

**DEPARTMENT OF SOCIOLOGY
UNIVERSITY OF NAIROBI**

**SUBSTANCE USE AND ABUSE AMONG OFFENDERS UNDER PROBATION
SUPERVISION IN KENYA: A CASE OF OFFENDERS UNDER PROBATION
SUPERVISION IN LIMURU**

By

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**RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS (M.A) IN
CRIMINOLOGY AND SOCIAL ORDER**

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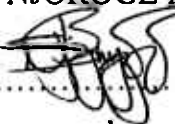
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DECLARATION

I hereby declare that this project paper is my own original work and has not been submitted to any other university for examination.

SAMUEL NJOROGE NJORE


SIGN.....

DATE..... 8/11/11

The research project has been submitted for examination to the Department of Sociology and Social Work, Faculty of Arts of the University of Nairobi with my approval.

SUPERVISOR

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SIGN.....

DATE..... 14/11/2011

DEDICATION

I dedicate this work to my wife Irene and two daughters Eve and Abigail who have had to endure weekends without their husband and father as I undertook this research. Especially to my daughter Eve who incessantly enquired as to whether I have finished my homework.

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ACRONYMS AND ABBREVIATIONS

AUDIT	Alcohol Use Disorders Identification Test
DAST	Drug Abuse Screening Test
INCB	International Narcotics Control Board
NACADA	National Agency for Campaign Against Drug Abuse
UNODC	United Nations Office on Drugs and Crime
UNDCP	United Nations International Drug Control Program
WHO	World Health Organizations

ABSTRACT

The study aimed at establishing the prevalence of substance use and abuse, factors that influence the substance use and abuse, and the effects of substance use and abuse among offenders under probation supervision in Kenya. It focused on offenders under probation supervision in Limuru District.

The research design adopted for this study was descriptive. The target population of the study was the offenders under probation supervision in Limuru, from which a sample was selected through stratified random sampling. 66 male and 18 female offenders were sampled; data was obtained using a semi-structured questionnaire and two standard tests of substance abuse. This was piloted and amended prior to administration to the respondents. Chiefly quantitative analysis using descriptive statistics was undertaken on the data collected.

The study revealed a substance use rate of 64.6% i.e. for users of both alcohol and other drugs. There was a larger proportion of alcohol users among the sampled population 58.2% compared to drug users who were 32.9%. Prevalence of both alcohol and drug use was lowest among the female population; only 15% of the current alcohol users were female. Similarly only 3.8% the current drug users were female. The most commonly used alcoholic beverage was beer used by 67.4% of the current users of alcohol. Hard liquor followed at 23.9% with chang'aa and traditional brew trailing at 2.2% and 6.5% respectively. Further 2 types of drugs were found to be favored by the drug users i.e. cannabis sativa (bhang) and miraa. Bhang was favored by the majority of drug users i.e. 73.1% with the balance of 26.9% preferring miraa.

71.7% of the current alcohol users reported some level of problem with alcohol as measured by the Alcohol Use Disorders Identification Test, 34.8% reported harmful or hazardous drinking while 36.9% reported dependence on alcohol. 26.9% of the drug users reported a low level drug use problem, 46.2% reported a moderate level problem, and 23.1% reported a substantial level problem. Only 3.8% reported a severe level drug use problem. The alcohol problem was more prevalent among the age brackets of (26years and above) among the male respondents. Among the female respondents prevalence was highest among the (19-35years). Among the male respondents the drug use problem appeared to be concentrated in the age

bracket of (14-25years). Among the female respondents prevalence was negligible with only 1 respondent in the age bracket of (19-25years) reporting a moderate level drug use problem.

Conflict in the respondent's homes, substance use by respondents' parents' and respondent's employment status were found not to be related with either alcohol or drug use. Substance use by the respondents' siblings was related to alcohol use but not drug use by the respondents. Longer duration probation sentences were found not to have the anticipated protective effect against both alcohol and drug use by the respondents.

25.5% of the substance users reported to have suffered medical problems due to their substance use while 19.6% reported to have lost jobs at some point due to substance use. Only 17.6% reported to have engaged in violent behavior due to their substance use and only 15.7% reported to have engaged in risky sexual behavior due to substance use. Contrary to expectation only 13.7% engaged in illegal activities to obtain money to fuel their substance use behavior. On the other hand 39.2% of the substance users said that their substance use had a role in the commission of their current offences.

The study recommends intervention in the form of substance abuse counseling and rehabilitation to address the substance use and by extension reduce recidivism. Such intervention should incorporate measures geared towards overcoming external influence from persons such as friends and siblings. It should also be geared towards character formation and the inculcation of moral values that exalt self control and abhor the reverse. Finally the study recommends appropriate programs that mitigate the effects of substance use. This is especially with regard to effects of a medical nature that include treatment and control of communicable diseases.

CHAPTER ONE: INTRODUCTION

1.1 Introduction

The problem of substance use and abuse is universal; the manual of 'Global Illicit Drug Trends 2003 from the U.N. Office on Drugs and Crime estimated that about 200 million people worldwide consume illicit drugs (United Nations, 2003). The report indicates that the global drug problem continues to spread in geographical terms and drug seizures show that more than 25% of the cases reported in the years 2002 to 2003 were in Africa, compared to a little more than 10% reported in the years 1998 to 1999.

Proscribed substances have come under increased control because of punitive laws and international conventions Coomber (1991). The Kenyan Government has ratified three major U.N. conventions on Narcotic Drugs and Psychotropic Substances. In Kenya the principle law dealing with drugs that was enacted in 1994 is the Narcotic Drugs and Psychotropic Substance Control Act of 1994. Further as a consequence to concerns about the increasing rates of substance use and abuse, especially among the youth the National Agency for Campaign Against Drug Abuse (NACADA) was formed in 2001 to lead in the fight against substance abuse. Consumption and sale of alcohol is regulated by the liquor licensing act cap 121, the chang'aa prohibition act cap 70 laws of Kenya and the recently enacted alcoholic drinks control act of 2009.

One of the main reasons for the criminalization of particular substances is the significant association believed to exist between drug abuse and crime. Alcohol abuse has also been linked to criminality (L. Siegel 2000) Available statistics tend to confirm this notion. In the U.S.A. survey on probation conducted in 1995 reported that 14% of probationers were on drugs when they committed their offence (Drugs and Crime Facts, 2009). A similar survey conducted among prison inmates in 2004 revealed that, 32% of state prisoners and 26% of federal prisoners interviewed said they had committed their current offence while under the influence of drugs.

Generally rates of drug use among offender populations are considerably high compared with the general population. In Canada at least 70% of federal offenders have a substance abuse problem

(Canadian Centre for Substance Abuse 2008). A survey conducted in Scotland revealed that among the household population aged 16 to 59, 13% had used any illicit drug and 0.5% had used heroin in the past year, (Scottish Crime and Victimization Survey, 2006). By comparison, the 2006 Scottish Prisoner Survey found that 67% of prisoners reported having used illicit drugs in the year before coming to prison and about half of these (52%, which is about one-third of all prisoners) said they had used heroin in that period.

In Australia although cannabis remains the most widely used illicit drug its use among adolescents in the general community aged 14-19 years had reduced significantly in 2007. This trend was however, not replicated among young offenders who spent time in detention facilities (Australian Institute of Health and Welfare, 2008). Further it was evident that almost all adolescents who spent some time in custody had tried cannabis at some stage in their life and this trend appeared to have remained quite stable over time. In contrast, cannabis use among the general population of the same age group had been steadily decreasing since 1998 (NSW Department of Juvenile Justice, 2003). In the city of Chicago 82% of persons arrested by the Chicago area police tested positive for illicit drug use this is a high rate compared to 40% of high school seniors in the student population that reported use of marijuana in the USA (Drugs and Crime Facts, 2009)

The Kenyan Society has in the past decade witnessed an exponential increase in the number of substance abusers. Cases of alcohol and drug abuse have been on the rise. The Statistical Abstracts of 2008 show that convicted prisoners of drug related cases increased from 2440 in 2003 to 6,486 in 2007, a 166% increase, those convicted and placed on probation rose from 726 in 2003 to 985 in 2007 a 37% increase. Offenders convicted and imprisoned under the Liquor Licensing Act rose from 26,731 in 2003 to 29,080 in 2007 a 9% increase, (Statistical Abstract, 2008). These figures only capture those cases that are registered into the criminal justice system, it is believed that majority of the cases go undetected. The U.N. Office on Drugs and Crime, 2004 report says that the most prevalent drugs in Kenya are cannabis sativa (bhang), Miraa or at, Heroin, and Cocaine in that order (UNODC, 2004).

Concerns have been raised by NACADA about the increase in the number of substance abusers and its link with crime especially juvenile delinquency. A survey conducted by NACADA reported high prevalence rates of alcohol and drug abuse among the youth. An average of 4% and 33% of the student and non student youth interviewed respectively reported to have been current users of either alcohol or other proscribed substances (NACADA 2004). The effects of substance abuse are varied ranging from health problems, broken relationships, poor academic performance and antisocial behaviors that lead to crime (NACADA, 2004 WHO, 1993). Goldstein's tripartite frame work (1985) which describes the relationship between drug use and offending behavior, outlines 3 ways in which substance use and crime can interact: 1st, substance use can lead to crime as a result of the pharmacological properties of drugs, the need to make money to obtain drugs, or the systematic violence associated with the drug economy; 2nd crime can lead to drug use when individuals who commit crime are exposed to social situations in which drugs are used and drug use is encouraged and 3rd drug use and crime are not causally related but both result from other factors such as poverty, sexual and physical abuse and lack of educational and employment opportunities. This essentially is what necessitates the criminalization of the distribution, sale, use and possession of illegal substances.

According to NACADA (2007) Kenyans generally hold positive attitudes towards legitimate drugs such as alcohol, tobacco and tobacco products, and miraa and a good number use such drugs and substances. The same study found that Peer pressure and availability of drugs in the community are closely associated with drug and substance abuse among young persons.

NACADA (2007) reports that Misuse of resources meant for family or personal use is the most commonly cited social problem arising from drug addiction. Close to 90% of all heron/cocaine users, 44% of bhang users and 40% of tobacco and alcohol users reported to have diverted resources in order to buy the drugs. The same study established increased risky behavior among substance users reporting that 70% of the respondents aged between 15-64 with multiple sexual partners were substance abusers putting them at a higher risk of contracting HIV and AIDS. Other effects reported were Absenteeism from school and work, crime and violence as a result of drug and substance abuse.

The government has adopted 2 broad strategies in its fight against drugs; control of supply and reduction of drug demand (Mwenesi, 1995). To date this country's government's efforts in the fight against substance abuse have been directed towards controlling availability, accessibility, utilization and prescription practices especially for therapeutic drugs (WHO, 1993). There appears not to be any special facilities for the treatment and rehabilitation of drug users (Mwenesi, 1995).

1.2 Problem Statement

Substance use and abuse has traditionally been associated with crime, the popular notion is the association of violent and property offences with alcohol and drug use. Until the late 1970's most investigators reported that abusers were arrested primarily for property crimes, however recent scholarly literature reports an increasing amount of violence associated with drugs (F. Adler et al 1995). One of the main reasons for the criminalization of particular substances is the significant association believed to exist between drug abuse and crime. Alcohol abuse has also been linked to criminality (L. Siegel 2000)

Available statistics tend to confirm this notion. In the U.S.A an Alcohol and Crime report of the U.S.A's Bureau of Justice Statistics reported that about 3 million violent crimes occurred each year in which victims perceived the offender to have been drinking at the time of the offence. Further that for about 1 in 5 of those cases victims also reported that they believed the offender to have been using drugs as well (U.S.A BJS, 1998). The same report indicated that 66% of victims who suffered violence by someone intimate (a current or former spouse, boy friend, or girl friend) reported that alcohol had been a factor (U.S.A, BJS 1998).

A similar report by the U.S department of justice shows that the first national survey on probation conducted in 1995 reported that 14% of probationers were on drugs when they committed their offence (Drugs and Crime Facts, 2009). A similar survey conducted among prison inmates in 2004 revealed that, 32% of state prisoners and 26% of federal prisoners interviewed said they had committed their current offence while under the influence of drugs. Among state prisoners drug offenders and property offenders reported the highest incidence of drug use at the time of the offence. Among federal prisoners, drug offenders and violent

offenders were the most likely to report drug use at the time of their crimes (Drugs and Crime Facts, 2009).

Other reviews have consistently shown that alcohol problems drug problems or combinations of the two are associated with crime (Boland, Henderson, & Baker, 1998; Dowden & Brown, 1998). Further, substance abuse has been found to be an important contributor to recidivism among offenders (Motiuk, 1998) as cited by (Jan L et al 2004). Substance abuse appears to be an important precipitating factor in domestic assault, armed robbery and homicides (L. Siegel 2000).

The above data points towards the fact that majority of offenders are likely to be substance users or abusers. In sum research testing both the criminality of known substance users and the substance use of known criminals produces a very strong association between substance use and crime (L. Siegel 2000).

Various explanations have been advanced to explain the various ways in which substance use is associated or linked with crime. Goldstein's tripartite frame work (1985) which describes the relationship between drug use and offending behavior, outlines 3 ways in which substance use and crime can interact: 1st, substance use can lead to crime as a result of the pharmacological properties of drugs, the need to make money to obtain drugs, or the systematic violence associated with the drug economy; 2nd crime can lead to drug use when individuals who commit crime are exposed to social situations in which drugs are used and drug use is encouraged and 3rd drug use and crime are not causally related but both result from other factors such as poverty, sexual and physical abuse and lack of educational and employment opportunities. It has been established that substance use and abuse interferes with maturation and socialization (Siegel 2000). Substance abusers are more likely to drop out of school, be under employed, engage in risky behavior, contract HIV and become unmarried parents, situations that have proven to be pathways into crime. This is by way of weakening of social bonds that leads to antisocial behavior (Siegel, 2000)

The onset of substance use, abuse and criminal behavior can be attributed to either personal or environmental factors. The environmental view holds that these vices result from the influence of

destructive social forces on human behavior. According to Siegel (2000) most criminals grew up in deteriorated parts of town and lack the social support and economic resources familiar to more affluent members of society. Likewise though the problem of substance use and abuse cuts across the social class divide, it is more apparent in the lower class populations found in slums and inner city neighborhoods. L. Siegel further notes that youths living in this deteriorated inner city slum areas where feelings of alienation and hopelessness run high often meet established drug users who teach them that narcotics provide the answer to their feelings of personal inadequacies and stress. Criminal behavior may result followed by substance use or the reverse. However the temporal or causal sequence notwithstanding researchers agree that whereas substance abuse may not cause criminal behavior it does enhance it (Adler et. Al 1995). Therefore offenders with substance use problems would be more likely to reoffend due to their dependence and addiction. Their substance use problems become a threat to their reform process.

Research has demonstrated that majority of offenders tend to generally be socially and occupationally disadvantaged; having lived in poverty had limited education and training opportunities, experienced physical and sexual abuse, are single parents or have had a history of substance abuse. Lower-class young people are much more likely than middleclass young people to commit serious crime such as burglary, robbery, assault, and sexual assault (Adler et. Al 1995). According to a study conducted by Adams et al (2009) while overall offenders seem to be socially and occupationally disadvantaged it is more so for women offenders. Further the study found that majority of the female offenders were already on hard drugs by the time they were arrested whereas male offenders tended to be excessive users of cannabis and alcohol before entry into the criminal justice system.

As a consequence substance abuse treatment has over the years been gradually integrated into probation practice. According to Siegel (2000) probation practitioners in their endeavor to better service the needs of offenders, are increasingly utilizing substance abuse treatment programs managed by probation agencies as well as the community. This results from needs identified by the courts or the probation agencies. In the United States for example the U.S Department of Justice reported that almost all probationers had one or more conditions attached to their sentence by the court or probation agencies. Among such conditions was testing for drugs and

substance abuse treatment (Drugs and Crime facts, 2009). Drug and alcohol treatment was a sentence condition for 41% of adults on probation; 37% had received similar treatment previously. Further an estimated 29% of probationers were required to get treatment for alcohol abuse or dependency and 23% for drug abuse. Drug treatment was required nearly twice as frequently among felons as misdemeanants (Drugs and Crime facts, 2009)

The probation department in Kenya has played the traditional dual roles of supervision of probation court orders that require the offender to be of good behavior, while at the same time implementing treatment plans aimed at preventing recidivism. With a projected increase in the number of offenders through the prison decongestion program, the probation department will be hard pressed to formulate effective scientifically developed treatment plans for offenders placed under probation supervision.

Substance use and abuse among the offending population in Kenya has not been studied, yet public opinion and numerous media reports decry the increase in alcohol and drug use and abuse and its association with crime. The department of probation in Kenya has in the recent past attempted to integrate alcohol and substance abuse treatment into its programs. However, currently no systematic study of the substance use and abuse among offenders under probation supervision has been conducted nor have their characteristics, much less its relationship with crime.

As such and in order to come up with effective treatment plans for offenders under probation supervision, it is critical to study substance use and abuse among the offenders and the factors influencing such use or abuse.

1.2.1 Key Research Questions

1. What is the prevalence of substance use and abuse among offenders under probation supervision?
2. What are the situational and economic factors that influence the use and abuse of substances among offenders under probation supervision?
3. What are the effects of substance use and abuse among offenders under probation supervision?

4. What are the protective factors that influence the non use/abuse of substances among offenders under probation supervision?

1.3 Study Objectives

Broadly therefore the goal of the study was be to establish the prevalence of substance use and abuse among offenders under probation supervision in Kenya and to make a comparison of characteristics of offenders' with a history of substance use and abuse and those without.

The specific objectives of the study were to:

- i. Establish the prevalence of substance use and abuse among offenders under probation supervision.
- ii. Establish situational and economic factors influencing substance use and abuse among offenders under probation supervision.
- iii. Establish the effects of substance use and abuse among offenders under probation supervision.
- iv. Establish protective factors that influence the non use/abuse of substances among the non-using/abusing offenders under probation supervision.

1.4 Justification of the Proposed Research

The penal system in Kenya has over the years had a punitive reaction to crime with a preference for imprisonment. The prison population steadily increased from 94,220 in 2003 to 114,087 in 2007 (Statistical Abstracts, 2008). Subsequently owing largely to challenges of congestion in prisons the Kenya Government's penal reform program in its Medium Term Plan (2008-2012) of the vision 2030 focuses on alternatives to imprisonment marking a principle shift towards non-custodial sentences (Probation Service Strategic Plan 2008-2012). This portends a projected increase in the population of offenders under probation supervision which recorded an increase from 9,331 in 2003 to 11,817 in 2007 (Statistical Abstracts, 2008).

With the projected increase in the population of offenders under probation supervision, the probation department will be hard pressed to formulate effective scientifically developed

treatment plans for them. Further with the sum research testing both the criminality of known substance users and the substance use of known criminals producing a very strong association between substance use and crime. Research geared towards exploring this association among the offending population in Kenya is very essential and will contribute towards enhancement of services rendered to offenders under probation supervision in Kenya.

1.5 Scope and Limitations of the Research

The study covered the prevalence of substance use and abuse among offenders serving non custodial sentences and more specifically those under probation supervision. It in addition covered the effects of substance use and abuse and the social-cultural, social-psychological and economic factors that influence use and/or abuse and nonuse and/or abuse of substances among offenders under probation supervision. The target group chosen for the study was the offending population serving probation sentences under the supervision of the Probation Office in Limuru.

The study was therefore be limited in scope to the geographical area of Limuru and to the social, economic, psychological and other factors prevailing within the area. This is because majority of the offenders under supervision reside and committed their offences within the jurisdiction of Limuru and its environs. Generalization of the findings of the study to other regions will therefore be subject to the extent of similarities in the social, economic and psychological factors. Research targeting the offending population in Kenya is very scarce; this therefore limited literature review from local sources.

1.6 Definition of Terms

TERM	MEANING
Alcohol	Any beverage that contains in part or whole any amount of alcohol.
Drugs	The various classes of drugs include but are not limited to: cannabis, solvents/inhalants, and tranquilizers e.g. valium, barbiturates, cocaine, and stimulants.

Drug abuse	The use of prescribed or over the counter medications used in excess of the directions and any non medical use of any drugs
Economic Factors	Factors related to economic activity and productivity of individuals.
Offender	An individual found by a court of law to have contravened the law.
Mood Altering Substance	Refers to both drugs and alcohol
Probation Supervision	Monitoring of an offenders progress by a Probation Officer as ordered by the court and as is required for rehabilitation of an offender.
Prevalence	Pervasiveness of the problem of substance use and abuse.
Situational Factors	These refer to the various external factors that influence an individual's behavior.
Substances	Refers to mood altering substances of both alcoholic and drug types
Substance use	The use of alcohol and drugs at a low non problematic level that would require minimal and non intensive intervention.
Substance abuse	The excessive use of alcohol and drugs at a substantial to severe problematic level that would require intensive intervention.
Standard Drink	An alcoholic drink containing 10 grams of pure alcohol

CHAPTER TWO: LITERATURE REVIEW

2.1 Review of Empirical Literature

This chapter reviews empirical and theoretical literature. It will focus on a universal overview of the subject later narrowing down to the regional and local perspectives. As a result various theories will be examined in line with the emanating arguments.

2.1.1 Historical Perspective of Substance Use

Substance use and abuse is a phenomenon that is as old as the human race. According to Gahlinger (2001), archaeological records show that mind altering drugs have been used by all people who have access to them. Early humans discovered that eating some plants resulted in a feeling of relaxation, happiness or peace; others had the effect of increased energy alertness and stamina; whereas others resulted in strange sensations terrifying visions or a profoundly different awareness. In early belief systems any substance with the ability to cure or prevent illness was considered sacred. Therefore psychoactive drugs were closely related to religion, drugs that caused illness were considered the devils weed like the flower “Datura”. Surrounding these psychoactive drugs, social and religious rituals arose as a way of controlling their use. By allowing them to be used on special occasions by specific people, the general population could be protected from harm. According to (Gahlinger, 2001), Paracelus 1493 – 1541 states that, all substances are poisonous; there is none which is not poison. The right dose differentiates between a poison and remedy.

The history of substance use can be traced to the use of opiates where the first evidence of their use was in Mesopotamia. As early as 300 BC the Chinese used the opium plant as medicine while the red Indians in Latin America, used cocoa plants as tea leaves. By 1900, 25% of China’s population, which was half of the adult population, was addicted to opium. In 1830, 20 year old Fredrick Serturner who was a Pharmacists assistant isolated the active principle from opium and called it morphine. He found it to be 10 times stronger than crude opium. By 1898 both morphine and opium were cheaper than alcohol and was used in the American civil war. The invention of the first practical hypodermic needle in 1848 made it easier to use morphine. By the War’s end morphine addiction was referred to as the “soldier’s disease” and it was estimated that

over 400,000 veterans were addicts. By 1898 heroin was being marketed as cough medicine, marijuana had always been used as a medicine but by mid 19th century it had become very popular with writers, poets and artists.

Since pre-colonial times, Kenyans have been consuming and using intoxicants. Alcohol was widely consumed and was made from various ingredients like cereals and was also tapped from palm trees. Fermentation was done from mixing ingredients such as honey and sugarcane. This form of alcohol was mostly used in its natural form or distilled to into a spirit. These brews are what today are known as chang'aa, busaa in Kenya, Gongo in Tanzania and Waragi in Uganda (Mwenesi, 1995).

Further According to Mwenesi (1995) herbs roots leaves and plants were sources of Drugs. Tobacco leaves were chewed, smoked, or inhaled as snuff; Khat leaves and skin from its twigs were also chewed. Others were mainly used for medicinal purposes and they formed the basis for indigenous pharmacology. Important to note is that the consumption of drugs and alcohol was prescribed by the community giving the conditions for their use and consumption. Alcohol and tobacco use was restricted to the elders. There was cultural stigma attached to drunkenness and liberal consumption of alcohol during specific cultural activities like weddings crop harvests and other social occasions.

Though the potential for substance abuse was great it largely did not exist because of the strong social cohesion that existed in traditional society, which acted like mitigation mechanism. After colonization the environment under which drugs were used changed. At the social level the close community unit was split and there was erosion of the power of censure and control which had been placed in the families. The new economic dispensation and the process of urbanization were now supported by a political system where the social system was grounded on values and principles that were permissive with emphasis shifting from the community to the individual. Therefore the Kenyan community which had been mostly agricultural and rural based was transformed by urban influence consequently bringing with it the potential for abuse of substances that were previously not abused. (Haji, 1985)

Post independence structures and cultural values introduced and put into place by foreign influence occasioned by colonization were not replaced neither did the society revert back to pre-colonial cultural values. Instead foreign culture gained ascendancy resulting in the commercialization and liberal use of alcohol and drugs. This is the practice that has gradually degenerated to the present day social problem of substance abuse that has drawn national level concern.

2.1.2 The Scope of Substance Use and Abuse.

According to the UNODC (2010), estimates show that between 155 and 250 million people, or 3.5% to 5.7% of the population aged 15-64, had used illicit substances at least once in the previous year. It is further reported that Cannabis users comprise the largest number of illicit drug users (129-190 million people). Amphetamine-type stimulants are the second most commonly used illicit drugs, followed by opiates and cocaine.

According to the same report at the core of drug consumption lie the ‘problem drug users’: those who inject drugs and/or are considered dependent, facing serious social and health consequences as a result. It is estimated that there were between 16 and 38 million problem drug users in the world in 2008. This represents 10% to 15% of all people who used drugs that year.

Data on the delivery of treatment services reveals that in Europe and Asia, most of the treatment demand is for opiates. In the Americas, it is cocaine, and in Africa and Oceania, it is cannabis. Cannabis remains the most widely consumed drug worldwide. Global annual cannabis use prevalence is estimated between 2.9% and 4.3% of the population aged 15-64. The highest is in Oceania (9.3% to 14.8%), followed by the Americas (6.3% to 6.6%). There are an estimated 15 – 19.3 million annual cocaine users (annual prevalence of 0.3% to 0.4%) in the world North America (2%), Oceania (1.4% to 1.7%) and West Europe (1.5%) are the regions with the highest prevalence rates. Between 12.8 and 21.8 million people (0.3% to 0.5% of the world population aged 15-64) used opiates in 2008. More than half of the world’s opiate users are in Asia (UNODC, 2010).

The UNODC estimates that between 13.7 and 52.9 million people aged 15 to 64 had used an amphetamine type substance in the past year (0.3% to 1.2% of the population), including 10.5 to

25.8 million ecstasy users (0.2% to 0.6% of the population). Oceania, East and South-East Asia, North America, and West and Central Europe are the regions with the highest prevalence rate of ATS use. In addition to the drugs mentioned above, the misuse of prescription drugs, such as synthetic opioids, benzodiazepines or synthetic prescription stimulants, is a growing health problem in a number of developed and developing countries.

The problem of substance use and abuse has been found to be more prevalent among adolescents and young adults. According to INCB (2009), rates of drug use tend to be higher during the teenage and early adult years. First use of drugs most often occurs in adolescence. In the past, it could generally be said that if young persons had not begun using drugs by the end of their adolescent years, they were unlikely to begin; however, an increase in the number of persons first using drugs in their early adult years has been reported in numerous countries.

In the past, young males were more likely to use drugs. While that is generally still the case, the gap between drug use among females and drug use among males has narrowed for certain drugs in various countries throughout the world (INCB, 2010). The use of illicit drugs is more balanced between males and females, but it still sees a higher number of men involved. For all drugs, the gender gap between males and females is lower among the young population than for the adults. Male students outnumber females in the use of cocaine and cannabis in all European countries. In contrast, female students more frequently report tranquillizer use in virtually all countries and ecstasy use in some countries (UNODC, 2010).

The same report indicates that data from Latin America and other parts of the world suggest that the more advanced the country, the higher the proportion of females among drug users. In general, substance dependence and abuse is also higher for males than females, although in the United States an age-specific analysis reveals that in 2008, the rate of substance dependence was higher for females (8.2%) than males (7.0%) in the population aged 12 to 17, while the same rate was almost double for males (12.0%) than females (6.3%) in the population 18 years and older. Though in India chewing tobacco is a common practice among many women, research findings in the 1990's indicates that substance abuse was a predominantly male phenomenon with up to 94% of women reporting to have never used substances in their lifetime (Gill, 2000).

Findings of several studies undertaken in Kenya have looked at the scope and extent of drug abuse and the specific types of drugs involved. According to Mwenesi (1995), the key finding of his study is that Kenya fitted in the category of an “Apparently endangered country” a term used to refer to a country where the number of seizures and amounts seized, reports from health and social workers and other statistics indicated an increasing trend of drug substance abuse.

According to findings of NACADA (2004), substance use and abuse is widespread, affecting mostly the youth but cutting across all social and economic groups. The study identifies alcohol, tobacco, bhang and miraa as the most used and abused substances. It reported that the youth were also abusing imported illegal substances such as Heroin, Cocaine and Mandrax. The study revealed that substance use was more prevalent among the non-student than student populations. Mwenesi (1995) reveals that young men mostly abuse bhang while older men abuse alcohol. The rich people in the society use narcotics like heroine, and cocaine and strong spirits while the poor abuse bhang and locally brewed alcohol.

In recent years there has been a significant increase in the use of narcotic drugs in urban areas especially Nairobi and Mombasa. As indicated by The Standard on 22 September 2010, the International Narcotics Control Board in 2008 reported that heroin and cocaine abuse was on the increase in Kenya Particularly in Nairobi and Mombasa. The paper in its Crime, Courts and Investigations feature highlighted the flourishing heroine trade in Mathare Slums and the growth of an addict population in Nairobi. Earlier studies revealed that substance use was more prevalent in urban and peri-urban areas. Dadphane et al (1982) found out that drug abuse was more prevalent in peri-urban areas followed by urban areas and the rural areas.

High prevalence of substance use and abuse has been confirmed to exist among the offending population. In the U.S.A an Alcohol and Crime report of the U.S.A’s Bureau of Justice Statistics reported that about 3 million violent crimes occurred each year in which victims perceived the offender to have been drinking at the time of the offence. Further that for about 1 in 5 of those cases victims also reported that they believed the offender to have been using drugs as well (U.S.A BJS, 1998). The same report indicated that 66% of victims who suffered violence by

someone intimate (a current or former spouse, boy friend, or girl friend) reported that alcohol had been a factor (U.S.A, BJS 1998).

A similar report by the U.S department of justice shows that the first national survey on probation conducted in 1995 reported that 14% of probationers were on drugs when they committed their offence (Drugs and Crime Facts, 2009). A similar survey conducted among prison inmates in 2004 revealed that, 32% of state prisoners and 26% of federal prisoners interviewed said they had committed their current offence while under the influence of drugs. Among state prisoners drug offenders and property offenders reported the highest incidence of drug use at the time of the offence. Among federal prisoners, drug offenders and violent offenders were the most likely to report drug use at the time of their crimes (Drugs and Crime Facts 2009).

The U.S Department of Justice reported that almost all probationers had one or more conditions attached to their sentence by the court or probation agencies. Among such conditions was testing for drugs and substance abuse treatment (Drugs and Crime facts, 2009). Drug and alcohol treatment was a sentence condition for 41% of adults on probation; 37% had received similar treatment previously. Further an estimated 29% of probationers were required to get treatment for alcohol abuse or dependency and 23% for drug abuse. Drug treatment was required nearly twice as frequently among felons as misdemeanants (Drugs and Crime facts, 2009)

Studies of the prevalence of substance use and abuse among the offending population in Kenya have not been conducted. However the Statistical Abstracts (2008) show that convicted prisoners of drug related cases increased from 2440 in 2003 to 6,486 in 2007, a 166% increase, those convicted and placed on probation rose from 726 in 2003 to 985 in 2007 a 37% increase. Offenders convicted and imprisoned under the Liquor Licensing Act rose from 26,731 in 2003 to 29,080 in 2007 a 9% increase. The U.N. Office on Drugs and Crime, 2004 report says that the most prevalent drugs in Kenya are cannabis sativa (bhang), Miraa or Khat, Heroin, and Cocaine in that order (UNODC, 2004).

2.1.3 Factors Influencing Substance Use and Abuse.

There are various factors that account for the use of proscribed substances that may eventually lead to abuse of the same. Substance abuse disorders are caused by multiple factors including genetic vulnerability, environmental stressors, social pressure, individual personality and presence of psychiatric problems (Gill, 2000). According to INCB (2009), the question of why some people begin to use drugs and others do not is complex. It is understood to hinge on the interplay of a number of factors, including genetic and environmental factors. These factors can serve to increase or decrease the likelihood of substance use and subsequent abuse. The terms “risk factor” and “protective factor” refer to those attributes or conditions that serve to either increase or decrease the likelihood of drug use. Everyone possesses or experiences a combination of those factors, in their personal, family, social, school, community and societal environments. These factors may be categorized broadly as socio-cultural, socio-psychological, and economic, factors. These factors are going to be analyzed alongside their contribution to substance use and abuse as either risk or protective factors or both.

2.1.4 Socio-Cultural Factors

Several socio-cultural factors account for substance use which can eventually lead to abuse; one of the factors is the easy availability of abused substances. The fact that the ingredients for making alcoholic drinks and tobacco are grown in the country illustrates just how readily available such substances are. Miraa which was legalized in 1977 is openly grown in the Meru region of the country, cannabis which is illegal is grown in secret, other illegal substances find their way into the country through major international entry points therefore all one requires is money and to keep an eye out for the law especially where illegal substances are involved. Legal drinking hours in Kenya are long and a person can get alcoholic beverages any time of day and night (Mwenesi, 1995). Although on average every individual is at one time or the other at risk of substance use, there is a population of children and young people exposed to more than an average level of risk. That risk may be manifested in various ways; if drugs are available to young people during adolescence and adulthood e.g. as a result of drug use in the family or a high level of drug trafficking in the neighbourhood, they are more likely to use drugs INCB (2009).

According to INCB (2009) Social influences play an increasingly prominent role as children approach adolescence. In some societies, the media have contributed to a normalization of drug use. Popular culture has also encouraged drug use whereby the young love movies and popular stars that are known or depicted to be substance users. Popular cultures link substance use to popularity, success, sophistication, good times, sex appeal and independence (NACADA, 2004). According to Mwaniki (1982), active advertisements of alcohol and tobacco encourage youngsters to try this new “stuff”. Most tobacco and beer companies have in the past been sponsoring many sports events that attract individuals especially the young who are easily influenced which is why the Government of Kenya instituted a ban on billboard and posters on alcohol and tobacco in the proximity of schools.

Most of the users begin at their teenage years when a lot of changes occur in their bodies. As observed by NACADA (2004) peer pressure is a contributory factor in drug abuse by users in Kenya. Phillips (1994) observes that peer pressure and the need to be accepted are the single most powerful forces influencing youth to become involved in drugs. Halima (1995) notes that, drug use in tertiary institutions is in ‘order’ because of high level tolerance from comrades. Ray and Ksir (1996) argue that as adolescence progresses, peer influence even in drug use behavior becomes stronger. Young people tend to be influenced by their perception of how common or “normative” drug use is in their networks. If a young person’s friends or peers smoke, drink or use drugs or it is believed that they do, the young person is more likely to do those things, too. There is also the false impression that some substances like bhang provides strength to carryout heavy tasks courage to commit crime and enables one to be alert for long so as to be able to study for long hours.

The phenomenon of peer influence as a risk factor is complex; peer influence rarely takes the form of overt coercion to try drugs, as is sometimes assumed. According to INCB (2009) decisions on the use of a particular drug are also linked to perceptions of the risk associated with the use of that drug. As the perceived risk associated with the use of the drug increases, the rate of its use tends to decline. However, the concept of drug-related risk is best considered in relation to the benefits perceived by the young person. Some young people may perceive unhealthy behavior such as drug use as having important social benefits (for example, supporting

a desired identity or making friends). Consequently, knowledge about drug risks does not serve as a protective factor in itself, but belief that the relative risks of drug use outweigh the benefits does. Spiritual engagement, active involvement in healthy recreational activities and service to a community are all important social factors that provide protection during adolescence.

A relationship appears to exist between substance abuse and religious faith. With regard to alcohol Islamic youth in Kenya reported the least use, with Christian youth following while non-religious youth reported the most use (NACADA, 2004). (Haji, 1995) noted that in Kenya; the North Eastern Province where Islam is dominant and is against alcohol the use and abuse of the same is low while that of tobacco and miraa which is not proscribed by Islam is high. This is because Islam does not agree with western popular lifestyles. Ray and Ksir (1996) observe that that Catholics and Jews are more likely to drink than Protestants while the non religious are more likely to drink than the religious.

Haji (1985) and Obondo (1998) assert that socio-economic changes that affect every sphere of life lead to social problems because most people are not able to adopt to change leading to resentment that may lead to substance use. Internal migration, in particular migrating from a rural setting to an urban one, may be a risk factor when it causes a sense of uprooting, loss of traditional family values and relationships, loss of social structure with respect to the community of origin, difficult cultural adaptation or a feeling of alienation INCB (2009). Weak communities are more likely to experience crime, public drug use and social disorder, which, in turn, can further weaken those communities. A community's cohesiveness and ability to solve common problems is an indicator of community health that may have a bearing on a number of issues, including drug use. According to NACADA (2004) and Ndirangu (2000), most of the Kenyan communities have witnessed the erosion of their cultural values and foundations some of which for instance controlled the use of alcohol by restricting its use to senior age groups or during special occasions. The erosion of traditional values has been blamed for the prevailing social economic changes including urbanization where the moral fabric has been loosened.

Another reason that puts individuals at risk is bad parentage, in the form of negative socialization and imparting of negative values. Children who grow up in a family where members drink,

smoke and use other substances are more likely to abuse substances in future. Some youths assist their parents sell substances and in the process get exposed and start using them. Yambo and Acuda (1983) revealed that the attitude of a household was a better predictor of drug use behavior of the youth than attitudes of the youth themselves. Some parents use or sell substances and at times the children are involved in the business of selling the substances predisposing them to substance use which eventually may end up as substance abuse (Obondo 1998; NACADA, 2004). Ray and Ksir (1996) argue that the use of alcohol by parents has an impact on subsequent alcohol use by their adolescent children.

According to the INCB (2009) most of the factors predisposing the young to substance use arise from community conditions and other broad social factors for example, adequacy of income, employment and housing and the quality of social support networks. Not having a reasonable income is a risk factor, as are having jobs with boring tasks, having no supervision and having no opportunity for promotion. A similar view is held by NACADA (2004) that the young are a population at special risk occasioned by inadequacy of social services, recreational facilities, educational and employment opportunities and other social support.

The opportunity to attend school is an important protective factor. For children who are able to attend school, the quality of the school experience has an impact on their health and on their likelihood of engaging in risky behaviour, including drug use INCB (2009). Further young people who are not engaged in learning and who have poor relationships with their peers and teachers (e.g. young people who are bullied or who experience a feeling of not belonging or who are not engaged in their schoolwork or other activities) are more likely to experience mental health problems and to be involved in various types of health-risk behaviour, including drug use. Early sexual activity is strongly related to delinquency and drug abuse. Girls who have been pregnant report increased prior use of alcohol and other drugs. Youth who do not feel a strong attachment to their parents are more likely than others to use drugs and become delinquent (UNDCP, 1995).

2.1.5 Socio-Psychological Factors

Research shows that mental health issues tend to become more prevalent during adolescence and are often associated with increased risk for drug use. According INCB (2009) drug use by some youth may be an attempt to relieve mental health problems. In adolescence, a sensation-seeking personality is a risk factor for drug use, but so are internalized problems (such as anxiety). On the other hand, an easy-going temperament in early childhood is a protective factor that buffers the influence of risk factors, reducing the likelihood of later drug use and other problematic behaviour.

The quality of family life is a large factor affecting health and behaviour throughout childhood and adolescence. It is generally true that adolescents are markedly influenced by their parents when it comes to long term goals and plans. Early deprivation (e.g. lack of affection from caregivers, neglect or abuse) often has a profound effect on a child's Pathway through life. Children of drug or alcohol-dependent parents are at particular risk for later drug use (INCB 2009). Ndirangu (2000) observes that unfavourable socialization of children by parents such as harsh and inconsistent discipline and hostility or rejection towards children has been a contributing factor to substance abuse in Kenya. The feelings of anger, fear, loneliness and depression arising from deprivation of parental and general family love is hard to deal with. Phillips (1994) observes that some people who become involved in drugs are looking for escape outlets, the problems in their family lives are too depressing to face; drug use and abuse becomes a shield from the real problems of growing up. NACADA (2004) supports this view by noting that homelessness or hostile unhealthy homes drive young people to experiment with substances as a means of escaping the harsh realities of life. Parents who are good listeners, set reasonable expectations, monitor their child's activities and model healthy attitudes and behaviour (e.g. in relation to use of medication) have a protective effect (INCB 2009).

According to Ndirangu (2000) and Phillips (1994), some youth abuse drugs in the attempt to search for identity and recognition. They further observe that negative self image of the youth in Kenya and their search to be recognized has driven them to seek unconventional ways such as substance use for them to realize their "lost or unrecognized self esteem." NACADA (2004) points out that one of the greatest initial influences that make young people in Kenya experiment

with substances and/or drugs is the person's attitude towards the substance use behaviour. For example, Cobb (2001) observes that most adolescents are aware of the hazards of smoking but go ahead to start and continue smoking as determined by their attitude towards the behaviour. Gerber and Newman (1989) reinforce the foregoing by noting that adolescents who become smokers do not differ from non-smokers in their beliefs about the negative effects of smoking.

2.1.6 Economic Factors

Economic factors appear to contribute to substance abuse in many countries; poverty and unemployment have been reported to contribute to substance abuse. Paradoxically, affluence and poverty are a major cause of substance abuse; the rich abuse substances because they can afford them whereas the poor ones abuse cheap alcoholic drinks (NACADA, 2004). Mwaniki (1982) in his study found that socio-economic backgrounds have a major impact on substance use or abuse with alcohol and tobacco being used more by 14% of the lowest income groups as compared to higher income groups. Haji (1985) found that socio-economic problems were associated with the use and abuse of Khat in Kenya. Deprivations arising from rampant levels of poverty are major contributor to substance abuse.

Phillips (1994) reports that some youth who find it hard to get a job without experience especially during hard economic times resort to finding self employment in the selling of drugs and in the process end up using and abusing the stuff that they sell. Frustration arising from lack of school fees and boredom due to unemployment leads some people to use drugs under the illusion that those who use and abuse will become bold, confident and courageous (Kipkirui, 2002). Substance use and abuse is common in street life, as in the case of street children who abuse substances as a means of helping them run away from the harsh realities of life (Mathenge, 1996). The drugs also give them the courage or confidence to operate in their occupations/careers of crime such as robbery and stealing. Similarly idleness among the youth from poverty hit families who are unable to find gainful employment abuse cheap alcoholic drinks (NACADA, 2004; Ray and Ksir, 1996)

The World Health Organization (WHO, 1993) in its Kenya Country Report on 'women and drug abuse' reveals that most women users and abusers are victims of poverty and family

disintegration. They include prostitutes, brewers and sellers of chang'aa, school dropouts and poor female-headed households and young mothers aged between 13-15years. In one rural area up to 24% of the female head of households were alcohol dependent and have developed various health and socio-economic problems.

2.1.7 Effects of Substance Use and Abuse.

Substance use and abuse has complex and varied effects. Insel et al (1998) observe that the same drug may affect different people differently or the same person differently under different circumstances. Most people start abusing drugs when they are below 21years, when their bodies are still forming thereby interfering with normal growth. The pharmacological properties of drugs have an overall effect on the person's body chemistry, behavior and psychology. Excessive consumption of alcohol and the abuse of substances, including cigarette smoking, has contributed to much of the physical, psychological, familial and social problems (APA, 2000).

People who abuse substances experience a wide array of physical effects other than those expected. The excitement of a cocaine high for instance is followed by a 'crash'; that is a period of anxiety, fatigue, depression and an acute desire for more cocaine to alleviate feelings of the crash. Marijuana and alcohol interfere with motor control and are factors in many motor vehicle accidents. Sudden abstinence from certain drugs results in withdrawal symptoms. For example heroin withdrawal can cause vomiting, muscle cramps, convulsions and delirium (APA, 2000).

With the continued use of a physically addictive drug, tolerance develops requiring constantly increasing amounts of the substance to duplicate the initial effect. Sharing hypodermic needles used to inject some drugs dramatically increases the risk of contracting AIDS and some types of hepatitis. In addition, increased sexual activity among drug users both in prostitution and from the disinhibiting effect of some drugs also puts them at risk of HIV and AIDS and other sexually transmitted diseases. NACADA (2007) observes that drug users are more likely to have more than one sexual partner compared to non-users.

The social effects of substance use and abuse are varied starting with broken relationships, poor academic performance that translates to dropping out and into narrow life opportunities, and consequently the inability to get and keep jobs. Substance use can disrupt family life and create

destructive patterns of co-dependency that is, the spouse or whole family out of love or fear of consequences, inadvertently enables the user to continue using drugs by covering up, supplying money, or denying that there is a problem (APA, 2000). It is important to note that even though women abuse drugs less than men they are affected by problems related to substance abusing men like violence in homes, economic insecurity, and HIV infection (Mwenesi, 1996)

In the workplace it is costly in terms of lost work time and inefficiency. Drug users are more likely than non-users to have occupational accidents, endangering themselves and those around them (APA, 2000). Most abusers get into anti-social behaviour making them social deviants who are normally associated with crime and social depravity drug abuse in families often becomes a vicious cycle (Obondo, 1996)

The relation between drugs and crime is a complex one involving drug users and peddlers. Drug related crime can disrupt neighbourhoods due to violence among drug dealers, threats to residents and the crimes of the addicts themselves. In some neighbourhoods younger children are recruited as lookouts and helpers because of the lighter sentences handed to juvenile offenders (APA, 2000). People under the influence of alcohol are more likely to commit violent crimes like rape and murder than people who do not use drugs. According to Insel et al (1998) drug use and abuse increases crime partly to pay for the habit and partly because some users are stimulated by certain drugs like cocaine to act more violently and at times criminal organizations seeking to control drug supplies use force to manage their markets. In addition to alcohol and tobacco the U.N. Office on Drugs and Crime (2004) reports that the most prevalent drugs in Kenya are cannabis sativa (bhang), Miraa or Khat, Heroin, and Cocaine in that order. The effects of some of these drugs are addressed below.

2.1.8 Alcohol

It is probably the oldest drug in the world; it has been used for religious ceremonies, feasts, celebrations and as a form of medicine for many years. Alcohol has contradictory roles on the one hand when used in moderation it can enhance social occasions by loosening inhibitions and creating a pleasant feeling of relaxation but on the other hand it has definite physiological effects, it is also easily available with prices that cater for all customers (Obondo, 1998). Cobb

(2001) observes that alcohol is not widely regarded as a drug because its use is at times so embedded in the social cultural context of everyday life it is however a powerful central nervous system depressant.

According to Insel et al (1998) ethyl alcohol is the common psychoactive ingredient in all alcoholic beverages. Beer a mild intoxicant usually consists of 3 – 6 parts of alcohol by volume. Hard liquors like gin and whisky are made by distilling brewed or fermented grains and other products and contain 35 – 50% alcohol. However traditional unregulated liquor like chang'aa is sometimes spiked with other alcohols such as methanol (wood alcohol) and isopropyl alcohol (rubbing alcohol) which are highly toxic and can cause blindness and other serious problems which may eventually lead to death when consumed in small doses. Alcohol is easily absorbed with 20% absorption from the stomach to blood stream, 75% in the upper part of small intestines and the rest along the gastrointestinal track (NACADA, 2009). It is absorbed into all tissues of the body affecting everything from the central nervous system, to internal organs, to skeletal muscles. Excessive use of alcohol can damage the liver (for example through liver cirrhosis), produce gastritis, affects kidney functioning, leads to sensory disturbances, blackouts, memory loss, coma and ultimately death (Insel et al, 2000).

The social and psychological effects of alcohol use are immense; for every person who is alcoholic another 3 or 4 other people are affected. According to Ray and Ksir (1996), alcohol abuse is associated with issues such as poor health, reduced productivity, violence, spread of sexually transmitted infections, road accidents, child abuse and neglect, indiscipline and decline in academic performance among students. Alcohol abuse is a source of social and economic problems in the family. Alcoholics often have other substance abuse problems attested by the fact that 90% of cocaine abusers also abuse alcohol (Obondo, 1998).

2.1.9 Tobacco

It is the second in the list of the most abused substances. Once considered glamorous and sophisticated the recognition of health risks has brought about increased disapproval. Tobacco contains nicotine an addictive agent. NACADA (2004) adds that the harmful substances in cigarettes include carbon monoxide, cyanide, formaldehyde mercury, lead and ammonia. At low

dosage nicotine acts as a stimulant increasing heart rate, blood pressure, can enhance alertness, concentration, rapid information processing and memory of learning. It also appears as a sedative reducing aggressiveness and alleviating stress response. It has short and long term adverse effects on a person (Insel et al 1998).

The short term effects of tobacco are that, nicotine stimulates the brain to release chemicals that alters mood, constricts blood vessels especially at the skin, stimulates adrenal glands to release adrenaline, causes changes in functioning of the heart and other organs, increases mucus production and damages cilia in bronchial tubes, allowing particles to reach delicate lung tissue and depresses hunger contraction. Adverse effects of smoking cigarettes are that it leads to disease and death risks, for example, cardiovascular disease, lung disease, cancer, dental disease and other diseases like peptic and duodenal ulcers, osteoporosis and maternal/child risks. Effects of tobacco smoke on passive smokers includes increased risk of lung cancer, cardiovascular disease, and other diseases, children especially suffer increased frequency of asthma and respiratory infection, increased risk of hospitalization for bronchitis, pneumonia, increased ear infections and exacerbation of allergies.

Economic costs are varied as noted by Insel et al (1998), with an average of \$2.50 per pack for cigarettes the cost it amounts to \$920 per year for a pack-a-day habit. This is in addition to increased health and home premiums, more frequent dry cleaning of cloths, more frequent cleaning of teeth, frequent cleaning of the house, office and car and burnt clothing, upholstery and carpeting.

2.1.10 Bhang-Cannabis Sativa

Cannabis is a mood altering drug that comes from the cannabis sativa plant it is used mainly in 3 forms; as marijuana (the dried leaf of the plant), hashish and hash oils (both from the plant resins). Marijuana and hashish are usually smoked in cigarettes (called joints or reefers), in cigars ("blunts"), in pipes or water pipes ("bongs"). Hash oil is added to marijuana or tobacco cigarettes, cannabis can also be cooked in food.

Cannabis is the third most used drug in Kenya as revealed by NACADA (2004). It is also known as dope, bhang, marijuana, pot or hashish it is the most commonly used psychoactive drug in

Kenya. About 30% of the bhang used in Kenya is grown domestically and the rest imported from Uganda. It contains over 450 chemical substances most of which are harmful to the body, the most dangerous is known as cannabis. Some of the immediate effects of bhang are a false sense of happiness and wellbeing heightened sense of sight and hearing, a false sense of strength, importance and dryness of the mouth. Some users feel happy and start talking a lot while others remain quiet and withdrawn it makes a person clumsier and slow to react and therefore driving and operating machinery becomes unsafe. Other users experience severe anxiety and high doses can cause panic attacks, paranoia and temporary psychosis. These effects usually disappear within hours after high doses one might hallucinate but this is unusual. SAPTA (2010) observes that for unexplained reasons cannabis smokers in Africa are developing cannabis induced psychotic disorders and schizophrenia it is suspected to be caused by cannabis growers curing their plants in petrol or some other form of solvent. It is also common for people to add other substances to make it more powerful.

Using cannabis heavily and for a long time can have serious side effects. Cannabis smoke contains cancer producing chemicals. Smoking cannabis damages the lungs and can lead to chronic coughing and lung infections. People who smoke both marijuana and tobacco may develop lung, neck and head cancers at younger age than those who smoke only tobacco. Heavy long time cannabis users develop problems with short term memory, concentration and abstract thinking. Some heavy users appear less active, less ambitious and unmotivated than other people this most often results in self neglect. Women take longer to get pregnant and their babies die before they are born and those born have bad health, damage to brain, lungs, heart, liver, kidneys and other organs at times ending in death.

People who use cannabis often find that they require more and more to get the same effect heavy users can become mentally and physically dependent, or addicted to how it makes them feel. They fail to stop using cannabis even when it causes them serious problems. Dependent users who quit may experience mild withdrawal symptoms like troubled sleep, irritability, anxiety, nausea, sweating and loss of appetite (SAPTA, 2010). Social problems experienced are accidents that could be avoided, families become poorer, children stop going to school, more violence, increased crime, and careless sexual behavior leading to diseases like HIV/AIDS.

2.1.11 Khat or Miraa

Khat is a herbal product consisting of the leaves and shoots of the shrub *Catha edulis* it is cultivated in the horn of Africa and the Arabian Peninsula. Most commonly chewed to obtain a stimulant effect, dried up plant material is sometimes made into tea or a chewable paste (SAPTA, 2010). In Kenya, it is also known as Mairungi, Miraa, kijiti, gomba or veve it is popularly grown in Meru. It is legal in Kenya and most of Sub-Saharan Africa though two of the chemicals that are released when the plant is chewed, cathinone, and cathine are classified as class c drug.

Khat degrades with time so it must be consumed within 36 hours of harvesting. The effects from chewing khat can be felt within 30 minutes, though it may take two hours to take full effect. Its effects may last up to 20 hours, its consumption induces mild euphoria and excitement Khat induced manic behaviors, hyperactivity, and hallucinations. Although khat is a stimulant some users may experience a calming effect if used over a few hours. Pesticide (dimethoate) residue has been found on khat leaves produced in Yemen. Chronic dimethoate poisoning can lead to weakness, fatigue, slurred speech and lack of co-ordination (APA, 2000).

Its adverse effects are a worsening of existing or latent psychiatric disorders, risk factor for the development of oral cancers, insomnia, high blood pressure, impotence in men, lower sperm count, anxiety and aggression, lethargy, nightmares and tremors. It may also cause depression, though this is unproven, loss of touch with reality and Permanent tooth darkening (of a greenish tinge). There is some evidence that khat affects the reproductive health of both sexes. In women it may be associated with delivery of low birth weight babies (as with smoking cigarettes), although the evidence for this is not strong. Khat use may cause inflammation of the liver, though this is unproven (SAPTA, 2010)

2.1.12 Heroin

Its harmful effect arises from the drug itself, its impurities and especially one of its methods of administration, i.e. by intravenous injection. Other methods of use include chasing the dragon, snorting and subcutaneous administration (skin-popping). Regardless of its intake methods, its abuse produces the following effects and harm; withdrawal reactions such as a runny nose

lacrimation, piloerection, nausea and vomiting, diarrhea, muscle aches, bone pain, and insomnia. The psychiatric effects include, risk of dependency and sedation. Its physical effects include, respiratory depression, nausea and vomiting, constipation, loss of appetite, weight loss, increased risk of having different infection, e.g. tuberculosis and increased risk of intrauterine death, stillbirth, low birth weight and heroin withdrawal symptoms in the newborn.

2.1.13 Volatile Solvents or Inhalants

Many substances can be abused under this category, e.g. solvents, adhesives, petrol, cleaning fluid, thinner and butane. The methods of ingestion depend on the substance, they include inhalation from tops of bottles, beer cans, cloths held over the mouth, plastic bags and sprays. Effects during intoxication include; irritability, euphoria, slurring of speech, indecisiveness, lack of coordination, disinhibition, abdominal pain, nausea and vomiting, blurring of vision, chest pain, difficulty in breathing, tinnitus, hallucination, disorientation, prone to accidents, coma, arrhythmia, cardiac arrest, asphyxia, death. Its psychological and psychiatric effects of chronic abuse include; risk of dependency, nervousness and depression. The physical effects of chronic abuse include; headache, loss of appetite, skin problems, neurotoxic effects, e.g. peripheral neuropathy, impaired cerebellar function, encephalitis, dementia, damage to liver, kidney, heart, lungs, bone marrow and adrenal glands (APA, 2000).

2.1.14 Undesirable Social Effects of Substance Abuse

According to APA (2000) the undesirable social effects of substance abuse can be summarized as follows; problems with primary support group: e.g. with family members that manifests in discord with parents or family members leading to estrangement, disruption of family by separation, removal from the home, and discord with siblings. The other is discord with partners (married or cohabited) that leads to disruption of family by separation, divorce, or estrangement, neglect to children in care. There are also problems related to the social environment such as unstable friendships, inadequate social support leading to solitary living.

Educational problems include lack of motivation to study leading to discord with teachers or classmates and inability to keep up with regular study subsequently dropping out from school. Occupational problems include inability to accomplish job assignments leading to threat of job

loss, stress at work, frequent change of jobs and subsequent unemployment. Housing problems include inability to pay rent due to financial difficulties leading to discord with neighbours or landlord and subsequent homelessness.

Economic problems include extreme poverty due to drug use leading to the abusers becoming a burden to the society. This leads to the State or Society having to cover the cost of health care services, detoxification, hospitalization, long-term medication, long-term counseling services, half-way house, day hospital and other residential service, etc. There are also problems related to interaction with the legal system, the need of money to support drug-taking habits, easily leads to involvement in illegal activities (such as drug peddling), prostitution, robberies and other forms of larceny leading to arrest, and incarceration.

Other psychosocial and environmental problems include, conflict with non-family caregivers such as counselors, social workers, or physicians, and withdrawal from services or treatment. The drug abuser becomes unemployed and sinks into poverty; some will subsequently engage in crimes, prostitution and drug trafficking. The society has to bear the subsequent costs of law enforcement, welfare services and medical care. The society has to divert a large amount of resources to provide prevention, treatment, detoxification, rehabilitation and counseling. Charity and welfare services have to be provided to the affected family members, neighbourhood and other victims of their harmful and anti-social behaviour. As a consequence a large amount of resources is spent on law enforcement, criminal prosecution and punishment.

2.1.15 Substance Use and Abuse and Offending

According to UNDCP (1995) drugs and crime may be related in several ways. First, illicit production, manufacture, distribution or possession of drugs may constitute a crime. Secondly, drugs may increase the likelihood of other, non-drug crimes occurring. Thirdly, drugs may be used to make money, with subsequent money-laundering. And fourthly, drugs may be closely linked to other major problems, such as the illegal use of guns, various forms of violence and terrorism.

Goldstein's tripartite frame work (1985) describes 3 ways in which substance use and crime can interact: 1st, substance use can lead to crime as a result of the pharmacological properties of

drugs, the need to make money to obtain drugs, or the systematic violence associated with the drug economy; 2nd crime can lead to drug use when individuals who commit crime are exposed to social situations in which drugs are used and drug use is encouraged and 3rd drug use and crime are not causally related but both result from other factors such as poverty, sexual and physical abuse and lack of educational and employment opportunities.

The onset of substance use, abuse and criminal behavior can be attributed to either personal or environmental factors. The environmental view holds that these vices result from the influence of destructive social forces on human behavior. According to Siegel (2000) most criminals grew up in deteriorated parts of town and lack the social support and economic resources familiar to more affluent members of society. Likewise though the problem of substance use and abuse cuts across the social class divide, it is more apparent in the lower class populations found in slums and inner city neighborhoods.

Research has demonstrated that majority of offenders tend to generally be socially and occupationally disadvantaged; having lived in poverty had limited education and training opportunities, experienced physical and sexual abuse, are single parents or have had a history of substance abuse. Lower-class young people are much more likely than middleclass young people to commit serious crime such as burglary, robbery, assault, and sexual assault Adler et. al (1995). According to a study conducted in Adams (2009) while overall offenders seem to be socially and occupationally disadvantaged it is more so for women offenders. Further the study found that majority of the female offenders were already on hard drugs by the time they were arrested whereas male offenders tended to be excessive users of cannabis and alcohol before entry into the criminal justice system.

It has been established that substance use and abuse interferes with maturation and socialization Siegel (2000). Substance abusers are more likely to drop out of school, be under employed, engage in risky behavior, contract HIV and become unmarried parents, situations that have proven to be pathways into crime. This is by way of weakening of social bonds that leads to antisocial behavior Siegel (2000). He further notes that youths living in this deteriorated inner city slum areas where feelings of alienation and hopelessness run high often meet established

drug users who teach them that narcotics provide the answer to their feelings of personal inadequacies and stress. Criminal behavior may result followed by substance use or the reverse.

There appears to exist a temporal causation relationship between drugs and crime with the question of which is cause and which is effect arising out of such a relationship. In the case of individual addicts, drug use may precede crime or the reverse. After examination of groups, researchers in the United States have concluded that many variations exist but that some delinquency or crime often precedes addiction. They have found that involvement in property crime generally precedes the addiction career. After addiction occurs, property crime increases and narcotic use is further increased (UNDCP 1995). However the temporal or causal sequence notwithstanding researchers agree that whereas substance abuse may not cause criminal behavior it does enhance it (Adler et al 1995). Therefore offenders with substance use problems would be more likely to reoffend due to their dependence and addiction. Their substance use problems become a threat to their reform process.

Researchers have found a close connection between drug abuse, criminal behaviour and social attitudes. Review of the crime/drugs literature supports three notions that (a) heroin addicts are usually deeply involved in crime (b) daily opiate use increases criminality several fold and (c) periods of curtailed narcotics use produced by treatment, has been shown to lead to reduced levels of property crime which become extremely low after termination of the addiction career (UNDCP, 1995).

According to UNDCP (1995) the close connection between drug use and criminal behaviour is supported by many studies. A national survey in the United States examined the relationship between drug use and criminal behaviour of arrested persons. Results showed that substance use is a strong correlate of being booked for a criminal offence. The findings on males in 14 United States cities in 1989 established that a high percentage of arrested persons had used cocaine within a period of the past 3 days with New York having (76%), Philadelphia (74%) and the District of Columbia (65%). Until the late 1970's most investigators reported that abusers were arrested primarily for property crimes, however recent scholarly literature reports an increasing amount of violence associated with drugs F. Adler et. al (1995). One of the main reasons for the

criminalization of particular substances is the significant association believed to exist between drug abuse and crime. Alcohol abuse has also been linked to criminality (Siegel 2000)

In the U.S.A an Alcohol and Crime report of the U.S.A's Bureau of Justice Statistics reported that about 3 million violent crimes occurred each year in which victims perceived the offender to have been drinking at the time of the offence. Further that for about 1 in 5 of those cases victims also reported that they believed the offender to have been using drugs as well (U.S.A BJS, 1998). The same report indicated that 66% of victims who suffered violence by someone intimate (a current or former spouse, boy friend, or girl friend) reported that alcohol had been a factor (U.S.A, BJS 1998). A similar report by the U.S department of justice shows that the first national survey on probation conducted in 1995 reported that 14% of probationers were on drugs when they committed their offence (Drugs and Crime Facts, 2009). A similar survey conducted among prison inmates in 2004 revealed that, 32% of state prisoners and 26% of federal prisoners interviewed said they had committed their current offence while under the influence of drugs. Among state prisoners drug offenders and property offenders reported the highest incidence of drug use at the time of the offence. Among federal prisoners, drug offenders and violent offenders were the most likely to report drug use at the time of their crimes (Drugs and Crime Facts, 2009).

Other reviews have consistently shown that alcohol problems drug problems or combinations of the two are associated with crime (Boland, Henderson, & Baker, 1998; Dowden & Brown, 1998). Further, substance abuse has been found to be an important contributor to recidivism among offenders (Motiuk, 1998) as cited by (Jan L et al 2004). Substance abuse appears to be an important precipitating factor in domestic assault, armed robbery and homicides L. Siegel (2000). The above data points towards the fact that a substantial number of offenders are likely to be substance users or abusers. In sum research testing both the criminality of known substance users and the substance use of known criminals produces a very strong association between substance use and crime (Siegel 2000).

Whether illicit drug use should be considered a crime, a disease, a social disorder or some mixture of these is debated in many countries. Often, public policy is ambivalent about the

nature of addiction, with social attitudes towards drug abuse reflecting uncertainty about what causes abuse and who is ultimately responsible. However the sharpest global increase in crime recorded in both the 1980-1985 period and the 1975-1989 period was in drug related crime and robbery. The rate of increase in drug crimes was greater than for all other types of crime, except kidnapping, (UNDCP, 1995)

As a consequence substance abuse treatment has over the years been gradually integrated into probation practice. According to Siegel (2000) in their endeavor to better service the needs of offenders, probation practitioners are increasingly utilizing substance abuse treatment programs managed by probation agencies as well as the community. This results from needs identified by the courts or the probation agencies. In the United States for example the U.S Department of Justice reported that almost all probationers had one or more conditions attached to their sentence by the court or probation agencies. Among such conditions was testing for drugs and substance abuse treatment (Drugs and Crime facts, 2009). Drug and alcohol treatment was a sentence condition for 41% of adults on probation; 37% had received similar treatment previously. Further an estimated 29% of probationers were required to get treatment for alcohol abuse or dependency and 23% for drug abuse. Drug treatment was required nearly twice as frequently among felons as misdemeanants (Drugs and Crime facts, 2009)

Studies of the prevalence of substance use and abuse among the offending population in Kenya have not been conducted. However the Statistical Abstracts (2008) show that convicted prisoners of drug related cases increased from 2440 in 2003 to 6,486 in 2007, a 166% increase, those convicted and placed on probation rose from 726 in 2003 to 985 in 2007 a 37% increase. Offenders convicted and imprisoned under the Liquor Licensing Act rose from 26,731 in 2003 to 29,080 in 2007 a 9% increase.

2.1.16 Probation Practice

The origins of probation can be traced to English criminal law of the middle ages. Harsh punishments were imposed on adults and children alike for offences that were not of a serious nature. The harshness eventually led to discontent in certain progressive segments of English Society (Burrell, 2003). Probation developed out various practices used under English Criminal

Law, one such practice known judicial reprieve, allowed a convicted offender to request a judge to suspend the sentence on condition that the offender displays good behavior (Bohm et al 1999).

Eventually, the courts began the practice of 'binding over for good behavior' a form of temporary release during which offenders could take measures to secure pardons or reduced sentences. In due time English courts began suspending sentences in exchange for good behavior

According to Bohm et al (1999) the more immediate origins of probation lie in the efforts of John Augustus (1785-1859), a Boston Shoemaker who volunteered to stand bail and assume custody for select, less serious offenders in exchange for the judges deferring the sentencing. He was responsible for monitoring offenders' activities and later reporting to the judge on their performance in the community, if the judge was satisfied with community performance charges were dropped if not sentencing proceeded.

Probation usually involves the suspension of the offender's sentence in return for the promise of good behavior in the community under the supervision of the probation agency. It usually replaces a term in an institution. In some cases the offender is first sentenced to a prison term and then the sentence is suspended and replaced with a probation term, in others the imposition of a prison term is delayed or suspended while the offender is placed on probation (Siegel, 2000).

The history of probation service in Kenya dates back to 1943 when a series of commissions appointed by the British colonial government recommended its establishment. Probation as practiced in Kenya today has its origin from Britain and the Probation Ordinance passed in 1943. It commenced in Kenya officially in 1946 and in its formative stages was confined to the then Nairobi Municipality and at the time only dealt with Juvenile and women offenders. Over the years the probation service in Kenya has grown and now runs a total of 117 stations managing a daily average of 36000 offenders with a professional workforce of 457 probation officers (Probation Service Strategic Plan 2008-2012).

The scope of its programs has grown from the initial supervision and rehabilitation of offenders placed under probation supervision to the development of community service orders (CSO) program which came into in 1999 as a reparative sentence. The probation department runs three

programs namely probation orders program, community service orders program, and the aftercare program. The probation orders program draws its mandate from the probation of offender's act cap 64 laws of Kenya the act embodies the departments rehabilitation agenda and a link with the judiciary particularly with regard to assisting the courts with sentencing decisions. Probation officers conduct a presentence investigation whose report is presented to the courts to inform sentencing decisions. Offenders subsequently sentenced to probation are placed under the supervision of the probation officer for the prescribed duration during which time their criminogenic needs are addressed to prevent reoffending (Probation Service Strategic Plan 2008-2012).

The community service orders program's (CSO) legal mandate is drawn from the community service orders act number 10 of 1998 of the Laws of Kenya. The program is in line with the global trend that is increasingly favoring non-custodial sentences as opposed to incarceration. It is a reparative sentence that requires an offender to carry out unpaid public work in the offended community and in the process repairing the damaged relationship between the offender and the community. The Aftercare Program deals with the supervision of offenders who are released from various penal institutions either on license or upon completion of their sentences for reintegration and resettlement. The probation service implements this program as per the borstal institutions act cap 92 Laws of Kenya, prisons act cap 90 Laws of Kenya and the mental health act cap 248 Laws of Kenya.

2.2 Review of Theoretical Literature

Theories occupy an important place in research and research methods for it is believed that research without theory is blind. Kerlinger (1964) defines theory as a set of interrelated constructs (concepts) definitions and propositions that present a systematic view of phenomena by specifying relations among variables, with the purpose of explaining and predicting phenomena. A number of theories have been advanced that explain substance abuse and other criminal behavior. This section examines some of those theories; however this research is grounded on two major theories namely strain theory of anomie and the differential association theories. Some other theories that explain crime and substance use will receive some mention but as noted, the two theories guiding this research will receive considerable attention.

2.2.1 Strain Theory of Anomie

Anomie, is a state of 'normlessness' or "rootlessness" created by the breakdown of common standards of behavior and morality. The term often refers to situations where social order appears to have collapsed. French sociologist Émile Durkheim first used "anomie" in the late 1800s and early 1900s to describe societies in transition from agricultural to industrial ones (Encarta, 2009). In periods of rapid change people are abruptly thrown into unfamiliar situations. Rules that once guided behavior no longer hold (Adler et al, 1995).

Durkheim believed that when a simple society develops into a modern, urbanized one the intimacy needed to sustain a common set of norms declines (Adler et al, 1995). Groups become fragmented, and in the absence of a common set of rules, the actions and expectation of people in one sector may clash with those of people in another. As behavior becomes unpredictable the system gradually breaks down and the society is in a state of anomie. The high prevalence of substance use in Kenya is associated with the introduction of foreign ways of life that have been undermining indigenous cultures. Traditional culture generally restricted the use of some substances like alcohol to older age groups and special occasions often sanctioning the use of alcohol under strict conditions. This is no longer the case the restrictions have largely been abandoned, instead alcohol is now available to adults and juveniles alike although the law prohibits sale of alcohol to juveniles. This situation has made it easy for all and sundry to access use and eventually abuse drugs

American sociologist Robert Merton adapted the term anomie to explain deviance and crime in the United States as a result of disparity between high goals and limited opportunities. He believed that crime and other anti social behavior are a direct result of lower class frustration and anger (Siegel, 2000).

Merton found that two elements of culture interact to produce potentially anomic conditions they are, culturally defined goals and socially approved means of obtaining them for example the goal of acquiring wealth, success and power and socially permissible means like hard work education and thrift. He argued that the means to acquire wealth are stratified across class and status lines, those with little formal education and scarce economic resources soon find that they are denied

the ability to legally acquire wealth. They lack the means due to poverty traps that majority of those in the lower economic classes find themselves caught up in. They probably come from poor dysfunctional families and cannot for example afford a good education that would guarantee a good job and subsequent wealth. He argued that the problem of crime and antisocial behavior is created by a social structure that holds out the same goals to all its members without giving them equal means to achieve them (Adler et al, 1995).

The theory is also known as the goal-means gap theory, because the anomie in this case results from strain caused by the inability of individuals to attain the culturally defined goals through legitimate means. According to Merton when socially mandated goals are uniform throughout the society and access to legitimate means is bound by class and status the resulting strain produces anomie among those who are locked out of the legitimate opportunity structure. Consequently they may develop criminal or delinquent solutions to the problem of attaining goals (Siegel, 2000). Individuals caught up in this kind of anomie may react in any of the following ways conformity, innovation, ritualism and retreatism. We shall look at innovation and retreatism which are likely to amount to substance abuse and crime.

Innovation: Innovators accept society's goals but since they have few legitimate means of achieving them they design their own means for getting ahead. The means may be burglary, robbery, embezzlement, drug dealing and trafficking and a host of other criminal activities. Youngsters who have no parental attention, no encouragement in schools, no way to the top and no future prospects may steal, sell drugs, or extort money. Once inducted into a life of crime they may also end up using and abusing substances behavior that has been found to be consistent with criminal lives.

Retreatism: This is the adaptation of people who give up both the goals (can't make it) and the means (why try) and retreat into the world of drug addiction or alcoholism (Siegel, 2000). The retreatist mode allows for an escape into a nonproductive nonstriving lifestyle.

Kenya like other capitalist societies stresses the culturally defined goals of acquiring wealth through socially approved means that include hard work, the acquisition of an education and the right connections. Such means are out of reach for the majority of the poor urban and rural Kenyan

society. They lack the economic means to acquire a good education and most engage in economic activities with very low returns such as subsistence farming and minimum wage casual labor the resultant strain as this group strives to achieve the accepted goals of wealth and success leads to adaptations in the form of innovation and retreatism that could explain the rising levels of violent and property crime and high prevalence of substance abusers in the country.

The strain theory of anomie therefore gains relevance in the study of substance abuse, deviance in general and in the designing of interventions to combat substance abuse. The theory posits that substance abuse and other criminal behavior is an outcome of strain created by a system of cultural values that extols virtually above all else, certain common symbols of success for the population at large while its social structure rigorously restricts or completely eliminates access to approved modes of acquiring this symbols for a considerable part of the same population (Adler, et al 1995). Therefore it makes sense for efforts to be put in place to alleviate poverty and offer more opportunities for the acquisition of skills by the youth in impoverished rural and urban settlements.

2.2.2 Differential Association Theory

The differential association theory has its origin in Edward H Sutherland, he held that deviant behavior and criminality stemmed neither from individual traits nor from socio-economic conditions. He believed instead that it was a function of a learning process that could affect any individual in any culture (Siegel, 2000). Further that skills and motives conducive to crime are learned as a result of contact with pro-crime values, attitudes, definitions and other patterns of criminal behavior.

According to the theory a person becomes a criminal or delinquent because of an excess of definitions favorable to the violation of the law (Adler et al, 1991). Individuals are exposed to these social and cultural definitions through personal relationships which vary in frequency, duration, priority and intensity. Becoming a criminal is a social learning process involving language motivation and skills. The theory is made is based on nine prepositions as follows.

1. Criminal behavior is learned as any other behavior such as writing painting or reading

2. Criminal behavior is learned as a byproduct of interacting with others in a process of communication.
3. Learning criminal behavior occurs within intimate personal groups, for example children who grow up in homes where parents abuse alcohol are more likely to view drinking as socially and physically beneficial.
4. When criminal behavior is learned it involves learning the techniques of committing crime which are sometimes complicated and others simple. It also requires learning the specific direction of motives, drives, rationalizations, and attitudes.
5. The specific directions of motives and drives are learned from perceptions of the various aspects of the legal code as favorable or unfavorable. Reaction to social rules and norms is not uniform across society individuals constantly meet others who hold different views on the utility of obeying the legal code. These others whom they admire may openly disdain or flout the law or ignore its substance.
6. A person becomes delinquent when he or she perceives more favorable than unfavorable consequences to violating the law. According to Sutherland's theory, individuals become law violators when they are in contact with persons, groups or events that produce an excess of definitions favorable toward criminality and are isolated from counteracting forces.
7. Differential associations may vary in frequency, duration, priority and intensity.
8. The process of learning criminal behavior by association with criminal and anticriminal patterns involves all of the mechanisms that are involved in any other learning process.
9. Although criminal behavior expresses general needs and values, it is not excused by those general needs and values because noncriminal behavior also expresses the same needs and values.

In summary differential association theory holds that people learn criminal attitudes and behavior during their adolescence from close, trusted friends or relatives. A criminal career develops if

learned antisocial values are not at least matched or exceeded by conventional attitudes and behaviors. Therefore criminal behavior is learned in a process that is similar to learning any other human behavior (Siegel, 2000).

The theory gains in the substance abuse problem in a number of ways. In many instances, individuals learn the use of drugs from their peers through peers interactions and influences (Namwonja, 1993). They youth who also constitute the majority of offenders under probation supervision tend to form friendship groups, which members strive to achieve a sense of belonging and identity by doing whatever other peer members are doing. In the event that other peer group members use drugs and have a dominant influence over other members the non using members may be influenced to start in order to guard against discrimination.

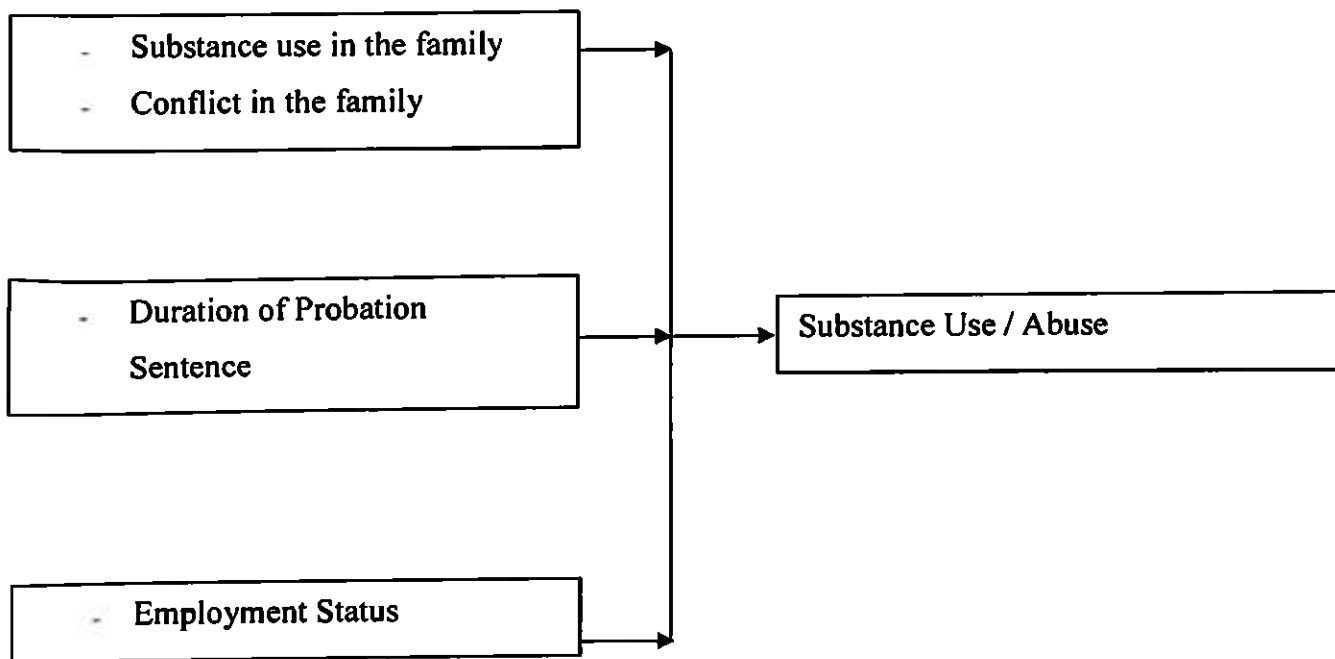
In the same vein the concept of modeling helps to explain why some young people abuse drugs, they tend to copy what the adult members of society do. This means that there are possibilities of young people trying drugs if they are in constant interaction with drug abusing adults, youth who come from families of drug abusing and peddling parents have been found to have higher chances of abusing drugs than those from the non abusing parents.

The theory aids in the design of intervention strategies for example group treatment sessions in group treatment sessions delinquent behavior is attacked while conventional behavior is promoted. In Kenya society's reaction to substance abuse has included the extension of peer counseling services to the abusers geared towards behavior modification.

2.3 Conceptual Framework.

Figure 1: Conceptual Framework

Independent Variable



2.4.0 Research Questions

5. What is the prevalence of substance use and abuse among offenders under probation supervision?
6. What are the effects of substance use and abuse among offenders under probation supervision?

2.4.1 Research Hypothesis

Going by the evidence from the literature review the following hypotheses will be tested during the study.

1. Situational and economic factors influence substance use and abuse among offenders under probation supervision such that.

- Offenders whose parents were also at one point users of mood altering substances are more likely to be users of the same than those whose parents have never been users
- Offenders whose siblings are users of mood altering substances are more likely to be users of the same than those whose siblings are not users.
- Offenders emanating from homes prone to conflict are more likely to be users of mood altering substances than those from homes without.
- Substance users are more likely to be those with short probation sentences as opposed to those with long sentences.
- Unemployed offenders are more likely than their employed counterparts to be users of mood altering substances.

CHAPTER THREE: METHODOLOGY

This section describes the methodology that was used in carrying out the study. The research site, target population, research and sampling design as well as sources and methods of data collection and analysis are discussed.

3.1 Site Description

The study covered offenders placed under probation supervision within the jurisdiction of Limuru District which is served by the Senior Principle Magistrate's court within the municipality of Limuru. This includes the Limuru District proper and the newly created Lari District. The area is largely agricultural in nature with commercial tea and flower farming. The municipality's economy is dominated by Bata Shoe Company which together with the commercial tea and flower estate has attracted a sizeable population of migrant workers. It is also an area of contrasts with the dry Ndeiya region that borders Kajiado and the evergreen Limuru and Lari that are adjacent to the Abadare ranges.

3.2 Research Design

A research design is the general plan of how one goes about answering research questions (Nachmias et al, 1996). The research design adopted for this study is a descriptive design whereby the study sought to determine the current status of a sample from the population of offenders under probation supervision in Limuru. Descriptive research portrays an accurate profile of persons, events or situation. It allows the collection of large amounts of data from a sizable population in a highly economic way allowing also for the collection of quantitative data that that can be analyzed quantitatively using descriptive and inferential statistics (Nachmias et al, 1996). The descriptive design was chosen because data was collected from a cross section of offenders under probation supervision in Limuru, intended to describe the substance abuse situation among the offenders in terms of prevalence, effects and the aggravating and mitigating factors. A descriptive research determines and reports the way things are. It attempts to describe such things as behavior, attitudes, values and characteristics (Mugenda and Mugenda, 1999).

3.3 Sampling Design

A sample of the population was examined with the assumption that it was representative of the entire population. Purposive sampling was utilized at the initial stage to select the Limuru Probation Station as the study's focal point. This was due to its accessibility and proximity to the researcher. The sample was further selected using probability sampling technique. The goal of probability sampling was to select a reasonable number of cases that represent the target population. The probability sampling procedure used in this study is stratified random sampling. In stratified random sampling, the goal is to achieve desired fair representation from the various sub-groups in the population in order to capture in-depth information essential for the study. It provided an effective system way of capturing, in a small group, the variations that exist in the target population (Mugenda and Mugenda, 1999). The probability sampling technique ensured that there was fair representation and generalization of the findings to the population. The target population was stratified into two categories male and female. A sample of 50% was then selected through systematic random sampling from each of the strata as illustrated in the table below.

Table: 1 Sample Size

Strata	Population Size	Sample Size	%
Male	133	66	39.3
Female	35	18	10.7
Total	168	84	50

3.4 Sources of Data

This study utilized both primary and secondary sources of data. Primary data which was accorded more emphasis was collected from respondents in the study who comprised of a sample of offenders under probation supervision in Limuru. Secondary data was drawn from records at the Limuru probation station and constituted the type of offenses committed by the offenders, duration of their sentences and conditions to their sentences if any.

3.5 Data Collection Methods

Data was obtained from the field using a semi-structured questionnaire. The questionnaire was developed and organized on the basis of the research questions and specific objectives to ensure relevance to the research study. A semi-structured questionnaire was used because it consists of both open and close ended questions through which the study got a complete and detailed understanding of the issue under research (Kombo and Tromp, 2006). Data was collected on what actually prevailed in the field of interest by asking the people who have had experience in it to reconstruct their experiences and challenges. In this study the data was primarily collected through the administration of questionnaires to the sampled respondents.

Additionally the AUDIT (Alcohol Use Disorders Identification Test) and the DAST-10 (Drug Abuse Screening Test) which are standard tests were administered to measure the extent of alcohol and drug abuse respectively among the sampled population. The AUDIT consists of 10 questions with scores for each question ranging from 0-4. The first response for each question (e.g. never) scores 0, the second question (e.g. less than monthly) scores 1, the third (e.g. monthly) scores 2, the fourth (e.g. weekly) scores 3, and the last response (e.g. daily or almost daily) scoring 4. For questions 9 and 10, which only have three responses the score is 0, 2 and 4 in that order. A total score of 8 or more is associated with harmful or hazardous drinking, a score of 13 and more in women and 15 or more in men is likely to indicate alcohol dependence.

The DAST-10 is a 10 item, yes/no, self report instrument that has been shortened from the initial 28-item DAST. It takes less than 8 minutes to administer. It is designed to provide a brief instrument for clinical screening and treatment evaluation for drug abuse and is recommended for adults and older youth. It tests for drugs other than alcohol and excluding tobacco and tobacco products. The answer for each of the 10 items is YES or NO; a score of 1 is assigned to each item for which the response is "YES" and 0 for a "NO" except for the third question for which a "NO" response is assigned 1 point and 0 for a "YES" response. The points are then accumulated from which the severity of the problem is assessed. An overall score of 0 means "no problem reported" requiring no intervention, 1-2 means "low level problem" that requires monitoring and reassessment at a later date, 3-5 means a "moderate level problem" requiring

further investigation, 6-8 means a substantial level problem requiring assessment and a score of 9-10 indicates a “severe level problem requiring assessment.

To ensure the effectiveness of the questionnaire a pre-test was carried out on the questionnaire to test its validity and reliability as a data collection tool. It was administered to a small representative sample to find out if the questions measured what they are supposed to measure, if the wording was clear, if all questions were interpreted in the same way by the respondents, if the questions provoked a response and if there was any researcher bias. After piloting, the necessary amendments were made to perfect the questionnaire’s concepts and wording. The questionnaire was then administered to the respondents by the researcher by interview method. The questionnaires were then gathered for analysis.

3.6 Data Analysis

(Mugenda and Mugenda, 1999) outlined that a response rate of 50 per cent is adequate for analysis and reporting, a response of 60 per cent is good and a response rate of 70 per cent is very good. The data gathered through the close ended questions was analyzed using quantitative analysis, specifically descriptive statistics such as mean scores, frequencies, percentages, and cross tabulations. Chi-square test was used to test association between variables and the use and abuse of substances and thus was a basis for rejecting or accepting the null hypothesis. This was aided by the use of Statistical package for Social Scientists. The analyzed data was then presented in tables of frequency distribution, bar and pie charts.

3.7 Problems Encountered

The study was successfully undertaken but not without limitations two of which stood out and are worth mentioning. The first is what I term as the offender dilemma and the second is domestication of the screening tools. It took some effort to assure and get some of the offenders comfortable to reveal information pertaining to their substance use. This was due to the fact that while serving their sentences they are expected to be of good conduct and they therefore might have felt like they might have been self incriminating. As alluded to earlier this was overcome by assuring the offenders of confidentiality, their anonymity and the purpose for which the

information was being gathered. The second was domestication of the screening tests; this was especially with regard to matching the quantities consumed with the standardized drink as intended by the authors of the test. This was overcome by probing the respondents further as to the sizes of the containers used to serve the drinks that they partook especially the illicit kind of drink like chang'aa and traditional brew. The alcohol content of the informally brewed and packaged alcohol was approximated by the alcoholic content of their formal counterparts for example chang'aa compares in terms of content with hard liquor while muratina compares with wine.

CHAPTER FOUR: DATA PRESENTATION AND ANALYSIS

4.0 Introduction

This chapter discusses the manner in which the data collected was analyzed and presented. The findings are presented in form of tables, charts, and graphs. The interpretation of the findings is in accordance with the study's objectives which were;

- i. Establish the prevalence of substance use and abuse among offenders under probation supervision.
- ii. Establish situational and economic factors influencing substance use and abuse among offenders under probation supervision.
- iii. Establish the effects of substance use and abuse among offenders under probation supervision.
- iv. Establish protective factors that influence the non use/abuse of substances among the non-using/abusing offenders under probation supervision.

4.0.1 The Response Rate

Table: 2 Response rate

Strata	Questionnaires Issued	Questionnaires Administered	% of the Response Rate to the Sample Size
Male	66	61	72.6
Female	18	18	21.4
Total	84	79	94

The study achieved a 94% response rate; a total number of 61 of a targeted 66 male offenders were interviewed, with the expected target of 18 females being achieved.

4.0.2 Background of the Respondents

4.0.3 Demographic Characteristics of the Respondents

Table 3: Demographic Characteristics

Age (Years)	Frequency	Percent
14-18	10	12.7
19-25	17	21.5
26-35	28	35.4
36 and above	24	30.4
Total	79	100
Sex		
Male	61	77.2
Female	18	22.8
Total	79	100
Marital Status		
Never Married	33	41.8
Married	28	35.4
Separated	18	22.8
Total	79	100
Level of Education		
Primary Incomplete	38	48.1
Primary Completed	18	22.8
Secondary Incomplete	7	8.9
Secondary Completed	13	16.5
Post Secondary (Diploma/Certificate)	3	3.8
Total	79	100

It was observed that majority of the respondents were above the age of 26 years. Majority 35.4% fell in the 26-35years age brackets while 30.4% were aged 36years and above. 21.5% were in the 19-25years age brackets while 12.7% were in the 14-18years age brackets. It was observed that

majority of the offenders under probation supervision in Limuru are Male. Of the respondents sampled 77.2% were male while 22.8% were female.

Majority of the respondents 41.8% were single and had never married. Only 35.4% were of the married category with 22.8% having previously been married but were now separated. Only 3.8% of the respondents had acquired any post secondary education having reached the post secondary level diploma or certificate. The majority 48.1% did not complete their primary education with 22.8% having the completed primary school level as their highest. Only 16.5% of the respondents had completed secondary level education with 8.9% having attended and not completed this level. It is worthy to note that 96.3% of the respondents did not advance beyond secondary school.

4.0.4 Respondents Religious Affiliations

Table 4: Respondents Religious affiliation

Respondents Religion	Frequency	Percent
Catholic	16	20.3
Protestant	58	73.4
Islam	2	2.5
Other	3	3.8
Total	79	100

It was observed that the respondents were of various religious affiliations with the majority 73.4% being Protestants. 20.3% were found to be Catholics, 2.5% were Muslims with 3.8% having no religion (2) and traditionalist (1).

4.0.5 Type of Offence

Table 5: Type of Offence

Type of Offence	Frequency	Percent
Theft of Property	34	43.0
Physical Assault Related	33	41.8
Alcoholic Drinks Control Act 2009	3	3.8
Gambling Related	1	1.3
Possession of Narcotics	8	10.1
Total	79	100

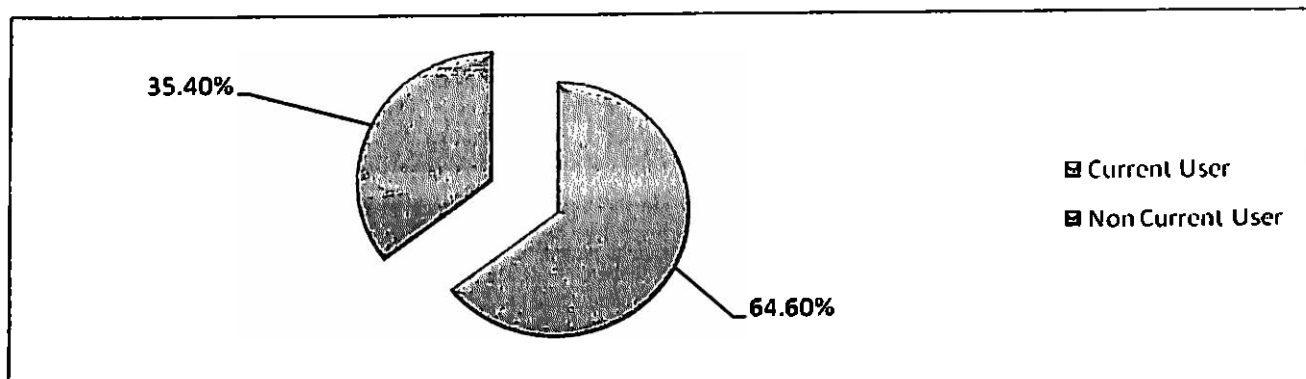
The most frequent offences committed by the sampled offender's for which they were sentenced to probation were theft related at 43% followed by physical assault related at 41.8%. Possession of narcotics mostly bhang was at 10.1% with offences under the alcoholic drinks control act and gambling related offences having a frequency of 3.8% and 1.8% respectively.

4.1 Prevalence of substance use and abuse among offenders under probation supervision.

The objective was to establish the prevalence of substance use and abuse among offenders under probation supervision in Limuru. The research question was; what is the prevalence of substance use and abuse among offenders under probation supervision? The study sought to establish the mood altering substances (excluding tobacco) used and the extent of such use among offenders under probation supervision in Limuru. These were cross tabulated with the offender's socio-demographic characteristics to establish underlying trends in the use/abuse. The results were analyzed and presented as follows

4.1.1 Substance Use Rate (Past 12 months)

Figure 2: Substance Use Rate (Past 12 months)



The study established that overall substance use i.e. for both alcohol and drugs was prevalent among 64.6% of the sampled respondents. The balance of 35.4% reported neither the use of alcohol nor drugs.

4.1.2 Drinking Status (Past 12 Months)

Table 6: Drinking Status (Past 12 months)

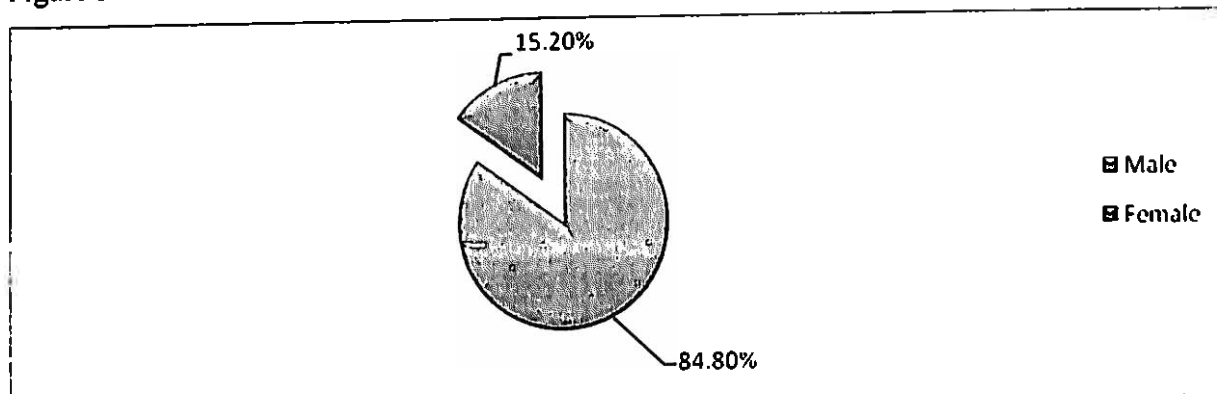
Drinking Status (Past 12 Months)	Frequency	Percent
Current Drinker	46	58.2
Non Current Drinker	33	41.8
Total	79	100

It was observed that the larger percentage 58.2% of the sampled respondents were current users of alcohol and the balance of 41.8% were not current users with regard to the reference period of 12 months an overall prevalence rate of 58.2%. This is as illustrated by table 9.

Table 7: Drinking Status and Sex of the Respondents

Sex	Drinking Status (Past 12 Months)		Total
	Current Drinker	Non Current Drinker	
Male	39	22	61
Female	7	11	18
Total	46	33	79

Figure 3: Current Drinkers and Sex of Respondents



Of the 46 current users of alcohol 84.8% were male and only 15.2% were female. From the data it follows then that the prevalence of alcohol usage is higher among male than female respondents as illustrated in table 10 and figure 3.

Table 8: Drinking Status and Religious Affiliation

Religious Affiliation	Drinking Status (Past 12 Months)		Total
	Current Drinker	Non Current Drinker	
Catholic	8	8	16
Protestant	34	24	58
Islam	2	0	2
Other	2	1	3
Total	46	33	79

It was observed that a majority of the respondents were of the Christian faith i.e. 93.7%. It was further observed that majority of the Christians were of the protestant affiliation i.e. 78.4%. Of the sampled respondents 2.5% were Muslim and 3.8% categorized as other, professed no faith or were traditionalists. The study revealed that prevalence of alcohol usage was highest among the sampled Muslims with 100% being current users of alcohol a prevalence rate of 100%. The protestant population followed with 34 out of the 58 turning out to be current users of alcohol a prevalence rate of 58.6%. Among the Catholics prevalence was at 50% with 8 out of the 16 being current users of alcohol. 2 out of 3 of those professing other or no faith were current users a prevalence rate of 66.7%.

Table 9: Drinking Status and Type of Offence

Type of Offence	Current Drinker (Past 12 Months)		Total
	Current Drinker	Non Current Drinker	
Theft of Property	21	13	34
Physical Assault Related	16	17	33
Alcoholic Drinks Control Act 2009	2	1	3
Gambling Related	0	1	1
Possession of Bhang	7	1	8
Total	46	33	79

The study revealed that there was a higher prevalence of alcohol usage among offenders with theft, physical assault related offences, offences under the alcoholic drinks control act and possession of bhang. Majority of the offenders fell in the theft related and physical assault related category. Offenders with theft related offences had a higher level of alcohol usage with a count of 21 out of 34 respondents in this category being current users of alcohol a prevalence of 61.8%. 16 offenders out of 33 in the physical assault related category were current users of alcohol a prevalence of 48.5%. When the two categories are combined 37 out of 67 were current users of alcohol which is a prevalence of 55.2%. This was replicated in the alcoholic drinks control act and possession of bhang category which combined had 9 out of 12 being users of alcohol a prevalence of 75%. There therefore seems to be an association between alcohol usage and the offences of theft and physical assault.

4.1.3 Alcoholic Beverages Mostly Used

Table 10: Alcoholic Beverage Mostly Used

Most Taken Alcoholic Drink	Frequency	Percent
Beer	31	67.4
Hard Liquor	11	23.9
Chang'aa	1	2.2
Traditional Brew	3	6.5
Total	46	100

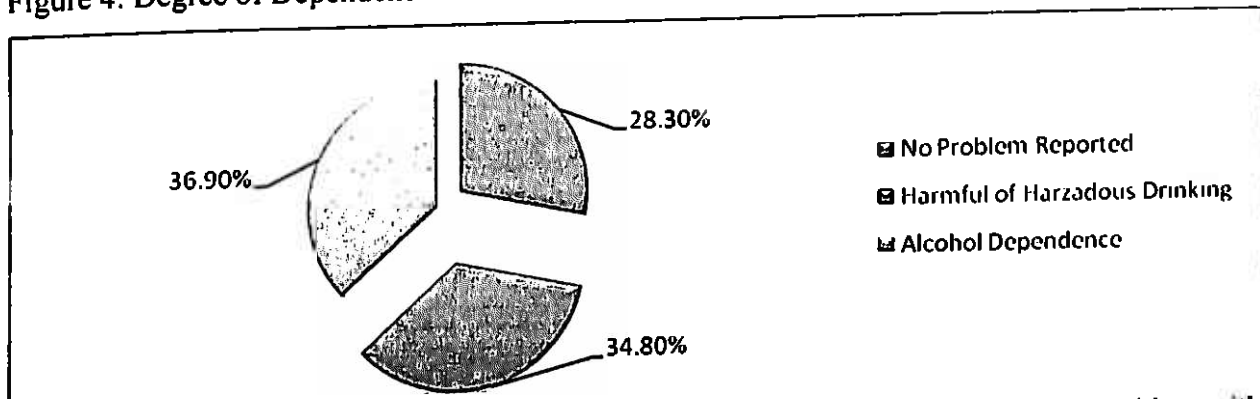
The most frequently used alcoholic drink by the current drinkers was beer which was used by 67.4% followed by hard liquor used by 23.9%. Chang'aa and traditional brew was used by 2.2% and 6.5% of the current users of alcohol.

4.1.4 Degree of Dependence on Alcohol

Table 11: Degree of Dependence on Alcohol

	Degree of Alcohol Dependence			Total
	No Problem Reported	Harmful or Hazardous Drinking	Alcohol Dependence	
Current Drinker	13	16	17	46
Non Current Drinker	33	0	0	33
Total	46	16	17	79

Figure 4: Degree of Dependence on Alcohol



The study revealed that of the 46 current users of alcohol 13 i.e. 28.3% reported no problem with alcohol as measured by the Alcohol Use Disorders Identification Test. The balance of 71.7% reported some level of problem drinking with 16 i.e. 34.8% reporting harmful or hazardous drinking and 17 i.e. 36.9% reporting alcohol dependence levels this is illustrated by table 14 and figure 4 above.

Table 12: Alcohol Dependence and Age and Sex

Degree of Alcohol Dependence		Age of the Respondents (Years)				Total
		14-18	19-25	26-35	36 and above	
Male	No Problem Reported	6	10	9	10	35
	Harmful or Hazardous Drinking	0	2	6	5	13
	Alcohol Dependence	1	2	6	4	13
	Total	7	14	21	19	61
Female	No Problem Reported	2	0	5	4	11
	Harmful or Hazardous Drinking	0	1	2	0	3
	Alcohol Dependence	1	2	0	1	4
	Total	3	3	7	5	18

Figure 5: Degree of alcohol dependence and Sex

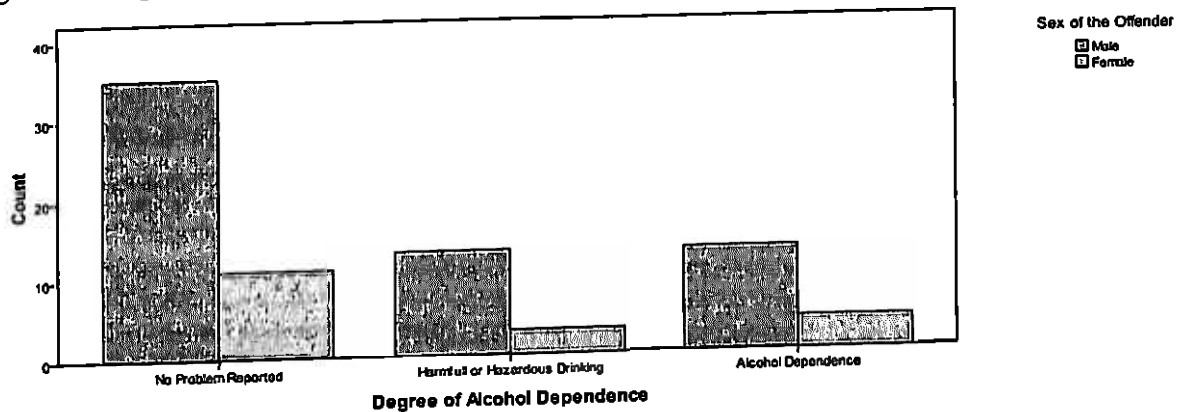
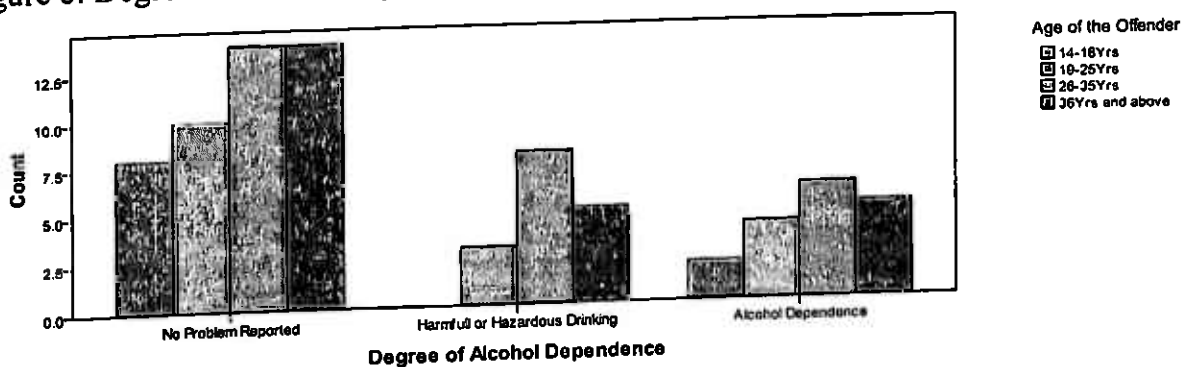


Figure 6: Degree of alcohol dependence and age



The alcohol problem was more prevalent among the age bracket of (26-35) among the male respondents with 57.2% of them reporting either harmful or hazardous drinking or alcohol dependence on the AUDIT test. In the age bracket of (19-25) 28.6% had an alcohol problem to a certain degree with a higher percentage of 47.4% among those of 36 years and above only 14.3% in the age bracket of (14-18) reported an alcohol problem albeit in the severe level of alcohol dependence. Among the female respondents prevalence was highest among the (19-25) age bracket with 100% reporting either alcohol dependence or harmful or hazardous drinking. In the age bracket of (14-18) 33.3% reported alcohol dependence. 28.6% in the age bracket of (26-35) reported harmful or hazardous drinking level and 20% among the 36 and above reported alcohol dependence level.

In general these findings are inconsistent with reviewed literature which put adolescent youth at higher risk than the adult population. Clearly prevalence was higher in the male respondents aged 26 and above at 52.5% than in those aged between 14 and 25 who were 23.8%. However among the female respondents prevalence was slightly higher among the adolescent youth with 66.7% in the ages of 14-25 reporting some level of problem drinking compared with only 25% in the ages of 26 and above.

4.1.5 Drug Use Status (Past 12 Months)

Table 13: Drug Use Status (Past 12 months)

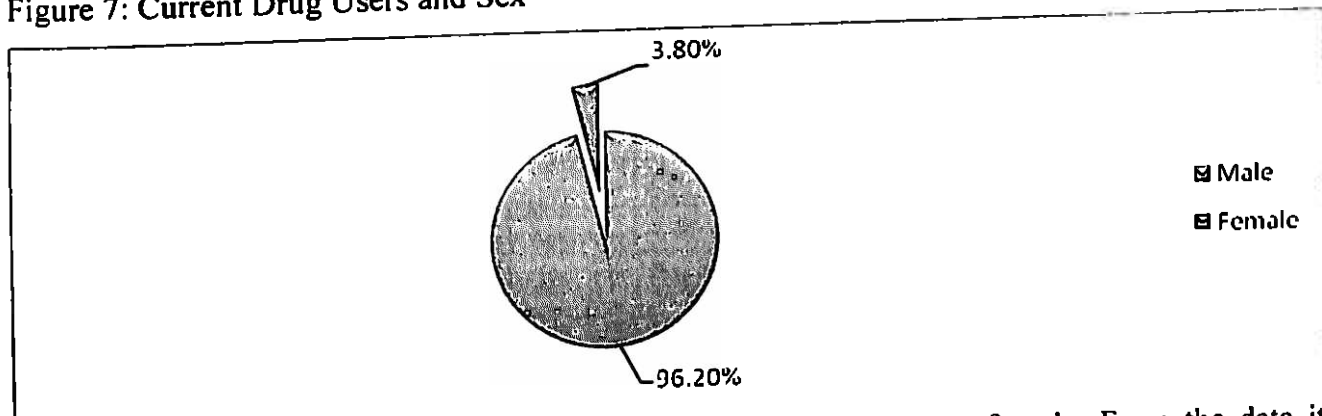
Drug Use Status (Past 12 Months)	Frequency	Percent
Current Drug User	26	32.9
Non Current Drug User	53	67.1
Total	79	100.0

Compared to alcohol drug usage had a lower prevalence. It was observed that unlike alcohol which had 58.2% of current users, current drug users were 32.9% of the sampled respondents. 67.1% of the sampled respondents were not current users of drugs with regard to the reference period of the past 12 months as illustrated by table 16.

Table 14: Drug Use Status and Sex of Respondents

Sex	Current Drug User (Past 12 Months)		Total
	Current Drug User	Non Current Drug User	
Male	25	36	61
Female	1	17	18
Total	26	53	79

Figure 7: Current Drug Users and Sex



Of the 26 current drug users 96.2% were male and only 3.8% was female. From the data it follows then that the prevalence of drug usage is higher among the male offenders than the females as illustrated in table 17 and figure 7 above.

Table 15: Drug Use Status and Religious Affiliation

Religious Affiliation	Drug Use Status (Past 12 Months)		Total
	Current Drug User	Non Current Drug User	
Catholic	6	10	16
Protestant	17	41	58
Islam	1	1	2
Other	2	1	3
Total	26	53	79

It was observed that a majority of the respondents were of the Christian faith i.e. 93.7% of the respondents. It was further observed that majority of the Christians were of the protestant

affiliation i.e. 78.4%. Of the sampled respondents 2.5% were Muslim and 3.8% categorized as other, professed no faith or were traditionalists. The study revealed that prevalence of drug use was highest among respondents of the other category with 2 out of the 3 being users of drugs a prevalence of 66.7%. The Muslim respondents followed with 1 out of the 2 being a drug user a prevalence of 50%. Among the Catholics prevalence was at 37.5% with 6 out of the 16 being current drug users. 17 out of 58 of the Protestants were current drug users a prevalence rate of 29.3%.

Table 16: Drug Use Status and Type of Offence

Type of Offence	Drug Use Status (Past 12 Months)		Total
	Current Drug User	Non Current Drug User	
Theft of Property	10	24	34
Physical Assault Related	7	26	33
Alcoholic Drinks Control Act 2009	1	2	3
Gambling Related	1	0	1
Possession of Bhang	7	1	8
Total	26	53	79

The study revealed that there was generally a lower prevalence of drug usage among offenders with theft, physical assault related offences, and offences under the alcoholic drinks control act compared with alcohol usage. Majority of the offenders fell in the theft and physical assault related category. Offenders with theft related offences had a low level of drug usage compared to alcohol usage with a count of 10 out of 34 respondents in this category being current users of drugs a prevalence of 29.4%. 7 offenders out of 33 in the physical assault related category were current drug users a prevalence of 21.2%. When the two categories are combined 17 out of 67 were current drug users which is a prevalence of 25.42%. This was replicated in offences under the alcoholic drinks control act with only 1 out of 3 in this category reporting drug usage a prevalence of 33.3%. Prevalence of usage was highest among those respondents convicted for possession of bhang with 7 out of 8 of respondents under this category being current users a prevalence rate of 87.5%.

4.1.6 Drug Most Commonly Used

Table 17: Drug Mostly Used

Most Taken Drug	Frequency	Percent
Cannabis Sativa (Bhang)	19	73.1
Miraa	7	26.9
Total	26	100.0

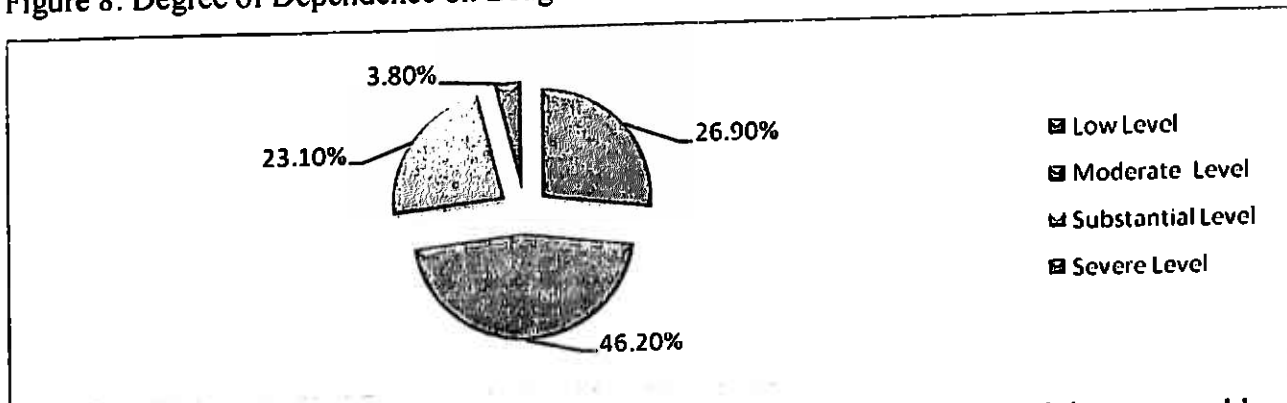
The most frequently used drug by the current drug users was bhang which was used by 73.1% followed by Miraa that was used by the remaining 26.9%.

4.1.7 Level of Dependence on Drugs

Table 18: Degree of Dependence on Drugs

Drug Use (Past 12 Months)	Degree of Dependence on Drug					Total
	No Problem Reported	Low Level	Moderate Level	Substantial Level	Severe Level	
Current Drug User	0	7	12	6	1	26
Non Current Drug User	53	0	0	0	0	53
Total	53	7	12	6	1	79

Figure 8: Degree of Dependence on Drugs



The study revealed that of the 26 current drug users 26.9% reported a low level drug use problem that would require monitoring and assessment at a later date. 46.2% reported a moderate level problem requiring further investigation. 23.1% reported a substantial drug related problem with

3.8% reporting a severe level problem both requiring assessment and intervention as illustrated by table 21 and figure 8 above. This is as measured by the Drug Abuse Screening Test (DAST).

Table 19: Dependence on Drugs and Age and Sex

Degree of Dependence on drugs		Age of the Respondents (Years)				Total
		14-18	19-25	26-35	36 and above	
Male	No Problem Reported	5	6	11	14	36
	Low Level	0	1	3	3	7
	Moderate Level	1	5	5	0	11
	Substantial Level	0	2	2	2	6
	Severe Level	1	0	0	0	1
	Total	7	14	21	19	61
Female	No Problem Reported	3.0	2	7	5	17
	Low Level	0	0	0	0	0
	Moderate Level	0	1	0	0	1
	Substantial Level	0	0	0	0	0
	Severe Level	0	0	0	0	0
	Total	3	3	7	5	18

Figure 9: Degree of Drug Dependence and Sex

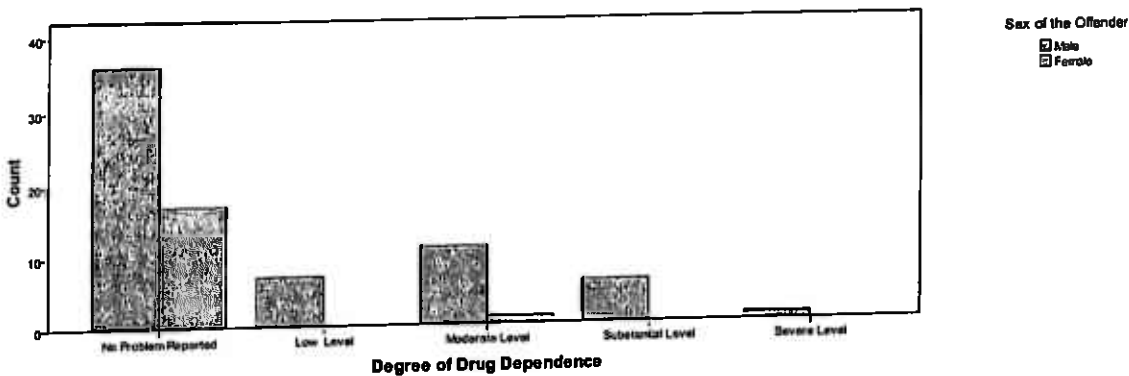
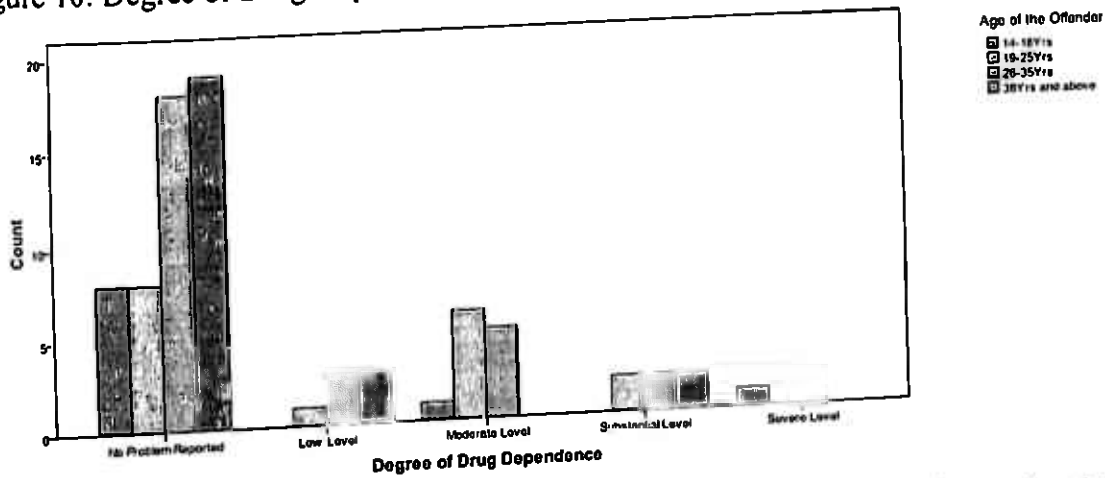


Figure 10: Degree of Drug Dependence and Age



The Drug use problem in the male population was more prevalent among the age bracket of (19-25), 57.1% in this category reported some degree of drug use related problem. 7.1% in this age bracket reported a low level problem, 35.7% reported a moderate level problem with 14.3% reporting a substantial level problem on the DAST. In the age bracket of (26-35), 47.6% had some degree of drug use problem, 14.3% in this category reported a low level problem, 23.8% reported a moderate level problem with 9.5% reporting a substantial level problem. In the age category of 36years and above 26.3% had some level of drug use problem, 15.8% reported a low level problem with 10.5% reporting a substantial level problem. 28.6% in the age bracket of (14-18 years) reported some degree of drug use problem. Among the female respondents prevalence was negligible with only 1 respondent in the age bracket of (19-25years) reporting a moderate level drug use problem. In general these findings are consistent with reviewed literature which put adolescent youth at higher risk than the adult population. Prevalence was higher in respondents aged between 14 and 25 at 47.6% than in those aged 26 and above at 37.5%.

4.2 Factors Influencing Substance Use and Abuse among Offenders under Probation Supervision.

The objective was to establish the factors influencing substance use and abuse among offenders under probation supervision in Limuru. The research hypotheses were that;

- Offenders whose parents were also at one point users of mood altering substances are more likely to be users of the same than those whose parents have never been users

- Offenders whose siblings are users of mood altering substances are more likely to be users of the same than those whose siblings are not users.
- Offenders emanating from homes prone to conflict are more likely to be users of mood altering substances than those from homes without.
- Unemployed offenders are more likely than their employed counterparts to be users of mood altering substances.

4.2.1 Substance Use by Respondents Parents

Table 20: Substance Use by Parents and alcohol usage

Drinking Status (Past 12 Months)	Parents' Substance Ever Use		Total
	Yes	No	
Drinker	24	22	46
Non Drinker	16	17	33
Total	40	39	79

The assumption in this aspect was that majority of the current users of alcohol were likely to come from homes in which the parents were also at one point users of mood altering substances. This denotes a relationship between parents' use of mood altering substances and subsequent usage of alcohol by the respondents. It was observed that a slim majority, 24 out of 46 i.e. 52.2% of the alcohol users were from homes in which either parent had at one point used mood altering substances with the balance of 47.8% coming from homes in which the parents had never used mood altering substances. This is an indication that parents having at one point been users of mood altering substances does not seem to be related to the use of alcohol among the respondents.

4.2.2 Substance Use by Respondents Siblings

Table 21: Substance use by siblings and alcohol usage

Drinking Status (Past 12 Months)	Siblings Substance Use (Past 12 Months)		Total
	Yes	No	
Drinker	33	13	46
Non Drinker	15	18	33
Total	48	31	79

The assumption in this aspect was that majority of the current users of alcohol were likely to come from homes in which the siblings were also users of mood altering substances. This denotes a relationship between siblings' use of mood altering substances and the usage of alcohol by the respondents. It was observed that a majority, 33 out of 46 i.e. 71.7% of the alcohol users were from homes in which their siblings were also users of mood altering substances with the balance of 28.3% coming from homes in which the siblings were not users of mood altering substances. A slim minority 15 out of 33 i.e. 45.5% of the non drinkers were from homes in which their siblings were users of mood altering substances. This is an indication that siblings' current use of mood altering substances seems to be related to the current usage of alcohol among the respondents. Influence among siblings in this respect can be said to be significant.

4.2.3 Conflict in the Homes in Which Respondents Were Raised

Table 22: Conflict in the respondents' homes and alcohol usage

Drinking Status (Past 12 Months)	Conflict in the Family		Total
	Yes	No	
Drinker	14	32	46
Non Drinker	9	24	33
Total	23	56	79

The assumption in this aspect was that the more conflict prone the homes in which the offenders were raised the more likely they were to engage in alcohol consumption. This denotes a relationship between conflict in the homes and subsequent usage of alcohol. The study observed

4.2.2 Substance Use by Respondents Siblings

Table 21: Substance use by siblings and alcohol usage

Drinking Status (Past 12 Months)	Siblings Substance Use (Past 12 Months)		Total
	Yes	No	
Drinker	33	13	46
Non Drinker	15	18	33
Total	48	31	79

The assumption in this aspect was that majority of the current users of alcohol were likely to come from homes in which the siblings were also users of mood altering substances. This denotes a relationship between siblings' use of mood altering substances and the usage of alcohol by the respondents. It was observed that a majority, 33 out of 46 i.e. 71.7% of the alcohol users were from homes in which their siblings were also users of mood altering substances with the balance of 28.3% coming from homes in which the siblings were not users of mood altering substances. A slim minority 15 out of 33 i.e. 45.5% of the non drinkers were from homes in which their siblings were users of mood altering substances. This is an indication that siblings' current use of mood altering substances seems to be related to the current usage of alcohol among the respondents. Influence among siblings in this respect can be said to be significant.

4.2.3 Conflict in the Homes in Which Respondents Were Raised

Table 22: Conflict in the respondents' homes and alcohol usage

Drinking Status (Past 12 Months)	Conflict in the Family		Total
	Yes	No	
Drinker	14	32	46
Non Drinker	9	24	33
Total	23	56	79

The assumption in this aspect was that the more conflict prone the homes in which the offenders were raised the more likely they were to engage in alcohol consumption. This denotes a relationship between conflict in the homes and subsequent usage of alcohol. The study observed

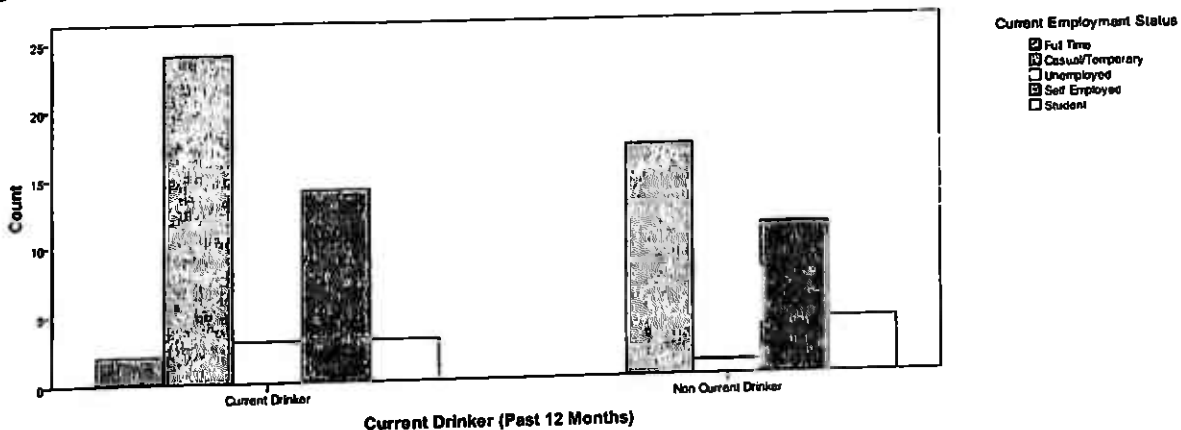
that majority of the respondents 70.9% came from homes without conflicts compared to the balance of 29.1% from homes with some amount of conflict. It was however observed that only 14 out of 46 of the alcohol users i.e. 30.4% came from homes with some amount of conflict with the balance of 69.6% coming from homes without conflicts. This is an indication that conflict in the homes does not seem to be related to alcohol usage.

4.2.4 Current Employment Status and Alcohol Usage

Table 23: Current Employment Status

Drinking Status (Past 12 Months)	Current Employment Status					Total
	Full Time	Temporary	Unemployed	Self Employed	Student	
Drinker	2	24	3	14	3	46
Non Drinker	0	17	1	11	4	33
Total	2	41	4	25	7	79

Figure 11: Current Employment Status



It was observed that majority of the respondents 75 out of 79 i.e. 94.9% were in some form of gainful employment. This therefore disqualifies lack of employment as a factor influencing the use of alcohol.

4.2.5 Substance Use by Parents and Respondents' Drug Usage

Table 24: Substance Use by Parents and Drug Usage

Drug Use Status (Past 12 Months)	Parents' Substance Ever Use		Total
	Yes	No	
Drug User	10	16	26
Non Drug User	30	23	53
Total	40	39	79

The assumption in this aspect was that majority of the current drug users were likely to come from homes in which the parents were also at one point users of mood altering substances. This denotes a relationship between use of mood altering substances by parents' and the usage of drugs by the respondents. It was observed that a minority, 10 out of 26 i.e. 38.5% of the drug users were from homes in which either parent had at one point used mood altering substances with the balance of 61.5% coming from homes in which the parents had never used mood altering substances. This is an indication that parents having at one point been users of mood altering substances is not a key determining factor in the usage of drugs among offenders under probation supervision in Limuru.

4.2.6 Substance use by Siblings and Respondents' Drug Usage

Table 25: Substance Use by Siblings Drugs Usage

Drugs Usage Status (Past 12 Months)	Siblings Substance Use (Past 12 Months)		Total
	Yes	No	
Drug User	18	8	26
Non Drug User	30	23	53
Total	48	31	79

The assumption in this aspect was that majority of the drug users were likely to come from homes in which the siblings were also users of mood altering substances. This denotes a relationship between usage of mood altering substances by siblings and the usage of drugs by the respondents. It was observed that a majority, 18 out of 26 i.e. 69.2% were from homes in which

their siblings were users of mood altering substances with the balance of 30.8% coming from homes in which the siblings had never used mood altering substances. Contrary to expectations the siblings of 30 out of 53 i.e. 56.6% of the non users were also current users of mood altering substances. This is an indication that substance use by siblings does not seem to be a key factor influencing the use of drugs among the respondents.

4.2.7 Conflict in the Respondents' Homes and Their Drug Usage

Table 26: Conflict in the respondents' homes and drug Usage

Drug Use Status (Past 12 Months)	Conflict in the Family		Total
	Yes	No	
Drug User	8	18	26
Non Drug User	15	38	53
Total	23	56	79

The assumption in this aspect was that the more conflict prone the homes in which the offenders were raised the more likely they were to engage in drug usage. This denotes a relationship between conflict in the respondents' homes and the usage of drugs by the respondents. The study observed that majority of the respondents 70.9% came from homes without conflicts compared to the balance of 29.1% from homes with some amount of conflict. It was however observed that only 8 out of 26 i.e. 30.8% of the drug users came from homes with some amount of conflict with the balance of 69.2% coming from homes without conflicts. This is an indication that conflict in the homes is not a determining factor in the use of drugs among the sampled population.

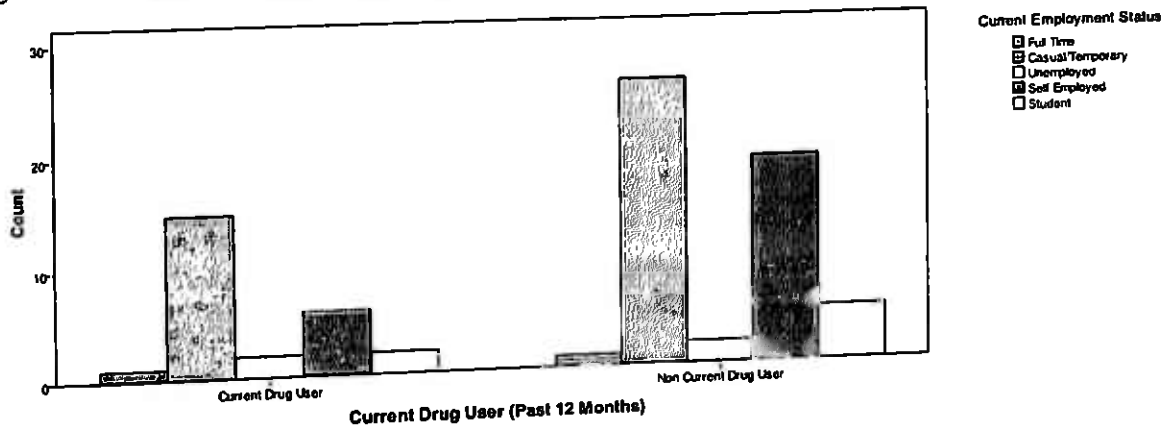
4.2.8 Respondents Current Employment Status and Their Drug Use

Table 27: Current Employment Status and Drug Use

Drug Use Status (Past 12 Months)	Current Employment Status					Total
	Full Time	Temporary	Unemployed	Self Employed	Student	
Drug User	1	15	2	6	2	26
Non Drug User	1	26	2	19	5	53

Total	2	41	4	25	7	79
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Figure 12: Current Employment Status



It was observed that majority of the respondents 75 out of 79 i.e. 94.9% were in some form of gainful employment. This therefore disqualifies lack of gainful employment as a factor influencing the use of drugs.

4.3 Effects of Substance Use and Abuse among the offenders under probation supervision.

The study investigated the effects that substance use and abuse has had on the users/abusers among the sampled population. It tested for effects on the respondents' relationship with the family and friends, and effects on economic activities. Further whether substance use has occasioned violence, criminal activities, medical problems, and risky sexual behavior. The data was analyzed using descriptive statistics and presented using frequency tables.

4.3.1 Effects of Substance use and abuse among offenders under probation supervision

Table 28: Effects of Substance Use and Abuse 1

Occasioned Problems with spouse/parents/close relatives	Frequency	Percent
Yes	28	54.9
No	23	45.1
Total	51	100
Occasioned Family Neglect		
Yes	14	27.5
No	37	72.5
Total	51	100
Occasioned Broken Friendships		
Yes	23	45.1
No	28	54.9
Total	51	100
Neglect of Economic Activities		
Yes	18	35.3
No	33	64.7
Total	51	100
Occasioned Job Loss		
Yes	10	19.6
No	41	80.4
Total	51	100

As illustrated in table 28 above, the study observed that of the substance users 54.9% reported to have experienced problems with their spouse, parents, and close relatives due to substance use. 27.5% reported to have neglected their familial responsibilities. The study further observed that of the substance users 45.1% reported to have experienced broken friendships due to substance use. 35.3% reported to have neglected their economic activities. 19.6 % of the substance users reported to have lost jobs due to their substance use.

Table 29: Effects of Substance Use and Abuse 2

Occasioned Violent Behavior	Frequency	Percent
Yes	9	17.6
No	42	82.4
Total	51	100
Occasioned illegal activities		
Yes	7	13.7
No	44	86.3
Total	51	100
Occasioned Medical Problems		
Yes	13	25.5
No	38	74.5
Total	51	100
Occasioned Risky Sexual Behavior		
Yes	8	15.7
No	43	84.3
Total	51	100
Played Role in Offence Commission		
Yes	20	39.2
No	31	60.8
Total	51	100

Only 17.6 % reported to have engaged in violent behavior due to substance use as illustrated in table 29 above. 13.7 % of the substance users reported to have engaged in illegal activities while 25.5 % reported to have experienced medical problems. The study further observed that of the substance users 15.7 % reported to have engaged in risky sexual behavior due to substance use. A significant 39.2% reported that their substance use had a role in the commission of their current offence.

4.4 Protective Factors influencing the non use/abuse of substances among Offenders under Probation Supervision.

The study tested for one protective factor that may influence the non use of mood altering substances among the sampled population. This was the duration of the respondents' probation sentences; the research hypothesis was that;

- Substance users are more likely to be those with short sentences as opposed to those with long sentences.

The findings are as illustrated below.

4.4.1 Duration of the Respondents' Probation Sentences and the usage of Alcohol

Table 30: Duration of Probation Sentences and Alcohol Usage

Drinking Status (Past 12 Months)	Duration of Probation Sentence		Total
	6-18 Months	19 -36 Months	
Current Drinker	12	34	46
Non Current Drinker	7	26	33
Total	19	60	79

The assumption in this aspect was that majority of the alcohol users were likely to be carrying short probation sentences as opposed to the longer ones. This is based on the premise that short sentences were lenient for offences whose circumstances the courts did not deem to be very grave whose breach may attract similar reaction. Thus rendering long sentences to act as a protective factor this denotes a relationship between sentence duration and the usage of alcohol. This is such that the non drinkers were more likely to be serving longer sentences than the current drinkers. The study revealed that a majority of the non drinkers 26 out of 33 i.e. 78.8% had sentences ranging from 19-36 months. Similarly among the current drinkers a majority 34 out of 46 i.e. 73.9% had sentences ranging from 19-36months. Only a minority 21.2% and 26.1% of non drinkers and current drinkers respectively had shorter sentences ranging from 6-18 months. This therefore has no implication as a protective factor on the use of alcohol.

4.4.2 Duration of the Respondents Probation Sentences and their Usage of Drugs

Table 31: Duration of Probation Sentences and Drug Usage

Drug Use Status (Past 12 Months)	Duration of Probation Sentences		Total
	6-18 Months	19 -36 Months	
Drug User	7	19	26
Non Drug User	12	41	53
Total	19	60	79

The assumption in this aspect was that majority of the drug users were likely to be serving short probation sentences as opposed to the longer ones. This is based on the premise that short sentences were lenient and for offences whose circumstances the courts did not deem to be very grave whose breach may attract similar reaction. Thus rendering long sentences to act as a protective factor this denotes a relationship between sentence duration and the usage of drugs. This is such that the non drug users were more likely to be serving longer sentences than the current drug users. The study revealed that a majority of the non-drug users 41 out of 53 i.e. 77.4% had sentences ranging from 19-36 months. Similarly among the current drug users a majority 19 out of 26 i.e. 73.1% had sentences ranging from 19-36 months. Only a minority 22.6% and 26.9% of non drug users and current drug users respectively had shorter sentences ranging from 6-18months. This therefore has no implication as a protective factor on the use of drugs.

4.4.3 Hypotheses testing

For the hypothesis testing, chi-square test was used as a test of association between various variables and the usage of alcohol and drugs and was thus a basis for not rejecting or rejecting the null hypothesis. The table 32 summaries the statistical tests carried out.

Table 32: Hypotheses testing

Alcohol Usage	Variable	X ²	P-value	df	α - Value	Ho
	Parents' Substance Use	0.105	0.746	1	0.05	Not rejected
	Siblings Substance Use	5.568	0.018	1	0.05	Rejected
	Conflict in the Family	0.093	0.760	1	0.05	Not rejected
	Duration of Probation Sentence	0.250	0.617	1	0.05	Not rejected
Drug Usage	Parents' Substance Use	2.297	0.130	1	0.05	Not rejected
	Siblings Substance Use	1.166	0.280	1	0.05	Not rejected
	Conflict in the Family	0.051	0.821	1	0.05	Not rejected
	Duration of Probation Sentence	0.175	0.676	1	0.05	Not rejected

As regards the relationship between respondents' usage of alcohol with; their parent's substance use the chi-square P-value was 0.746 which was greater than the α level of significance of 0.05 meaning the relationship between the two variables is not statistically significant in this case. With regard to their siblings substance use, the chi-square P-value was 0.018 which was less than the α level of significance of 0.05 meaning that the relationship between the two variables was statistically significant in this case. With regard to conflict in the homes where they grew up, the chi-square P-value was 0.760 which was greater than the α level of significance of 0.05 meaning the relationship between the two variables is not statistically significant in this case. Finally with regard to the duration of their probation sentences, the chi-square P-value was 0.617 which is

greater than the α level of significance of 0.05 meaning that the relationship between duration of sentence and the use of alcohol by the respondents is not statistically significant in this case.

As regards the relationship between respondents' drug usage with; their parent's substance use, the chi-square P-value was 0.130 which is more than the α level of significance of 0.05 meaning that the relationship between the two variables is not statistically significant in this case. With regard to their siblings substance use, the chi-square P-value was 0.280 which is more than the α level of significance of 0.05 meaning that the relationship between the two variables is not statistically significant in this case. With regard to conflict in the homes where they grew up, the chi-square P-value was 0.821 which is more than the α level of significance of 0.05 meaning that the relationship between the two variables is not statistically significant in this case. Finally with regard to the duration of their probation sentences, the chi-square P-value was 0.676 which is greater than the α level of significance of 0.05 meaning that the relationship between duration of sentence and the use of drugs by the respondents is not statistically significant in this case.

CHAPTER FIVE: SUMMARY CONCLUSION AND RECOMMENDATION

5.0 Summary of Findings and Conclusions

The study revealed a substance use rate of 64.6% i.e. for users of both alcohol and other drugs. This indicates there is a significant substance use problem among offenders under probation supervision in Limuru. This compares to findings of a study in Chicago that reported a substance use rate of 82% among arrested persons. There was a larger proportion of alcohol users among the sampled population 58.2% compared to drug users who were 32.9% clearly illustrating that alcohol as a problem is more pronounced than drug use. The drug use rate is slightly lower than the 67% rate established in a survey of prisoners in Scotland but higher than the rate in the global general population of 5.7% according to UNODC (2010) and much higher than that of the general household population in Scotland which was at 13% according the Scottish Crime and Victimization Survey of 2006. Prevalence of both alcohol and drug use was lowest among the female population; only 15.2% of the 46 current alcohol users were female. Similarly only 3.8% of the 26 current drug users were female this illustrates that the substance abuse problem is more pronounced among the male population.

It was noted that alcohol use was highest among offenders convicted of the offence of possession of bhang at 87.5% followed by those convicted under the alcoholic drinks control act 66.7%, theft of property at 61.8% and finally physical assault with a rate of 48.5%. Similarly drug use was highest among offenders convicted of the offence of possession of bhang at 87.5% followed by theft of property at 29.4%, then physical assault at 21.2%. 1 out of 2 i.e. 50% of those convicted under the alcohol drinks control act was a drug user and the only offender convicted of gambling was a user of bhang. It is important to note that majority of the offenders under supervision fall under the category of theft and physical assault. Between the two categories prevalence of both alcohol and drug use was higher among those convicted of theft.

The study revealed that the most commonly used alcoholic beverage was beer used by 31 out of 46 i.e. 67.4% of the current users of alcohol. Hard liquor followed at 23.9% with chang'aa and traditional brew trailing at 2.2% and 6.5% respectively. The study further revealed that only 2 types of drugs were favored by the drug users i.e. cannabis sativa (bhang) and miraa. Bhang was

avored by the majority of drug users i.e. 73.1% with the balance of 26.9% preferring miraa. Of the 46 current users of alcohol 71.7% reported some level of problem with alcohol, 34.8% reported harmful or hazardous drinking while 36.9% reported dependence on alcohol. This was as measured by the Alcohol Use Disorders Identification Test. With regard to drug use the study revealed that of the 26 current drug users, 26.9% reported a low level drug use problem that would require monitoring and assessment at a later date. 46.2% reported a moderate level problem requiring further investigation. 23.1% reported a substantial drug related problem with 3.8% reporting a severe level problem both requiring assessment and intervention.

The alcohol problem was more prevalent among the age brackets of (26 and above) among the male respondents. Among the female respondents prevalence was highest among the (19-35). In general these findings are inconsistent with reviewed literature which put adolescent youth at higher risk than the adult population. Clearly prevalence is higher in male respondents aged 26 and above at 52.5% than in those aged between 14 and 25 at 23.8%. However among the female respondents prevalence was slightly higher among the adolescent youth with 66.7% respondents between the ages of 14-25 reporting some level of problem drinking compared with only 25% in the age of 26 and above. The Drug use problem in the male population was more prevalent in the age bracket of (14-25years) at 47.6% than in the age of 26 and above at 37.5% prevalence. Among the female respondents prevalence was negligible with only 1 respondent in the age bracket of (19-25years) reporting a moderate level drug use problem.

It was expected that, conflict in the homes within which the respondents were raised would have been a factor influencing the use of alcohol. However this was not the case as it was found not to have any significant relationship with the usage of alcohol by the respondents. The same was the case for substance use by parents which was found not to be significantly related with alcohol use by the respondents. However substance use by siblings it was established had a significant relationship with the use of alcohol by the respondents. Employment status was found not to have a significant relationship with the usage of alcohol by the respondents.

The findings were similar for drug usage with the study revealing that conflict in the homes within which the respondents were raised was not significantly related to the use of drugs by the respondents. This was the case also for substance use by the respondents' parents which was found not to be significantly related to drug use by the respondents. The same was the case for substance use by the respondents' siblings which was found not to be related to drug usage by the respondents this I should point out is unlike findings for alcohol usage that found a significant relationship between the two. As was the case with usage of alcohol employment status did not seem to have any significant relationship with the usage of drugs by the respondents.

The study tested for duration probation sentence as a protective factor. In both the cases of alcohol and drug usage by the respondents the study revealed that there was no relationship between alcohol use and duration of probation sentences in the sense that longer sentences seemed to have no implication on the non use of alcohol by the respondents.

The study revealed that substance use had a negative effect on the relationships between the users and their close family relations such as spouse, parents and close friends. 54.9% of substance users reported to have suffered problems in such relations due to their substance use. 45.1% of the substance users reported that their substance use had occasioned strained relations with and loss of friends. 35.5% of the substance users reported to have neglected their economic activities due to substance use whereas 27.5% reported to have neglected their families due to their substance use.

25.5% of the substance users reported to have suffered medical problems due to their substance use while 19.6% reported to have lost jobs at some point due to substance use. Only 17.6% reported to have engaged in violent behavior due to their substance use and only 15.7% reported to have engaged in risky sexual behavior due to substance use. Contrary to expectation only 13.7% engaged in illegal activities to obtain money to fuel their substance use behavior. On the other hand 39.2% of the substance users said that their substance use had a role in the commission of their current offences.

5.1 Recommendations

The study having revealed an overall substance use rate of 64% means that the problem of substance use is significant one among the offenders under probation supervision in Limuru. Further 39.2% of substance users were of the view that their substance use played a role in the commission of their current offences.

Intervention in the form of substance abuse counseling and rehabilitation is recommended to address the substance use and by extension reduce recidivism. Such intervention should prioritize the component of alcohol abuse as it seems to be more pronounced than drug abuse.

Such intervention should incorporate measures geared towards overcoming external influence from persons such as friends and siblings. It should also be geared towards character formation and the inculcation of moral values that exalt self control and abhor the reverse.

In such efforts it is recommended that special consideration be given to male offenders as they appear to be the most vulnerable in the population. The study additionally recommends an increase in the overall efforts geared towards reduction of the supply of cannabis sativa (bhang) which turned out to be the most commonly used drug.

Finally the study recommends appropriate programs to be put in place that mitigate the effects of substance use. This is especially with regard to effects of a medical nature that include treatment and control of communicable diseases.

5.1 Areas for Further Research

Further study is required to explore the factors that influence substance use and abuse among offenders under probation supervision. It emerged that the traditionally held notions of instability and conflict in the home and substance use by parents did not seem to hold as influencing factors in the study's findings. This is also due to the high awareness levels among the respondents that did not seem to act as a protective factor against substance use. Another area for further research is an investigation of the role played by substance use in the commission of criminal offences by the offenders. This would enhance rehabilitation programs for the offenders on probation especially in the area of preventing future offending.

REFERENCES

- Acuda S. W. (1985) Alcohol and Alcohol Problems Research. International Review Services No.1 British Journal of Addictions.
- Adams Kerryn and Wendy Loxley (2009) Women Drug Use and Crime: Findings from the Drug Use Monitoring Australia Program. Canberra: Australian Institute of Criminology.
- Adler Freda, Mueller Gerhard O. W, Laufer William S. (1995) Criminology. 2nd Edition: The Shorter Version. New York McGraw-Hill INC
- Anderson Dana, Jan Looman and Jeffrey Abracen (2000) Alcohol and Drug Abuse in Sexual and Non Sexual Violent Offenders. Sexual Abuse: A Journal of Research and Treatment.
- APA, American Psychiatric Association (2000). Diagnostic and Statistical Manual of Mental Disorders, 4th Edition, Text Revision. Washington, DC, American Psychiatric Association, 2000.
- Australian Institute of Health and Welfare. (2008). 2007 National Drug Strategy Household Survey: First Results. Canberra: Australian Institute of Health and Welfare.
- Bohm Robert M, Haley Keith N (1999) Introduction to Criminal Justice 2nd Edition. New York. McGraw-Hill
- Boland, Henderson, & Baker, (1998). Case Need Domain: Substance Abuse Assessment Reviews: Forum on Corrections Research.
- Bureau of Justice Statistics (1998) Alcohol and Crime. Washington DC: U. S. Department of Justice.
- Bureau of Justice Statistics (2009) Drug and Crime Facts. Washington DC: U. S. Department of Justice.
- Coomber, Ross (1994) Drugs and Drug use in Society: A Critical Reader. Avon Bath Press.
- Department of Probation and Aftercare Services (2005) Probation Service Strategic Plan 2005-2009. Nairobi: Office of the Vice President and Ministry for Home Affairs

Department of Probation and Aftercare Services (2008) Probation Service Strategic Plan 2008-2012. Nairobi: Office of the Vice President and Ministry for Home Affairs

Gahlinger, M. Paul (2001) Illegal Drugs: A complete Guide to their History, Chemistry Use and Abuse. Hardin: Sage Bush Press

Gill Kawaljeet Kaur (2000) Substance Abuse in Vulnerable Populations. Bombay: DB Taraporevala Son's Publication.

Haji, Asha R J (1985) The Social Economic Factors Associated with Khat use and Abuse in Garrisa (Kenya). M. A. Sociology, University of Nairobi

INCB (2009) Report on the International Narcotics Control Board. New York. United Nations.

Insel Paul M. and Walton T Roth (1998) Core Concepts in Health. California: Mayfield Publishing Company.

Kenya National Bureau of Statistics (2008) Statistical Abstract. Nairobi: Ministry of Planning and National Development.

Kerlinger, Fred N (1983) Foundation of Behavioral Research 2nd Edition. Deki: Surjeel Publications.

Kombo, D. K. and Tromp D. L. A. (2006) Proposal and Thesis Writing: An Introduction. Paulines Publications Africa, Kenya.

Mathenge Jane N (1996) The Role of the Church in The Rehabilitation of Street Children with Special Reference to Nairobi Area. Thesis, Department of Religious Studies, University of Nairobi.

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Motiuk L (1998) Using Dynamic Factors to Better Predict Post Release Outcome. Forum of Corrections Research.

- Mugenda, M. O. and Mugenda, A. G. Research Methods Quantitative and Qualitative Approaches, Africa Center for Technology Studies, Nairobi, Kenya.
- Mwenesi, Halima. A, (1995) Rapid Assessment of Drug Abuse in Kenya. A National Report. Nairobi: United Nations International Drug Programme (UNDCP)
- NACADA (2004) Youth in Peril and Drug Abuse in Kenya. Nairobi: National Agency for Campaign Against Drug Abuse.
- NACADA (2007) Rapid Situation Assessment of Drug and Substance Abuse in Kenya. Nairobi: National Agency for Campaign Against Drug Abuse.
- Nachmias David, Frankfort Chava (1996) Research Methods in the Social Sciences. 5th Edition. London: St Martin Press, Inc
- NSW Department of Juvenile Justice. (2003). 2003 NSW Young People in Custody Health Survey: Key findings report. Sydney: NSW Department of Juvenile Justice.
- Obondo Anne Atieno (1996) The Social Economic Effects of Alcoholism on the Kenyan Family. Doctoral Thesis-Department of Psychiatry, University of Nairobi.
- Siegel Larry (2000) Criminology. 7th Edition: Belmont. Wardsworth
- Ray, O. & Ksir, C. (1996). *Drugs, Society, and Human Behavior*. Boston: WCB/McGraw-Hill.
- UNODC (2004) World Drug Report. New York. United Nations
- UNODC (2010) World Drug Report. New York. United Nations.
- UNDCP (1995). The Social Impact of Drug Abuse. Copenhagen. United Nations Publications
- WHO Assessment Report (1993) Women and Drug Abuse: A Gender Analysis and Review. A Pilot Study of Nairobi City and Kyaume Sublocation Nairobi: University of Nairobi.

Serial No.....

QUESTIONNAIRE

My name is S. N. Njore, I am carrying out a study on substance use and abuse among offenders under probation supervision. I am requesting for your time so that I can ask you a set of questions that will inform the study. I would like to assure you that what we discuss will remain strictly confidential, will be used for academic purposes and that your identity will not be revealed. If you agree to the interview, please let us proceed. Thank you.

PART I: GENERAL INFORMATION

1. Age

Under 13 14-18 19-25 26-35 36 and above

2. Sex of the respondent:

Male

Female

3. Marital Status (*Prompt to get appropriate response*)

Never Married Married Separated Widowed/er

4. Highest level of education (Tick and specify as appropriate)

i. Primary Incomplete

ii. Primary Completed

iii. Secondary Incomplete

iv. Secondary Completed

v. Post Secondary (diploma/certificate)

vi. Undergraduate

vii. Postgraduate

viii. Other (Specify)

5. What religion do you belong to?

i. Catholic

ii. Protestant

iii. Islam

iv. Other

6. What is your current employment status?

i. Full time

ii. Casual/temporary

iii. Unemployed

iv. Self employed

v. Student

vi. Other (specify)

7. What kind of specific work do you do?

- i. Unskilled labour
- ii. Skilled labour
- iii. Low level employees
- iv. Mid level employees
- v. Professional
- vi. Small entrepreneur
- vii. Other (specify).....

8. For which offence were you sentenced to probation?.....

9. What is the duration of your probation sentence.....

PART II: RISK AND PROTECTIVE FACTORS

10. For the most part would you say that you were raised by?

- Mother only Father only Mother and father Sibling (s) Grand Parent Other Relatives

11. Has either of your parents at one point used alcohol or other mood altering substances? Yes No

12. Has either of your parents used alcohol or other mood altering substances in the past 12 months?

- Yes No

13. Have you had occasion for conflict in your immediate family (parents, siblings, cousins etc) that has resulted in injury or the malicious damage of property? Yes No

14. Has any of your immediate family members (parents, siblings, cousins etc) been convicted of a criminal offence? Yes No

15. If answer is yes for 15 above which offence.....

16. Have any of your siblings at one point used alcohol or other mood altering substances? Yes No

17. Have any of your siblings used alcohol or other mood altering substances in the past 12 months?

- Yes No

18. Have any of your close friends used alcohol or other mood altering substances in the past 12 months?

- Yes No

19. Are you aware of the harmful effects caused by abuse of mood altering substances? Yes No

PART III EFFECTS OF SUBSTANCE USE

Instructions: Administer this section to respondents who have registered some level of substance use on the AUDIT and DAST tests

1. How old were you when you had your first alcoholic drink?
Under 13 14-18 19-25 26-35 36 and above
2. How old were you when you first used drugs?
Under 13 14-18 19-25 26-35 36 and above
3. From the list which alcoholic beverage do you mostly take?
 - i. Beer
 - ii. Wine
 - iii. Hard liquor
 - iv. Chang'aa
 - v. Traditional brew
4. From the list which category of drugs do you mostly take?
 - i. Marijuana
 - ii. Sedatives e.g. valium
 - iii. Cocaine e.g. crack, rock, cocaine, speed ball etc.
 - iv. Stimulants e.g. amphetamine, methamphetamine.
 - v. Heroin
 - vi. Others Specify
5. Has substance use created problems between you and your spouse/parents/close relatives? Yes No
6. Have you ever lost friends because of your substance use? Yes No
7. Have you ever neglected your family because of your substance use? Yes No
8. Have you ever neglected your economic activities because of your substance use? Yes No
9. Have you ever lost a job because of your substance use? Yes No
10. Have you ever gotten into fights when under the influence of substances? Yes No
11. Have you ever engaged in illegal activities in order to obtain mood altering substances? Yes No
12. Have you had medical problems because of your use of mood altering substances? Yes No
(e.g. memory loss, hepatitis, convulsions, bleeding, liver sclerosis, jaundice etc.....)
13. Have you ever engaged in risky sexual behavior while under the influence of mood altering substances?
Yes No
14. Do you think your substance use had a role in the commission of your current offence? Yes No

Thank you for your cooperation

PART III EFFECTS OF SUBSTANCE USE

Instructions: Administer this section to respondents who have registered some level of substance use on the AUDIT and DAST tests

1. How old were you when you had your first alcoholic drink?
Under 13 14-18 19-25 26-35 36 and above
2. How old were you when you first used drugs?
Under 13 14-18 19-25 26-35 36 and above
3. From the list which alcoholic beverage do you mostly take?
 - i. Beer
 - ii. Wine
 - iii. Hard liquor
 - iv. Chang'aa
 - v. Traditional brew
4. From the list which category of drugs do you mostly take?
 - i. Marijuana
 - ii. Sedatives e.g. valium
 - iii. Cocaine e.g. crack, rock, cocaine, speed ball etc.
 - iv. Stimulants e.g. amphetamine, methamphetamine.
 - v. Heroin
 - vi. Others Specify
5. Has substance use created problems between you and your spouse/parents/close relatives? Yes No
6. Have you ever lost friends because of your substance use? Yes No
7. Have you ever neglected your family because of your substance use? Yes No
8. Have you ever neglected your economic activities because of your substance use? Yes No
9. Have you ever lost a job because of your substance use? Yes No
10. Have you ever gotten into fights when under the influence of substances? Yes No
11. Have you ever engaged in illegal activities in order to obtain mood altering substances? Yes No
12. Have you had medical problems because of your use of mood altering substances? Yes No
(e.g. memory loss, hepatitis, convulsions, bleeding, liver sclerosis, jaundice etc.....)
13. Have you ever engaged in risky sexual behavior while under the influence of mood altering substances?
Yes No
14. Do you think your substance use had a role in the commission of your current offence? Yes No

Thank you for your cooperation

SUBSTANCE USE/ABUSE

AUDIT (Alcohol Use Disorders Identification Test)

These questions relate to your use of alcoholic beverages during the past 12 MONTHS. This information is important to objectives of the study. Once again I assure you that it will remain strictly confidential, will be used for academic purposes only, your identity will not be revealed and it **WILL NOT** be used against you therefore please be honest as you give your response.

1. How often do you have a drink containing alcohol?
Never Monthly or less 2-4 times a month 3 times a week or more times week
2. How many standard drinks containing alcohol do you have on a typical day when drinking?
1 or 2 3 or 4 5 or 6 7 to 9 10 or more
3. How often do you have six or more drinks on one occasion?
Never Less than monthly Monthly Weekly Daily or almost daily
4. During the past year, how often have you found that you were not able to stop drinking once you had started?
Never Less than monthly Monthly Weekly Daily or almost daily
5. During the past year, how often have you failed to do what was normally expected of you because of drinking?
Never Less than monthly Monthly Weekly Daily or almost daily
6. During the past year, how often have you needed a drink in the morning to get yourself going after a heavy drinking session
Never Less than monthly Monthly Weekly Daily or almost daily
7. During the past year, how often have you had a feeling of guilt or remorse after drinking?
Never Less than monthly Monthly Weekly Daily or almost daily
8. During the past year, have you been unable to remember what happened the night before because you had been drinking?
Never Less than monthly Monthly Weekly Daily or almost daily
9. Have you or someone else been injured as a result of your drinking?
No Yes, but not in the past year Yes, during the past year
10. Has a relative or friend, doctor or other health worker been concerned about your drinking or suggested you cut down?
No Yes, but not in the past year Yes, during the past year

Scoring the AUDIT

Scores for each question range from 0-4, with the first response for each question (e.g. never) scoring 0, the second (e.g. less than monthly) scoring 1, the third (e.g. monthly) scoring 2, the fourth (e.g. weekly) scoring 3, and the last response (e.g. daily or almost daily) scoring 4. For question 9 and 10, which only have three responses the scoring is 0, 2 and 4 (from left to right)

Total Score

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A score of 8 or more is associated with harmful or hazardous drinking, a score of 13 or more in women and 15 or more in men is likely to indicate alcohol dependence.

Ranking of the alcohol abuse problem

AUDIT Score	Degree of Problem
8 and above	Harmful or hazardous drinking
13 and above in females	Alcohol Dependence
15 and above in males	Alcohol Dependence

11. Current alcohol user Noncurrent alcohol user (*Tick where appropriate*)

Scoring the AUDIT

Scores for each question range from 0-4, with the first response for each question (e.g. never) scoring 0, the second (e.g. less than monthly) scoring 1, the third (e.g. monthly) scoring 2, the fourth (e.g. weekly) scoring 3, and the last response (e.g. daily or almost daily) scoring 4. For question 9 and 10, which only have three responses the scoring is 0, 2 and 4 (from left to right)

Total Score

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Ranking of the alcohol abuse problem

AUDIT Score	Degree of Problem
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13 and above in females	Alcohol Dependence
15 and above in males	Alcohol Dependence

11. Current alcohol user Noncurrent alcohol user (Tick where appropriate)

SUBSTANCE USE/ABUSE

DAST-10 (Drug Abuse Screening Test)

The following questions relate to your potential involvement with drugs excluding alcohol and tobacco during the past 12 MONTHS. This information is important to objectives of the study. Once again I assure you that it will remain strictly confidential, will be used for academic purposes only, your identity will not be revealed and it **WILL NOT** be used against you. Therefore please be honest as you give your response.

(When the words drug abuse are used they mean the use of prescribed or over the counter medications used in excess of the directions and any non medical use of any drugs)

1. Have you used drugs other than those required for medical reasons? Yes No
2. Do you abuse more than one drug at a time? Yes No
3. Are you always able to stop using drugs when you want to? Yes No
4. Have you had "blackouts" or "flashbacks" as a result of drug use? Yes No
5. Do you ever feel bad or guilty about your drug use? Yes No
6. Does your spouse (or parent) ever complain about your involvement with drugs? Yes No
7. Have you neglected your family because of your use of drugs? Yes No
8. Have you engaged in illegal activities in order to obtain drugs? Yes No
9. Have you ever experienced withdrawal symptoms (felt sick) when you stopped taking drugs? Yes No
10. Have you had medical problems as a result of your drug use (e.g. memory loss, hepatitis, convulsions, bleeding etc...)? Yes No

Scoring and Interpretation

Score 1 point for each question answered "YES" and 0 for each question answered "NO", except for question 3 for which a "NO" answer receives 1 point and 0 for a YES answer. Add up the points and interpretations are as follows.

Total Score

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Ranking of the drug abuse problem

DAST Score	Degree of Problem	Suggested Action
0	No problem reported	None at this time
1-2	Low level	Monitor and reassess at a later date
3-5	Moderate level	Further investigation is required
6-8	Substantial level	Assessment required
9-10	Severe level	Assessment required

11. Current drug user Noncurrent drug user *(Tick where appropriate)*