuses in Nairobi County (Ministry of Education Science and Technology-MoEST, 2013), to serve as a sampling frame. According to Neuman (2006) a sample frame is a list that contains and closely matches the element of researcher’s defined population. The 21 identified public university campuses in Nairobi County had been accredited by the Commission of University Education (CUE). These campuses were considered to be equipped with enough information on preventative strategies influencing drug abuse reduction amount undergraduate students in public university campuses.

The researcher purposively selected Egerton and Moi University Campuses. The two campuses are situated in Central Business District (CBD) which is in the heart of Nairobi metropolitan city where drug abuse among students is very high (Kimilu, 2011). This aroused the need to establish how preventative strategies influenced the reduction of drug abuse among students. Kenyatta University Parklands Campus was selected using purposive sampling for pilot testing of the instruments. The rest of the university campuses in Nairobi County held the same characteristics with Egerton and Moi University campus in Nairobi CBD thus they were likely to yield the same results (Otingi, 2012).
3.4.2 Sample and Sampling Procedures of the Students

There were 80,000 students enrolled in public university campuses in Nairobi County (MoEST, 2016). The third year full time students were 15,000 in public universities in Nairobi County. Due to the big number of students, ten percent of each selected public university campus population formed the sample size. The use of 10% to determine sample size is in line with Gay (1981) who recommends a sample of 10% of the population for a descriptive survey study. The 10% of the third year students was 1,500 students. The sample size was selected from the Egerton (800 students) and Moi (700) universities respectively. The sample size comprised of 670 males and 830 females.

Purposive sampling procedure was used to sample various faculties. In Egerton University the researcher purposively selected Faculty of Education, International Relations, Gender, Eco-statics and faculty of Criminology. In Moi university campus, Faculty of Business and Economics, Human Resource Development, Arts and Social Sciences and Faculty of Education were purposively selected. The rationale behind this selection was the fact that the selected faculties had larger number of students than the others; therefore they were able to give a whole picture of what was happening in the other faculties.

To ensure that certain sub-groups in the research population were equally represented in the sample a stratified random sampling procedure was be adopted. Stratified random sampling was preferred because it enabled the researcher to achieve the desired representation from various universities (Denscombe, 2011). According to Bryman (2008) stratified random sampling minimises sample selection bias by ensuring that certain segments of the population are not either overrepresented or underrepresented in the study. The researcher then employed simple random sampling to get the required sample. The researcher stratified the 800 students...
from Egerton and 700 students from Moi university campuses into various selected faculties in each campus and then grouped them into males and females. Simple random sampling was then used to select students from each gender. As a result 560 male and 940 female students were selected.

3.4.3 Sample and Sampling Procedures of Peer Counsellors

Purposive sampling was used to select peer counsellors. According to Teddlie and Tashakkori (2009), purposive sampling is characterised by the use of judgement and deliberate effort to obtain representative samples. This is in line with Bazeley (2009) who states that, the principle of selection in purposive sampling is the researcher’s judgement. Purposive sampling therefore allowed the researcher to select participants that have the required and adequate information that helped to validate and expand on the quantitative data. Teddlie and Tashakkori (2009) further asserted that this sampling procedure enabled the researcher to reach the targeted sample quickly, saves time, money and effort.

The guidance and counselling department is in charge of appointing peer counsellors within the university. From the documented register of peer counsellors in the department of guidance and counselling, the researcher purposively selected peer counsellors from each of the university campuses. There were 20 peer counsellors in Egerton and 30 peer counsellors in Moi CBD university campuses. The researcher purposively selected 10 peer counsellors from each campus based on their responsibility and leadership positions. Thus a total of 20 peer counsellors were selected. Peer counsellors interact closely with other students as they try to help them in their social challenges that sometimes lead to drug abuse among some students (Otingi, 2012). Thus peer counsellors are believed to be in a position to know how students respond to drug
abuse preventative strategies and some of the factors that could be hindering their effectiveness in reducing drug abuse among undergraduate students (Wilson & Kolander, 2010).

3.4.4 Sample and Sampling Procedures of Deans of Students

Two deans of students, one from each public university campuses were automatically included to participate in this study since there was only one dean of students in each campus. The deans are in charge of students’ welfare therefore they provided important information about the influence of drug abuse preventative strategies and possible solutions that can boost their effectiveness. The researcher also believed that, the deans are aware of the effectiveness of drug abuse preventative strategies in reducing drug abuse among students and the factors that could be hindering their effectiveness.

3.4.5 Sample and Sampling Procedures of University Counsellors

Two university counsellors, one from each selected university campuses were automatically included in this study. The rationale behind their inclusion was based on the merit of their profession and their counselling experience and the fact that each university campus had only one counsellor. Thus the researcher believed that they knew how preventative strategies influenced drug abuse reduction among students. The university counsellors were also considered important informants in this study because they were believed to have close interactions with the students since they assisted students in their personal growth and in dealing with life challenges (Kyalo, 2010). They are also involved in organising university seminars and workshops for various social areas. Therefore they were more likely to provide information
about the influence of preventative strategies in reducing drug abuse and also what the students
said about these preventative strategies.

**Table 1**
Target Population, Sample Size and the Sampling Techniques

<table>
<thead>
<tr>
<th>Population Category</th>
<th>Target Population</th>
<th>Sample Size</th>
<th>Sampling Techniques</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public University Campuses</td>
<td>21</td>
<td>2</td>
<td>purposive</td>
<td>10</td>
</tr>
<tr>
<td>Students</td>
<td>15,000</td>
<td>1,500</td>
<td>Stratified Random Sampling</td>
<td>10</td>
</tr>
<tr>
<td>Peer Counsellors</td>
<td>50</td>
<td>20</td>
<td>Purposive</td>
<td>40</td>
</tr>
<tr>
<td>Deans of Students</td>
<td>2</td>
<td>2</td>
<td>Automatically included</td>
<td>100</td>
</tr>
<tr>
<td>University Counsellors</td>
<td>2</td>
<td>2</td>
<td>Automatically included</td>
<td>100</td>
</tr>
</tbody>
</table>

3.5 **Description of Data Collection Instruments**

The research questions and the phenomenon under study determine the data collection methodology (Denscombe, 2011). Since this study employed convergent parallel mixed methods design, both quantitative and qualitative data collection techniques were used. Questionnaires, in-depth interview and focus group discussion guides were used to collect data. According to Greene (2007) the use of various data collection instruments yields more valid findings and helps the researcher to explain the contradictions of data collected with one instrument with the others.
3.5.1 Questionnaire for Students (Appendix C)

According to Creswell (2014), convergent parallel mixed method design involves collecting quantitative and qualitative data at roughly the same time. Therefore the researcher collected both quantitative and qualitative data at roughly the same time. The researcher used questionnaires to collect quantitative data from the students. Kothari and Garg (2014) asserted that the questionnaires are free from the bias of the interviewer since answers are in participants’ own words. He adds that questionnaires do not only give the participant adequate time to give well thought out answers but also enable the researcher to reach out to large samples as well as to participants who are not easily approachable.

The researcher found use of questionnaires effective because researching on drug abuse is not easy as drug abuse is considered a crime and the participants fear to be identified and arrested by the authorities. Thus anonymity guaranteed by the questionnaires helped to produce candid answers to the questions posed in the questionnaires. Each questionnaire comprised of seven parts. Part A (see Appendix C) comprised of demographic questions that sought information on sex, age, experience, faculty, marital status and kinds of drugs commonly abused by students in university campuses. The other parts (B, C, D, E, F, and G) comprised of questions that were guided by the research questions. The questionnaires had both open-ended and closed-ended questions.

3.5.2 Focus Group Discussions Guide for Peer Counsellors-FGD (Appendix D)

This study incorporated Focus Group Discussions (FGD) to collect data from the peer counsellors. There were two FGD which were labelled group A and Group B. Each group
comprised of 10 peer counsellors. One group was from Moi and the other one was from Egerton University Campuses. According to Bryman (2008), focus group approach offers the opportunity of allowing people to probe each other’s reasons for holding certain view. This helped the researcher to develop an understanding about why people held different feelings on the influence of preventative strategies on drug abuse reduction since members of the groups probed and challenged each other to give reasons for holding certain views on the topic under discussion.

3.5.3 In-depth Interview Guides for Deans of Students (Appendix E)

In-depth interview guide was used to generate qualitative data that the researcher used to explain the quantitative results. In-depth interview guide was used to obtain information from deans of students and university counsellors. According to Kothari and Garg (2014) the instrument aided the researcher to gather more detailed information about the problem under study since verbal and nonverbal cues were observed. In this study the instrument enabled the researcher to gather detailed information on the influence of preventative strategies on drug abuse reduction among students. The in-depth interview guide comprised of questions on demographic information and other questions that were asked as par the research questions.

The in-depth interview guide for deans of students was open-ended. Part (A) of the guides covered the demographic characteristics of the participants; Part (B) consisted of items on the current situation of drug abuse among the undergraduate students, part (C) consisted of various items on the influence of drug abuse awareness on drug abuse reduction. Part (D) consisted of factors on that hinder to effective implementation of drug abuse policies. Part (E) contained questions on the influence of guidance and counselling on drug abuse reduction. Part
(F) consisted of questions on how building positive personal image influenced drug abuse reduction while part (G) sought to find out the challenges that hindered effective reduction of drug abuse among students.

3.5.4 In-depth Interview Guides for University Counsellors (Appendix F)

In this study, in-depth interview guide for university counsellors was open-ended. Part (A) of the guides covered the demographic characteristics of the participants; Part (B) consisted of items on the current situation of drug abuse among the undergraduate students, part (C) consisted of various items on the influence of drug abuse awareness on drug abuse reduction. Part (D) consisted of items on the hindrances to effective implementation of drug abuse policies. Part (E) contained questions on how guidance and counselling help in drug abuse reduction. Part (F) consisted of questions on how building positive personal image influence drug abuse reduction while part (G) sought to find out the challenges hindering effective reduction of drug abuse among students.

3.6 Reliability and Validity of Research Instruments (Appendix G)

One of the key questions for researchers in social sciences regardless of their areas of specialisation is to formulate research questions and select appropriate tools for the specific question they are investigating. For the research to be accurate its findings must be reliable and valid. Although validation of findings occurs throughout the steps in the process of research, this section focused on the procedures for validating the instruments that were used to collect data in the study (Creswell, 2014).
Validity of Research Instruments

A quantitative research instrument is considered valid if it measures what it was intended to measure (Kothari, 2015). In qualitative research validity involves trustworthiness, utility and dependability of the research findings (Creswell, 2008). In the current study both quantitative and qualitative research instruments were used to collect data. Thus both quantitative and qualitative validity was determined before the research collected data.

Validity of Quantitative Instruments

According to Mertens (2010) the questionnaires are said to be valid when they actually measure the intended parameters. In this study the items of the questionnaire were constructed according to the research questions in chapter one. This ensured that the instrument covered all the content that it was designed to measure with respect to the research variables. The researcher involved peer researchers, two university supervisors as well as other three research experts in examining and verifying the content validity of the data collection instruments. Creswell (2013) recommends the use of professional expertise in the field to establish the validity of research instruments. Each of them worked independently and provided feedback to the researcher. The recommendations given by the peer researchers, supervisors and research experts were incorporated in the final instruments. This involved omitting invalid items in the tools, revising unclear and obscure questions as well as rewording complex items before data collection was conducted. The instruments were further piloted and further revision was done in the questionnaire. This ensured that the instruments measured the variables they were intended to measure.
As recommended by Creswell (2009), the researcher also used both method and source triangulation to valid the research findings. In the current study the researcher used both cross-sectional (quantitative) and phenomenological (qualitative) designs. The researcher used many tools to collect data which included the use of questionnaires, in-depth interview guides and focus group discussions’ guide. Source triangulation was also used which involved data from the undergraduate students, the peer counsellors, university counsellors and the deans of students while social learning and Freudian theories were triangulated. Triangulation ensured that the study was “accurate and credible” because information was drawn from multiple sources of information, individuals and processes as well as use of more than one theory to ground the study (Creswell, 2005).

Validity of Qualitative Instruments

Credibility of qualitative research is equivalent to internal validity in quantitative research. Lincoln and Guba (1985) argue that ensuring credibility is one of most important factors in establishing trustworthiness of a qualitative research. To increase the credibility of the study, the researcher used phenomenological scientific research design that is systematic and well stipulated. The researcher also triangulated different data sources of information by examining evidence the students, peer counsellors, deans of students and university counsellors. This enabled the researcher to build a coherent justification for various emerging themes (Creswell, 2014).

In addition, the researcher had an external audit done by an independent reader who reviewed various aspects of the study especially in regard to: the extent to which the findings were grounded in the data, logical inferences and appropriateness of the themes (Bloomberg,
Likewise the researcher made sure that the participants were clear on the nature of the study which included explaining to them why the study was necessary, what the study was all about and how the data would be collected. This removed all the doubts and misconception about the study. The researcher also ensured that a trust-relationship had been established before the commencement of data collection. This was done by spending a period of time with participants who enabled the researcher to become sensitised to the situation on the ground and at the same time the participants got opportunity to become used to the presence of the researcher. This reduced bias on the both side of the researcher and the participants. The researcher also confirmed the findings and analysis of the study with participants to ensure that the responses they gave were accurate. The researcher ensured that detailed descriptions of the setting were provided to enable the results to become more realistic and richer (Creswell, 2014). Further, accurate and detailed field notes were kept safely and clearly to enable the researcher to note the variations in responses over the course of time.

3.6.2 Pilot Testing of the Instruments

Pilot study was done in one of the public university campuses in order to pre-test the data collection instruments. According to Mugenda and Mugenda (2012) pre-testing refers to trying out the research tools in the field so as to discover vague questions and unclear instructions in the instruments. The study involved Parklands Campus for pilot testing. The campus is located in the idyllic suburbs of the City of Nairobi in Parklands on Chemelil Road off Kolobot Road. It is also near Stima Plaza and adjacent to Sirona Hotel and can be approached from Kipande, Limuru, or Forest Roads. The selected public university campus did not participate in the main study. This was in line with Murray and Brubaker (2008) who noted that a small sample that was not used in
the final study was suitable for testing research instruments in order to discover possible weaknesses.

The public university campus which had similar characteristics was purposively selected from the public university campuses in Nairobi County. The participants included undergraduate students, peer counsellors, deans of students and university counsellors. Students who were selected filled in the student’s questionnaire while the peer counsellors held two separate discussions groups each in the two sampled public university campuses. The deans of students and the university counsellors were interviewed separately but at roughly the same time to ensure validity and reliability of the responses provided by the participants.

The pilot study assisted in establishing if the instruments succeeded in measuring what they were intended to measure. The research questions and items in the questions that did not yield expected responses and those that were not clear, were refined by re-rephrasing them, while irrelevant questions were removed. This gave the researcher confidence that researcher instruments were both valid and reliable.

3.6.3 Reliability of Research Instruments

Reliability of a research study involves the consistence, stability, or dependability of the data. Reliability in research is influenced by the degree of error. As random error increases, reliability decreases (Mugenda & Mugenda, 2003). In order for results to be usable in further research steps they must be reliable. Joppe (2000) defined reliability as the extent to which results are consistent over time and avers that when the study is, an accurate presentation of the total population understudy, then it is said to be reliable. If it is possible to reproduce the study
results under similar methodology, then the research instruments are reliable. Reliability is the degree to which measures are free from error and therefore yield consistent results (Zikmund, 2003).

**Reliability of Quantitative Instruments**

The testing of the reliability of questionnaire as an instrument of data collection through review of the formatting, the wording and Likert scale scoring was in two levels. The researcher compared his questionnaire with other questionnaires, as done by other researchers and peer reviewed it using other academicians to ensure appropriateness of the length and structure of the questions.

To ensure the reliability of the questionnaire and data collected for this study, the researcher performed a pilot study using one campus. The questionnaires were distributed to the third year students in this campus. The data obtained from the questionnaire was analysed independently to ensure that the variables were being responded to as intended. The researcher repeated the routine until he was comfortable that the data collected and analysed through the questionnaire was valid and reliable. Based on pilot study feedback the questionnaire was amended until the researcher obtained a final version for use in collecting data for the research.

The researcher used Cronbach’s Alpha (α) which is a commonly known measure of internal consistency. The CCA (α) indicates the extent to which reliability of a set of test items used to measure a single independent variable (Cronbach, 1951). The CCA (α) ranges from 0.0 to 0.9 with over 0.9 being rated as excellent while less than 0.5 is unacceptable, with over 0.7 being acceptable while below 0.7 being unacceptable. The cut-off for reliability for the study was
0.7, which was the acceptable measure; a score of less than 0.7 led to rejection while greater than 0.7 was good for the study. The reliability results indicated that all variables were reliable with Cronbach’s Alpha (α) of above 0.7.

Reliability of Qualitative Instruments

In order to determine the reliability of qualitative instruments, triangulation method was used. The researcher used the methodological triangulation. According to Ritchie and Lewis (2005), the use of different methods of data collection in a study compensated for individual limitations of each method and exploited their respective benefits. The researcher triangulated data sources and methodology by involving quantitative and qualitative research approaches as well as a wide range of participants (students, peer counsellors, deans of students and university counsellors) in the study. Through this technique individual viewpoints and experiences were verified against those of others thus a rich picture of the attitudes, needs or behaviour of those under scrutiny was constructed based on the contributions of a range of people (Neuman, 2009). The researcher closely checked the transcripts to make sure that they did not contain obvious mistakes made during transcription. The data were constantly compared with the codes and memos about the codes and their definitions were keenly written. This ensured that there was no drift from the codes.

3.7 Description of Data Collection Procedures

Prior to data collection, the researcher sought approval and a written permission to conduct research from the Faculty of Education at The Catholic University of Eastern Africa.
This letter was used to get a permit from the National Commission for Science Technology and Innovation (NACOSTI). The permit was used to get permission from the administration office of the sampled public university campuses within Nairobi County. With the clearance to conduct the study from the relevant authorities, the researcher visited the sampled public university campuses and established a working relationship with all selected participants. This gave the researcher room to explain in details the purpose of the study after which the participants signed the consent form. The researcher then commenced the data collection using questionnaires, focus group discussions and in-depth interviews. Since the study used convergent parallel mixed research design, the researcher collected quantitative and qualitative data in the same day from each university campus (Creswell, 2014).

The questionnaires were administered to the students by two research assistants who had been inducted by the researcher, while the university counsellors and the deans of students were interviewed by the researcher herself. Moreover, there were two focus group discussions for the peer counsellors which were held separately on a weekend within the university campus classrooms. This time was appropriate because there was less noise within the campus premises and the peer counsellors felt free to discuss the issue without fear of victimisation. The discussion proceedings were taped with the consent of the participants. The students’ questionnaires were administered during lecture time through the permission and assistance of lecturers in charge of the lectures and were collected immediately after the lecture.

The researcher booked an appointment with the university counsellors and the deans of students one week prior to the actual day of data collection. All the in-depth interviews were done and recorded with permission from the participants as it was scheduled.
3.8 Description of Data Analysis Procedures

The study used both quantitative and qualitative approaches to process, analyse and interpret data. In convergent parallel mixed design, quantitative and qualitative data analysis was done separately. Thus the researcher analysed quantitative data first, then qualitative data. The researcher then merged both quantitative and qualitative results during the interpretation of the data. This helped to explain in detail any contradiction or incongruent information in the findings (Creswell, 2014).

Data analysis commenced from the site, which involved checking the completeness of the research responses, filling in gaps and verifying what was not clear. The analysis also involved seeking confirmations from participants and serialising the instruments from each participant before leaving the field every day. This was done in preparation for data entry and data analysis.

3.8.1 Description of Quantitative Data analysis

The study used both quantitative and qualitative approaches to process, analyse and interpret data. In convergent parallel mixed design, quantitative and qualitative data analysis was done separately. Thus the researcher analysed quantitative data first, then qualitative data. The researcher then merged both quantitative and qualitative results during the interpretation of the data. This helped to explain in detail any contradiction or incongruent information in the findings (Creswell, 2014).

Quantitative data was analysed through the use of Statistical Package for Social Science (SPSS version 21.0). Descriptive and inferential statistics were computed. Descriptive statistics (frequency-distribution and percentages) were used to arrange, summarise and convey the distribution of key variables. Tallied frequencies gave a clear picture of which frequencies were
most common. This aided the researcher to know which preventative strategies influenced drug abuse reduction more effectively than the others. Inferential statistics (chi-square) were computed to test the association between the dependent variable (drug reduction) and the individual independent variables (preventative strategies).

3.8.2 Qualitative Data Analysis

Qualitative data were obtained by taking notes from focused group discussions and in-depth guides. Data was summarised from every university campus visited each day. Verification process was also done by visiting the participants for clarification before analysing of data. The next step involved transcribing the recorded data from the focus group discussions and the in-depth interviews. The researcher then summarised the data according to the research questions and also according to emerging themes. The themes were then coded and categorised for analysis. Computer assisted qualitative data analysis (CAQDAS) was used to assist the researcher in qualitative data analysis.

Thematic data analysis was done according to the six steps mentioned by Braum and Clarke (2006). The step by step guide was instrumental in creating and establishing meaningful patterns. In the first step, the researcher familiarised herself with the data, then in the second step meaningful data was identified. This was followed by searching for themes in relation to research questions. In the fourth step the researcher read through the focus group and in-depth interview guides responses obtained from the peer counsellors, the deans of students and the university counsellors, while in the fifth step the researcher defined and named the identified themes. Finally in the sixth step, the researcher wrote the findings in a narrative and
interpretative form which involved writing the responses from the participants in verbatim and presenting the findings in a narrative presentation form.

### 3.9 Ethical Considerations

According to Marshall (2014) ethical issues may arise from the research problem and run throughout the process of the study. Thus before conducting the study, the researcher sought to understand the postgraduate students’ research guidelines of The Catholic University of Eastern Africa. This enabled the researcher to carry out the process of the research professionally. A reconnaissance study was conducted through informal conversation with the university’s students, lecturers and other stakeholders to ensure that the research problem under study benefited the participants and the society.

The researcher then sought approval of the research study from the National Commission for Science Technology and Innovation (NACOSTI) of Kenya, which represents the Ministry of Education’s informed consent. The researcher used this permit to approach the selected public university campuses within Nairobi County from whom informed consent to carry out the study was sought. The researcher gave a letter of introduction (See Appendix A) to the participants which they read and asked questions related to the study before signing the consent form. The Informed Consent Form (See Appendix B) was based on the purpose and the objective of the study. The purpose of the study was explained to the participants before they gave their informed consent. The participants were informed that participation was voluntary and that they could terminate their participation any time. This was in accordance to Neuman (2009) who stated that participation in research must be voluntary and that participants need to know what they are being asked to participate in, so that they can decide whether to terminate the participation or
not. After all relevant questions were answered to the satisfaction of the participants; the participants signed the consent form.

To guarantee anonymity and confidentiality of the participants and the information given, the researcher ensured that no participant wrote his/her name on the questionnaires. Instead, numbers were assigned to the participants’ responses (Morse & Niechaus, 2009). The information was stored and locked in a safe place where only the researcher and the assistant researchers were able to access. In addition, the researcher avoided research plagiarism by acknowledging all sources of data from other studies. The method of data collection and instruments was constructed and reviewed by three peer researchers, two supervisors and three researcher experts to ensure the items did not cause any harm to the participants (Creswell, 2014).

The researcher held a brief meeting in each university campus with, 10 students, the peer counsellors, dean of students and university counsellor who participated in the study. In this meeting, a summary of the findings was disclosed to the participants. The participants confirmed that what was captured in the findings represented their own views and opinions.

In analysing data the researcher avoided siding with participants or disclosing only positive results. This, according to Creswell (2014), can be achieved by reporting multiple perspectives of the data as well as respecting the privacy and anonymity of participants. While reporting the findings of the study, the researcher communicated in clear straightforward and appropriate language and reported the findings honestly. The researcher also avoided disclosing information that would harm participants by using composite stories; this made it difficult for people to identify individual participants (Webster, 2013).
CHAPTER FOUR

DATA PRESENTATION AND DISCUSSION OF RESEARCH FINDINGS

4.1 Introduction

This chapter presents the results and discussions of the findings of this study on how the preventative strategies influence drug abuse reduction among undergraduate students in public university campuses in Nairobi County. To ensure that the instruments developed produced results precisely and accurately in terms of measurements, Cronbach’s alpha coefficient formula was used as an appropriate statistical test for assessing the reliability of the research instruments.

Three peer researchers, two supervisors and three experts in the research area were involved in the validation of the research instruments. The results were presented in frequencies, percentages, tables and figures. The chapter was presented based on the following subsections: return rate of research instruments, demographic information of the participants, the current state of drug abuse among undergraduate students, influence of drug abuse awareness on drug abuse reduction among undergraduate students, influence of drug abuse policy on drug abuse reduction among university students, influence of guidance and counselling on drug abuse reduction, influence of positive personal image on drug abuse reduction, challenges hindering the effective reduction of drug abuse among undergraduate students. Table 2 indicates the reliability coefficient index of the various variables in the study.
Table 2

Cronbach’s Alpha Coefficients

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cronbach alpha</th>
<th>Critical value</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug abuse awareness</td>
<td>.733</td>
<td>.7</td>
<td>Reliable</td>
</tr>
<tr>
<td>Drug abuse policy</td>
<td>.738</td>
<td>.7</td>
<td>Reliable</td>
</tr>
<tr>
<td>Guidance and counselling</td>
<td>.901</td>
<td>.7</td>
<td>Reliable</td>
</tr>
<tr>
<td>Positive personal image</td>
<td>.902</td>
<td>.7</td>
<td>Reliable</td>
</tr>
<tr>
<td>Challenges hindering effective reduction of drug</td>
<td>.782</td>
<td>.7</td>
<td>Reliable</td>
</tr>
<tr>
<td>abuse</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.2 Return Rate of Research Instruments

In order to describe the sample for demographic information, descriptive statistics was used. To obtain data from the students, questionnaires were distributed to students in the two public university campuses in Nairobi County that is, Egerton and Moi University campuses. Two focus group discussion guides, one from each university campus were used to gather data from the peer counsellors while in-depth interview guides were used to collect data from the university counsellors and the deans of students. Table 3 shows the expected and actual participants who participated in the study.
Table 3
Return Rate of Research Instruments by Participants

<table>
<thead>
<tr>
<th>Item</th>
<th>Proposed participants</th>
<th>Actual participants</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>1,500</td>
<td>1,430</td>
<td>95.3</td>
</tr>
<tr>
<td>Peer counsellors</td>
<td>20</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>University counsellor</td>
<td>2</td>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>Dean of students</td>
<td>2</td>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,524</strong></td>
<td><strong>1,454</strong></td>
<td><strong>95.4</strong></td>
</tr>
</tbody>
</table>

Table 3 shows the return rate for the four groups of participants. From the 1,500 questionnaires distributed to the students, 1,430 (95.3%) were filled and returned. For the peer counsellors, university counsellors and deans of students there was 100% response rate. The percentage return rate was considered adequate in providing valid and reliable presentation of the population. The high percentage return rate was attributed to the fact that the questionnaires, the in-depth interviews and the focussed group discussions were conducted by the researcher personally with assistance of two assistant researchers.

4.3 Demographic Information of Participants

This section gives information on the demographic characteristics of the students, the peer counsellors, the deans of students and the university counsellors who participated in this study. The information involved the gender, age, marital status, qualification and the years of experience.
4.3.1 Demographic Information of Students

The students who participated in this study were full time students and in their third year of study. Their demographic information included the gender, age and marital status.

Table 4 indicates the findings of the demographic information of the students.

Table 4
Demographic Information of Students

<table>
<thead>
<tr>
<th>Demographic information</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>670</td>
<td>44.6</td>
</tr>
<tr>
<td>Female</td>
<td>830</td>
<td>55.4</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-20</td>
<td>406</td>
<td>27.1</td>
</tr>
<tr>
<td>21-23</td>
<td>711</td>
<td>47.4</td>
</tr>
<tr>
<td>24-26</td>
<td>255</td>
<td>17.0</td>
</tr>
<tr>
<td>Above 26</td>
<td>128</td>
<td>8.5</td>
</tr>
<tr>
<td><strong>Marital status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>1,265</td>
<td>84.3</td>
</tr>
<tr>
<td>Married</td>
<td>185</td>
<td>12.4</td>
</tr>
<tr>
<td>Separated</td>
<td>20</td>
<td>1.3</td>
</tr>
<tr>
<td>Divorced</td>
<td>30</td>
<td>2.0</td>
</tr>
</tbody>
</table>

The gender of the students who participated in this study was sought in order to ensure representativeness. Slightly more than half (55.4%) of the participants were female while 44.6%
were male. This showed a good representation of the study population by gender. The findings on gender of the students showed there was equal gender representation in the study.

The participants were asked to indicate their age bracket. This was categorised into the following age brackets: 18-20 years, 21-23 years, 24-26 years and above 26 years. The findings in Table 3 indicate, that the age of a vast majority (74.5%) of the students indicated that they were aged between 18 and 23 years. Another (25.5%) of them were aged 24 years and above. The results indicated that majority of undergraduate students were aged between 18 to 26 years.

The participants were asked to indicate their marital status. This was categorised into the following: divorced, single, separated or married. The results showed that majority (84.3%) of the students were single, while 12.4% were married, and a small percentage 2% and 1.3% were divorced and separated respectively. The findings showed that a higher percentage of students were not married.

4.3.2 Demographic Information of Peer Counsellors

This section gives information on the demographic characteristics of the peer counsellors involved in this study. The section was presented under various demographic factors. Table 5 shows the demographic information of the peer counsellors.
Table 5
Demographic Information of the Peer Counsellors

<table>
<thead>
<tr>
<th>Demographic information</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>8</td>
<td>40</td>
</tr>
<tr>
<td>Female</td>
<td>12</td>
<td>60</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-20</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>21-23</td>
<td>12</td>
<td>60</td>
</tr>
<tr>
<td>24-26</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>Above 26</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Marital status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>Married</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Separated</td>
<td>8</td>
<td>-</td>
</tr>
<tr>
<td>Divorced</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Duration of service</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Year</td>
<td>8</td>
<td>40</td>
</tr>
<tr>
<td>2 Years</td>
<td>7</td>
<td>35</td>
</tr>
<tr>
<td>3 Years</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>Above 4 Years</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

The gender of the participants in this study was sought in order to ensure representativeness. With reference to the gender of the peer counsellors, the first focus group had an equal gender representation while the second group had seven females and three males. Thus there were 60% females and 40% males. This indicated that public universities had more female peer counsellors than males. Flansburg (2012) identified gender as one of the factors that determine the effectiveness of guidance and counselling services in reducing drug abuse among students. Some students may seek counsel from opposite gender while others would prefer counsellors of the same gender.
The findings indicate that majority of the peer counsellors aged between 21-24 years. This is important because most of the students are also in the same age bracket which may make it easy for most students to associate and share their problems with them since the age difference is narrow. None of the peer counsellors was above twenty six years of age. Duration of service is a good indicator of how peer counsellors handled issues of drug abuse among students and the challenges they faced. The peer counsellor’s years of service was sought in order to gather the background experiences in curbing drug abuse among their fellow students. The findings also revealed that all the peer counsellors were single.

The findings showed that, more than a third (40%) of the peer counsellors had worked for one year. Another 35% had worked for a period of two (2) years and 20% of the peer counsellors had worked for three (3). Another 5% of the peer counsellors had worked for more than 4 years because of various reasons ranging from lack of university fees and sicknesses. The fact that majority (60%) of the peer counsellors have done peer counselling for more than two years was an indication that most of the peer counsellors had enough experience to handle most drug abuse cases which may have contributed to effective reduction of drug abuse among students.

The results also suggested that most of students had adequate experience of what goes on in the public university campuses as far as drug abuse preventative strategies are concerned. Flansburg (2012) argued that the experience and knowledge of the counsellor determined whether the students would continue seeking counselling services or not. It is therefore important that peer counsellors are trained continuously to equip them with current counselling skills and especially in counselling drug abuse among students.
4.3.3 Demographic Information of University Counsellors

There were only two university counsellors from the two selected university campuses in Nairobi County. Both the counsellors were female. Counsellor from university campus X was aged fifty (50) years while counsellor from university campus Y was sixty (60) years old. Further counsellors from university campus X had a Master’s degree in guidance and counselling while the other one held a doctorate degree in counselling psychology. These background results of the university counsellors showed disparity in gender representation. This disparity may have discouraged most male students from seeking counselling assistance when confronted with life challenges. This is because some students will prefer to share their problems with same gender counsellors while others prefer the opposite gender. The age of the participants showed a wide age gap between the students and the counsellors. The counsellors’ academic qualification indicated that the counsellors were highly qualified to handle students’ challenging issues. One of the counsellors had an experience of five years while the other one had fifteen years’ experience. This indicated that they had adequate experience of handling issues related to drug abuse in the universities.

4.3.4 Demographic Information of Deans of Students

Two deans of students were interviewed. This was because each university campus has one dean of students who are considered reliable in providing detailed and adequate information concerning drug abuse preventative strategies among the university students. The deans of students from university campus X was a male while the one from university campus Y was a female. The two deans of students were aged 45 to 55 years respectively. Thus the deans were in a position to interact freely with the students since the age gap between them and the students
was not too wide nor were they too young to command respect as parents to the students. The two deans of students had doctorate degrees in educational administration which indicated that they were highly qualified to handle students’ matters. Both deans of students had worked for at least three years showing that they had interacted well with the undergraduate students well.

4.4 Current State of Drug Abuse among the Undergraduate Students

In this question, the researcher sought to establish the current state of drug abuse among the students in public university campuses in Nairobi County. Students were therefore asked to indicate the most commonly abused drugs, whom they think first introduced the abusers to drug abuse, Students’ Source of Drugs, Places Where Students Abuse Drugs, When Students and Commonly Abuse Drugs.

4.4.1 Commonly Abused Drugs in Public University Campuses

In order to have an overall picture about commonly abused drugs in the public university campuses, the participants were asked to indicate which drug was commonly abused by the undergraduate students. Students’ responses are as shown in Table 6.
Table 6
Commonly Abused Drugs in Public University Campuses

<table>
<thead>
<tr>
<th>Item</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>664</td>
<td>46.4</td>
</tr>
<tr>
<td>Bhang</td>
<td>360</td>
<td>25.2</td>
</tr>
<tr>
<td>Shisha</td>
<td>233</td>
<td>16.3</td>
</tr>
<tr>
<td>Cocaine</td>
<td>84</td>
<td>5.9</td>
</tr>
<tr>
<td>Tobacco</td>
<td>42</td>
<td>2.9</td>
</tr>
<tr>
<td>Miraa</td>
<td>37</td>
<td>2.6</td>
</tr>
<tr>
<td>Heroine</td>
<td>10</td>
<td>0.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,430</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Regarding the commonly abused drugs in public university campuses, nearly half of the participants (46.4%) indicated alcohol. Another 25.2% and 16.3% of the students indicated bhang and shisha respectively. Cocaine (5.9%), tobacco (2.9%), miraa (2.6%) and heroine (0.7%) had a mention as the commonly abused drugs. During a focus group discussion with the peer counsellors, it was revealed that alcohol and bhang were the mostly abused drugs by undergraduate students in public university campuses. One of the peer counsellors in group A went on to elaborate and stated that:

Most of the students I have interacted with are struggling with alcohol and bhang addiction with at least half of them using bhang. In addition most of the abusers are in fourth year students. Male students on the other hand, say nine out of every ten students were the most abusers (FGD A in University Y, February 19, 2016).

Speaking on the same subject another peer counsellor said:

Alcohol is the commonly abused drug in our university though, the abuse of shisha has been on the rise of late as many students consider it as cool not as a drug. 50% of the
cases I deal with are alcohol related with a majority of the students being in their second, third and fourth years of study (FGD B in University X, February 19, 2016).

The interviews with the deans of students and the university counsellors cited abuse of alcohol, bhang and miraa as the most commonly abused drugs by the students. These findings agreed with Oshikoya and Alli (2006) who carried out a study in Nigeria on the prevalence of drug abuse among university students. The study showed that alcohol accounted for the commonly abused drugs by university students as opposed to bhang which was only used by 3.5% of the students. Wood, Nagoshi, and Dennis (2013) revealed otherwise as their study showed that bhang was the most commonly abused drug by university students in Uganda with a mention of inhalants and cocaine among other hard drugs. This was attributed to the fact that relevant authorities are reluctant to crack the whip on the offenders especially the suppliers of these drugs.

4.4.2 Introducing Students to Drug Abuse

The participants were further asked to indicate who introduced them to drugs. The suggestions given included; high school friends, neighbours (H/s friends), family members, university friends (Uni Friends) and advertisements (Adverts). The participants’ response was as indicated in Figure 2.
Slightly more than a third 486 (34%) of the students indicated that students were introduced to drug abuse by their high school friends. Another 31.4% of the students indicated university friends. Neighbours accounted for 14.4%, family members 12.1% while 8.2% were influenced by media advertisements. The results indicated that friends both at high school (43.0%) and university (31.4%) play an important role in introducing their fellow students to drug abuse. It was also clear from these findings that most of university students had been introduced to drug abuse before the joined universities. It was also revealed that university friends played a crucial role in introducing students into drug abuse. These findings concur with Ondieki and Mokua (2012) who found out that the interests and expectations of a peer group played an important role in determining on whether or not a student would try a dependence producing drug. They also revealed that a friend or peer group was likely to be the source of information on the availability and the allegeable effects of drugs of abuse.

These findings tend to confirm Bandura’s social learning theory that asserts that behaviours are learned through observation and imitation of the role models and peers. Thus it is evident that most students learn how to abuse drugs from their peers either in high school or

---

**Figure 2: Introducing Drug Abuse to Students**
universities. This as well agreed with the conceptual framework of this study which cited peer influence as an intervening factor that is likely to interact with the preventative strategies to either reduce or increase drug abuse among undergraduate students.

The results also indicated that 173 (12.1%) of the students were for the opinion that family members introduced them to drug abuse. This agreed with the social learning theory that posits that the environment in which a child grows highly determine his/her behaviour in adulthood. The family members are the first role models that the child comes into conduct with thus if members of the family abuse drugs then the child is likely to abuse drugs in adulthood. This explained why a good percentage 12.1% continued to abuse drugs despite preventative strategies having been put in place in public universities. In a focus group discussion with the peer counsellors, it was anonymously agreed that most students abuse drugs because their friends abused drugs. In addition the university counsellors consented that the abuse of drugs among students was highly determined by the group an individual students joins immediately after being admitted into the campus.

4.4.3 Students’ Source of Drugs

The participants were asked to indicate the source of drugs of abuse. Some of the suggestions given were; the university staff, university students, on the streets, parents or relatives and local residents around university. The results are as shown in Table 7.
Concerning the source of drugs abused by the students, slightly more than half (54.2%) of the students indicated that they got the drugs from the local residents around the university. Another 32.7% of the students indicated that they got the drugs from fellow university students. The results showed that the environment surrounding universities were critical sources of drugs of abuse. In this case most of the university campuses are surrounded by busy streets where dubious businesses such as drug trafficking take place. It was also clear that most students (32.7%) got drugs from their fellow students. This agreed with Ondieki and Mokua (2012) who asserted that peers or friends in universities were the major source of information about the availability of drugs of abuse.

Only a small percentage 9.8%, 2.9% and 0.3% of them agreed that students got drugs of abuse from the streets, parents/relatives and the university staff respectively. The findings concurred with Masese et al. (2012) who found out that some students worked in cahoots with watchmen, cooks and cleaners in peddling drugs into the institutions of learning and that shoe shiners or vendors, maize roasters and matatu touts were deeply involved in supplying drugs to
students. Although the percentage of these people was small, there is need to seal such loopholes otherwise most students may end up being introduced to drug abuse which becomes very difficult to stop. In agreement with the findings from the students’ questionnaire, a peer counsellor from university X in their discussions commented:

There are so many students selling drugs within the university though some university staffs have been caught in the recent past selling drugs to students just because of the love for quick money. Further there is a notorious gang of residents that resides around the university which I believe is the main supplier of these drugs (FGD B in University X, February 19, 2016).

In an interview with the university counsellors, a comment by a university counsellor from university Y seemed to agree with the students views when she stated:

It is hard to know where the students get drugs from since most of them do not always reveal their sources when they come for counselling for fear of victimization by the drug peddlers. However, I have heard other students say some of their classmates get drugs from the local residents or friends not necessarily within the university but also from other universities (Counsellor in university Y, February 19, 2016).

From the conceptual framework the drug abuse policy are meant to reduce the availability and accessibility of drugs of abuse among university students. However, the findings of the study have revealed that local residents around universities (54.2%) are the major source of alcohol and drugs while students (32.7%) are second in providing drugs to their colleagues. Bandura (1989) in his social learning theory posits that the environment in which students learn and live in determines whether students will continue to abuse drugs or not. Most of the university campuses in Nairobi are located in high raised buildings and on busy streets within which dubious businesses such as drug trafficking are carried out. This makes it easy for drug traffickers to mingle and interact with students. A peer counsellor, who looked a little old, with a frowning face said:
It is sad to see our generation wasting away as a result of the irresponsibility and greed of some corrupt people in this city. Most of the students I have counselled always get drugs from some of the influential people in the city. I am certain that these businessmen are the source of a good percentage of drugs used in this university FGD A in University Y, (February 19, 2016).

Family background has been cited as a factor that can either enhance effective reduction of drug abuse among students or even increase the abuse. The findings have revealed that some parents 2.9% are a source of drugs of abuse to the students. Social learning theory asserts that behaviour is first learned from the immediate family members particularly the parents or the caregivers. It is unfortunate that some students get drugs of abuse directly from their parents or close relatives. Commenting on the same issue, another peer counsellor from university X had this to say:

It is indeed true that we cannot talk about the source of drugs in the university without mentioning the influential drug cartels in the city. But what worries me is the number of parents and relatives who supply their children with the drugs knowing very well the effects of these drugs (FGD B in University X, February 19, 2016).

This sentiment seemed to suggest that for the preventative strategies to effectively reduce drug abuse among students all stakeholders (the government, parents, policy makers, university administration and the students) must team up to fight against drug abuse students. It is also evident that some of the university campuses are situated very near bars and public restaurants where alcohol and other drugs are sold. This has encouraged students to keep abusing drugs especially when they are economically, socially or academically challenged. Such factors need to be rectified and new policies developed to protect students from being exposed to destructive environments.
4.4.4 Places Where Students Abuse Drugs

The participants gave various places where the students abused drugs. These included but not limited to private hostels, residential places (homes and rented rooms), university premises and at homes. Easy availability and accessibility of drugs makes an environment conducive for drug abuse. Leong et al. (2011) revealed that students will always abuse drugs because they are readily available. Table 8 shows the responses of the students.

Table 8
Places Students Abuse Drugs

<table>
<thead>
<tr>
<th>Item</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential places (homes, rented rooms)</td>
<td>425</td>
<td>29.7</td>
</tr>
<tr>
<td>Private hostels</td>
<td>314</td>
<td>21.9</td>
</tr>
<tr>
<td>Outside the university</td>
<td>257</td>
<td>17.9</td>
</tr>
<tr>
<td>University premises (classes, hostels)</td>
<td>154</td>
<td>10.8</td>
</tr>
<tr>
<td>Streets</td>
<td>154</td>
<td>10.8</td>
</tr>
<tr>
<td>Public social places (Uhuru park/gardens)</td>
<td>126</td>
<td>8.8</td>
</tr>
<tr>
<td>Total</td>
<td>1,430</td>
<td>100</td>
</tr>
</tbody>
</table>

With respect to where the students normally abuse drugs there were mixed reactions. The findings of this study revealed that 739 (51.6%) of the students abuse drugs while in their residential places (homes, rented rooms) and in private hostels. Students abuse drugs in places they deem secure from being caught either by the anti drug abuse police unit, parents or the university administration. Such environment will increase drug abuse even with preventative
strategies having been put in place. Speaking on the same issue a peer counsellor in one of the focus group discussions stated:

It is hard to specifically point a particular place because most of these students use drugs anywhere. At times you will meet some of them along the university corridors especially at night because there is no one around. Some of them however, I presume abuse drugs in their residential places since they stay outside the university (FGD A in University Y, February 19, 2016).

Another 17.9% of students indicated that students mostly abused drugs outside the university while university premises (classes, toilets) and Nairobi streets accounted for 10.8% each. Public places (Uhuru park/gardens) accounted for 8.8%. The indication here was that residential places and private hostels are turning to be preferable environments where most of university students abuse drugs from. This was because most of the university students rented private hostels or servant quarters from where they commuted to the university. Some of these residences proved to be places where students abused drugs freely since the university authority or the parents were not near to monitor their behaviours (Masese et al., 2013).

Adeoti and Edwards (2010) found out that parents have become very busy and preoccupied looking for money and no longer spend time with their children. This as a result has given the students the opportunity to engage with maladaptive behaviours such as drug abuse without their parents’ knowledge. It is of essence that parents get involved in the life of their children so that they can know early when their children start abusing drugs. This will help to salvage them from drug addiction. During FGD in university Y, a number of peer counsellors were in unison that most of the students used the drugs in the private hostels. One peer counsellor went on to state that:
I can say that hostels have become more of drug dens than sleeping places. A recent tip off by one of the students revealed a more shocking incident that left the university puzzled. One of the rooms in the boys’ hostel had been converted to a smoking and drinking zone and was the most frequently visited room in the whole hostel (FGD B in University X, February 19, 2016).

The findings from the in-depth interviews with the deans of students seemed to agree that it is difficult for the university administration to monitor and control how students behave when they are out of campuses. This may give them opportunity to abuse drugs freely. In an agreement a counsellor from university X asserted that although the preventative strategies had managed to reduce drug abuse among students, their effectiveness would be more felt if the parents followed up to know what students do after they leave campuses. The counsellors were in agreement that if drug abuse is detected early enough it can be prevented thus effectively reducing the abuse tremendously.

4.4.5 The Time Students Abuse Drugs

The participants were further asked to indicate when the students commonly took the drugs. The suggestions given were on weekends, during examinations, before classes, after classes, after examination and during study times. The reviewed literature indicated that most students (54.6%) abused drugs when they are preparing to sit for examinations particularly at the end of the term (Ajayi & Ayodele, 2013). The students’ response was as shown in Table 9.
Table 9
Time of Abusing Drugs by the Students

<table>
<thead>
<tr>
<th>Items</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekends</td>
<td>762</td>
<td>53.3</td>
</tr>
<tr>
<td>During examinations</td>
<td>257</td>
<td>18.0</td>
</tr>
<tr>
<td>Before classes</td>
<td>149</td>
<td>10.5</td>
</tr>
<tr>
<td>After classes</td>
<td>149</td>
<td>10.5</td>
</tr>
<tr>
<td>After examinations</td>
<td>80</td>
<td>5.6</td>
</tr>
<tr>
<td>During class time</td>
<td>3</td>
<td>2.3</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>1,430</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The study found that slightly more than half (53.3%) of the students agree that drugs are mostly abused during the weekends, 18% were from the opinion that drugs are abused during the examination period while 10.5% of the participants indicated before and after classes. On the other hand, 5.6% pointed that drugs are mainly abused after examination while a further 2.3% abused the drugs while studying. The results showed that over 50 percent of the students abused drugs during the weekend break. The results contradicted the findings by Ajayi and Ayodele (2013) who asserted that most of students abused drugs at the end of semester as they prepared for examinations. However, a comment by one of the peer counsellors seemed to agree with Ajayi and Ayodele. The peer counsellor said: “Most of the students use drugs especially bhang and miraa during the exam period when they want to transnight”. This was an indication that there were those students who abused drugs just for examination purposes while the majority (53.3%) abused drugs during weekends possibly because they were idol or with their friends who
abuse drugs. When asked the same question, the university counsellors were for the opinion that most drug abusers whom the counselled admitted that they abused drugs mostly during weekends while with their friends and immediately after examinations in order to relax. This view tends to agree with the peer counsellors views that most students abused drug when they were stressed by academic performance.

4.5 Influence of Drug Abuse Awareness on Drug Abuse Reduction

This study sought to examine the influence of drug abuse awareness on the drug abuse reduction in public university campuses in Nairobi County. Various items were presented to the students, dean of students and the university counsellors. The students were asked to indicate whether to: larger extent, some extent, little extent and no extent they agreed with various statements presented to them in a table. Table 10 shows the distribution of students’ responses regarding the respective statement.
Table 10

Influence of Drug Abuse Awareness on Drug Abuse Reduction

<table>
<thead>
<tr>
<th>Item</th>
<th>Larger Extent</th>
<th>Some Extent</th>
<th>Little Extent</th>
<th>No Extent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F (%)</td>
<td>F (%)</td>
<td>F (%)</td>
<td>F (%)</td>
</tr>
<tr>
<td>Extent of agreement on: I attend drug abuse awareness seminars every semester</td>
<td>257 18</td>
<td>206 14.4</td>
<td>229 16</td>
<td>738 51.6</td>
</tr>
<tr>
<td>My university organises drug abuse awareness workshop every semester</td>
<td>154 10.8</td>
<td>472 33</td>
<td>285 19.9</td>
<td>519 36.3</td>
</tr>
<tr>
<td>Drug abuse awareness has helped some students stop abusing drugs</td>
<td>391 27.4</td>
<td>501 35</td>
<td>342 23.9</td>
<td>196 13.7</td>
</tr>
<tr>
<td>Some students have reduced the number of times they abuse drugs after they are made aware of the consequences</td>
<td>369 25.8</td>
<td>565 39.5</td>
<td>332 23.2</td>
<td>163 11.4</td>
</tr>
<tr>
<td>Since most students are aware of the effects of drug abuse, drug abuse prevalence rate has reduced</td>
<td>309 21.6</td>
<td>551 38.5</td>
<td>416 29.1</td>
<td>154 10.8</td>
</tr>
<tr>
<td>Drug abuse awareness has reduced cases of drug abuse accidents among students</td>
<td>327 22.9</td>
<td>575 40.2</td>
<td>365 25.5</td>
<td>163 11.4</td>
</tr>
<tr>
<td>Drug abuse awareness has reduced drug abuse related deaths among students</td>
<td>313 21.9</td>
<td>645 45.1</td>
<td>281 19.6</td>
<td>191 13.4</td>
</tr>
<tr>
<td>Drug abuse awareness has reduced cases of indiscipline related to drug abuse</td>
<td>285 19.9</td>
<td>528 36.9</td>
<td>365 25.5</td>
<td>252 17.6</td>
</tr>
<tr>
<td>Drug abuse awareness has reduced cases of violence among students</td>
<td>360 25.2</td>
<td>551 38.6</td>
<td>346 24.2</td>
<td>173 12.1</td>
</tr>
<tr>
<td>Drug abuse awareness has reduced reported cases of health problems related to drug abuse</td>
<td>346 24.2</td>
<td>571 39.9</td>
<td>369 25.8</td>
<td>144 10.1</td>
</tr>
</tbody>
</table>

176
According to Table 10, the finding showed that 65.3% of the students suggested that drug abuse awareness had effectively influenced reduction of drug abuse among undergraduate students in public university campuses in Nairobi County. Another 60.1% of the students agreed that awareness of the effects of drug abuse had reduced the prevalence rates to a larger extent and some extent. The findings from the focus group discussions concur with the students’ responses in that twelve out of twenty peer counsellors agreed that drug abuse awareness had reduced drug abuse a great deal. Explaining the situation a peer counsellor in FGD A said:

The abuse of drugs has been rampant in this university since we are situated in the central business district (CBD). This therefore prompted the university to organize awareness seminar every semester which has so far proved to be efficient as some of the students are slowly seeking help to deal with the addiction problems (FGD A in University Y, February 19, 2016).

These findings seemed to support the findings by Boneli et al. (2012) who argued that the main objective of drug abuse awareness programmes was to empower individual student’s initiative to prevent getting into drug abuse and create positive attitude towards preventative strategies. The finding in this study and Boneli et al. (2012) were in agreement with Bandura’s principle of reciprocal determinism. According to this principle learning new knowledge tends to change a person’s behaviour. This implied that students would change their drug abuse behaviour after acquiring more knowledge about drug abuse. The findings from the interviews with the deans agreed that drug abuse awareness helped to reduce drug abuse among students. Commenting on the effectiveness of drug abuse awareness, the dean of students from university X stated:

We carry out drug abuse seminars; we invite resource persons and motivational speakers to talk to our students. During orientation for the new students, first year students are educated and informed on drug abuse and its effects. I can say these measures have been effective in the reduction of drug abuse though it’s difficult to clean it completely. Further complains from lecturers and students concerning alcoholism and smoking has
reduced and there are a few cases of students’ absenteeism in the last three years which I can attribute to drug abuse awareness (Dean 1, University X, February 17, 2016).

Although drug abuse awareness was cited as being effective in drug abuse reduction among students, the findings revealed that 51.6% of the students did not attend drug abuse awareness seminars. This finding supported Oshikoya and Alli (2006) who found that the level of drug abuse awareness in universities in Nigeria was still wanting. This pointed that awareness was still a major concern with over 65% of the students still abusing drugs despite having received drug abuse awareness in these universities. The current study further revealed that 19 percent of students were for the opinion that drug abuse awareness had no effect on reduction of drug abuse among students. This reaction agreed with Tsevtkova and Antonova (2013) who found that the larger the number of students who attended drug abuse awareness programmes in Sweden, the larger the number of drug abusers. This implied that sometimes drug abuse awareness can increase students’ curiosity and some of them may end up experimenting on drugs.

Despite the mixed reaction it is the opinion of the researcher that drug abuse awareness is critical in the fight against drug abuse in public universities. Knowledge of the effects of drugs is a powerful tool that has proved important in the fight. Awareness empowers people to make informed decision before and after engaging in drug abuse. Sometimes students make unwise decision but when they recall certain information such as negative effects of drug abuse from their memories they are able to reform immediately.
4.6 Factors Hindering Effective Implementation of Drug Abuse Policies

This study sought to evaluate the factors hindering the effective implementation of drug abuse policy in public university campuses in Nairobi County. Students, peer counsellors, dean of students and the university counsellors were presented with various items on the hindrances to effective implementation of drug policy in universities to respond to. The students were asked to indicate whether to: larger extent, some extent, little extent and no extent they agreed with various statements presented to them in a table. Table 11 shows factors hindering effective implementation of drug abuse policies.
### Table 11
Factors Hindering Effective Implementation of Drug Abuse Policy

<table>
<thead>
<tr>
<th>Item</th>
<th>SA</th>
<th>A</th>
<th>UD</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are drugs abuse policies in our universities</td>
<td>504</td>
<td>35.3</td>
<td>589</td>
<td>41.2</td>
<td>131</td>
</tr>
<tr>
<td>Drugs abuse policies are not effectively implemented in our university</td>
<td>173</td>
<td>12.1</td>
<td>546</td>
<td>38.2</td>
<td>243</td>
</tr>
<tr>
<td>Corrupt NY has hindered implementation of drugs abuse policies</td>
<td>406</td>
<td>28.4</td>
<td>360</td>
<td>25.2</td>
<td>243</td>
</tr>
<tr>
<td>Most students do not support the implementation of drugs abuse policies</td>
<td>313</td>
<td>21.9</td>
<td>528</td>
<td>36.9</td>
<td>243</td>
</tr>
<tr>
<td>Lack of sensitisation on drugs abuse policies has influenced its implementation</td>
<td>383</td>
<td>26.8</td>
<td>565</td>
<td>39.5</td>
<td>258</td>
</tr>
<tr>
<td>Most of the students leaders are not committed to the implementation of drugs abuse policies</td>
<td>233</td>
<td>16.3</td>
<td>552</td>
<td>38.6</td>
<td>362</td>
</tr>
<tr>
<td>Drugs abuse policies are applied discriminatively</td>
<td>243</td>
<td>17</td>
<td>379</td>
<td>26.5</td>
<td>386</td>
</tr>
<tr>
<td>Students negative attitude towards the implementation of drugs abuse policies</td>
<td>402</td>
<td>28.1</td>
<td>490</td>
<td>34.3</td>
<td>272</td>
</tr>
<tr>
<td>Lack of support from the university staff</td>
<td>309</td>
<td>21.6</td>
<td>406</td>
<td>28.4</td>
<td>314</td>
</tr>
<tr>
<td>Lack of warning signs on notice board on possession and consumption of drugs</td>
<td>406</td>
<td>28.4</td>
<td>346</td>
<td>24.2</td>
<td>187</td>
</tr>
</tbody>
</table>
According to Table 11, majority of students (76.5%) admit that there were drug abuse policies in their universities. This concurs with Agrawal, Everett and Sharma (2010) who asserted that 97% of learning institutions in USA had developed written drug abuse policies which prohibited possession and abuse of illegal legal drugs among students. However, students’ responses (66.3%) indicated that lack of sensitization contributed greatly to ineffectiveness of these policies. On the other hand 52.6% of the students agreed that universities were lacking warning signs on the notice boards regarding possession and consumption of drugs. This implied that most students were not aware of the rules and regulations related to the possession, consumption or trafficking of drugs of abuse within the university campuses. Agrawal et al. revealed that 40% of students in USA agreed that drug abuse policies were hardly known and were ineffective as far as reduction of drug abuse was concerned. These sentiments were echoed by a peer counsellor from FGD B when he said:

The policies in question have never been publicised in the university. For example if we can go around asking every staff or student if they have an idea of the existence of drug abuse policies in the university, I am sure most of the responses you will receive will be negative. Now can we implement something that we know nothing about? I think the concerned parties should make an effort in ensuring that these policies are public since they are the property of the university but not only for a few people (FGD B in University X, February 19, 2016).

The study also established that students’ negative attitude towards these policies as indicated by 62.4% hindered their effective implementation. This was also indicated (58.8%) of students argued that students do not support the implementation of drugs policies. The interpretation was that most of university students do not own up the drug abuse policies. This was likely because the students were not actively involved in the formulation of the policies. These findings are in agreement with Tsering (2014) who found that students were normally denied the opportunity to participate in decision making in most institutions of learning.
According to Tsering, this made them feel less important and demotivated in implementing institutional policies. In support Ochando (2015) argued that involving students in policy making made them more accountable to themselves, independent in thoughts and responsible in their behaviour. These findings were confirmed by the statement made by one of the university counsellors who said:

There are so many challenges in the implementation of these policies ranging from the negative attitude from the students to the laxity on the part on the administration. There are scenarios in which our hands are tied since some of the notorious students using or supplying these drugs have “powerful connections” in the city thus threatening those that are against them. We just stand there to see since they are the “big fish” unlike other students (University counsellor 1, University X, February 15, 2016).

Poor and lack of commitment to the implementation of the drug abuse policy were indicated by 50.3% and 54.9% of the students respectively. A discussion with peer counsellors indicated that the university administration is sleeping on the job in relation to the implementation of drug abuse policy. In addition, an interview the dean of students in university Y indicated that some university staffs were not committed to the fight against drug abuse among students instead, some of the university staff abuse drugs while others collude with the students in the possession and selling of the prohibited drugs. This made it difficult for such staffs to commit themselves fully in the eradication of drug abuse among students. A study by Masese et al. (2012) showed that students in Kenyan institutions of learning worked in cahoots with watchmen, cooks and cleaners in peddling drugs into the institutions of learning.

Corruption and discrimination in the application of drug abuse policy accounted for 53.6% and 43.5% respectively. Most of the students argued that students from politicians and high profile families were never punished when caught with drugs of abuse. The reviewed literature by Cockayne and Williams (2012) revealed that corruption has hindered effective
implementation of drug abuse policy in Nigeria. During an interview with the deans, both the deans agreed that there were many challenges facing the implementation of the policies in universities today. The dean in university X went on to say: “I can say the biggest challenge is the drug lords in the city who are so intent in destroying the lives of this generation”. Commenting on the same a peer counsellor in FGD A stated:

In as much as there are drug policies in the university, the university administration is sleeping on the job. For instance I dealt with a case in which a student who was supposed to be expelled from the university as a result of possession of large amount of marijuana went scot-free because of what he terms as “kununulia administration chai”. In short the university administration is very corrupt (FGD A in University Y, February 19, 2016).

In addition to the findings from the students’ questionnaire, the discussions with the peer counsellors and interviews with the deans and university counsellors indicated that the environment in which the university campuses are situated affected the effective implementation of drug abuse policy. Most of university campuses in Nairobi County are situated on storey buildings where businesses of different kinds take place and drugs of abuse are readily available. This finding supports 81.7% of the students who indicated that the availability and accessibility of drug abuse has hindered effective reduction of drug abuse among students. Commenting on the environmental factor one of the deans said:

The environment in which we are situated has become a big challenge because drugs are found in every street and when the students leave the college we have no control of what happens to them outside. Some families do condone drug abuse which makes students continue to abuse drugs while out of campus. Peer pressure especially among the first years students who cannot stand influence from their friends, also contributes to this problem (Dean 2, in University Y, February 14, 2016).

From the conceptual framework, the environment in which the university campuses are situated can either enhance the effective reduction of drug abuse or increase its abuse. Form the dean of students’ comment it is clear that the effectiveness of preventative strategies in reducing
drug abuse has highly being affected by the environment in which public university campuses are situated. As indicated earlier, Nairobi has the second highest cases of drug abuse among students (Okwarah, Gakunju, & Thungu, 2012). This is mainly caused by the fact that many adults who are role models are abusing drugs and at the same time drugs are easily available and accessible.

4.7 Influence of Guidance and Counselling on Drug Abuse Reduction

This study sought to examine the influence of guidance and counselling on drug abuse reduction in public university campuses in Nairobi County. Various items were presented to the students, peer counsellors, deans of students and the university counsellors. The students were asked to indicate whether they: Strongly Agree (SA), Agree with (A), Undecided (UD), Disagree (D) or Strongly Disagree (SD) with the statements. Table 12 shows the distribution of students’ responses.
<table>
<thead>
<tr>
<th>Item</th>
<th>SA</th>
<th>(%)</th>
<th>A</th>
<th>(%)</th>
<th>UD</th>
<th>(%)</th>
<th>D</th>
<th>(%)</th>
<th>SD</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has helped to avoid drug abuse</td>
<td>659</td>
<td>46.1</td>
<td>449</td>
<td>31.4</td>
<td>129</td>
<td>9</td>
<td>119</td>
<td>8.3</td>
<td>74</td>
<td>5.2</td>
</tr>
<tr>
<td>Has helped to solve problems that led to drug abuse</td>
<td>440</td>
<td>30.8</td>
<td>556</td>
<td>38.9</td>
<td>271</td>
<td>19</td>
<td>122</td>
<td>8.4</td>
<td>41</td>
<td>2.9</td>
</tr>
<tr>
<td>Has helped me to stand against peer influence</td>
<td>588</td>
<td>41.1</td>
<td>519</td>
<td>36.3</td>
<td>164</td>
<td>11.5</td>
<td>117</td>
<td>8.2</td>
<td>42</td>
<td>2.9</td>
</tr>
<tr>
<td>I have settled most of my indiscipline cases related to drug abuse</td>
<td>350</td>
<td>24.5</td>
<td>598</td>
<td>41.8</td>
<td>173</td>
<td>12.1</td>
<td>192</td>
<td>13.4</td>
<td>117</td>
<td>8.2</td>
</tr>
<tr>
<td>Has helped me to reduce drug abuse</td>
<td>398</td>
<td>27.8</td>
<td>603</td>
<td>42.2</td>
<td>243</td>
<td>17</td>
<td>140</td>
<td>9.8</td>
<td>46</td>
<td>3.2</td>
</tr>
<tr>
<td>Students have acquired effective communication so that they don’t</td>
<td>393</td>
<td>27.5</td>
<td>612</td>
<td>42.8</td>
<td>168</td>
<td>11.7</td>
<td>187</td>
<td>13.1</td>
<td>70</td>
<td>4.9</td>
</tr>
<tr>
<td>abuse drugs to communicate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has made students to have a negative attitude towards the drug abuse</td>
<td>327</td>
<td>22.9</td>
<td>449</td>
<td>31.4</td>
<td>256</td>
<td>17.9</td>
<td>257</td>
<td>18</td>
<td>141</td>
<td>9.8</td>
</tr>
<tr>
<td>I often attend counselling sessions due to drug abuse</td>
<td>290</td>
<td>20.3</td>
<td>379</td>
<td>26.5</td>
<td>215</td>
<td>15</td>
<td>299</td>
<td>20.9</td>
<td>247</td>
<td>17.3</td>
</tr>
<tr>
<td>made me to mend my relationship with my parent which had made me</td>
<td>412</td>
<td>28.8</td>
<td>556</td>
<td>38.9</td>
<td>200</td>
<td>14</td>
<td>130</td>
<td>9.1</td>
<td>132</td>
<td>9.2</td>
</tr>
<tr>
<td>abuse drugs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has made me to adhere to university drug abuse policies</td>
<td>414</td>
<td>28.8</td>
<td>533</td>
<td>37.3</td>
<td>186</td>
<td>13</td>
<td>210</td>
<td>14.7</td>
<td>87</td>
<td>6.2</td>
</tr>
</tbody>
</table>
The findings on the influence of guidance and counselling on drug abuse reduction established that majority of students in public university campuses supported that guidance and counselling had helped to reduce drug abuse among students. This was as indicated by the higher percentage in each of the questions asked about influence of guidance and counselling in drug abuse reduction. Most students 78% agreed that guidance and counselling had helped them to avoid abuse of drugs while 69.7% were for the opinion that guidance and counselling has helped to solve problems that would have led to drug abuse. This agreed with students (66.3%) who were for the opinion that students had settled most of indiscipline cases related to drug abuse through guidance and counselling. These findings concurred with Leong et al. (2011) who argued that personal, social and emotional challenges contributed to students’ drug abuse and that only counselling and therapeutic attention offered through guidance and counselling could help to solve these problems. In agreement with these sentiments one of the peer counsellor stated:

Counselling has helped the abusers come to terms with the negativity of abusing drugs and looking at the positivity of not abusing. Further most of the students who were abusing drugs have been on the forefront advocating for abstinence (FGD B in University X, February 19, 2016).

This sentiment was in agreement with the reviewed literature by Schertzer and Stone (1990) who asserted that a healthy emotional climate can be created by assisting students to adjust to the new situations. Clarifying on the role of guidance and counselling in the fight against drug abuse, one of the university counsellors stated that counselling was not mainly an investigative department but a corrective process and had proved effective in the fight against drug abuse in the university. According to her some of the students she had counselled had
reduced the abuse while others had completely gotten rid of the drugs and had rebuilt a drug-free life.

Equally appalling according to the findings was that many students (70.3%) indicated that guidance and counselling had enabled them to acquire effective communication skills. This implied that students did not need to abuse drugs in order to gain confidence to express themselves before their peers. Likewise 66.1% of the students were of the views that guidance and counselling had helped them to adhere to the university’s policy on drug abuse. These findings showed that students who sought help from guidance and counselling were possibly sensitised on the university policies.

Understanding the views of students on the influence of guidance and counselling on drug abuse reduction was important because as Bandura (1986) in his social learning theory argued, an individual’s behaviour was determined by the level of self-confidence that individual held. This meant that students with high self-efficacy would always seek amicable ways of solving challenges in life whereas students with low self-efficacy believed that difficult tasks and situations were beyond their capabilities which would lead them to drug abuse. Therefore the findings on students’ views about the influence of guidance and counselling on drug reduction showed that a great number of the university students were attaining higher levels of self-confidence due to guidance and counselling. Therefore enhancing guidance and counselling services would contribute greatly to drug abuse reduction. Although the findings from the students’ questionnaire showed that guidance and counselling effectively reduced drug abuse among students, the findings from the peer counsellors’ discussions and university counsellors’ interviews showed contrary findings. For instance in FGD A, one of the peer counsellors has this to say:
Guidance and counselling in most cases is not effective in the fight against drug abuse since most of the counsellors are not trained to handle issues related to drug abuse. I have seen cases where a student would be counselled but after a while re-embark on the abuse of drugs (FGD A in University Y, February 19, 2016).

In support of this statement the counsellor from university Y said:

In as much as counselling has proved effective in the recent past, the new generation is hard to deal with. Most of the students that come for counselling are either compelled to do so out of curiosity or just because they were referred to us by the dean of students thus sometimes it is difficult to convince these students of the harmful effects of drugs. I believe that change is an intrinsic aspect rather than an extrinsic aspect of human beings. If a drug addict really wants to change, guidance and counselling can prove to be effective rather than changing as a result of the pressure from the external sources (University counsellor 2, in University Y, February 14, 2016).

The findings in this study were in agreement with the findings from the reviewed literature (Flansburg, 2012) which discovered that some students did not seek guidance and counselling services because of various reasons. Some of the reasons cited included breach of confidentiality which created mistrust among students, lack of adequate time allocated for guidance and counselling while other students have negative attitude towards counselling services because they have a misconception that guidance and counselling is an investigative department. According to Flansburg (2012) guidance and counselling played an insignificant role in the fight against drug abuse because most of the affected students were afraid of seeking counselling services as a result of fear to disclose personal information to strangers, while others feared that their social circle would become aware that they were seeing a therapist. From these findings therefore it is important that university counselors and the peer counselors to observe ethical principles in counseling so as to win trust and confidence of the students.
4.8 Influence of Building Positive Personal Image on Drug Abuse Reduction

This study sought to examine the influence of building positive personal image on drug abuse reduction in public university campuses in Nairobi County. Various items were presented to the students, while interviews with deans of students and the university counsellors were held. Peer counsellors were also engaged in focus group discussions. The students were asked to indicate whether they: strongly agree, agree, were undecided, disagree or strongly disagree with the respective statements. In order to get an overall impression on the influence of personal image on drug abuse reduction, the participants were asked to indicate their ratings. Table 13 summarises their responses.
### Table 13
Influence of Personal Image on Drug Abuse Reduction

<table>
<thead>
<tr>
<th>Item</th>
<th>SA</th>
<th>(%)</th>
<th>A</th>
<th>(%)</th>
<th>UD</th>
<th>(%)</th>
<th>D</th>
<th>(%)</th>
<th>SD</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students abuse drugs to gain confidence</td>
<td>430</td>
<td>30.1</td>
<td>572</td>
<td>40</td>
<td>90</td>
<td>6.3</td>
<td>206</td>
<td>14.4</td>
<td>132</td>
<td>9.2</td>
</tr>
<tr>
<td>Students do not abuse drugs to please their friends.</td>
<td>290</td>
<td>20.3</td>
<td>715</td>
<td>50</td>
<td>186</td>
<td>13</td>
<td>159</td>
<td>11.1</td>
<td>80</td>
<td>5.6</td>
</tr>
<tr>
<td>Students do not abuse drugs as a defence mechanism against shyness.</td>
<td>369</td>
<td>25.8</td>
<td>515</td>
<td>36</td>
<td>186</td>
<td>13</td>
<td>253</td>
<td>17.7</td>
<td>107</td>
<td>7.5</td>
</tr>
<tr>
<td>Students do not abuse drugs to be able to speak to their peer.</td>
<td>308</td>
<td>21.6</td>
<td>543</td>
<td>38</td>
<td>257</td>
<td>18</td>
<td>238</td>
<td>16.7</td>
<td>84</td>
<td>5.9</td>
</tr>
<tr>
<td>Students do not abuse drugs because they make independent decision.</td>
<td>425</td>
<td>29.7</td>
<td>529</td>
<td>37</td>
<td>200</td>
<td>14</td>
<td>159</td>
<td>11.1</td>
<td>117</td>
<td>8.2</td>
</tr>
<tr>
<td>Students do not abuse drugs because they have positive self-image.</td>
<td>440</td>
<td>30.8</td>
<td>529</td>
<td>37</td>
<td>208</td>
<td>14.5</td>
<td>206</td>
<td>14.4</td>
<td>47</td>
<td>3.3</td>
</tr>
<tr>
<td>Students do not abuse drugs because they have healthy social relation</td>
<td>342</td>
<td>23.9</td>
<td>515</td>
<td>36</td>
<td>243</td>
<td>17</td>
<td>204</td>
<td>14.3</td>
<td>126</td>
<td>8.8</td>
</tr>
<tr>
<td>Students do not abuse drugs because they have high self-esteem.</td>
<td>402</td>
<td>28.1</td>
<td>615</td>
<td>43</td>
<td>232</td>
<td>16.2</td>
<td>121</td>
<td>8.5</td>
<td>60</td>
<td>4.2</td>
</tr>
<tr>
<td>Students do not abuse drugs because they are assertiveness.</td>
<td>476</td>
<td>33.3</td>
<td>486</td>
<td>34</td>
<td>300</td>
<td>21</td>
<td>137</td>
<td>9.6</td>
<td>31</td>
<td>2.1</td>
</tr>
<tr>
<td>Students with high self-efficiency do not abuse drugs.</td>
<td>412</td>
<td>28.8</td>
<td>558</td>
<td>39</td>
<td>228</td>
<td>16</td>
<td>136</td>
<td>9.5</td>
<td>96</td>
<td>6.7</td>
</tr>
</tbody>
</table>
According to the findings, majority of the students (70.1%) strongly agreed and agreed that students abuse drugs in order to gain confidence. This finding can be explain by the findings in the demographic data in figure 4 which indicates that most of the undergraduate students are aged between 21-23 years which is the adolescence stage. According to Dun et al. (2010) students at this stage are characterized by lack of confidence; need to belong to a particular group and they are confusion as they try to negotiate between the childhood and adulthood world.

Bandura (1986) in his social learning theory asserted that people with a weak sense of self-efficacy would avoid challenging tasks and believed that difficult tasks and situations were beyond their capabilities. He added that such people would focus on their personal failings and negative outcomes and would quickly lose confidence. Thus building positive personal image tends to develop confidence in students meaning those who abuse drugs to gain confidence will no longer need to abuse drugs.

The findings are in agreement with the views of Dun et al. (2010) who mentioned that students who abused drugs had personal problems such as low self-esteem, inadequate social skills and unclear values. The researchers added that most adolescents were socially incompetent and lacking in self-esteem. A study by Otingi (2012) revealed that building self-esteem acted as a vaccine that empowered individuals and inoculated them against socially undesirable behaviours. This was echoed by the finding of this study that revealed that slightly more than two thirds (67.8%) of the students strongly agreed and agreed that students with high positive self-image did not abuse drugs. In support of this finding, a majority of the peer counsellors were in consensus that the concept of positive self-image had highly reduced drug abuse among students. One of the peer counsellors said:
I believe that developing a positive personal image has led to a reduction in the abuse of drugs among the abusers. Moreover, having a positive personal image enhances self-respect and adherence to virtues than vices (FGD B in University X, February 19, 2016)

A study by Kumwenda et al. (2011) on how self-esteem influenced drug abuse among students mentioned that self-esteem has to do with an individual’s sense of value or worth, and that students with low self-esteem reported to have abused drugs more than those with high self-esteem. Agreeing on Kumwenda et al. (2011) the deans of students believed that building a positive image greatly influenced the abuse of drugs among the university students. During an interview one of the deans stated:

Most students who abuse drugs do so because they have a point of hating themselves. My office ensures that students do not feel intimidated. There was a student back in 2008 very clever but was an alcoholic, I kept talking to this student, encouraging him to respect himself and have confidence in himself. Today he is working as a senior person in one of the banks here in Nairobi (Dean 1, in University X, February 17, 2016)

However, the current study established that a number of students (18%) remained undecided on whether some students did not abuse drugs to be able to speak while 17% were undecided on whether students did not abuse drugs because they have healthy social relationships. The implication here is that although having high personal image made students to avoid drug abuse other factors such as environmental factors and family background could make students to abuse drugs.

On the students’ level of agreement on students not abusing drugs as defense mechanisms against shyness, nearly two thirds (61.8%) of the students strongly agreed and agreed that public university students with positive personal image did not abuse drugs as defense mechanism drugs fight against shyness. However 20.6% strongly disagreed and disagreed while 13% were
undecided. In respect to the fact that students did not abuse drugs because they are assertive more than two thirds (67.3%) of the students agreed and strongly agreed to the sentiment.

These findings confirmed Bandura (1977) argument that the environments in which people live highly influence the ability to remain firm in ones’ principle. Assertiveness involves standing firm on certain personal beliefs even if all the other people are of the contrary opinion. Most of the university students tended to be influenced by their peers and the role models around them thus if the role models and peers abused drugs then students with weak personalities would easily be influenced to abuse drugs. However this showed that students who were assertive were able to remain without abusing drugs even if most of university students abused drugs.

4.9 Challenges Hindering Effective Drug Abuse Reduction

This study sought to examine the challenges hindering the effective reduction of drug abuse among public university students in Nairobi County. Various items were presented to the students, peer counsellors, deans of students and the university counsellors. The students were asked to indicate whether: most pressing, pressing, least pressing and not pressing to the statements. The participants were asked to indicate the challenges hindering effective reduction of drug abuse. Table 14 summarises their responses provided.
### Table 14
Challenges Hindering Effective Reduction of Drug Abuse

<table>
<thead>
<tr>
<th>Item</th>
<th>Most pressing F (%)</th>
<th>Pressing F (%)</th>
<th>Least Pressing F (%)</th>
<th>Not pressing F (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Having excess money by students makes it easy to buy drugs.</td>
<td>678 47.4</td>
<td>365 25.5</td>
<td>252 17.6</td>
<td>135 9.5</td>
</tr>
<tr>
<td>Availability and accessibility of drugs within our university compound.</td>
<td>645 45.1</td>
<td>523 36.6</td>
<td>135 9.4</td>
<td>127 8.9</td>
</tr>
<tr>
<td>Peer pressure has hindered effective reduction of drugs abuse among students.</td>
<td>635 44.4</td>
<td>519 36.3</td>
<td>182 12.7</td>
<td>94 6.6</td>
</tr>
<tr>
<td>Poor implementation of drug abuse policies.</td>
<td>575 40.2</td>
<td>435 30.4</td>
<td>248 17.4</td>
<td>172 12</td>
</tr>
<tr>
<td>Family challenges.</td>
<td>490 34.3</td>
<td>449 31.4</td>
<td>388 27.1</td>
<td>103 7.2</td>
</tr>
<tr>
<td>Low self-esteem.</td>
<td>355 24.8</td>
<td>608 42.5</td>
<td>322 22.5</td>
<td>145 10.2</td>
</tr>
<tr>
<td>Most students are continuing to abuse drugs because their parents are abusing drugs.</td>
<td>243 17.0</td>
<td>598 41.8</td>
<td>355 24.8</td>
<td>234 16.4</td>
</tr>
<tr>
<td>Bad examples by role models.</td>
<td>542 37.9</td>
<td>556 38.9</td>
<td>175 12.2</td>
<td>157 11</td>
</tr>
<tr>
<td>Cultural beliefs and practices.</td>
<td>228 16.0</td>
<td>538 37.6</td>
<td>350 24.5</td>
<td>314 22</td>
</tr>
<tr>
<td>Academic challenges have made students to abuse drugs.</td>
<td>430 30.1</td>
<td>463 32.4</td>
<td>385 26.9</td>
<td>152 10.6</td>
</tr>
</tbody>
</table>
On the level of agreement on the challenges hindering effective reduction of drug abuse, the study found that majority of the students (47%) strongly agreed that having excess money by students makes it easy for them to buy drugs and that availability of drugs within the university compound contributed a great deal to the abuse of drugs as shown by 82% of students who strongly agreed and agreed to the statement. A study by Masese et al. (2012) and Leong et al. (2011) revealed that most students abused drugs because they were easily available. These researchers found that students needed not to struggle to get drugs of their choice.

Poor implementation of drug abuse policy and family challenges accounted for 70.6% and 65.7% respectively. The finding revealed that there was a gap in the fight against drug abuse both at the university and at home which may have resulted to students’ continuous drug abuse. According to social learning theory, the environmental factors such as availability of drugs and the commonly accepted behaviour in that particular environment greatly influenced the behaviour of the students living in that environment.

The implication was that as long as the university environments were saturated with drugs, students would continue to abuse them. Thus there was need for the university administrators to ensure that the environment in which the students learned were free from drugs of abuse. In the one of the focus group discussions, a peer counsellor concurred with the students findings when she stated:

The environment which we are in makes it hard to deal with drugs abuse. Drugs are sold all over sometimes even with our tight security still find some drug traffickers finding their ways into campus. Some students avoid the office because they have an attitude that the office is meant to punish them so it becomes difficult to reach them. The fact that we do not have hostels to host our students has posed a major challenge. Some parents are also not supportive; some abuse drugs while others tend to protect their children when called in the office. The university management some time does not give the expected support to the office of the dean especially when it comes to finance (FGD A in University Y, February 19, 2016)
With regards to the personal challenges influencing the effective reduction of drugs in public universities 42.5% of the students stated low self-esteem as a major pressing challenge. On the other hand 41.8% of them stated that most students abuse drugs as a result of influence from their parents who abused drugs. Bad role models, cultural beliefs and practices and academic challenges each had 38.9%, 37.6% and 36.9% respectively. The findings was in agreement with Holloway and Bennet (2012) and Wesley and Smith (2010) who found that peer pressure and poor role models have hindered drug abuse reduction among students. These findings also agreed with Bandura’s social learning that most of the young people would always imitate the behaviour modelled by their role models who included the parents, lecturers and other important people in the society. It is therefore imperative that parents, lecturers and other university support staff practice responsible behaviour that can be emulated by students.

4.10 Test of Hypotheses

In this section, inferential statistics were carried out to establish the statistical association between the influence of preventative strategies (drug abuse awareness, drug abuse policy, guidance and counselling and personal image) on reduction of drug abuse in public university campuses in Nairobi County. To establish the statistical associations, four hypotheses were tested using chi square tests for independence, which is appropriate for test of association between two categorical variables.
\( H_{01} \): Association between the Drug Abuse Awareness and Drug Abuse Reduction in Public Universities

The hypothesis was tested using chi-square statistical testing procedures. The decision rule was that, if the results showed p value of 0.05 or better, it would lead to the rejection of the null hypothesis and more especially if the results were found to be significant at 95% confidence level or higher, the null hypothesis would be rejected. The p value that would fall below the 0.05 level would mean that the null hypothesis will not be rejected. The findings are as shown in the table 15.

Table 15

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>1247.257(^a)</td>
<td>624</td>
<td>.000</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>1067.929</td>
<td>624</td>
<td>.000</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>61.904</td>
<td>1</td>
<td>.000</td>
</tr>
<tr>
<td>Number of Valid Cases</td>
<td>1430</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

0 cells (0.0%) have expected count less than 5.

A chi square test for independence was performed to evaluate the association between drug abuse awareness and drug abuse reduction. Based on the chi-square value of 1247.257 at degree of freedom (624) with asymptotic significance value of 0.000, since the p (0.000) value is less than the significance level of 0.05, we reject the null hypothesis and accept the alternative
hypothesis that states that there is statistical significant association between drug abuse awareness and drug abuse reduction among students in public university campuses in Nairobi County. This implies that drug abuse reduction in public university campuses is dependent on the effectiveness of drug abuse awareness campaigns. The resulting relation between these variables was significant 0.05, $\chi^2 (624, N = 1430) = 1247.257$, p<0.05.

These findings were in agreement with the findings from the students’ questionnaires, the deans of students and university counsellors’ interviews and FGD whose results showed a strong correlation between drug abuse awareness and drug abuse reduction among university students. In the questionnaires, students (62.4%) indicated that drug abuse awareness helped to stop drug abuse while 59.1% indicated that awareness on the effects of drug abuse has to a larger extent and some extent lowered the drug abuse prevalence rate among students.

In one of the FGD, a peer counsellor stated that drug abuse awareness has been instrumental since a good number of students have reconsidered using drugs for fear of falling victims to the health related complications or death. In agreement, one of the university counsellors asserted that creating drug abuse awareness has discouraged many students from abusing drugs. These findings support the findings of Boneli et al. (2012) who found that drug abuse awareness reduced the rate of drug abuse among students. However, the findings tend to disagree with Tsvetkova and Antonova (2013) who revealed that in Sweden, the larger the number of students who attended drug abuse education, the larger the number of students who abused drugs.
**H_{02}: Association between Drug Abuse Policies and Drug Abuse Reduction in Public Universities**

The hypothesis was tested using chi-square statistical testing procedures. The decision rule was that, if the results showed p value of 0.05 or better, it would lead to the rejection of the null hypothesis and more especially if the results were found to be significant at 95% confidence level or higher, the null hypothesis would be rejected. The p value that would fall below the 0.05 level would mean that the null hypothesis will not be rejected. The findings are as shown in the table 16.

**Table 16**

Chi-square test for association between drug abuse policies and drug abuse reduction in public universities

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Df</th>
<th>Asymp. Sig. (2-sided)</th>
<th>Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>7106.483a</td>
<td>408</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>3424.367</td>
<td>408</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>296.086</td>
<td>1</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>1430</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (0.0%) have expected count less than 5.

The Pearson chi square is (7106.483) at degree of freedom (408) and asymptotic significance 0.000, since the p value (0.000) is less than the alpha level (0.05) the null hypothesis is rejected and the alternative hypothesis is accepted. This means that since the p value for the
level of association between drug abuse policies and drug abuse reduction is less than 0.05, $\chi^2(408, N = 1430) = 7106.483$, $p = .000$, the null hypothesis which states that there is no statistical significance association between drug abuse policies and drug abuse reduction is rejected. Thus the alternative hypothesis is adopted. This therefore implies that drug abuse reduction in public universities is very much dependent on the effective implementation of the drug abuse policies put in place to curb the drug abuse.

The findings from the questionnaires, interviews and the FGD tend to agree with this finding that the implementation of drug abuse policies in public universities has led to reduction in drug abuse. Although the current study reveals strong association between drug abuse policies and drug abuse reduction studies (Ajala, 2012; Agrawal et al., 2010; Cockayne & Williams, 2012) found that challenges such as lack of commitment, skilful leadership, financial resources and the environment in which the university is situated hindered effective reduction of drug abuse. This calls for a review of educational policy regarding the suitable location where university campuses should be situated as well as re-sensitizing various stakeholders on the need to support the fight against drug abuse in our higher learning institutions.

**Hypothesis 3: Association between Guidance and Counselling and Drug Abuse Reduction in Public Universities**

The hypothesis was tested using chi-square statistical testing procedures. The decision rule was that, if the results showed $p$ value of 0.05 or better, it would lead to the rejection of the null hypothesis and more especially if the results were found to be significant at 95% confidence level or higher, the null hypothesis would be rejected. The $p$ value that would fall below the 0.05
level would mean that the null hypothesis will not be rejected. The findings are as shown in the table 17.

Table 17

Chi-square test for association between guidance and counselling and drug abuse reduction in public universities

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>215.907a</td>
<td>144</td>
<td>.000</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>206.971</td>
<td>144</td>
<td>.000</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>2.470</td>
<td>1</td>
<td>.116</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>1430</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (0.0%) have expected count less than 5.

The results in table 14 show zero (0) cells (0.0%) have expected count less than 5. This indicates that the assumptions of chi-square test have not been violated, thus the results are valid and reliable. The Pearson chi-square value is 215.907 at 144 degrees of freedom and the P-value of 0.000 at 5% significant level. P-Value is less than the Alpha value 0.05 (P<0.005). This implies that there is statistical significant association between drug abuse reduction and guidance and counselling 0.05, $\chi^2 (144, N = 1430) = 215.907$, p<0.05, thus the null hypothesis is rejected. The results therefore indicate that drug abuse reduction in public universities is significantly attributed to guidance and counselling of the affected students. This does not agree with Flansburg (2012) who argued that 65% of college students viewed counselling and psychotherapy as uncomfortable, upsetting, risky and tough for students to engage in.
Hypothesis 4: Association between Positive Personal Image and Drug Abuse Reduction in Public Universities

The test was done based on the decision rule that, if the results showed p value of 0.05 or better, it would lead to the rejection of the null hypothesis and more especially if the results were found to be significant at 95% confidence level or higher, the null hypothesis would be rejected. The p value that would fall below the 0.05 level would mean that the null hypothesis will not be rejected. The findings are as shown in the table 18.

Table 18

Chi-square test for association between positive personal image and drug abuse reduction in public universities

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Df</th>
<th>Asymp. Sig. (2-sided)</th>
<th>Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>135.727a</td>
<td>144</td>
<td>.006</td>
<td></td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>140.852</td>
<td>144</td>
<td>.009</td>
<td></td>
</tr>
<tr>
<td>Linear-by-Linear Assoc.</td>
<td>.384</td>
<td>1</td>
<td>.535</td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>1430</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (0.0%) have expected count less than 5.

The results in Table 16 show zero (0) cells (0.0%) have expected count less than 5. This indicates that the assumptions of chi-square test have not being violated, thus the results are valid and reliable. The Pearson chi-square value is 135.727 at the degree of freedom of 144 and the P-value of 0.006 (P< 0.05). This means that there is statistical significance relationship between
building positive personal image and drug abuse reduction since p is less than 0.05, \( \chi^2 (144, N = 1430) = 135.727, \ p<0.05 \). Thus the null hypothesis; there is no statistical significance relationship between positive personal image is rejected and the alternative hypothesis: there is statistical significance relationship between positive personal image is accepted.

The study therefore concludes that there is a statistical significant relationship between positive personal image among university students and drug abuse reduction. When asked whether the students abuse drugs because of low self-esteem, 71.1% of students both “strongly agreed” and “agreed” that, a large number of students abuse drugs due to low self-esteem. The findings tend to concur with Otingi (2012) who asserted that self-esteem acts as social vaccine that empowers individuals and inoculates them against undesirable behaviours.
CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary, conclusions and recommendation of findings based on the assessment of the preventative strategies influencing drug abuse reduction among public university students in Nairobi County.

5.2 Summary of the Study

While carrying out the study, the scope and the methodology was influenced by the literature review of the drug abuse preventative strategies, drug abuse related theory, and research relevant to the study. The need to address the influence of preventative strategies towards drug abuse reduction was facilitated by the increase in drug abuse prevalence rate, cases of absenteeism, accidents related to drug abuse, indiscipline cases and high mortality rate related to drug abuse among undergraduate students. Drug abuse among undergraduate students continues to increase despite various preventative strategies that have been put in place.

The reviewed literature indicates that that some of the preventative strategies have reduced drug abuse among undergraduate students while others have increased students’ curiosity hence leading to increase in drug abuse experimentation among students. For instance drug abuse awareness has been found to reduce drug abuse and on the other hand some students have experimented on drug abuse after drug awareness training. Although drug abuse policies are meant to create a drug free environment in our universities, the reviewed literature has revealed that factors such as availability of drugs of abuse, lack of support from the university
staff as well as poor implementation of these policies have continuously encouraged students to continue abusing drugs.

The objective of this study was to examine the preventative strategies influencing drug abuse reduction among the undergraduate students enrolled in public university campuses in Nairobi County. The study was guided by the following research questions: To what extent does drug abuse awareness influence drug abuse reduction; how do drug abuse policies influence drug abuse reduction; how does guidance and counselling services help in drug abuse reduction; How does building positive personal image influence drug abuse reduction; What are the challenges hindering effective reduction of drug abuse and to what extent are drug abuse preventative strategies effective in reducing drug abuse among undergraduate students in public university campuses in Nairobi County?

The study used convergent parallel mixed designs. Cross-sectional survey helped the researcher to draw a representative sample for the study while in-depth interview and FGD helped the researcher to study some of the participants in their natural settings. The sample size consisted of 1500 students, 20 peer counsellors, two deans of students and two university counsellors. Stratified random sampling was used to select the students while purposive sampling was used to select the peer counsellors based on the responsibility and leadership positions. The deans of students and the university counsellors were automatically included in the study since they were the only ones. Questionnaires, focus group discussion guides and in-depth interview guides were used to collect data. There was one questionnaire for the students, one focus group discussion guide and two in-depth interview guides, for deans of students and for university counsellors.
The content validity of the instruments was determined by constructing the student questionnaire according to the research questions and involving the two supervisors, two peer researchers and three other research experts. The construct validity was ensured through methodological, source and theory triangulation. The reliability of the instrument was determined and Cronbach’s alpha coefficient was used to determine the consistency of scores. A reliability index of greater than 0.7 was obtained for each variable which made the researcher conclude that the questionnaire was reliable (Drug abuse awareness at 0.733, drug abuse policy at 0.738, Guidance and counselling at 0.901 Positive personal image at 0.902 and Challenges hindering effective reduction of drug abuse at 0.782).

To ensure credibility and dependability of the data, the researcher used member checking by talking to the participants over and over again to confirm that the information presented was correct. The researcher as well used audit trail by going through field notes more than once to cross check the data that was reported. Ethical issues were observed whereby the researcher got permission from all the relevant authorities and sought informed consent of the participants while confidentiality was highly observed.

Data was analysed using SPSS software to produce frequencies, percentage and cross-tabulations. The data was presented using tables, narration and verbatim form. The main findings were presented according to the research questions that guided the study.

The response rate achieved from the students’ questionnaire was 1430 (95.3%) which was considered adequate in providing valid and reliable representation of the target population. The results also indicated that most of the university students were in the age bracket of 21-23 years old. This means that majority of them are in the adolescence stage.
The study also revealed that most of the students (84.3%) are not married. This contradicts the earlier assumption that marital challenges among students contributed to continuous drug abuse in university campuses in Nairobi County.

The demographic data on peer counsellors established that all the peer counsellors were students in the university campuses in Nairobi County and of the same age bracket with other students (Table 3). Likewise, while the findings showed equal gender representation in the peer counsellors’ group discussions of some of the peer counsellors had served for more than two years which was an indication that majority of them were in a position of handling most of drug abuse cases.

The data concerning the deans of students and university counsellors’ academic qualification and experience showed high qualifications and adequate experience. The dean of students from university X had master degree and doctor of philosophy business administration and educational administration respectively and had an experience of not less than three years. The university counsellors held doctorate degrees in counselling psychology and worked for more than five years.

The indication of the findings is that both the deans of students and the university counsellors were qualified and had adequate experience. Thus they were familiar with their duties and could dispense them effectively in terms of professional ability and performance. This agrees with the findings in chapter four which indicates that 398 (27.8%) of students strongly agree and 603 (42.2%) agree that guidance and counselling has helped to reduce drug abuse among undergraduate students.

From the findings it can be deduced that the level of academic education of both the deans of students and university counsellors has helped to reduce drug abuse among
undergraduate students in public university campuses in Nairobi County. These findings concur with the findings in Flansburg (2012) study. Flansburg conducted a study on the factors involved in college students’ use of counselling services. One of the objectives was to establish whether the academic qualifications and experience of the counsellors had any influence on the use of counselling services. The study established that the counsellors’ academic qualification and experience influenced on students’ use of their services.

5.3 Current State of Drug Abuse among Undergraduate Students

The researcher sought to establish the current state of drug abuse among undergraduate students in public university campuses. In the study alcohol was ranked in the first position followed by bhang and shisha in second and third positions respectively. The study also found that high school friends were major influence to drug abuse among students. Thus most of the undergraduate students were introduced to drug abuse before joining universities. The family attitude towards drug abuse was found to determine whether students will continue to abuse drugs or not. The study also revealed that the local residents who live near universities were the main source of drugs of abuse while residential places such as homes and rented rooms were places where students abused drugs. The study also found that most students abuse drugs on weekends and during examinations.

5.4 Influence of Drug Abuse Awareness on Drug Abuse Reduction

The researcher sought to establish how drug abuse awareness influenced the reduction of drug abuse among students in public university campuses. The study revealed that in general drug abuse awareness has led to reduction of drug abuse among undergraduate students in public
university campuses in Nairobi County. Secondly, the study established that although drug abuse awareness was cited as being effective in reduction of drug abuse among undergraduate students, a good number of students did not attend drug abuse awareness seminars organised by the university campuses. In addition the study found out that drug abuse awareness had created curiosity in some students which made them to start experimenting on drugs. The study also found out that most university campuses organised drug abuse workshops every semester and that the drug abuse awareness campaigns had resulted to drug abuse reduction. Moreover, the study found out that drug abuse prevalence rate had reduced due to drug abuse awareness among the undergraduate students. Finally, the study found out that cases of indiscipline, violence and deaths related to drug abuse had reduced tremendously due to drug abuse awareness.

5.5 Factors Hindering Effective Implementation of Drug Abuse policies.

Factors hindering the effective implementation of drug abuse policies were sought. Various factors were cited as hindrances to effective implementation of these policies. The findings of the study revealed that public university campuses have well defined drug abuse policies that prohibit trafficking, possession and consumption of drugs of abuse within their premises. Secondly, the study found out that drug abuse policies have helped to reduce drug trafficking, possession and abuse within the university campuses. In addition, lack of sensitisation on drug abuse policies was cited as the major factor that hinders their implementation.

There was clear indication that drug abuse policies were not effectively implemented in public university campuses. Discrimination and corruption hindered effective implementation of drug abuse policies. Moreover, most of university campuses lacked warning signs on sign posts
and notice boards on trafficking, possession and consumption of drugs of abuse. Finally, drug abuse by the parents, bad examples by role models and academic challenges were cited as the most pressing factors that hinder the effectiveness of drug abuse policies in drug abuse reduction.

5.6 Influence of Guidance and Counselling Services on Drug Abuse Reduction

The study analysed the influence of guidance and counselling on drug abuse reduction in public university campuses in Nairobi County. This information was sought from undergraduate students, peer counsellors, deans of students and university counsellors using students’ questionnaire, focus group discussions and interview guides. Guidance and counselling services greatly influenced drug abuse reduction among the undergraduate students. The study found out that guidance and counselling has helped to solve problems that would make students to abuse drugs. In addition, the study found out that guidance and counselling has enabled students to acquire effective communication skills which they lacked. The study also established that most students who seek guidance and counselling are aware of drug abuse policies and adhere to them.

5.7 Influence of Building Positive Personal Image on Reduction of Drug Abuse

The study sought to establish how building positive personal image influenced reduction of drug abuse. The study found out that building positive personal image has helped to reduce drug abuse among students. The study also established that by building positive personal image most students have gained self-confidence which had made them abuse drugs. Moreover, the study concluded that students with high positive personal image do not abuse drugs and finally that low positive personal image made some students to abuse drugs.
5.8 Challenges Hindering Effective Reduction of Drug Abuse

The research question sought to find out the challenges that hinder effective reduction of drug abuse among university students in public university campuses in Nairobi County. Having excessive money, availability and easy accessibility of drugs within university compounds were the main challenges that hindered effective reduction of drug abuse among undergraduate students in public university campuses. Consequently, peer pressure contributed immensely to drug abuse reduction among students despite preventative strategies having being put in place. Finally, poor implementation of drug abuse policy and family challenges were also cited to a lesser extent as hindering effective reduction of drug abuse in university campuses.

5.9 Conclusions

Based on the findings of the study, the following conclusions were arrived at; first, most of the university campuses have well established preventative strategies. These strategies have to a greater extent reduced drug abuse among the undergraduate students since drug abuse prevalence rate has been lowered, indiscipline, violence and death cases related to drug abuse have lowered. Therefore, the researcher concludes that the preventative strategies have influenced drug abuse reduction among the students.

Secondly, the effectiveness of preventative strategies has been affected by various factors. These factors include; the availability of drugs, excessive money among students, poor role models both at the family level and at the university and peer pressure. Thus, the researcher
concludes that preventative strategies can be more effective in reducing drug abuse among students if these factors are well addressed.

Thirdly, parents have contributed to drug abuse among the students either knowingly or unknowingly. Some of the parents have condoned drug abuse while others have failed to follow up with their children behaviours at the university. For affluent families, excessive money has been given to students making it easy for them access drugs. Some parents on the other hand abuse drugs and thus they always not in a position to fight drug abuse. Therefore, the researcher concludes that parents have contributed to continuous abuse of drugs among students rendering the preventative strategies ineffective.

In addition, drug abuse has persisted in public university campuses because some university support staffs have worked in cahoots with students in trafficking, possessing and consuming drugs. Corruption and discrepancies when dealing with those breaking the drug abuse policies have hindered effective reduction of drug abuse among students. Therefore, the researcher concludes that the ministry of education and the university administration should address the issues promptly in order to make the preventative strategies more effective.

Further, the preventative strategies have all contributed to drug abuse reduction in different ways. The drug abuse policies have reduced the availability of drugs in universities, drug abuse awareness, building of positive personal image as well as guidance and counselling have created sensitisation, personality building and problem solving skills. All these have contributed to reduction of drug abuse among students. The researcher therefore concludes that no one preventative strategy can be able to reduce drug abuse on its own. There is therefore need to strengthen all strategies and even develop more in order to win the fight against drug abuse among students. Finally, reduction of drug abuse among students require combined effort of the
parents, ministry of education, lecturers, university support staff, students, anti-drug abuse agents (NACADA) and the society as a whole if at all effective reduction of drug abuse among students is to be realised.

5.10 Recommendations

Following the findings and conclusions in the previous sections, the study derived various recommendations. The researcher recommended that the university administration and the anti-drug abuse agents such as NACADA should formulate different new methods of creating awareness to the students. These methods may include integrating drug abuse information in various courses offered and also encourage lecturers to spend some of their teaching time to sensitise students on the effects of drug abuse. Secondly, based on the findings the researcher recommends that the policy makers, the ministry of education and the university administration should embark on intense sensitisation programmes. This will help every students is aware of the rules governing the possession, trafficking or consumption of the illegal and legal drugs.

The study also recommends that the university administration should ensure that drug abuse policies are pinned on all notice boards particularly on students’ notice boards so that they can read them every time they are checking on what is new on the notice boards. In addition, the study recommends that the university administration should be more vigilant when recruiting staffs and exercise close supervision on the hired staff so that block every possible opening leading to drug abuse among students. This can be done by identifying the roles and responsibilities of staff in implementing and evaluating drug abuse preventative programmes and policies. On top of that, the researcher recommends that the university discipline committee
should apply drug abuse policies to all students without discrimination. This will enable the students to respect and take any measures of correction positively.

Moreover, the researcher recommends that the policy makers and the commission of university education in collaboration with the ministry of education should formulate policy that guide on suitable environment in which university campuses should be situated. This action will help to reduce the easy availability and accessibility of drug abuse among students. The researcher also recommends that guidance and counselling should be enhanced. This can be done through retraining of university counsellors and peer counsellors especially on counselling drug abuse cases. Likewise the university campuses should increase more time for counselling so that students can be attended to every time. In addition, the study recommends that the university counsellors and peer counsellors should ensure that confidentiality is observed during and out of counselling session. Confidentiality is one of the key ethical principles that make counselling effective. Observing confidentiality will help to rebuild students’ trust as well as to minimise fear of being victimised or stigmatised as drug abusers.

Further, the researcher recommends that parents should to be involved in lives of their children in building positive personal image. This can be done by showing them respect, involving them in family decision making and engaging them in family activities. Finally, the study recommended that parents should model responsible behaviours concerning drug use, instituting family rules, becoming more aware of youth culture, recognizing the early signs of drug abuse and by maintaining communication within the family and with other parents and the school. Parents should also educate their children on good use of money as well as ensure that they moderate the amount of money that they give to their children.
5.11 Recommendations for Further Studies

The findings of this research raise the need for further research to be carried out in order to address the problem of drug abuse among students in universities. The study was limited to Nairobi County. It would be useful for researchers to carry out an extensive study in other counties to provide a more comprehensive picture of the influence of preventative strategies on drug abuse reduction among undergraduate students in other counties in Kenya. Secondly, there is need to carry out a study on the role of the university staff in the fight against drug abuse among students. This may help the staff to understand their role and responsibilities in the fight against drug abuse among students.
REFERENCES


Kiboi, N. (2016). *Plasma interferon-gamma, interleukin-10 and adiponectin levels in HIV-1 and tuberculosis co-infected injection drug users at Bomu Hospital, Mombasa, Kenya* (Doctoral dissertation, Kenyatta University)


Nabunya, J. (2012). *Substance abuse among secondary school students in Uganda.* Field Project Department of Community Medicine. Muhumbili University college Health Sciences of the University of Dar es Salam, Tanzania.


Ngesu, D.G. (2012). Changes in college students’ use and abuse of alcohol and in their attitudes toward drinking over the course of their college years. Journal of Youth and adolescence, 23(2), 251-269.


APPENDICES

Appendix A:

Letter of Introduction

Researcher: Joyce G. Pere
Reg. No. 1021507
The Catholic University of Eastern Africa
20th January’ 2017

Dear student,

I am requesting for your participation in my research study entitled; Preventative Strategies influencing Drug Abuse Reduction among Undergraduate Students in Public University Campuses in Nairobi County. The purpose of the study is to establish the effectiveness of preventative strategies put in place in university campuses to prevent students from drug abuse. Your participation will involve answering questions which seek to establish the effectiveness of drug abuse preventative strategies in our universities. Your choice of not to participate or withdraw from the study will not affect you in any way. There are no foreseeable risks or discomfort if you agree to participate in this study.

All information collected will be used only for this study and will be kept confidential. Your name or any information that may reveal your identity will not be included in the results or in future publication of the results. Once the study is completed, I would share the results with you if you so desire. If you have any questions kindly contact me through;

Mobile: 0713226840
Email: perejoyce@yahoo.com

Kindly sign the consent form attached below if you have agreed to participate in this study.
Appendix B:
Informed Consent Form

Researcher: Joyce G. Pere
P.O Box 2784-00202
Nairobi, Kenya
+254713226840
perejoyce@yahoo.com

Please put your signature against the box

1. I confirm that I have read and understood
the letter of introduction dated 20th January 2017 for the above study.
I have had the opportunity to consider the information,
ask questions and have had them answered satisfactorily.

2. I consent to the interview/session
being audio taped

3. I agree to take part in the above study
Appendix C:

Questionnaire for Students

Dear Sir/Madam,

I am Joyce Pere, a student at The Catholic University of Eastern Africa (CUEA). I am carrying out a study on: Preventative Strategies influencing Drug Abuse Reduction among Undergraduate Students in Public University Campuses in Nairobi County, in partial fulfilment of the requirement for the award of the degree of Doctor of Philosophy in Education. I kindly request you to complete this questionnaire to assist me gather information for this study. The information that will be gathered is meant for academic research and will be treated with confidentiality. Respond to the questionnaire as honestly and precisely as possible. Do not write your name on this questionnaire.

With thanks,

Joyce Pere

PART A: Demographic Information

Please tick (✓) where appropriate or fill in the required information on the spaces provided.

1. Your gender:
   i) Male [ ]
   ii) Female [ ]

2. Your age bracket in years
3. Marital status

i) Single [ ]
ii) Married [ ]
iii) Separated [ ]
iv) Divorced [ ]

PART B: Current State of Drug Abuse among the Undergraduate Students

4. What kind of drugs do students mostly abuse?

Alcohol [ ] Bhang [ ]
Miraa [ ] Cocaine [ ]
Heroine [ ] Shisha [ ]
Shisha [ ] Tobacco [ ]

5. Who might have introduced you or your friend to your drug of choice?

i. High school friends [ ]
ii. Neighbours [ ]
iii. Family members [ ]
iv. University friends [ ]
v. Advertisements (radio, TV, Internet) [ ]

6. Where do students get their drugs of abuse from?

i) University staff [ ]
ii) University friends [ ]
iii) On the streets [ ]
iv) Parents/relatives [ ]
v) Local residents around university [ ]

7. From where do students normally abuse drugs?

i) Private hostels [ ]
ii) outside the university [ ]
iii) University premises (classes, toilets) [ ]
iv) Nairobi streets [ ]
v) residential (homes, rented rooms) [ ]
vi) public places (Uhuru park/gardens) [ ]

8. When do students commonly abuse drugs? [ ]

i) During examinations [ ]
ii) After examinations [ ]
iii) Weekends [ ]
iv) Before classes [ ]
v) After classes [ ]
vi) During my study time [ ]
PART C: Influence of drug abuse awareness on drug abuse reduction

9. For each of the statements below, please indicate the extent of your agreement or disagreement by placing a tick (✓) in the box. The response scale is; larger extent (4), some extent (3), little extent (2), no extent (1).

<table>
<thead>
<tr>
<th>No.</th>
<th>Statements</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Larger extent</td>
</tr>
<tr>
<td>i)</td>
<td>I attend drug abuse awareness seminars every semester.</td>
<td></td>
</tr>
<tr>
<td>ii)</td>
<td>My university organises drug abuse awareness workshops every semester.</td>
<td></td>
</tr>
<tr>
<td>iii)</td>
<td>Drug abuse awareness has made some students stop abusing drugs.</td>
<td></td>
</tr>
<tr>
<td>iv)</td>
<td>Some students have reduced the number of times they abuse drugs after they are made aware of the consequences.</td>
<td></td>
</tr>
<tr>
<td>v)</td>
<td>Since most students are aware of the effects of drug abuse, drug abuse prevalence rate has decreased.</td>
<td></td>
</tr>
<tr>
<td>vi)</td>
<td>Drug abuse awareness has reduced cases of drug abuse related accidents among students.</td>
<td></td>
</tr>
<tr>
<td>vii)</td>
<td>Drug abuse awareness has decreased drug abuse related deaths among students.</td>
<td></td>
</tr>
<tr>
<td>viii)</td>
<td>Drug abuse awareness has reduced cases of indiscipline related to drug abuse.</td>
<td></td>
</tr>
<tr>
<td>ix)</td>
<td>Drug abuse awareness has reduced cases of violence among students.</td>
<td></td>
</tr>
<tr>
<td>x)</td>
<td>Drug abuse awareness has reduced reported cases of health problems related to drug abuse.</td>
<td></td>
</tr>
</tbody>
</table>
PART D: Factors that hinder effective implementation of drug abuse policy

11. For each of the statements below, please indicate whether you agree or disagree with the following statements by placing a tick (√) in the box. The response scale is; SA: Strongly Agree (5); A: Agree (4); UN: Undecided (3); D: Disagree (2) and SD: Strongly Disagree (1).

<table>
<thead>
<tr>
<th>No.</th>
<th>Statements</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>SA</td>
</tr>
<tr>
<td>i)</td>
<td>There are drug abuse policies in our university.</td>
<td></td>
</tr>
<tr>
<td>ii)</td>
<td>Drug abuse policies are not effectively implemented in our university.</td>
<td></td>
</tr>
<tr>
<td>iii)</td>
<td>Corruption has hindered implementation of drug abuse policies in our university.</td>
<td></td>
</tr>
<tr>
<td>iv)</td>
<td>Most students do not support the implementation of drug abuse policies.</td>
<td></td>
</tr>
<tr>
<td>v)</td>
<td>Lack of sensitisation on drug abuse policies hinders its implementation.</td>
<td></td>
</tr>
<tr>
<td>vi)</td>
<td>Most of student leaders are not committed to the implementation of drug abuse policies.</td>
<td></td>
</tr>
<tr>
<td>vii)</td>
<td>Drug abuse policies are applied discriminatorily thus hindering its smooth implementation.</td>
<td></td>
</tr>
<tr>
<td>viii)</td>
<td>Students’ negative attitude towards implementation of drug abuse preventative strategies has hindered its implementation.</td>
<td></td>
</tr>
<tr>
<td>ix)</td>
<td>Lack of support from the university support staff has hindered the implementation of drug abuse policies.</td>
<td></td>
</tr>
<tr>
<td>x)</td>
<td>Lack of warning signs has hindered effective implementation of drug policies.</td>
<td></td>
</tr>
</tbody>
</table>
Part E: How guidance and counselling helps in drug abuse reduction

13. How has guidance and counselling influenced drug abuse reduction in your university? The response scale is; SA: Strongly Agree (5); A: Agree (4); UN: Undecided (3); D: Disagree (2) and SD: Strongly Disagree (1).

<table>
<thead>
<tr>
<th>Statement</th>
<th>SA</th>
<th>A</th>
<th>UN</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) Guidance and counselling has helped me to avoid drug abuse.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii) Counselling service has helped me to solve problems that led to my drug abuse.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iii) Guidance and counselling has helped me to stand against peer influence into drug abuse.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iv) I have settled most of my indiscipline cases related to drug abuse through counselling.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v) Guidance and counselling has helped students to reduce drug abuse.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vi) Through guidance and counselling students have acquired effective communication skills so they do not abuse drugs to be able to communicate.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vii) Guidance and counselling has made students to have negative attitude towards drug abuse.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>viii) I often attend guidance and counselling sessions due to drug abuse.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ix) Guidance and counselling has helped to mend my relationship with my parents which had made me abuse drugs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>x) Guidance and counselling has made me to adhere to university drug abuse policies.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Part F: How building positive personal image influences drug abuse reduction

15. How building positive personal image influences drug abuse reduction? For each of the statements below, please indicate whether you agree or disagree by placing a tick (√) in the box. The response scale is; SA: Strongly Agree (5); A: Agree (4); UN: Undecided (3); D: Disagree (2) and SD: Strongly Disagree (1).

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>SA</td>
</tr>
<tr>
<td>i)</td>
<td>Gaining confidence has reduced drug abuse.</td>
<td></td>
</tr>
<tr>
<td>ii)</td>
<td>Students do not abuse drugs to please their friends.</td>
<td></td>
</tr>
<tr>
<td>iii)</td>
<td>Students do not abuse drugs as a defence mechanism against shyness.</td>
<td></td>
</tr>
<tr>
<td>iv)</td>
<td>Students do not abuse drugs to be able to speak with their peers.</td>
<td></td>
</tr>
<tr>
<td>v)</td>
<td>Students do not abuse drugs because they make independent decision.</td>
<td></td>
</tr>
<tr>
<td>vi)</td>
<td>Students do not abuse drugs because they have high positive self-image.</td>
<td></td>
</tr>
<tr>
<td>vii)</td>
<td>Students do not abuse drugs because they have healthy social relationships.</td>
<td></td>
</tr>
<tr>
<td>viii</td>
<td>Students do not abuse drugs because they have high self-esteem.</td>
<td></td>
</tr>
<tr>
<td>ix)</td>
<td>Students do not abuse drugs because they are assertive.</td>
<td></td>
</tr>
<tr>
<td>x)</td>
<td>Students with high self-efficacy do not abuse drugs.</td>
<td></td>
</tr>
</tbody>
</table>
Part G: Challenges hindering effective reduction of drug abuse

17. What are the most pressing challenges hindering effective reduction of drugs in the universities? Kindly tick appropriately by placing a tick in the box (✓). The response scale is: Most pressing (4), Pressing (3), Least pressing (2), Not Pressing (1)

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Most</td>
</tr>
<tr>
<td></td>
<td></td>
<td>pressing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pressing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Least</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pressing</td>
</tr>
<tr>
<td>i)</td>
<td>Availability and accessibility of drugs within our university compound hinders reduction of drug abuse.</td>
<td></td>
</tr>
<tr>
<td>ii)</td>
<td>Most students are continuing to abuse drugs because their parents are abusing drugs.</td>
<td></td>
</tr>
<tr>
<td>iii)</td>
<td>Peer pressure has hindered effective reduction of drug abuse among students.</td>
<td></td>
</tr>
<tr>
<td>Iv)</td>
<td>Bad examples by role models have hindered effective reduction of drug abuse.</td>
<td></td>
</tr>
<tr>
<td>v)</td>
<td>Having excess money by students have it easy to buy drugs of abuse thus hindering drug abuse reduction.</td>
<td></td>
</tr>
<tr>
<td>vi)</td>
<td>Low self-esteem has hindered effective reduction of drug abuse.</td>
<td></td>
</tr>
<tr>
<td>vii)</td>
<td>Family challenges have led to ineffective reduction of drug abuse among students.</td>
<td></td>
</tr>
<tr>
<td>viii)</td>
<td>Cultural beliefs and practices have hindered effective reduction of drug abuse.</td>
<td></td>
</tr>
<tr>
<td>ix)</td>
<td>Academic challenges are hindrances to drug abuse reduction.</td>
<td></td>
</tr>
<tr>
<td>x)</td>
<td>Poor implementation of drug abuse policies has hindered reduction of drug abuse among students.</td>
<td></td>
</tr>
</tbody>
</table>

Thank you for your time and cooperation.
Appendix D: FGD Guide for Peer Counsellors

Dear Sir/Madam,

I am Joyce Pere, a student in Catholic University of Eastern Africa. I am carrying out a study on: *Preventative Strategies influencing Drug abuse Reduction among Undergraduate Students in Public University Campuses in Nairobi County*, in partial fulfilment of the requirement for the award of the degree of Doctor of Philosophy in Education. I kindly request you to complete this questionnaire to assist me gather information for this study. The information that will be gathered is meant for academic research and will be treated with confidentiality. Respond to the questionnaire as honestly and precisely as possible. Do not write your name on this questionnaire.

With thanks,

Joyce Pere

**PART A: Demographic Information of the Participants**

<table>
<thead>
<tr>
<th>Date</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Venue</td>
<td></td>
</tr>
<tr>
<td>Names of Interviewer</td>
<td></td>
</tr>
</tbody>
</table>
1. Which gender makes most of your drug abuse counselling clients?

2. Which year of study are most of your drug abuse clients?

3. From your counselling experience which is the most commonly abused drugs by students?

4. Where do most students get drugs of abuse from?

5. From your counselling experience when students abuse drugs?

6. From your experience as a peer counsellor where do students abuse drugs from?

7. From your opinion how has drug abuse awareness influenced reduction of drug abuse?

8. Comment on the implementation of drug abuse policy in your university

9. How has guidance and counselling influenced drug abuse in your university?
10. In your views how do you think building on positive personal image can help reduce drug abuse among undergraduate students?

11. What can you say are the most challenging factors in counselling students who are drug abusers?

Thank you for your cooperation
Appendix E: In-Depth Interview Guide for Dean of Students

Joyce G. Pere  
C/o The Catholic University of Eastern Africa  
P.O Box 2784-00202  
Nairobi, Kenya  
Phone: +254713226840  
Email: perejoyce@yahoo.com

TITLE OF THE STUDY
Preventative Strategies influencing Drug Abuse Reduction among Undergraduate Students in Public University Campuses in Nairobi County, Kenya

In-depth Interview Guide for Deans of Students

Thank you for your willingness to participate in this interview. You are assured of complete anonymity and your name will not appear in any of the interview records.

Part A: Demographic information

1. Gender:

   Male [    ]  
   Female [    ]

2. What is your approximate age?
   i. 25-30 [    ]
   ii. 31-35 [    ]
   iii. 36-40 [    ]
   iv. 45 and above [    ]
3. What is your academic qualification?
   i) Bachelor’s degree [ ]
   ii) Masters [ ]
   iii) PhD [ ]

4. How many years have you served as a dean of students?

5. From which department do most of disciplinary cases related to drug abuse come from?

**PART B: Current State of Drug Abuse among the Undergraduate Students**

4. What kind of drugs do students mostly abuse?

   Alcohol [ ] Bhang [ ]
   Miraa [ ] Cocaine [ ]
   Heroine [ ] Shisha [ ]
   Shisha [ ] Tobacco [ ]

5. Who do you think could have introduced you or your friend to your drug of choice?

   i. High school friends [ ]
   ii. Neighbours [ ]
   iii. Family members [ ]
   iv. University friends [ ]
   v. Advertisements (radio, TV, Internet) [ ]
6. Where do you think students get their drugs of abuse from?

   i. University staff [ ]
   ii. University friends [ ]
   iii. On the streets [ ]
   iv. Parents/relatives [ ]
   v. Local residents around university [ ]

7. From where would you say students normally abuse drugs?

   i. Private hostels [ ]
   ii. Outside the university [ ]
   iii. University premises (classes, toilets) [ ]
   iv. Nairobi streets [ ]
   v. Residential (homes, rented rooms) [ ]
   vi. Public places (Uhuru park/gardens) [ ]

8. When do students commonly abuse drugs?

   i. During examinations [ ]
   ii. After examinations [ ]
   iii. Weekends [ ]
   iv. Before classes [ ]
   v. After classes [ ]
   vi. During my study time [ ]

Part C: Influence of Drug Abuse Awareness on Drug Abuse Reduction

6. Kindly tell me about your role as a dean of students in reducing drug abuse in your university

7. How do you get to know the students who are involving themselves with drug abuse?

8. How do your university sensitise students about drug abuse in your university?

9. Comment on the effectiveness of drug abuse awareness in your university?

Part D: Hindrances to Effective Implementation of Drug Abuse Policy

10. What are hindrances to effective implementation of drug abuse policy?
Part E: How Guidance and Counselling Influence Drug Abuse Reduction

11. From your experience, comment on how guidance and counselling has helped in reduction of drug abuse among undergraduate students in your university.

Part F: How Building Positive Personal Image Influence Drug Abuse Reduction

12. Comment on how enhancing student’s positive personal image has influenced reduction of drug abuse among undergraduate students in your university

13. How is your university enhancing positive personal image among students?

Part G: Challenges Hindering Effective Reduction of Drug Abuse

14. What can you say are the reasons that make drug abuse preventative strategies not to be effective in reducing drug abuse among undergraduate students?

Thank you for your time and cooperation
Appendix F: In-depth Interview Guide for University Counsellors

Joyce G. Pere
C/o The Catholic University of Eastern Africa
P.O Box 2784-00202
Nairobi, Kenya
Phone: +254713226840
Email: perejoyce@yahoo.com

TITLE OF THE STUDY
Preventative Strategies influencing Drug Abuse Reduction among Undergraduate Students in Public University Campuses in Nairobi County, Kenya

In-depth Interview Guide for University Counsellors

Thank you for your willingness to participate in this interview. You are assured of complete anonymity and your name will not appear in any of the interview records.

Part A: Demographic information

1. Gender:

   i. Male [ ]
   ii. Female [ ]

2. What is your approximate age?
   i. 25-30 [ ]
   ii. 31-35 [ ]
   iii. 36-40 [ ]
   iv. 45 and above [ ]

3. What is your academic qualification?
   i. Bachelor’s degree [ ]
   ii. Masters [ ]
iii. PhD [ ]
iv. Others (specify) [ ]

4 How many years have you served as a university counsellor?
5 Which year of study do most of drug abuse clients come from?
6 From which department does most of your counselee come from?

PART B: Current State of Drug Abuse among the Undergraduate Students

4. What kind of drugs do students mostly abuse?

   Alcohol [ ] Bhang [ ]
   Miraa [ ] Cocaine [ ]
   Heroine [ ] Shisha [ ]
   Shisha [ ] Tobacco [ ]

5. Who you think might have introduced you or your friend to your drug of choice?

   i. High school friends [ ]
   ii. Neighbours [ ]
   iii. Family members [ ]
   iv. University friends [ ]
   v. Advertisements (radio, TV, Internet) [ ]

6. Where do students get their drugs of abuse from?

   i. University staff [ ]
   ii. University friends [ ]
   iii. On the streets [ ]
   iv. Parents/relatives [ ]
   v. Local residents around university [ ]
7. From where do students normally abuse drugs?

i. Private hostels
ii. Outside the university
iii. University premises (classes, toilets)
iv. Nairobi streets
v. Residential (homes, rented rooms)
vi. Public places (Uhuru park/gardens)

8. When do students commonly abuse drugs?

i. During examinations
ii. After examinations
iii. Weekends
iv. Before classes
v. After classes
vi. During my study time

Part C: Influence of Drug Abuse Awareness on Drug Abuse Reduction

i) Kindly tell me about your role as a university counsellor in reducing drug abuse among students in your university
ii) How do you detect a drug abuser and level of drug abuse in a student?
iii) In which ways does the university support your office in creating drug abuse awareness among undergraduate students in your university?

Part D: Hindrances to Effective Implementation of Drug Abuse Policy

i) How do your office sensitise students on drug abuse policy in your university?
ii) Comment the reasons that hinder effective implementation of drug abuse policy in your university

Part E: How Guidance and Counselling Influence Drug Abuse Reduction

i) From your experience how has guidance and counselling reduced drug abuse among students in your university?
ii) In your opinion, how has guidance and counselling influence students response to drug abuse?
Part F: How Building Positive Personal Image Influences Drug Abuse Reduction
   i) Comment on how your office has helped students to improve their self-image
   ii) How has personal drive influenced reduction of drug abuse among students in your university?

Part G: Challenges Hindering Effective Reduction of Drug Abuse
   i) What do you think are challenges hindering the effectiveness of drug abuse preventative strategies in your university?
   ii) What alternative drug abuse preventative strategies would you suggest to be put in place in your university

Thank you for your time and cooperation
Appendix G: Reliability Tests, Cronbach's Alpha

Influence of Drug Abuse Awareness on Drug Abuse Reduction

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>I attend drug abuse awareness seminars every semester.</td>
<td>27.6259</td>
<td>24.948</td>
<td>.327</td>
<td>.722</td>
</tr>
<tr>
<td>My university organises drug abuse awareness workshops every semester.</td>
<td>27.6315</td>
<td>23.600</td>
<td>.481</td>
<td>.698</td>
</tr>
<tr>
<td>Drug abuse awareness has made some students stop abusing drugs.</td>
<td>27.5972</td>
<td>23.644</td>
<td>.475</td>
<td>.699</td>
</tr>
<tr>
<td>Some students have reduced the number of times they abuse drugs after they are made aware of the consequences.</td>
<td>27.6119</td>
<td>24.723</td>
<td>.356</td>
<td>.718</td>
</tr>
<tr>
<td>Since most students are aware of the effects of drug abuse, drug abuse prevalence rate has decreased.</td>
<td>27.6392</td>
<td>24.939</td>
<td>.336</td>
<td>.721</td>
</tr>
<tr>
<td>Drug abuse awareness has reduced cases of drug abuse related accidents among students.</td>
<td>27.6441</td>
<td>24.772</td>
<td>.350</td>
<td>.718</td>
</tr>
<tr>
<td>Drug abuse awareness has decreased drug abuse related deaths among students.</td>
<td>27.6112</td>
<td>24.702</td>
<td>.356</td>
<td>.718</td>
</tr>
<tr>
<td>Drug abuse awareness has reduced cases of indiscipline related to drug abuse.</td>
<td>27.5720</td>
<td>25.540</td>
<td>.288</td>
<td>.727</td>
</tr>
<tr>
<td>Drug abuse awareness has reduced cases of violence among students.</td>
<td>27.6315</td>
<td>23.600</td>
<td>.481</td>
<td>.698</td>
</tr>
<tr>
<td>Drug abuse awareness has reduced reported cases of health problems related to drug abuse.</td>
<td>27.5972</td>
<td>23.644</td>
<td>.475</td>
<td>.699</td>
</tr>
</tbody>
</table>
Drug Abuse Policy and Drug Abuse Reduction

<table>
<thead>
<tr>
<th>Item Seed</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are drug abuse policies in our university.</td>
<td>15.4112</td>
<td>6.641</td>
<td>.532</td>
<td>.698</td>
</tr>
<tr>
<td>Drug abuse policies are not effectively implemented in our university.</td>
<td>15.0517</td>
<td>6.591</td>
<td>.651</td>
<td>.685</td>
</tr>
<tr>
<td>Corruption has hindered implementation of drug abuse policies in our university.</td>
<td>15.3070</td>
<td>6.062</td>
<td>.646</td>
<td>.674</td>
</tr>
<tr>
<td>Most students do not support the implementation of drug abuse policies.</td>
<td>15.2979</td>
<td>6.485</td>
<td>.617</td>
<td>.686</td>
</tr>
<tr>
<td>Lack of sensitisation on drug abuse policies hinders its implementation.</td>
<td>15.2476</td>
<td>6.665</td>
<td>.344</td>
<td>.730</td>
</tr>
<tr>
<td>Most of student leaders are not committed to the implementation of drug abuse policies.</td>
<td>15.4112</td>
<td>6.641</td>
<td>.532</td>
<td>.698</td>
</tr>
<tr>
<td>Drug abuse policies are applied discriminatively thus hindering its smooth implementation.</td>
<td>15.0517</td>
<td>6.591</td>
<td>.651</td>
<td>.685</td>
</tr>
<tr>
<td>Students’ negative attitude towards implementation of drug abuse preventative strategies has hindered its implementation.</td>
<td>15.2490</td>
<td>7.659</td>
<td>.047</td>
<td>.781</td>
</tr>
<tr>
<td>Lack of support from the university support staff has hindered the implementation of drug abuse policies.</td>
<td>15.4112</td>
<td>7.866</td>
<td>.052</td>
<td>.764</td>
</tr>
<tr>
<td>Lack of warning signs has hindered effective implementation of drug policies.</td>
<td>15.0517</td>
<td>7.643</td>
<td>.171</td>
<td>.746</td>
</tr>
</tbody>
</table>
## Guidance and Counselling and Drug Abuse Reduction

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guidance and counselling has helped me to avoid drug abuse.</td>
<td>13.1986</td>
<td>14.856</td>
<td>.599</td>
<td>.897</td>
</tr>
<tr>
<td>Counselling service has helped me to solve problems that led to my drug abuse.</td>
<td>12.9762</td>
<td>14.004</td>
<td>.665</td>
<td>.891</td>
</tr>
<tr>
<td>Guidance and counselling has helped me to stand against peer influence into drug abuse.</td>
<td>12.9322</td>
<td>12.946</td>
<td>.799</td>
<td>.882</td>
</tr>
<tr>
<td>I have settled most of my indiscipline cases related to drug abuse through counselling.</td>
<td>12.8671</td>
<td>13.357</td>
<td>.564</td>
<td>.900</td>
</tr>
<tr>
<td>Guidance and counselling has helped students to reduce drug abuse.</td>
<td>12.6056</td>
<td>12.993</td>
<td>.717</td>
<td>.887</td>
</tr>
<tr>
<td>Through guidance and counselling students have acquired effective communication skills so they do not abuse drugs to be able to communicate.</td>
<td>13.1986</td>
<td>14.856</td>
<td>.599</td>
<td>.897</td>
</tr>
<tr>
<td>Guidance and counselling has made students to have negative attitude towards drug abuse.</td>
<td>12.9762</td>
<td>14.004</td>
<td>.665</td>
<td>.891</td>
</tr>
<tr>
<td>I often attend guidance and counselling sessions due to drug abuse.</td>
<td>12.9322</td>
<td>12.946</td>
<td>.799</td>
<td>.882</td>
</tr>
<tr>
<td>Guidance and counselling has helped to mend my relationship with my parents which had made me abuse drugs.</td>
<td>12.8671</td>
<td>13.357</td>
<td>.564</td>
<td>.900</td>
</tr>
<tr>
<td>Guidance and counselling has made me to adhere to university drug abuse policies.</td>
<td>12.6056</td>
<td>12.993</td>
<td>.717</td>
<td>.887</td>
</tr>
</tbody>
</table>
## Personal Image and Drug Abuse Reduction

### Item-Total Statistics

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gaining confidence has reduced drug abuse.</td>
<td>14.3259</td>
<td>11.792</td>
<td>.809</td>
<td>.882</td>
</tr>
<tr>
<td>Students do not abuse drugs to please their friends.</td>
<td>14.2168</td>
<td>13.305</td>
<td>.589</td>
<td>.897</td>
</tr>
<tr>
<td>Students do not abuse drugs as a defence mechanism against shyness.</td>
<td>14.2706</td>
<td>13.433</td>
<td>.387</td>
<td>.910</td>
</tr>
<tr>
<td>Students do not abuse drugs to be able to speak with their peers.</td>
<td>14.4294</td>
<td>12.137</td>
<td>.858</td>
<td>.881</td>
</tr>
<tr>
<td>Students do not abuse drugs because they make independent decision.</td>
<td>14.5874</td>
<td>12.251</td>
<td>.678</td>
<td>.891</td>
</tr>
<tr>
<td>Students do not abuse drugs because they have high positive self-image.</td>
<td>14.3259</td>
<td>11.792</td>
<td>.809</td>
<td>.882</td>
</tr>
<tr>
<td>Students do not abuse drugs because they have healthy social relationships.</td>
<td>14.2168</td>
<td>13.305</td>
<td>.589</td>
<td>.897</td>
</tr>
<tr>
<td>Students do not abuse drugs because they have high self-esteem.</td>
<td>14.2706</td>
<td>13.433</td>
<td>.387</td>
<td>.910</td>
</tr>
<tr>
<td>Students do not abuse drugs because they are assertive.</td>
<td>14.4294</td>
<td>12.137</td>
<td>.858</td>
<td>.881</td>
</tr>
<tr>
<td>Students with high self-efficacy do not abuse drugs.</td>
<td>14.5874</td>
<td>12.251</td>
<td>.678</td>
<td>.891</td>
</tr>
</tbody>
</table>
## Challenges hindering effective reduction of drug abuse

### Item-Total Statistics

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Tot Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability and accessibility of drugs within our university compound hinders reduction of drug abuse.</td>
<td>22.5483</td>
<td>33.992</td>
<td>.575</td>
<td>.747</td>
</tr>
<tr>
<td>Most students are continuing to abuse drugs because their parents are abusing drugs.</td>
<td>22.4832</td>
<td>36.570</td>
<td>.369</td>
<td>.773</td>
</tr>
<tr>
<td>Peer pressure has hindered effective reduction of drug abuse among students.</td>
<td>22.5112</td>
<td>36.481</td>
<td>.368</td>
<td>.774</td>
</tr>
<tr>
<td>Bad examples by role models have hindered effective reduction of drug abuse.</td>
<td>22.5483</td>
<td>33.992</td>
<td>.575</td>
<td>.747</td>
</tr>
<tr>
<td>Having excess money by students have it easy to buy drugs of abuse thus hindering drug abuse reduction.</td>
<td>22.4832</td>
<td>36.570</td>
<td>.369</td>
<td>.773</td>
</tr>
<tr>
<td>Low self-esteem has hindered effective reduction of drug abuse.</td>
<td>22.5112</td>
<td>36.481</td>
<td>.368</td>
<td>.774</td>
</tr>
<tr>
<td>Family challenges have led to ineffective reduction of drug abuse among students.</td>
<td>22.5483</td>
<td>33.992</td>
<td>.575</td>
<td>.747</td>
</tr>
<tr>
<td>Cultural beliefs and practices have hindered effective reduction of drug abuse.</td>
<td>22.4832</td>
<td>36.570</td>
<td>.369</td>
<td>.773</td>
</tr>
<tr>
<td>Academic challenges are hindrances to drug abuse reduction.</td>
<td>22.5112</td>
<td>36.481</td>
<td>.368</td>
<td>.774</td>
</tr>
<tr>
<td>Poor implementation of drug abuse policies has hindered reduction of drug abuse among students.</td>
<td>22.5483</td>
<td>33.992</td>
<td>.575</td>
<td>.747</td>
</tr>
</tbody>
</table>
Appendix H: Map of Nairobi County
Appendix I: Introduction Letter from the University

The Catholic University of Eastern Africa
Faculty of Education
Department of Postgraduate Studies in Education

Our Ref: CUEA/DVC-ACAD/FOE/PGSE/NACOSTI/001/Aug 2016

19th August, 2016

The Director,
National Commission for Science, Technology and Innovation (NACOSTI)
NAIROBI

RE: JOYCE G. PERE – REG. NO. PhD/1021507

I am writing to introduce to you Joyce G. Pere who is a final year PhD in Education Degree student at The Catholic University of Eastern Africa, Nairobi – Kenya, and to request you to assist her to accomplish her academic research requirements.

Joyce’s PhD in Education Degree specialization is Educational Research and Evaluation. She has completed all course work requirements for this programme. However, every student in the programme is required to conduct research and write a report/dissertation submitted during the final years of studies.

Accordingly, Joyce’s research topic has been approved. She will conduct research on the following topic:

**Topic:** “Preventive Strategies on Drug Abuse Among Undergraduate Students in Public Universities in Nairobi County, Kenya”.

Thanking you in advance for any assistance you give to Joyce.

Sincerely,

[Signature]

Dr. Marcella Momanyi
Head of Department,
Postgraduate Studies in Education
Appendix J: Research Authorization Letter

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Ref: No. NACOSTI/P/16/87643/13405

Joyce Gachege Pere
Catholic University of Eastern Africa
P.O. Box 62157-00200
NAIROBI.

Date: 7th September, 2016

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on “Preventative strategies on drug abuse among undergraduate students in public university campuses in Nairobi County, Kenya,” I am pleased to inform you that you have been authorized to undertake research in Nairobi County for the period ending 6th September, 2017.

You are advised to report to the Vice Chancellors of selected Universities, the County Commissioner and the County Director of Education, Nairobi County before embarking on the research project.

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

BONIFACE WANYAMA
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The Vice Chancellors
Selected Universities.

The County Commissioner
Nairobi County.

Appendix K: Research Permit

THIS IS TO CERTIFY THAT:
MS. JOYCE GACHEGE PERE
of CATHOLIC UNIVERSITY OF EASTERN AFRICA, 2784-202 Nairobi, has been permitted to conduct research in Nairobi County
on the topic: PREVENTATIVE STRATEGIES ON DRUG ABUSE AMONG UNDERGRADUATE STUDENTS IN PUBLIC UNIVERSITY CAMPUSES IN NAIROBI COUNTY, KENYA
for the period ending: 6th September, 2017

Applicant’s
Signature

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

Republic of Kenya

National Commission for Science, Technology & Innovation

NACOSTI
Serial No. A
Research Clearance Permit

National Commission for Science, Technology & Innovation

10861

CONDITIONS: see back page