# THE RELATIONSHIP BETWEEN FAMILY SUPPORT, SELF-EFFICACY AND RELAPSE OCCURENCE AMONG YOUTHS RECOVERING FROM DRUG ADDICTION IN SELECTED REHABILITATION CENTRES OF LIMURU SUB-COUNTY

### WANGITHI ISABEL KINYUA C50/89030/2016

A RESEARCH PROJECT SUBMITTED TO THE COLLEGE OF HUMANITIES
AND SOCIAL SCIENCES, UNIVERSITY OF NAIROBI, IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER
DEGREE OF PSYCHOLOGY (COMMUNITY PSYCHOLOGY)

**NOVEMBER 2019** 

### **DECLARATION**This research is my original work and has never been submitted for examination or award

in any other university.	
Signature WANGITHI ISABEL KINYUA C50/89030/2016	Date
This research project has been submitted for exam supervisor.	nination with my approval as the
Signature	Date
PROFESSOR MICHAEL M NDURUMO	
Department of Psychology	
University of Nairobi.	

#### **DEDICATION**

I give thanks to the almighty God for enabling me to do and complete this project despite the challenges faced. I heartily dedicate this research to my mother, Miss. Teresiah Njoki Gichangi for the emotional, spiritual and financial support and for encouraging me to soldier on when I felt stuck. I would also like to dedicate this research to my uncles; Dr. Michael Mbee Gichangi and Dr. Antony Runo Gichangi, my aunts; Mrs. Githogori and Mrs. Runo for the unending support and encouragement during this whole study period. This study is due to the undying grace and love of God.

#### ACKNOWLEDGEMENT

I heartily want to thank the almighty God for his unending sustenance and assistance. I enthusiastically acknowledge the technical assistance from my supervisor Professor Michael M Ndurumo without whose unwavering support, guidance and encouragement this research project would not have been accomplished. He guided and motivated me towards meeting my deadlines, sacrificed his personal time just to guide me all through the research period. I really appreciate and thank him for everything. Extended gratitude goes out to the Department of Psychology, lecturers and staff for all the support they have accorded me throughout my study period. I thank my fellow class and course mates for the guidance, encouragement and gently nudge to finish this course and research work; the sacrifices you made for me are very much appreciated. I wish to convey my sincere gratitude to the administrators and staff members of the rehabilitation centres I involved in my study; for granting me permission and great support during the research period. To my respondents, I am greatly indebted because without you this study would not have been a success. Finally I would like say a big thank you to my brother; Collins Munene and my cousins; Dr. Wanjiru, Miss. Muthoni, Mr and Mrs. Maina and Mr and Mrs. Gichangi for their support, patience, encouragement and understanding throughout the whole study period. May the Grace of God be with you all.

### TABLE OF CONTENTS

DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENT	iv
TABLE OF CONTENTS.	V
CHAPTER ONE.	1
INTRODUCTION	1
1.1 Background of the Study	1
1.2 Statement of the Problem.	4
1.3 Purpose of the Study	5
1.4 Objectives of the Study	6
1.5 Research Questions.	6
1.6 Hypotheses.	6
1.7 Justification.	7
1.8 Significance of the Study	7
1.11 Scope and Delimitations.	8
1.12 Limitations	8
1.13 Operational Definition of Terms.	9
CHAPTER TWO	12
LITERATURE REVIEW	12
2.1 Introduction.	12
2.2 Family support and self-efficacy of youths recuperating from addiction to drugs	12

2.3 Family Support and Relapse among young recovering addicts	16
2.4 The relationship amid family support, self-efficacy and relapse of	young recovering
addicts	21
2.5 Role of confounding variables	25
2.5.1 Age and self- efficacy and relapse amongst young recuperating	
drugs	
2.5.3 Socio-Economic status, employment, self-efficacy and relapse	
recovering drug addicts	31
2.5.4 Summary of Literature Review	32
2.5 Theoretical Framework	34
2.5.1 Social Support Theory	34
2.5.2 Family Systems Theory	36
CHAPTER THREE	40
RESEARCH DESIGN AND METHODOLOGY	40
3.0 Introduction	40
3.1 Research Design.	40
3.2 Location of the Study	40
3.3. The Target Population	40
3.4 Sampling Procedure	41
3.5 Sample size	41
3.6 Instruments of the Study	41
3.6.1 Validity of Research Instrument	42
3.6.1.1 Content Validity	42
3.6.1.2 Construct Validity	42
3.6.1.3 Predictive and Concurrent Validity	42

3.6.2 Reliability of Research Instrument	43
3.7 Pilot Study.	43
3.8 Data Collection Procedure	43
3.9 Ethical Considerations.	44
3.10 Data Analysis	44
CHAPTER FOUR	46
DATA ANALYSIS AND INTERPRETATION	46
4.0 Introduction	46
4.1 Demographic Information	46
4.1.1 Age	46
4.1.2 Gender	47
4.1.3 Level of Education.	47
4.1.4 Employment.	48
4.2 Analysis of Hypothesis One.	48
4.2.1 Respondents' Frequency of Self-efficacy	48
4.2.2 Chi-square Test: Correlation amid Family Support and Self Efficacy	49
4.3. Analysis of Hypothesis Two	50
4.5 The correlation of Age, Gender, Education and Employment level with Self-and Relapse.	· ·
CHAPTER FIVE	55
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	55
5.0 Introduction	55
5.1 Internal and External Validity	55
5.2 Summary of Findings	56

5.2.2 Extent to which Support from the family correlates with Relapse	e among Young
recuperating Addicts	58
5.2.3 Extent to which Support from the family, Self-efficacy and Rela	pse of Young
Recovering Addict	59
5.3 Conclusions.	60
5.4 Recommendations	60
REFERENCES.	61
APPENDICES	71
Appendix I: Questionnaire	71
Appendix 2: University Authorization/Introduction Letter	75
Appendix 3: University Letter to the National Commission for Science	e, Technology and
Innovation (NACOSTI)	75
Appendix 4: Government Research Permit	76

### LIST OF TABLES

Table 4.1: Efficacy of the respondents	.49
Table 4.2: Chi-square test: Family support on self-efficacy	.49
Table 4.3: Cramer's V Test	.50
Table 4.4: Chi-square test on family support and relapse	.51
Table 4.5: Multivariate regression analysis: Family support on self-efficacy and relapse.	.52
Table 4.6: Relationship amid demographic variables and self-efficacy	.53
Table 4.7: Relationship amid demographic variables and relapse	.54

### LIST OF FIGURES

Figure 2.1: Family systems theory	37
Figure 2.2: Conceptual Framework of the study	38
Figure 4.1: Age of respondents	46
Figure 4.2: Education level of respondents	47
Figure 4.3: Respondent's employment status	48

## CHAPTER ONE INTRODUCTION

#### 1.1 Background of the Study

Addiction is a major concern (Chesang, 2013), there has been an increase in the prevalence of young people becoming addicted to drugs and being taken to treatment facilities. For instance, the United Nations World Drug Report (2014), explained that more than 20 million people take drugs. It amounts to 5% of the world's population. The research found Kenya to be part of the top four quite well-known African nations for drug use. A National Campaign Against Drug Abuse (NACADA) (2012) study about severity of alcohol and drug abuse demonstrates that alcohol and substance abuse in the world is alarming.

The study showed that alcohol accompanied by cigarettes is commonly used by adolescents. An alarming 11.7% are reportedly dependent on alcohol at the age of 15 to 24 years. Unfortunately, this group of age is made up of young people in Kenya, some of whom are students in either secondary or higher educational institutions; depriving the nation of its vibrant workforce, which could otherwise deliver the best of the goods and services of the economy.

Young people in Kenya use drug and substance the most, where peer influence and idleness have been recorded to be the key factors that drive them towards drug use (Njoki, 2013). More than half of Kenya's drug users are amid the ages of 10 and 28, with more than 60% living at the urban places and 21% living in rural areas. Nathaniel, (2014), reported that drug abuse has impacted communities, educational facilities, and work areas because it has influenced persons across all age groups. This has encouraged different organizations to assist those who have fallen victim to addiction by introducing measures to rehabilitate them or equip them with the ability to avoid relapse. Nathaniel, 2014, states the rehabilitation centers are essential. The World Drug Report 2014 showed that the rehabilitation centers offered behavioral change support to about 200 million people in the age range from 16 to 60 years.

According to Higgings (2014), drug users 'recovery and treatment can be described as

the phase in which a patient goes through the health check, mental restoration, and psychoactive drug withdrawal management. The origin of rehabilitation and recovery was in Europe during the First World War. The war's brutal conditions led to substance abuse and addiction among the troops. It culminated in the transfer of more than thousands of soldiers to rehabilitation centers for treatment. Out of the soldiers who went for the rehabilitation program 75 percent recovered fully while 25 percent went back to taking drugs after a period of 6 months (Hubbard, 2014). This shows that although the rehabilitation program did result in recovery of some soldiers there is still a population that relapsed due to unknown factors.

The prevalence of relapse cases of substance abuse in South Africa goes up to 75% amid 3-6 months after treatment (ADINOFF, 2010). Based on statistics from a study in South Africa, Gauteng Province, young people aged 20-24 years admitted to rehabilitation centers for addiction therapy relapse at a rate of 27%. Those aged amid 25 and 29 years relapse at a rate of 17% and those aged from 30 to 34 years 11% and those aged amid 35 and 39 years 7% ((SACENDU), 1996 to 2013). Therefore, it is clear from these findings that younger adults have a higher tendency to relapse during the first few months of rehabilitation discharge. In Kenya, a report in Nairobi found that the number of rehabilitation centers has grown and, at the same time, the number of relapse cases has also increased by 60 million (Gathu, 2013). This is due to the fact that alcoholism is a chronic disease and prone to recur during the first few years of treatment (Chepkwony, Chelule, & Barmao, 2013). The findings indicate that relapse is a key area in the treatment of addiction that requires further investigation, particularly among young people with the highest prevalence of drug abuse (NACADA, 2013).

Stressful family environments were also found to be predictive of relapse (Sanchez-Hervas, 2012). He identified traumatic family conditions to be indicative for relapse. A research by Haegerich & Tolan (2009) on self-efficacy and social support of former addicts who have finished their 30-day, 60-day, 90-day or 120-day therapies confirms that family support is the key factor found in leading to Malaysia's relapse. Results show that a lack of open contact amid former addicts and members of their family raises the

likelihood of addicts to relapse. Around 57% of respondents believe that it is hard to discuss their issues with the group. If this continues, they face a difficult situation that would lead them to relapse.

A study conducted by Swanepoel (2014) in South Africa's Gauteng Province among young Africans in recovery found that 88.6% of men and 77.8% of women receded after discharge because of the absence of family support. This shows the need for family support in the avoidance and treatment of substance abusers.

Maybe the high relapse rates are due to factors that need to be explored within the family system itself. There is proof that some apparently supportive family relationships may potentially encourage relapse (Orford, Velleman, Copello, Templeton, & Ibanga, 2010). Coping techniques such as pouring out liquor or narcotics, coercion, dramatic begging for reform, avoidance, nagging, threatening to divorce, drinking with him / her, and manipulative or coercive methods are referred to as co-dependent habits and have been shown to intensify alcohol and drug usage (Hunter-Reel, McCrady, & Hildebrandt, 2009).

A study conducted by Githae (2015) in Nairobi, Kenya to assess the interaction amid families conveyed emotion and relapse showed that a total of 45 percent of hospitalized alcoholics who recorded re-admission failed to recognize resentment from the members of their family. Twelve percent of respondents were uncertain, 32 percent complied to replies indicating brutality from members of their family, and 11 percent were in agreement. The findings indicated that nearly half of alcoholic families could be viewed as conveying aggression in their family relations, characterizing a family environment that does not support the recovering addict (Githae, 2015). Individuals with the necessary skills as well as high self-efficacy mostly organize the effort required to avoid high-risk alcohol and substance use circumstances effectively (Kadden & Litta, 2011).

When a slip happens, people with a high self-efficacy tend to consider a recurrence as a short term eventuality and then regain control. However, a recent study by Birgen (2013) found that 31.3% agreed and 27.1% strongly agreed to recur due to over-confidence while 10.4% disagreed while 12.5% disagreed strongly. The results further found that respondents below the age of 30 years claimed to have relapsed more than three times having the highest recurrence level of 60% from the sample population, those in their youthful years relapse at a rate of 20% and those in their middle aged years also had the same rate. Although many studies show that members of the family help a recovering addict and the self-efficacy of the abuser anticipate a low likelihood of recurrence, several researchers have shown a difference in their findings.

There is scientific proof that some seemingly supportive family interactions can actually promote recurrence (Orford, Velleman, Copello, Templeton, & Ibanga, 2010). In addition, most studies showed a co-relation amid family support and relapse among alcoholics and the relationship amid self-efficacy and among alcoholics. Research by NACADA (2013) found that alcohol, cigarettes, bhang, miraa / khat, psychotropic drugs and inhalants are the most frequently abused substances by young people. Most of the experiments are performed in Western countries, while most of the research in Kenya is carried out in Nairobi County recovery centres (Githae, 2015; Birgen, 2013 & Gathaiya, 2011).

The researcher conducted the study in the sub-county of Limuru, it is a multi-ethnic population engaged in horticulture, small-scale tea and coffee farming, as well as small businesses lives in Limuru (Kenya Central Statistics Bureau, 2009). It has a total of 14 NACADA-accredited hospital rehabilitation centers and admits clients from across the country (NACADA, 2016).

#### 1.2 Statement of the Problem

Ideally, youths are thought to be the pillar of every nation because of their energy, creativity and youthfulness (Kadden & Litta, 2011). However, substance abuse in Kenya has been shown to be a pandemic that has left the youths to be the most susceptible to the harmful effects on it has users, their households and the community at large (Njoki,

2013). Birgen (2013) found that individuals below the age of 30 years claimed to have relapsed more than three times having the highest recurrence level of 60%. Due to this, the number of treatment facilities that have been built up to address the country's addiction problem has been on the rise. (Gathu, 2013) records an unprecedented shoot in the percentage of addiction treating centers from 13 in 1999 to over 50 in the year 2007. Regardless of the upsurge in treatment centres as a consequence of a rise in demand for their services, there was also a statistical spike in the country's cases of relapse. NACADA (2013), calculated 60% of the country's annual rate of relapse.

While most findings have indicated family support, have a positive impact on self efficacy and relapse, this data is ambiguous. Several studies have shown that family support is not linked favorably to self-efficacy or recurrence (Orford, Velleman, Copello, Templeton, & Ibanga, 2010). While there has been a number of studies conducted to validate the family support/self-efficacy/relapse correlation, these have been performed in the West. The research performed in Africa, has been done in countries with different cultures from Kenya. Furthermore, it is interesting that most family support/selfefficacy/relapse relationship studies have been conducted among alcoholics based on all age groups, whereas findings involving young people with the Narcotic demographics are very scanty or old. An information gap as to why many patients receiving treatment in drug addiction rehabilitation centers are undergoing relapse among the young aged clients exists (Chepkwony, Chelule, & Barmao, 2013). It raises the question of whether support from the family has a high relationship with the self-efficacy and relapse following rehabilitation of drug-addicted youths. The central focus of the study was therefore to establish the link amid support from the family, self-efficacy and relapse amid the young recovering clients, as well as offer current information on relapse among individuals recuperating from addiction to drugs in Limuru Sub-County, Kenya.

#### 1.3 Purpose of the Study

The study aimed at determining whether a connection exists amid support from the family, self-efficacy and recurring to drug use among youths recuperating from addiction to drugs in selected rehabilitation centres in Limuru Sub-County, Kenya.

#### 1.4 Objectives of the Study

The objectives of the study are as follows:

- To identify the extent to which family assistance correlates with self-efficacy amongst youth recuperating from addiction to drugs while admitted at the selected Limuru Sub-County rehabilitation centers.
- ii. To define the degree to which support from the family is correlated with recurrence amongst young people recuperating from addiction to substance while in admission in selected rehabilitation centres in the Sub- County of Limuru.
- iii. To find out the magnitude to which family assistance has a relationship with self-efficacy and recurrence amongst young people recuperating from drug addiction at selected rehabilitation centers in Limuru Sub-County.

#### 1.5 Research Questions

The following study questions were developed for the intent of this research work;

- i. To what extent does family support correlate with self-efficacy among youth recovering from drug addiction admitted at selected Limuru Sub-County rehabilitation centres?
- ii. To what point does family support correlate with relapse among young people recovering from drug addiction admitted at the selected rehabilitation centres in Limuru Sub- County?
- iii. To what degree does family support correlate with self-efficacy and relapse occurrence among young people recovering from drug addiction admitted in selected rehabilitation centres in Limuru Sub-County?

#### 1.6 Hypotheses

The research was carried out to validate the null hypotheses below:

1. **H<sub>0</sub>:** Family assistance has no noteworthy relationship with the self-efficacy among the youths recovering from addiction to drugs while in admission in the selected rehabilitation centres in the Sub-County of Limuru.

- 2. **H<sub>0</sub>:** Family assistance has no noteworthy correlation with substance use recurrence amongst the youths recuperating from addiction to drugs while in admission in the rehabilitation centres selected in Limuru Sub-County.
- 3. **H<sub>0</sub>:** There is no noteworthy correlation amid family assistance, self-efficacy and substance use recurrence among the youths recovering from drug addiction admitted in the selected rehabilitation centres in Limuru Sub-County.

#### 1.7 Justification

Studies by Githae (2015) and Birgen (2013) in Nairobi found that care from the family reduces relapse. However, a study by Copello, Ilbanga, Orford, Templeton & Velleman (2010), shows that family support induces relapse in some situations. Research focused on relapse and self-efficacy showed conflicting findings as to whether family support prevents or triggers relapse in Birgen (2013) and Kadden & Litta (2011). In addition, studies on the function of family support on self-efficacy and relapse are scarce and dated, and limited studies are carried out in Kenya. Preliminary studies have been carried out to identify aspects that have a noteworthy effect on the recovery and sobriety among addicts across all age groups in Kenya, most of which focus on alcoholism (Chepkwony, Chelule, & Barmao, 2013). Few have been done targeting the youths so as to understand the high prevalence of relapse rates among the young recovering addicts (UNDOC, 2005). To comprehend the high prevalence of relapse levels among young recovering addicts, little has been undertaken (UNDOC, 2005). Therefore, the current study aimed at determining empirically verified evidence on how these variables (family support, selfefficacy and relapse) correlate to each other in order to set guidelines for any successful treatment.

#### 1.8 Significance of the Study

Prevention of relapse is the key issue when it comes to controlling dependence. Hence, focus of the current study was to uncover to what degree to which family support relates to self-efficacy and substance use recurrence amongst young people recuperating from

dependency of drugs in the picked substance treatment centres in Limuru Sub-County, Kenya. This study provided quantitative evidence that helped in understand what role support from the family plays in self-efficacy and returning to drug use required to improve fields of action in the treatment of addiction and avoidance of relapse. This study was expected to support dependency counselors by considering different approaches to improving the avoidance of relapse. Individuals healing from dependency can better know their role in prevention of relapse as well as that of their families This research may help NACADA and the Ministry of Health in designing policies that benefit addiction treatment practitioners. The study can help society, including hospitals and religious institutions, identify ways to avoid relapse. The findings of the study can shed light on existing literature on treatment of drug addiction and prevention of relapse.

#### 1.11 Scope and Delimitations

This study had a descriptive nature and focused on young people recovering from drug addiction. The study analyzed and measured the degree of family support provided to the respondents using questionnaires. The family support systems that were assessed included: emotional support, instrumental support, informational support and appraisals. The questionnaire also assessed the self-efficacy concepts that included; the perceived potential of the respondents to: manage stress, say no to substance abuse invites, and to resist certain drug use stimuli. The concepts of relapse included emotional regression, mental relapse, and physiological relapse.

#### 1.12 Limitations

The focus was on eight identified private rehabilitation centers in the sub-county of Limuru, Kenya. Limuru from Kiambu County was purposively selected because most studies on support from the family, self-efficacy and relapsing among recovering addicts have been done in Nairobi County. There are many licensed and unlicensed facilities in Kiambu County for addiction treatment and rehabilitation. Only a number of them were chosen and involved in the study in the Limuru sub-county. Nevertheless, the research results can be extended to other rehabilitation centers in Kenya with similar characteristics. This is because of the following reasons.

- 1. The study used standardized tools to collect data and test the hypothesis. Therefore, the tools reliability and validity were approved giving the findings a high chance of being generalized.
- 2. The participants were all amid 18-39 years whereas, gender, social economic status, and education level were controlled. Therefore, the findings can be extended to other individuals in recovery within the same age group.
- 3. The rehabilitation centres involved in the study were all NACADA accredited and licensed. This means therefore, the findings of the study can be extended to other rehabilitation centres that are accredited by NACADA.

During the course of the study, the main problem was that each rehabilitation center had a different program and the different clients had varying timetables based on their needs. It was difficult, therefore, to easily identify young people aged between 18 and 39. As a result of this purposeful screening was used whereby, therapists found the consumers matching the age group so that they could be asked for consent to participate. It was also a challenge to find the site of the rehabilitation centres. However, it was easier to access them using the address and pin locations on the government website.

#### 1.13 Operational Definition of Terms

The word used in the research and their meanings are given below.

**Attitude:** Is represented by judging a specific entity with some degree of favor or disfavor (Gopnic, 2015)

**Capability:** Is the psychological and physical capacity of the individual to engage in the activity in question. It includes the knowledge and skills required (Mayne, 2016).

**Confidence:** It is a positive belief that you can do what you want to do (Snyder and Lopez, 2009).

**Companionship:** Is "a sense of fellowship and communion" according to the Oxford English (2013).

**Communication:** Is the transfer of knowledge and meaning from one individual to another (Keyton, 2010).

Cravings: The urge to use a drug to feel its euphoric effects and/or to prevent the

abstinence-related symptoms (Farlex, 2013).

**Drug Addict:** A person who is physically and psychologically reliant on a medication in order to obtain the same results through increasing doses of the drug. Withdrawal symptoms arise after a time of abstention from medications, so it is hard to work without the medication in everyday life (Matsumoto, 2009).

**Encouragement:** Is to help others by convincing them that they can work to find solutions or overcome any difficulties they face, to instill courage and confidence in transformation (Sweeney, 2009).

**Youths**: Sigelman and Rider (2006) defined youths as Young adults amid the ages of 20-39. Although Tanner and Arnett (2009), describe them as a mid 18-25 years of age. In order to include all aspects of young adulthood, this research concentrated on young adults aged from 18-39 years.

**Family**: It is the tiniest element in the society, its function is really important, especially as the foundation for personal development in the early stages of development (Rosdiana & Suwarto, 2016)

**Family support**: Attempts by family members to assist a person to resist the use of substances (Rosdiana & Suwarto, 2016).

**Emotional support:** Close friends and family members showing empathy, love, trust and care by providing optimism and a safe space (Karen, Barbra & Viswanath, 2002).

**Instrumental support:** Tangible aid and service (Karen, Barbra & Viswanath, 2002) like care, provision of transportation, medication or food.

**Informational support:** Advice, suggestions, and information (Karen, Barbra & Viswanath 2002) for example, doctors giving advice about how to prevent and manage seizures, parents giving information about how to interact with schoolmates.

**Appraisals:** Information that is useful for self-evaluation (Karen, Barbra & Viswanath, 2002).

**Capability:** Being able to carry out tasks and to select a lifestyle according to personal values (Courtenay, 2008).

**Rehabilitation:** According to J.P. Higgings, (2014) it is a period in which a patient undergoes health checks, mental restoration and the treatment of psychoacti ve drug withdrawal symptoms

**Self-Efficacy:** Believing in your innate aptitude to realize goals, the goal of this study being drugs abstinence (Kolbe, 2009).

**Relapse:** The downturn in an attempt by a person to modify or correct a certain behavior in this study the behavior being modified is the use of substance (Higgings, 2014). He listed three types of relapse namely;

**Emotional relapse**: Emotions like anger and sadness become difficult to manage.

**Cognitive relapse**: One begins to romanticize the days of using drugs and feels that they were greater than the sober days.

**Physical relapse**: one finally starts going back to using environments and associates such that he ends up using the drug of choice.

### CHAPTER TWO LITERATURE REVIEW

#### 2.1 Introduction

Increase substance abuse in modern populations has typically culminated in many families and communities having severe or persistent difficulties (Higgings, 2014). Research among individuals who had undergone treatment for addiction showed that their use of drugs has influenced many aspects of their life (Schafer, 2011). It included disruption and abuse in the home, joblessness, domestic discord and dissolution, physical and mental disorder (Schafer, 2011). In fact, people living with individuals with problems of alcohol and/or narcotics are likely to suffer (Schafer 2011). Drug management and rehabilitation programs are typically engrossed exclusively towards the patient / client, with little or no focus being given to family members (Rosdiana & Suwarto, 2016).

Over the past few decades, services have gradually entailed a 'family dimension,' indicating an increase in awareness of the necessary roles that households can engage in during the management of addiction, as it is also affected by family members ' involvement (Martin, Lewis, Joshua-Martin, & Sinnot, 2010). The importance of the chapter was to investigate support from the family and its impact on self-efficacy and relapsing back to drug use among young recuperating addicts. Previous research literature analysis was focused on the study factors that included; support from the family, self-efficacy, and relapse. Family support was the study's independent variable, while the dependent variables include both self-efficacy and relapse. All objectives of the research were addressed while monitoring the confounding variables; age, race, educational level and employment status

# 2.2 Family support and self-efficacy of youths recuperating from addiction to drugs

Support is the knowledge from others that one is cherished and cared about, respected and supported, as well as part of a communication network or shared responsibilities. Help outlets may come from a wide range such as parents, wife, children, colleagues, acquaintances, youth, social and community connections. Treatment participation of the

parents can be a good indicator of the success of the treatment (Martin, Lewis, Joshua-Martin, & Sinnot, 2010). Using drugs may frequently cause one to alienate himself from his kins (West, 2009).

Self-efficacy is a variable which determines how a person can interpret an activity as distressing and thus can decide how they can relate to it. According to the study, general self-efficacy is correlated with a further positive mindset to yourself and the world. Self-efficacy has an effect on the risk of relapse. Several surveys have pointed out that the most significant factor driving long term recovery from dependence is self-efficacy. The study results would help the author explain the correlation amid care from the community and self-efficacy amid young users who rebound.

Arshat & Ismail (2017) explored the impact of interactions on the self-control and self-efficacy of adolescents by including a maximum of 318 adolescents amid the ages of 13 and 17 who reside in Johor, Malaysia as research respondents. To gather the necessary data from the participants, a self-administered questionnaire was introduced. Before progressing with this study, consent from different parties was acquired. The family relationship indicator included family relationship subscales (like cohesion, support and communication). Responses were rated on a Likert scale of four points (1=Not accurate at all, 2=Scarcely always real, 3=True a bit, 4=Almost always or always true). Teenage resilience assessment was utilized to assess teenage self-control and self-efficacy. Results found that assistance contributed strongly to self-efficacy (r = 0.02, p < 0.01). Additionally, highly self-efficient adolescents come from a family that shows high support levels. However, this study involved respondents amid the ages of 13 and 17. This study's author is targeted at working with young people within the ages of 18 and 39.

Nevertheless, when exploring whether the correlation is significant amid coping strategies, self-efficacy and social support and discrepancies amid these factors during rehabilitation. Williams (2013) undertook a longitudinal study of 27 people attending two steadying and drug-free Drug Rehabilitation treatment programs. Differences within

populations and sex are also assessed; 88% for males and 12% for females. The participants ' age range ranged amid 20-60 years. During the recovery process, respondents were measured annually and three months apart for all four-factor ratings. Wilcoxon analysis was then used to assess discrepancies amid Group A and Group B between the analysis and the re-rest. Self-efficacy and mental quality of life (p=.702) were considered to be a poor relation.

Cibulskytė & Staskevičienė (2017) published another study examining the fluctuations in self-efficacy and support from society to drug dependent women and men during the recovery process. Questionnaires were used to collect the data. The study had 101 alcohol-addicted persons, who took part in Minnesota 12-step program in the centre for addicts. The researcher used questionnaires to gather the data. The study was participated by 101 drug abusers who enrolled in the Institute of Addictive Addiction 12-step program in Minnesota: 33 females and 68 males aged 18-39 and 40-59 (average age was 39). Participants signed the informed consent forms and completed the same questionnaires two times: during the start of being treated and on the finish of being treated. This took approximately 30 minutes to fill the survey, information were processed using SPSS 16.0. Social pre-treatment support is seen in the 40- to 59-year-old age range, while posttreatment connections are seen in both age groups (18-39 and 40-59). The association amid alcohol avoidance, self-efficacy and societal support before care is seen amongst those aged 40 to 59 years, correlation remainned unchanged following therapy. The study revealed that higher overall self-efficacy was correlated with higher perceived social support following recovery during rehabilitation. This study, nevertheless, only had alcoholic participants in the study while the researcher will involve respondents using various drugs that have been reported to be abused by young people.

In spite of this, Bhisma & Mahendra (2016) studied resident self-efficacy to Tanah Merah Rehabilitation Center, Samarinda, irrespective of drug addiction via family support. For case study technique, the analysis used a qualitative method. The data gathering methods used were in-depth surveys, visitors, former users, peers, and citizen family members were research participants. The specimens are collected using purposeful process of

sampling and snowballs. The results showed that one of the variables affecting residents' self-efficacy was encouragement from resident relatives as emotive help, trust to heal, a logic of concern, insightful care as recommendations and from the parent of the resident. The analysis used the technique of snowball sampling which indicated that the author could have polled respondents who chose to be central and therefore could have offered biased testimonies.

Nevertheless, Noor (2017) utilized qualitative research techniques to examine the issue of social factors in order to contribute to future re-establishment relapses and complications faced by rehabilitated individuals towards a rehabilitated life. The approach consisted of a collection of in-depth interviews with pre-selected respondent who were identified using purposive sampling techniques. The results showed a lack of strong self-efficacy among chronic abusers to resist temptations or overcome challenges they face. The rehabilitated drug addicts were known to be highly depressed or overwhelmed by the living environment's social pressure. So that if the community (including the family) does not endorse their decisions about maintaining their sobriety, the influence of weak personality or self-efficacy will not work. This research however, included personality as a variable and did not indicate the nature of the sampled population in terms of age or gender. The researcher is targeting to work with both male and female young recovering addicts.

Results indicated that 48.6 percent of males and 0.0 percent of females relapsed because of lack of self-efficacy; both merged had a p-value of 0.11 that showed statistical significance based on p-0.1. This study was however, was done in South Africa which has a different culture from Kenya. The cultural differences might cause a difference in findings in Kenya. Additionally, the study did not show how family support influences self efficacy

Birgen (2013) conducted a study to evaluate causes of relapse at the picked centers of rehabilitation in Nairobi, Kenya, taking into account the above gap This report followed a cross-sectional research design based on eight rehabilitation centers with 226 clients enrolled. Many alcoholics were aged 26 to 35 years (70.8%) and 95.8% were men, while 2.1% were females. From the results, 27% strongly agreed that their ability to handle high-risk scenarios was overconfident, 30% approved, 10% disagreed and 12% strongly disagreed. This study although done in Kenya did not show how family support influences self-efficacy of individuals recovering from drug addiction

#### 2.3 Family Support and Relapse among young recovering addicts

Razali, Madon, Juhari, & Samah (2016) conducted a study in Malaysia aimed at exploring the connection amid relational variables such as parents, colleagues, and social support with a propensity former drug abusers to relapse. This study examined 242 former drug addicts; data collection was carried out by Russell & Cutrona (1987) using the Social Provisions Scale (SPA) questionnaire. The Reliability Coefficient of these measures was guaranteed using the Cronbach's alpha test which made all of them higher than 70. The results showed that most respondents got moderate family support at 66.5 percent rate. The study also showed a strong positive relationship amid family support and relapse tendency. The frequency of the interaction obtained is intermediate (r=.564, p=.05). The positive correlation shows that there is a strong relationship amid family support and relapse tendency. This means that the higher the support of the family, the higher the tendency to recur. The study concluded that the aid provided by family members could be too much or even inadequate to help recovering abusers get rid of drug problems. Parents and family members should be prepared for the risk of relapse and have adequate knowledge (Heinz, Wu, Witkiewitz, Epstein, & Preston, 2019). Nonetheless, this study did not indicate the age group of or gender the respondents which might have been different from the population targeted by the researcher of the present study.

Osmany, Ali, Rizvi, Khan, & Gupta (2014), did a study in Delhi to assess percieved support and strategies of coping among alcohol and cannabis users and non users. A sample population of 60 respondents; 30 rehabilitation center employees and 30 non-Delhi employees were selected. Percieved level of social support and the cope scale were used in both categories to test social support and coping. Results were evaluated using the t-test and the corelation of the brand moment. The results revealed a higher percentage of emotional coping and dysfunctional coping among the dependent groups than the non-dependent group; All types are used to forecast the use of alcohol and cannabis (Dorard, Bungener, Corcos, & Berthos, 2013).

Dysfunctional or psychological functioning had a detrimental corelation with perceived social support when examining the correlation amid perceived assistance and the form of coping skills utilized. On the other side, constructive coping and perceived social aid had a positive relationship. In addition, this study looked at perceived social support while the author focused specifically at family support; both subconscious and implicit. The findings of the study might have been affected by other types of support received by the respondents.

Noor (2017), also used qualitative research techniques to examine the issue of social factors in leading potential relapse or obstacles to a rehabilitated existence for re-established or rehabilitated drug addicts. The procedures were a collection of in-depth interviews of pre-selected respondents identified using purposeful sampling techniques. The data collected was analyzed and reviewed so as to understand opinions of the participants. The study also shows that the essential factors that can enable individuals recovering from addiction transition to a rehabilitated and regular life are the orchestration of the support of community, the support of family and employer. Nevertheless, this report did not discuss the essence of the association amid care for the community and relapse, nor did it explain the characteristics of the study's surveyed respondents. The possible differences in sample population of this study to the sample population that the researcher will select might be a cause of differences in the study findings.

Additionally, Williams (2013) examined the positive association amid skills for coping, self-efficacy and support from the society with patient life worth in Dublin's drug addiction rehabilitation facilities and studied the disparities amid these factors during treatment. The research was observational by nature and included 27 people who attend two stabilizing and alcohol-free drug rehabilitation services. Variations were also calculated amid groups and gender; 88% of males and 12% of females. The respondents ' age range ranged amid 20-60 years. Nevertheless, this research examined whether a positive correlation exists amid skills for coping, self-efficacy, and quality of life with social support. While the study identified the impact of family support on relapse; support from the family was the self-governing variable, and the governed variable was relapse. The surveyed population also had an age range of 20-60 that the researcher planned to have outside the survey age range.

In spite of the gaps Fayazi, Rokhafroz, Gheibizadeh, Hakim, & Sayadi (2015), conducted a concise research to determine which variables (personal, community, or social) contribute to addiction relapse. It included 146 abusers who were chosen by purposeful and non-randomized testing at addiction treatment facilities in the Iranian city of Ahvaz. The analysis tools used was a questionnaire authored by the researcher, the split-half test and the alpha system used by Cronbach to assess the tool's accuracy. The data gathered was evaluated using descriptive statistics and SPSS software; 46.1% of the specimens were in the 20to 30-year-old age range. 24% of respondents agreed that they had always fallen back due to family prejudice, while 3% ticked at times, 1% rarely, and 6% never ticked. In contrast, 32% acknowledged that they had always fallen back due to the lack of proper family connections. It indicates that care from the parents, whose absence is demonstrated by social bias and lack of proper relationships, coincides with relapse among abusers who relapse. The sample, though, included participants from age groups outside the context addressed by the 19-to 39-year-old author. Just 46% were amid the ages of 20 and 30. The majority of the population outside the specified age range targeted by the

researcher might cause different results in the current study

However, Swanepoel (2014) found that 88.6% males and 77.8% females relapsed due to lack of support after treatment both having a p-value of .400; 45% males and 11.1% females relapsed due one or more of the family members using alcohol or drugs, both having a p-value of .057 which indicated a ststistical significance since the p value was less than 0.1. Both of these causes characterise a family that does not offer the right amount of support (Westhuizen, Alpaslan, & De Jager, 2013). This study was however, done in South Africa which has a different culture from Kenya. The cultural differences might cause a difference in results in Kenya.

In Kenya, Gathaiya (2011) conducted a study to determine relapse causes among schizophrenic patients in Mathari Hospital, Nairobi. The research was of a quantitative cross-sectional type and addressed family members and significant others at Mathari Hospital for 18 years and older. With 209 sampled individuals using the method of random sampling. Data was gathered over a span of two months using semi-structured questionnaires and evaluated using version 16 of SPSS. The results revealed that the majority of participants were amid 27 and 36 years of age with 66% of males and 34% of females. The author discovered that one of the main causes of schizophrenia relapse were family members that lacked sufficient knowledge on schizopheria, making it difficult for them to give the patients adequate and proper support upon hospital discharge. The study did not, however, relate family support with relapse of drug abuse as the researcher targets to.

Kairanya (2010) examined the reasons stopping drug abusers from being treated in drug rehabilitation facilities. The experiment was used to model quantitative research and questionnaire data. This approached centers for drug rehabilitation in the province of Nairobi where seven centers for treatment underwent a survey. For the 49 participants, purposeful and

clear random sampling methods were used. Data was collected using a survey that was intended to provide care to center workers. Using intensity table and percentages, information was evaluated and displayed. The results examined showed that, due to lack of community support, 26.5 million of the people rebounded. Stigmatization and lack of trust were some of the factors why the family did not support them following discharge. Although the family is part of the community, certain community structures may have altered the precise connection amid family support and relapse. This might bring about different results after the data from this current study is analyzed.

On the other side, Githae (2015) conducted a survey to explore the association amid the Conveyed Emotion group (showcased by aggression, disapproval and psychological overinvolvement) and the frequency of recovery deterioration. In Nairobi County, Kenya, samples were taken from groups of untreated alcoholics (N=186) and their family members (N=135). The methods used in the analysis were the Drug Use Disorders Assessment Tool (AUDIT) to test addiction Regression analyzes were used to explain the essence of the variables interaction and to determine the predictive value using the Social Sciences Numerical Suite (SPSS). From the questions asked with the intention of determining the impressions of animosity they felt from their family member, the question: she / he hates caring for me got 10% strong agreement, 17% Agree 19% Unknown 41% Agree 13% Strongly Agree; the question, she / he does no good 7% firmly agrees 18% Agree 10% Unsure 43% Agree 23% Strongly Agree. From the Likert measure with the highest percentage, the findings showed a high percentage of poor family support for the respondents who recurred. Results also established that a relapse is negatively linked to a family member's aggression. While hostility portrays a family that does not support a recovering drug addict, there is still another dimension of care that needs to be analyzed, but this research hasn't done so. In the current study, the author plans to address all facets of family support.

Finally, Birgen (2013) conducted a study to establish factors bringing about relapse in chosen

centers of rehabilitation in Nairobi, Kenya. From findings, 35% strongly agreed that an unsupportive family environment may make them to slip to drinking after treatment, 16% agreed, 6% disagreed while only 18% strongly disagreed on the same. This study only involved participants who were alcoholics leaving out individuals addicted to other drugs, additionally, the study did not look at family support it looked at family environment and relapse.

# 2.4 The relationship amid family support, self-efficacy and relapse of young recovering addicts

A study was conducted in Turkey (Gülaçtquel, 2010) to evaluate if presumed social support is a significant indicator of subjective well-being. The study was attended by 87 students enrolled in the main classroom teacher training school. "Subjective Well-being Index" and "Multi-Dimensional Perceived Social Aid System" have been used in the data collection process. Once ttest results linked to the significance of coefficients of regression were examined, it was recognized that social support earned from the family had a major predictive effect on the degree of subjective well-being. It was decided that there is no significant effect on the degree of personal well-being of social support provided from a special person and a relative. "Two aspects of psychological well-being were affective and cognitive Affective components comprises of positive emotions such as trust and like doubt, adverse emotions. Cognitive elements often include the happiness of individuals with life. Happiness with life relates to a desire to express happiness with different aspects of one's existence "(Gülaçt, 2010). This study only looked at emotions and life satisfaction in general. Meaning that other emotions are measures of life satisfaction could have contributed to the relationship found from the findings. The researcher is particularly focusing on family support, self-efficacy and relapse. This study also involved participants in the primary school level while the study targets youths aged 18 - 39 years.

Nonetheless, Kamaliya (2014) examined the correlation amid the aspects of social support and

the characteristics of personal well-being (life satisfaction, positive impact, and negative impact) in poor women, especially in Malang City with a study population of 92. The method of analysis used was a statistical methodology. The information was gathered using the questionnaire on the social network and the data analysis tool. The correlative finding was a positive relationship of p=0.00 amid social support and perceived well-being. The researcher also found that enforced and presumed support predicted positive effect, presumed support forecasted life satisfaction, and perceived support also predicted negative impact. The most sought-after social support of the respondents is their spouse. This study though, only targeted women who were married while the researcher will target both men and women in the youth age group of 18-39 years.

The correlative finding was a positive relationship of p=0.00 amid social support and perceived well-being. The correlative result was a favorable p=0.00 correlation amid reported well-being and social support. The study also observed that applied and assumed aid projected positive effect, presumed to support predicted life satisfaction, and expected support predicted negative impact as well. The respondents 'most sought-after social assistance is their partner. The findings showed that presumed support was an important predictor of subjective well-being and negative impact such as self-doubt in life satisfaction. Support has also been an important positive predictor of life satisfaction. Family involvement and help are significant predictors of positive effects such as confidence and self-efficacy (Siedlecki, Salthouse, Oishi, & Jeswani, 2014). Nevertheless, this study determined the correlation amid family support and all the participants 'subjective well-being influences amid the ages of 18 and 95. The current study focused only on family support and self-efficacy amongst that young people recuperating from addiction to drugs.

Incidentally, in Malaysia, a maximum of 318 adolescents aged 13 to 17 years were included as participants in a research, that examined the impact of relationships in the family on ability to control self and self-efficacy was studied. The test of family interaction was used to assess family relationships. Adolescent resilience measurement was used to measure adolescent self-control

and self-efficacy. The findings found that young people with poor family connections are more likely to have weak social skills. At the adolescent age, giving support and providing sufficient affections for the growing teen is essential (Arshat & Ismail, 2017). Another study found that self-efficacy is a somewhat big indicator of abstinence from alcohol usage post-treatment (Litt & Kadden, 2011).

In addition Nikmanesh, Baluchi, & Motlagh, (2016), studied the function of self-efficacy values and support from the society in predicting dependency relapse. The method of study was a correlation of factors. The findings were that F was 34.75 and significant in 0.000 for self-efficiency. Therefore, in self-efficacy beliefs, for those who experienced and did not experience going back to addiction, were different. The average self-efficacy rating in the non-relapse community was more than the relapse group value. These findings also found that F was 46.41 in social support and 0.000 in value. Therefore, amid the two classes, topics with and without dependency relapse, there was a significant difference. Those who had not one back to drugs, had lower societal support than the group that had gone back to drugs. The data revealed that self-efficacy foresees 0.17 of addiction relapse alterations, but social support foresees 0.22 of their changes. However, this research used snowball sampling method which could have caused some of the participants to respond with bias.

To cater for this inaccuracy, Noor (2017), Used qualitative research approaches to examine the issue of social factors in leading to future relapse and problems for rehabilitated drug addicts towards rehabilitated existence. The results showed that chronic abusers lacked a strong self-efficacy to escape life-threatening temptations, obstacles and triggers. The rehabilitated drug addicts were known to be very sensitive people, readily distressed and overwhelmed by the living environment's social pressure. So that if the world (including the family) does not support their decisions about maintaining their sobriety, their weak personality or self-efficacy could not function. This research did not indicate the nature of the sampled population in terms of age or

gender making while the researcher is targeting to work with young recovering addicts. The study also focused on the whole environment of the individuals recovering not just the family as the current study intends to.

Therefore, Gathaiya (2011) investigated relapse factors among schizophrenic patients at Mathari Hospital, Nairobi. The results showed that most of the patients were aged amid 27 and 36 with males being 66% and females being 34%. The researcher also found that most of the patients relapsed due to the side effects of the medication the main reason they would stop is lack of knowledge on how to counter the side effects which contributed to them having low belief in their ability to continue with the medication and manage the side effects. In contrast, family support was also a relapse predictor as most family members did not have sufficient details on how best to support clinicians while suffering side effects. Nevertheless, this report is investigating the regression in clinicians with schizophrenia while the current study would discuss substance abuse relpase.

Focusing on substance abuse, Birgen (2013) investigated the factors leading to reoccurrence in picked rehabilitation centers in Nairobi, Kenya. The results indicated that most alcoholics were aged 26 to 35 years (70.8% to 95.8% were males and 2.1% were females). From the results, 27% strongly agreed that they had fallen back due to their overconfidence in their ability to handle high-risk circumstances, 30% agreed that they had fallen back due to lack of support, 10% disagreed and 12% disagreed strongly this research found a correlation amid family support, self-efficacy and relapse. This study although done in Kenya does not show how family support influences self-efficacy of individuals recovering from drug addiction

#### 2.5 Role of confounding variables

# 2.5.1 Age and self- efficacy and relapse amongst young recuperating addiction to drugs

A majority of young people in Kenya are in substance use (NACADA, 2011). The average age indicated for experimentation with different types of drugs in South Africa is 17 to18 years, with the least experimentation age being eleven years and the biggest being thirty years (Swanepoel 2014). Urbanoski, Jelly, Hoeppner, & Slayamaker (2011) reported that this age group is in a developmental stage that poses a significant threat to drug use. Taghizadeh & Cherati (2013), however, conducted a study to establish the connection amid procrastination and self-efficacy amid drug users injecting drugs and other factors. This survey was carried out in the therapy for behavioral disorders, health center in Sari town, Iran, on 178 intravenous drug users. The sample groups were chosen. Concise and inferential statistics were used to quantify distribution assets shown in the frequency tables. Fisher and Spearman-Brown coefficients were used to scrutinize the data and showed that there is no noteworthy relationship seen amid age and self-efficacy.

In another study Individuals who recorded consuming cannabis at older ages had considerably higher self-efficacy rates of marijuana ( $\beta$  = 0.149, P < 0.05) (Hayaki, et al., 2011). However, Nikmanesh, Baluchi & Motlagh, (2017), investigated the function of self-efficacy values and support from the society in predicting a relapse in addiction using a causal-comparison approach. Data linked to the statistical factor of the age of respondents found that amongst people dependent to drugs who haven't relapsed: those aged 30 to 43 was 26.5 million with the biggest percentage and those aged 44 to 57 were 3. In comparison, amongst drug-dependent people with relapse: the 16-29 age group was

26.5 percent with the highest frequency and the 44-57 age group was 6.6 percent with the lowest frequency, which indicated that the level of relapse declined with age rise. This was however in a country with a different culture from Kenya.

In Kenya, Nairobi County, Githae (2015) examined the association amid family potrayed anger and relapse. There were 4 (2.2 percent) of the respondents who were under 18 years of age. Those aged 19 to 25 were 41 (22%), while the most of participants between 26 to 40 were 107 (57.5%). There were 30 (16.1%) participants amid 41 and 55 years of age, while 4 (2.2%) participants were over 56 years of age, which is probably to mean that only a few elderly people were accepted to treatment facilities. This study however focused on alcoholism only while the researcher will be looking at relapse of the drugs reported to be mostly abused by young people.

Low self-efficacy is known to cause recurrence to substances among adolescents. Self-efficacy is crucial for recurring dependence among users (Ibrahim, Kumar, & Samah, 2011). The results of Nikmanesh, Baluchi, & Motlagh (2017) in Iran also found that there were unique self-efficacy beliefs among the two classes, subjects with and without relapse of addiction. Mean self-efficacy rating in the non-relapse category was more than that of the relapse category. From these results it can be inferred that participants aged 16 to 29 years had low self-efficacy rates and those aged 30 to 43 years had modest self-efficacy levels while those aged 44 to 57 years had the highest self-efficacy levels. Swanepoel (2014) also found that 23.5% of the respondents aged 18-24 years and 50% of respondents aged 25-38 years relapsed due to lack of self-efficacy, this shows a positive relationship amid age and relapse.

On the other side, a great deal of self-efficacy can also induce a relapse (Ilze, 2014). Birgen (2013) found that total of 58.4% of the respondents relapsed due to feeling overconfident over their ability to avoid relapse. The results indicated that there were a relationships amid alcoholic relapse with age (p>0.005).

# 2.5.2 Gender, self-efficacy and relapse among young recovering drug addicts

Swanepoel (2014) found that Of the participants, 80% were males and 20% were females. 48.6 percent of male participants accepted to have relapsed due to insuficient self-efficacy, while 0 percent of females reported relapsing.

Additionally, In India, Korlakunta, Chary, & Reddy (2012) analyzed the causes for relapse in patients with alcohol dependence. The research established proximal risk factors that included contextual risks to self-efficacy, depression, external stimulus reactivity, affective conditions, stressful life experiences, gradual loss in social support. The study was done in the inpatient psychiatric zone on clients having alcohol dependence. The sampled population was 190 patients with Alcohol Dependence Syndrome (ADS); 94.7% were male and 5.3% were female. The results was gathered using a semi-structured questionnaire of socio-demographic variables and relapse explanations. Patients are treated with ADS dependent on ICD-10 guidelines. The findings showed that age (p-value= 0.004) and causes for relapse were significantly associated. 46% Of the reported males having relapsed due to cravings while only 10% of the females reported to have relapsed due to cravings. The study did not look at self-

efficacy it only assessed cravings.

However, Zhang, Feng, Geng, Owens, & Xi (2016) Examined self-denial, self-efficacy and drug users 'sources at the mandatory male substance detention center in Shanghai, and drug users 'outlooks towards this type of treatment. A maximum of 36 respondents (semi-structured and in-depth) are surveyed regarding their substance use and treatment record, self-assessment of dependence, reasons to avoid use, future strategies and outlooks to treatment. A conceptual review of answers to interview questions marked for content was conducted. From the findings, "overconfidence" (n=16) and "helplessness" (n=17) were found to be 2 main types of self-efficacy. Overconfident respondents minimized their degree of vulnerability, overstated their self-control and retained perceived motives and attributions. On the other hand, helpless respondents overestimated their dependency rates, exaggerated their ability to control self, as they had inner motives or attributions. Relative to those who were overconfident, vulnerable responders were with more experience of recurrence and were more likely to view recurrence like a loss and to assign recurrence in on purpose. Nevertheless, this study involved only male participants.

While involving both genders, Taghizadeh & Cherati (2013) identified the association amid procrastination and self-efficacy for intravenous drug users and other influences was studied. This cross-sectional study was carried out in the mental disorder therapy, health center in Sari town, Iran, on 178 intravenous drug users. Via census sampling, the samples were collected. Informative and inferential statistics were used to calculate the distribution properties shown as frequency dissemination tables. The results was evaluated using Fisher and Spearman-Brown coefficients and revealed the association

amid drug withdrawal period and self-efficacy was clear and important (P < 0.05). The correlation amid the periods of overcoming dependence and self-efficacy was important and negative (P = 0.05). Furthermore, 48.9 percent males had dependency relapse in the first 4 months afterwards.

However, this study was done in Iran which has a different culture from Kenya. In Kenya, Birgen (2013) did a study to establish factors leading to relapse in selected treatment centers in Nairobi, Kenya. The findings showed significant relationships with age (p>0.005) and alcoholic relapse. Although, the study involved people recovering from alcohol while the present study included young people recovering from addiction to all substance known to be used by youths.

# 2.5.4 Education Level, self-efficacy and going back to drug use amongst young recuperating drug addicts

A National Monitoring of the Future report Johnston, O'Malley, Bachman, & Schulenberg, (2011), found that teenagers with were less educated parents appeared to have the highest percentage of drug using behaviors while in 8th and 10th grades, although the correlation amid parental education and substance usage was favorable among the 12th graders for marijuana and alcohol. Cigarette smoking and parental education associations throughout high school continued to be negative (Johnston, O'Malley, Bachman, & Schulenberg, 2011). Although only high school participants who were younger than the target age group were included in this study.

Nevertheless, Patrick, Wightman, & Schoeni (2012) investigated the correlations of three childhood SES family indicators—salary, prosperity, and parental learning—with

cigarettes, drug consumption, and cannabis use in adolescence. Evidence are collected from the Income Dynamics National Panel Survey, a U.S. family questionnaire that integrates evidence from parents and their kids. That is, the use of these drugs did not vary greatly in the midst of the delivery of parental education. However, this research did not address the relationship amid education, self-efficacy and recurrence. This study however only looked at parents' education level instead of the participant's level of education.

Additionally, Nikmanesh, Baluchi, & Motlagh (2017) investigated the educational level, the frequency distribution of respondents suggested that 9.6 percent of people without relapse have primary education or less. The most common level of education for drug-dependent people without going back to drug use was the middle and high school education at 32 percent. In another study by Korlakunta, Chary, & Reddy, (2012) the uneducated cohort had 33 respondents, the Primary school cohort had 20 respondents, the High school cohort had 51 respondents while the graduate and above group 86 respondents which was the highest. This showed that most of the individuals in the rehabilitation centre were graduates. However, this study was done in a country that has a different culture from Kenya. The difference in the culture might have led to differences in the findings in the current study.

In Kenya, Birgen (2013) also did a study to establish causes of relapse in Nairobi. This study adopted cross sectional research design and at designated rehabilitation centers in Nairobi, Kenya, a review was also undertaken to determine factors contributing to relapse. This report followed sectional research design and concentrated on eight rehabilitation centers with 226 patients being accepted. There were 144 alcoholics and 8

qualified supports in the sample sizes. The results showed that there were significant correlations amid alcoholic relapse and academic level. 41.5 percent of alcoholics were middle-level students and 46.7 percent of them were relapsees. Although the study only involved alcohol recovering persons while the present study will involve youths recovering from addiction to all drugs reported to be used by youths.

# 2.5.3 Socio-Economic status, employment, self-efficacy and relapse among young recovering drug addicts

Substance use is correlated with family socioeconomic status (SES), but there is little agreement on how the two are connected (Huckle, You, & Casswell, 2010). A study was conducted by Patrick, Wightman, & Schoeni (2012) to investigate the correlations of three childhood SES family indicators— income, property, and parental education—with cigarettes, drug consumption, and cannabis use in adolescence. A nationwide survey of youths 18 to 23 years of age, was collected. Young adult information (N = 1,203; 66.1 percent white; 51.5 percent female) on their daily use of liquor, tobacco, and cannabis have been used as result variables for quantitative regression. Previous studies in these fields have not provided clear results (Huckle, You, & Casswell, 2010). This study though did not address the relationship amid social economic status, self-efficacy and relapse rates after treatment.

Another study was done by Korlakunta, Chary, & Reddy,(2012) to assess the reasons for relapse in alcohol dependent patients. They noticed that most of the people who experience relapse are working. The relapse could be induced by way of obtaining the medicines, operating tension. Bad encouragement (48 percent) Craving (72 percent), peer pressure (26 percent) and family issues (22 percent) included the explanations for relapse

found among the working respondents. Due to poor motivation (1%), poverty (13%), social stress (1%) and family problems (7%), the unemployed population rebounded. They noticed that both participants had the main reason to rebound because we feel weak and overconfident. This study however only looked at alcoholism while the current study will be looking at various drugs abused by youths.

Families with plenty of financial resources can do many things together that can serve to improve family members' friendship Chesang's (2013) claimed that there is a correlation amid employment and alcohol and other substances that use youth issues. Nonetheless, the claim by Chesang is based on finding from a study conducted in Kenya that has a culture distinct from Iran.

In kenya,Birgen (2013) found that the correlation amid relapse and profession was negligible, 41.5% of respondents were not officially working and 53.3% relapsed. Although the study involved only alcohol treatment while the analysis involves young people suffering from addiction to all substances recorded to be used by young people.

#### 2.5.4 Summary of Literature Review

The studies evaluated showed a strong relationship amid a supportive family and perceived capability and a significant association amid support from the family and relapse. In fact, most of the findings analyzed found that the participants 'parents were unsure of the best way to support them. Most of the studies analyzed agreed that family support does indeed influence the respondents recuperating from substance dependence. Although, very few studies had support from the family as the self-regulating variable and self-efficacy and relapse as the reliant variable. All these gaps considerably

influenced the researcher to focus the current study towards the direction of having support from the family as the self-governing variable and self-efficacy and relapse as the reliant variables.

Additionally, the studies involved respondents from different age groups. Whereby, the respondents above 40 years appeared to have a higher level of self-efficacy than participants with less than 30 years. These studies showed that the older the respondents the higher their level of self-efficacy was. Family support after discharge from the rehabilitation centres mostly influenced the self-efficacy of the respondents who were below 40 years. Those above 40 years appeared to have a high self-efficacy before and after discharge regardless of the level of family support. The researchers attributed this to be due to the fact that respondents above 40 years had already stabilized in terms of social economic status and employment. However the respondents below 40 years were still trying to stabilize financially and socially.

Results from studies in Kenya also showed a significant age-relapse association. Many participants reporting relapse were amid 25-40 years of age, while those who relapsed due to lack of self-efficacy were amid 26-35 years which was near to the current study's intended age group. The author observed that there was a significant correlation regarding gender, family support and self-efficacy in global and local studies. More males than females acknowledged feeling a loss of self-efficacy due to reduced levels of family support. The number of male respondents in all the studies reviewed was higher than the number of female respondents. However, the studies did not have youths as the sole respondents of the study; individuals below and or above the targeted age group of the current study were also involved. Due to this, the researcher of the current study

involved both male and female respondents in the youth age bracket, who have been reported to experience the largest instances of relapse. This was in order to determine whether these findings would be replicated in the location of the current study.

The educational level indicated a significant correlation with self-efficacy and relapse, but most respondents studied till college level. The studies showed that most of the respondents who relapsed had a college education level. Coincidentally, most of the respondents of the studies had a college level of education. There was a strong relationship amid the social economic position, self-efficacy and relapse. The literature review showed that most of the respondents who had experienced relapse had a low social economic status.

Employment, on the other hand, was not found to have a high connection with relapse. This is because the findings indicated that most of the participants were employed or working. However, a study in Kenya potrayed that most of the respondents were not officially working. Nevertheless, most of the research examined respondents recovering from alcoholism, leaving out people recovering from other substances. The researcher controlled the life standards and education level of the respondents so as to determine whether they both have a noteworthy relationship with the self-efficacy and relapse occurrence of the youths.

#### 2.5 Theoretical Framework

This study applied the principles of the social support and family systems theories to direct the study's conceptual framework.

#### 2.5.1 Social Support Theory

Social support theory, developed by Vaux (1988) is based on the principle that social support can be either emotional (nurturance, empathy, love, trust), informative (advice, guidance), companionship (sense of belonging); materialistic (financial assistance) or as appraisals (Wills, 1991). Support may come from many places, including parents, friends, animals, neighbors, staff, organizations. Social support can either be perceived or received support (Taylor, 2011). Moreover, the level of social support available can be measured as structural support or functional support. Structural support (also called social integration) means how connected a beneficiary is within a social network; such as the number of social links or how an individual's interconnected with the social network (Wills, 1998).

Family relationships and participation in clubs and organizations contribute to social integration. The functional support discusses the specific roles that members of a social network can perform, including the above-mentioned support of emotions, tools, knowledge, and companionship. The individuals recovering from drug addiction need support from the family. They are more likely to have a better transition and maintain sobriety after discharge from the rehabilitation centres if the families offer them functional support Taylor, Sherman, Kim, Jarcho, Takagi & Dunagan, (2004). The emotional support given in the form of trust and empathy is likely to encourage the individuals in recovery to believe in their capability to remain sober (Kadden & Litta, 2011).

Finally, appraisal is also crucial as it encourages one to proceed with the recovery activities. Affirmation from the family members gives one confidence which increases the self-efficacy to maintain sobriety. Willis (1991) stated that instrumental/ financial support is mostly received from parents and guardians; informational support is mostly received from siblings and age mates among youths; emotional support and appraisals can be received from both parents and siblings. Wills (1998) referred to these support as functional support, he added that structural support including social integration in activities should also be ensured as it provides companionship. It also helps keep the individual in recovery busy while also boosting their confidence and self-efficacy. The tenets of this theory guided the conceptual framework of this study as it showed how the variables interact. To support this theory the family systems theory has been discussed

below.

# 2.5.2 Family Systems Theory

This theory by Minuchin, (1974) is amongst foremost key findings created for group psychotherapy. A key tenent of theory include hierarchy, boundaries, interdependency, feedback and equilibrium. Additionally, the central principle of his theory is that the family will be viewed as a system. In line with the theory, a family is viewed to be a broad unit that is prone to change over time and is explicable when its several subsystems are comprehended (Minuchin, 1974). The subsystems include marital, sibling and parental subsystems. Among youths, the sibling subsystem is most likely to offer emotional, appraisals and informational support, the parental subsystem on the other hand is likely to offer emotional, informational, financial, and appraisal support (Munichin, 1974). The main principle states that the family as a unit is more than its parts (Noor, 2017).

Families are made up of interconnected individuals whose relationships, interactions, laws, boundaries and behaviors relate to the conduct of the group. Individual family members impact the system and the system influences the members-there is a significant degree of "influence circularity" (Minuchin, 1974). A section of the unit has an impact on remaining sections, resulting in a continual reorganization of the framework (Schafer, 2011). As related to this research, this basic principle suggests that the dynamics of the family may impact the recovery process of the dependent member of that family. The family member suffering from dependency, on the other side, may affect the overall family. For instance, an addict who steals the assets of his family to meet needs withheld by the family could provoke other family members to respond to his actions in a manner that can cause him / her negative emotions. In exchange, he /she could get the urge to take narcotics to alleviate the emotions. This circularity of events renders dependence the disease of a group, not the disorder of a person.

The basic tenent of this theory is, the necessities and needs not met by a family could contribute distress that is displayed as symptomatic dysfunction perpetuated by one child,

recognized as the 'identified patient' or IP (Nicholas, 2010). An instance, is when a parent denies a child affection and making him/ her child feel unloved, the child may revert to embracing peer's and friend's behaviors like substance abuse in order to get a sense of belonging. Thus the IP is the family member who embodies the problem of the family by having a maladaptive behavior such as drug addiction (Kadden & Litta, 2011). The IP's self-efficacy of saying no to peer pressure is compromised as the drug using action helps to meet the child's unmet need of acceptance (Nicholas, 2010). When the IP begins to feel embraced by the family during recovery it is more likely he/she will have a higher self-efficacy of saying no to peer pressure he/she has overcomes the apprehension of not fitting in with peers. The view of the Family Systems theory is summarized in Figure 2.1 below.

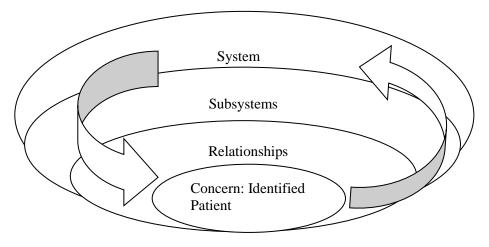


Figure 2.1: Family systems theory

**IP**: Shows disturbance

**Relationships**: Interactions, rules

Subsystems: Marital, Parental & sibling subsystems

**System**: Whole family

In summary, relapse in drug addiction occurs within the individual's social environment. Social network participants, like family members, may help to provide encouragement by expressing their confidence in the ability of the IP to maintain abstinence. Alternately, behaviors and interactions such as cohesiveness, control, and family roles may unconsciously or deliberately demonstrate lack of support to the abstinence mission. These patterns and behaviors influence family members in a revolving

way; because a family member's problem affects the whole family. Family Systems Theory's basic tenets helped conceptualize relapse as a phenomenon created by the negative attitudes and interpersonal complexities of family members coping with an individual overcoming dependency.

#### 2.6 The Conceptual Framework

From the family systems theory, below is the is the conceptual framework explaining and illustrating how the variables of the study, family support, self-efficacy and relapse occurrence relate with each other. The framework gives a description of the constructs of each variable of the study.

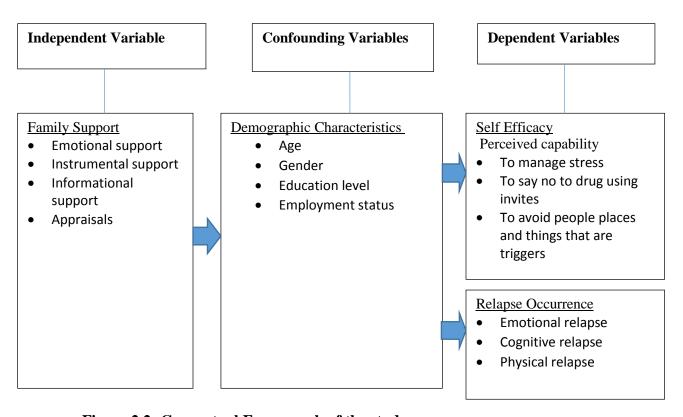


Figure 2.2: Conceptual Framework of the study

Source: Researcher

Clearly, the family support offered to drug-using youths contributes to their self-efficacy

and risk of relapse. In order to avoid relapse, emphasis should be centered on family support as a factor related to self-efficacy and youth rehabilitation. This research therefore sought to analyze the interaction amid the three variables w that include: Family support (independent variable), self-efficacy (dependent variable) and relapse occurrence (dependent variable). As well as other confounding variables. All three variables are interconnected by the confounding variables of the youthful people recuperating from addiction to drugs; age, gender, education level, and employment.

#### **CHAPTER THREE**

#### RESEARCH DESIGN AND METHODOLOGY

#### 3.0 Introduction

Data collection method, processing and analysis used to measure the different concepts listed above and to show the association amid them have been discussed in this chapter. Taking into account the technical processes used in the study. These were addressed in the following subheadings: research design, location of the study, study population, sampling methods and sample size, research tools, validity and reliability, ethical considerations data collection and processing.

#### 3.1 Research Design

A correlation design directed this research to understand the relationship amid variables and to approximate the rate to which support from the family is related to self-efficacy and relapse amid addiction-recovering youths.

# 3.2 Location of the Study

The location for this research was Limuru sub-county which is one of the 12 sub counties of Kiambu county, it is North of Kikuyu sub-county, South of Lari sub-couty and west of Kiambaa sub-county. The residents of Limuru sub-county are multi-ethnic, therefore, they represent the various cultures of Kenya (Kenya Central Bureau of Statistics, 2009). Kiambu County has been synonymous with heavy drug usage (NACADA, 2011) and many people recovering from drug addiction are inclined to seek aid from the county's centers of rehabilitation. Limuru has a total of 14 NACADA-accredited clinic rehabilitation centers and accepts patients from across the world, with 14 rehabilitation centers responsible for 29% of the country's total centers (NACADA, 2016).

#### 3.3. The Target Population

The study identified young people who were recovering from opioid use. They were sampled at any given time of the year from identified drug and alcohol rehabilitation centers with an intake range of 25-100 drug addicts. The research focused on young adults (both male and female) aged 18-39 to include all genders in the process of young

adulthood.

# 3.4 Sampling Procedure

Purposive sampling approach was used to identify young people amid the ages of 18 and 39 who had relapsed to the research. The sample was selected using the aid of addiction counselors who classified clients for an opportunity to participate in the research in the target age group. The NACADA Website was used to choose the 5 centres from which to pick the respondents to engage in the research, namely The Retreat Treatment and Rehabilitation Centre, Lifetime Wellness Treatment and Rehabilitation Centre, Asumbi Treatment Centre, Kentmere and Jorgs Ark Rehabilitation Centre. In cases where there were male and female clients in a centre, both genders were also selected by convenience.

#### 3.5 Sample size

A sample size of 80 respondents aged 18-39 years from the 5 rehabilitation centers were selected using the Kathuri and Pals table. Each centre had more male clients than females therefore most of the respondents selected fitting the sample were male.

#### 3.6 Instruments of the Study

The study used questionnaires to collect data that consisted only of closed-ended items. The information gathered on demographic background, adequacy of family members support, level of self-efficacy, and relationship amid family support and relapse. The level of support received by family members was assessed using the Schuster, Kessler & Asseltine (1990) Family Support and Strain Test. The self-efficacy of the Ip was assessed using the Self-Efficacy Scale for Drug Avoidance (DASES) (Martin, 1992). The questionnaires used a Likert scale of 5 points to assess the study's targets. The questionnaires were chosen because they had the concepts collected from the literature review of the components of the research. Such elements provided care for the parents, self-efficacy and recurrence. 15 items were given to each element and the total number of items obtained was 45.

#### **3.6.1** Validity of Research Instrument

The following types of validity were ensured for the research instruments.

#### 3.6.1.1 Content Validity

It was developed through the pursuit of literature of support family, self-efficacy and relapse. Components of support from the family included emotional support, instrumental support, informational support and appraisals (Karen, Barbra & Viswanath, 2002).

Self-efficacy had the following components; presumed capacity to conduct self-control, stress management capabilities, determination to abstain from using drugs or alcohol and the strength to deal with persistent craving's stimuli (Sutton, 2001). Relapse included elements that include mental relapse where one continues to have trouble controlling feelings such as anger and sadness, psychological relapse where one tends to glorify the use of days and think that they were stronger than the sober days, and ultimately physical relapse where one inevitably begins to use locations and associates and end up using the drug of choice (Higgings, Higgings, 2014).

# 3.6.1.2 Construct Validity

Second, the instruments used in the study and correlated with the objectives set as they included objects that would address all the research questions and check the hypotheses. The questionnaires had 45 items, whereby 15 tested for family support, 15 for self-efficacy and another 15 for relapse. To assess the important and unrelated items, the questionnaires were piloted. The piloting was done in another Rehabilitation centre using eight respondents. The analysis of the questionnaires showed that all the items except three were related to the study objectives and they helped to test the hypothesis. The three items were changed to items that were relevant to the study objectives.

#### 3.6.1.3 Predictive and Concurrent Validity

The study ensured predictive and concurrent validity using the pilot study, which was to be ensured if the results found in the pilot study were also be found in the study. The predictive and concurrent validity was ensured when the findings from the pilot study were replicated by the findings from the actual research.

#### 3.6.2 Reliability of Research Instrument

By using the Cronbach's alpha approach, the researcher determined the reliability of the instrument. This method was acceptable because it included a standard instrument administration and it ensured internal consistency (Kinyua, 2018). After the instruments were piloted and three of the 45 items produced for piloting were corrected, a coefficient of reliability was established. The target for the pilot study was the standard coefficient of .70, whereby items below .70 were cut-off. The pilot study dismissed and resulted in the changing of all the three items under.70. it meant that the remaining items in the instruments were reliable. The internal constancy of the Self-Efficacy Scale for Drug Avoidance (DASES) was highly satisfactory ( $\alpha = 0.809$ ) (Norozi, et al., 2016). While the Schuster, Kessler & Asseltine (1990) Family Support and Strain Test used was found by Saritas & Erci (2019) to have a reliability coefficient of 0.70.

#### 3.7 Pilot Study

It done at the New Hope Center for Rehabilitation; there was a sample of eight people involved. This sample population was different from the one involved in the actual study but they had similar attributes like age and gender as they fit in the youth age group and they were both male and female. The social economic status and education level also appeared to be similar to that of the respondents of the actual study as most fit in the middle and low socio-economic status and the college level of education. The participants of the pilot study were obtained using convenience sampling method and they all gave a verbal consent to be involved in the study. This was after the administrator gave a verbal consent to allow the pilot study to be carried out in the facility. The questionnaires were prepared for analysis and entered into SPSS. The findings were used to examine the instruments' validity and reliability. From the findings, three items were found irrelevant and were changed to relate to the objectives of the study.

#### 3.8 Data Collection Procedure

An introductory letter from the University of Nairobi's Department of Psychology was given to carry out the study. A research permit was sought to perform the study at The National Commission for Science, Technology and Innovation (NACOSTI). The letters

were sent to chosen rehabilitation centre's managers in order to give consent to collect the data at the facilities. The investigator began by explaining the study's objectives and answered questions the respondent had before the instruments were issued. The counselors helped the researcher identify to the young people recovering from drug addiction to engage in the experiment. The respondents were given the questionnaires and time to finish responding to the items of the instruments.

#### 3.9 Ethical Considerations

The researcher was granted a National Commission for Science, Technology and Innovation (NACOSTI) research permit. The investigator then obtained the administrator's consent to perform the study in the rehabilitation centers. Participants were notified and guaranteed of confidentiality towards data they will provide. The respondents, being over the age of 18, were asked to give a verbal consent to engage in the research before filling the questionnaires. They were informed not to indicate their names in order to ensure their anonymity They were assured that the study data was to be used only for academic reasons.

#### 3.10 Data Analysis

Raw data were checked for accuracy and completeness. Evaluation for errors, omissions and editing was done. The data collected from the questionnaire was keyed in the analysis software SPSS version 20.

This study utilized both descriptive and inferential statistical analysis methods. Frequency distribution and cross tabulation helped to analyze gender of the students, support from the family and self-efficacy.

Two forms of the evaluation were used for questions with the Likert scale. First analysis was the generation of frequency distribution and percentages used to analyze each of the Likert items. Then cumulative self-efficacy was established and classified into High (certainly yes, very likely yes and probably yes) and Low (really can't say, probably no, very likely no, certainly no) groups. The Family support was categorized into high (a lot, some and a little) and low (not at all) groups for questions i-vi. However, for reverse questions vii-xv the categories for the two groups were high (not at all) and low (a lot,

some and a little).

For inferential statistics, analysis under each null hypothesis was done as follows:

**Hypothesis one**: The two main factors are family support and self-efficacy in this hypothesis. A Chi-square analysis and Cramer's V were used at a significant level of 0.5 to investigate the correlation amid family support and self-efficacy.

**Hypothesis two:** Under this hypothesis, a Pearson correlation and a chi-square test were done to assess the correlation amid family support and relapse.

**Hypothesis three:** Under this hypothesis, multivariate regression analysis was conducted as an inferential statistic in establishing the correlation amid family support (independent variable), self-efficacy and relapse occurrence (dependent variables).

#### **CHAPTER FOUR**

## DATA ANALYSIS AND INTERPRETATION

#### 4.0 Introduction

The analysis of data and findings interpretation is discussed in this chapter. There were \five parts whereby; the first section discussed demographic information, second, third and fourth sections presented findings on the three targets, and the fifth section presented results on the impact of demographic variables on self-efficacy and going back to drug using habits.

# 4.1 Demographic Information

This part offered an overview of; respondents' age group, their gender, level of educational as well as status of employment.

# 4.1.1 Age

Figure 4.1 provides a dissemination relating to the age of the respondents.

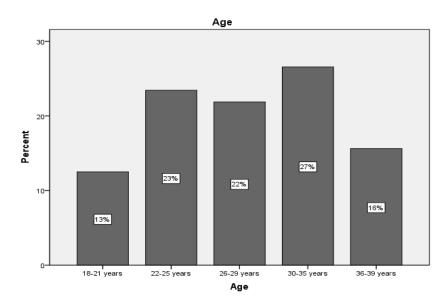


Figure 4.1: Respondents' Age

Findings from the figure above (4.1) indicates that most of the participants (27%) were amid the ages of 30 to 35 years, 23 percent were 22 to 25 years of age, 22 percent 26 to 29 years of age, 16 percent 36 to 39 years of age and 13 percent 18 to 21 years of age.

These findings infer that most rehabilitation centres' clients in their youthful year are amid the ages of 22 and 35 years.

#### **4.1.2** Gender

Findings showed that 65 percent (which is majority of the respondents) were male, while 35 percent were female. This implies that the males are more than females in the addiction treatment centres of Limuru.

#### 4.1.3 Level of Education

The figure below (4.3) shows the respondents' level of eeucation.

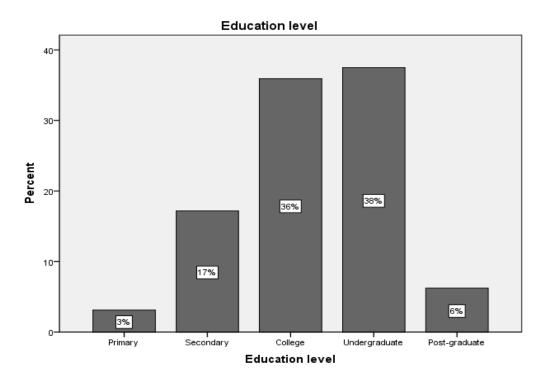
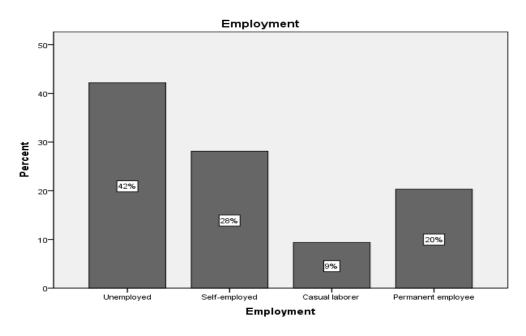


Figure 4.2: Level of Education

38 percent of the participants reported to have an undergraduate education, 36 percent reported to have a college degree 17 percent reported to have a secondary school certificate, 6 percent reported to have a post-graduate degree, and 3 percent of the participants only held a primary school certificate. From the findings, majority had a college and undergraduate education.

# 4.1.4 Employment

Figure 4.3 presents a distribution of the respondents' employment status.



**Figure 4.3: Employment Distribution** 

Most of participants reported to be unemployed (42 percent), 28 percent reported to be self-employed, 20 percent reported to be permanently employed and nine percent reported to be casual laborers. Therefore, most of the clients in their youth years were found to be unemployed.

# 4.2 Analysis of Hypothesis One

The current section helps to test the first hypotheses on whether support from the family does have a noteworthy relationship with the self-efficacy of youth clients recovering from addiction in the selected addiction treatment centres in the sub-county of Limuru where a chi square test was undertaken. The findings were shown below.

# 4.2.1 Respondents' Frequency of Self-efficacy

The table below presents frequencies and percentages on cases of high and low self-efficacy among the respondents of the study.

**Table 4.1: Efficacy of the respondents** 

Efficacy	Frequency	Percent	
Low efficacy	21	23.4	
High efficacy	59	76.6	
Total	80	100.0	

From the results in figure 4.1 above, 59 (76.6%) of the respondents had a high self-efficacy, while 21(23.4%) of the respondents had a low self-efficacy. The results revealed that even though the youths are recovering from drug addiction, they have a high sense of self-efficacy.

## 4.2.2 Chi-square Test: Correlation amid Family Support and Self Efficacy

Results of the chi-square test on the co-relation of support from the family and self-efficacy amongst participants.

Table 4.2: Chi-square test

			Asymp. Sig. (2-
	Value	Df	sided)
Pearson Chi-Square	19.446 <sup>a</sup>	48	.026
Likelihood Ratio	14.179	48	.018
Linear-by-Linear Association	.290	1	.039
N of Valid Cases	80		

a. 73 cells (97.3%) have estimated count less than 5. The least estimated count is .03.

The findings of the table (4.2) indicate that support from the family has a noteworthy corelation with self-efficacy ( $\chi = 19.446$ ; p = 0.026 < 0.05). The Cramer's V Test's findings are presented in the table that follows.

Table 4.3: Cramer's V Test

			Approx.
		Value	Sig.
Nominal by Nominal	Phi	.785	.026
	Cramer's V	.855	.026
N of Valid Cases		80	

Findings of the Cramer's V test indicate that support from the family as well as self-efficacy have a value of 0.855, p = 0.026 < 0.05. Indicating a strong co-relation between support from the family and self-efficacy.

Therefore, the hypotheses (H<sub>o</sub>) stating that "support from the family does have a noteworthy relationship with the self-efficacy of youth clients recovering from addiction in the selected addiction treatment centres in the sub-county of Limuru" got rejected. Meaning that, support from the family does significantly relate with the degree of self-efficacy amongst the youthful clients recuperating from addiction to drugs.

#### 4.3. Analysis of Hypothesis Two

The current section helps to test the second hypotheses on whether support from the family does have a noteworthy relationship with the relapse of youth clients that are recovering from addiction in the selected addiction treatment centres in the sub-county of Limuru where a Pearson correlation and a chi-square test were performed the findings were shown below.

The analysis showed that the two variables of the second hypotheses do have a noteworthy negative Pearson correlation whereby, r = -0.628; p = 0.032 < 0.05. This infers a strong relationship between support from the family and relapse. The Chi-square test findings are indicated below.

Table 4.4: The Chi-square test

			Asymp. Sig. (2-
	Value	Df	sided)
Pearson Chi-Square	44.652	696	.038
Likelihood Ratio	59.652	696	.020
Linear-by-Linear Association	.241	1	.044
N of Valid Cases	80		

a. 750 cells (100.0%) have estimated count less than 5. The minimum estimated count is .02.

The finding of the Chi-square test was that  $\chi = 44.652$ ; p = 0.038 < 0.05. This me means that support from the family and relapse do have a significant value of the Chi-Square. Therefore, the second hypothesis of the study was rejected meaning that support from the family reduces youths' chances of going back to drug using habits after going through rehabilitation.

# 4.4 Analysis of Hypothesis Three

The current section helps to test the third hypotheses on whether support from the family does have a noteworthy relationship with the self-efficacy and relapse of youthful clients that are recovering from addiction in the selected addiction treatment centres in the subcounty of Limuru. In order to test the hypothesis, a multivariate regression analysis was carried out. It was conducted because there are two reliant variables (self-efficacy and relapse) being projected by one self-reliant variable (family support). The findings are illustrated below.

**Table 4.5: Multivariate regression analysis** 

-						95% Confidence Interval	
Dependent			Std.			Lower	Upper
Variable	Parameter	В	Error	T	Sig.	Bound	Bound
Self-efficacy	Intercept	2.985	.532	25.607	.000	21.921	34.049
	Family	.407	.199	19.035	.034	15.015	20.041
Relapse	Intercept	2.335	.437	24.345	.000	20.462	33.208
	Family	380	.163	17.848	.028	12.247	19.406

Findings indicate that support from the family is a noteworthy predictor of the self-efficacy of the youths' (t = 19.035; p = 0.034). Additionally, support from the family is a noteworthy predictor of returning to substance use (t = 17.848; p = 0.028). the analysis also showed that increasing the support being given by the family by one unit results in a 40.7 percent increment in the self-efficacy of the youths ( $\beta = 0.407$ ). In addition, increasing the support given by the family leads to a percentage decrease of 38 in the youths' tendency to go back to drug use ( $\beta = -0.380$ ).

Therefore, the third hypothesis of the study was rejected meaning that support from the family does decrease the chances of the youths returning to drug use as it increases their self-efficacy to avoid drug use.

# 4.5 The correlation of Age, Gender, Education and Employment level with Self-efficacy and Relapse

The current section aims at showcasing how age of respondents, gender, level of education and employment on the self-efficacy and retuning back to drug use of the youths that are recuperating from drug addiction in the selected treatment centres. The Table 4.6 and 4.7 indicate the findings of the correlation amid the confounding variables and self-efficacy as well as return to drug use respectively.

Table 4.6: Relationship of confounding variables and dependent variables

		Unstandardized		Standardized			
		Coefficients	Coefficients		Coefficients		
Mode	1	В	Std. Error	Beta	t	Sig.	
	(Constant)	2.771	.450		6.165	.000	
	Age	147	.077	095	-2.139	.042	
	Gender	020	.184	015	107	.915	
	Education	018	.091	026	194	.847	
	level						
	Employment	.176	.082	.138	1.918	.033	

a. Confounding Variables: Age, gender, level of education status of employment

The results showed that for age (t = -2.139; p = 0.042 < 0.05) and status of employment (t = -2.139; p = 0.042 < 0.05) have noteworthy impacts on the self-efficacy of youths recovering from drug addiction. Whereby, increasing their age by one unit leads to a 14.7 percent decrease in their self-efficacy ( $\beta = -0.147$ ). On the other hand, positively changing the youths' status of employment positively increases their self-efficacy by a percentage of 17.6 ( $\beta = 0.176$ ). Nonetheless, gender of the respondents and their level of education do not have any significant effect their self-efficacy.

b. Dependent Variables: Self- Efficacy and Relapse

Table 4.7: The Relationship of the confounding variable and relapse

		Unstandardized		Standardized		
		Coefficients	Coefficients			
Mode	I	В	Std. Error	Beta	t	Sig.
	(Constant)	3.251	.337		9.635	.000
	Age	.033	.058	.081	.575	.567
	Gender	004	.138	004	030	.976
	Education	154	.069	275	-2.244	.029
	level					
	Employment	145	.062	321	-2.338	.023

a. Confounding variables: Age, gender, level of education and status of employment

The results show that the level of education (t = -2.244; p = 0.029 < 0.05) and the status of employment (t = -2.338; p = 0.023 < 0.05) do significantly affect the chances of relapse occurring. Whereby a unit increment in the level of education of the youths in recovery leads to a percentage decrease of 15.4 in the chances of returning to drug using habits ( $\beta = -0.154$ ). In addition, positively changing the status of employment reduces the possibility of the youth relapsing by a percentage of 14.5 ( $\beta = -0.145$ ). Nonetheless, age and gender do not significantly affect the chances of relapse.

b. Dependent Variable: Relapse

#### **CHAPTER FIVE**

#### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.0 Introduction

This chapter shows discussions as well as deductions made from the findings gotten from the data analysis. Further, it showcases the commendations of the results. The purpose of the study was to assess if there is a correlation amid support from the family, self-efficacy and returning to substance use among the youths that are recuperating from addiction to drugs in centres of treatment in Limuru.

# The hypotheses of the study were

(1) Support from the family does have a noteworthy relationship with the self-efficacy of youth clients recovering from addiction in the selected addiction treatment centres in the sub-county of Limuru; (2) Support from the family does have a noteworthy relationship with the relapse of youth clients that are recovering from addiction in the selected addiction treatment centres in the sub-county of Limuru (3) support from the family does have a noteworthy relationship with the self-efficacy and relapse of youthful clients that are recovering from addiction in the selected addiction treatment centres in the sub-county of Limuru.. Data collection was done among the 80 respondents, and was analyzed in order to test the hypotheses.

#### 5.1 Internal and External Validity

The questionnaire was piloted to assess the accuracy of the research tools used. The questionnaire reliability was measured using SPSS version 20 to assess the Cronbach's reliability coefficient and was concluded to be significant. The mean inter-item covariance was (.0804451), the number of items in the range (7) and the reliability coefficient of accuracy found was (0.8666).

There was one independent variable, family support, which was grouped to three subsets (emotional support, instrumental support, informational support and appraisals), two dependent variables self-efficacy and relapse, and four confounding variables (age, gender, level of education and status of employment). There are strengths and limitations

to be listed in the present study. The strength lies in the distribution of the confounding variables and relapse that is consistent across the study period and gives greater trust in the findings 'accuracy. On the other hand, the limitation is relying on a single measure of self-efficacy and family support provided by self-reporting individuals.

#### **5.2 Summary of Findings**

- 1. Most of the youths recuperating from addiction to drugs in the selected rehabilitation centers of Limuru were ranging between the ages of 22 and 35 years; and most of them were males.
- 2. Most of the respondents held college or undergraduate education levels, while majority of them were jobless.
- 3. The analysis of the data showed a high number of the participants had extraordinary levels of self-efficacy, and that support from the family was significantly related to self-efficacy.
- 4. Family assistance and chances of returning drug use to had a negative Pearson correlation. The findings showed that support from the family has no significant correlation with relapse
- 5. Multivariate regression data analysis was carried out to investigate whether support from the family has any relationship with both self-efficacy as well as with relapse. The finding indicated that an increment in support from the family results in the rise of self-efficacy and decreases the possibility of relapse among the recovering youths.
- **6.** An analysis of the data was undertaken to investigate the effect of age, gender, level of education and status of employment has on self-efficacy and the chances of a relapse occurring. The findings showed increment in age and positively changing the status of employment positively affected the self-efficacy of the respondents. Also, positively changing the level of educational and status of employment reduced possibility of a relapse among youths recuperating.

# 5.2.1 Degree to which support from the family has a connection with self-efficacy

The findings showed that family support and self-efficacy significantly correlate. These findings were supported by Arshat & Ismail (2017) who found that support contributed strongly to self-efficacy. These study findings also agreed with Martin, Lewis, Joshua-Martin, & Sinnot (2010) who concluded that treatment participation of the parents can be a good indicator of the success of the rehabilitation. Bhisma & Mahendra (2016) also found that encouragement of resident families in the form of emotional help, trust to heal, a sense of concern, insightful support in the form of recommendations and advice by the parent of the resident, influenced residents 'self-efficacy. Noor (2017) concluded that if the community (including the family) does not endorse the decisions of one in recovery about maintaining their sobriety, the influence is likely to be a weak self-efficacy towards recovery. The findings are also confirmed by the family systems theory by Munichin (1974), which states that when a family adapts positively to the change being experienced by one of its family member, the change the family member is experiencing is likely to be long lasting as he/she becomes more confident in his capability to change. Therefore, an individual recovering from addiction is likely to have a higher self-efficacy in his recovery if the family also adjusts to behaviors that encourage him/her in the recovery process.

Contrary to the findings of the current study, Cibulskytė & Staskevičienė (2017) found that the association between alcohol avoidance, self-efficacy and societal support before care is only seen in the age group aged 40 to 59 years old, not among individuals aged 18-39. Although, this study showed that there are post-treatment connections between alcohol avoidance, self-efficacy and societal support seen in both age groups (18-39 and 40-59). Additionally, Copello, Ilbanga, Orford, Templeton, & Velleman, (2010), also found that family support induces relapse in some situations. However in this study, the negative relationship is only evident when the assistance given by the family is indicative of codependency, if it is healthy then the association found was negative.

# 5.2.2 Extent to which Support from the family correlates with Relapse among Young recuperating Addicts

The findings showed that family support and relapse had a significant negative Pearson correlation (r = -0.628; p = 0.032 < 0.05), this implies that support from the family and relapse do significantly correlate. The Chi-Square test showed that family support and relapse had a significant chi-square value ( $\chi = 44.652$ ; p = 0.038 < 0.05).

These findings are in tandem with Mohamad Noor (2017) who found that the essential factor that can enable an individual recovering from addiction transition to a rehabilitated and regular life are the orchestration of the support of family. Kairanya (2010) also found that among individuals who had relapsed in his study, the level of family support was very low. Similarly, Rokhafroz, Gheibizadeh, Hakim, & Sayadi (2015), found that care from the parents coincides with sobriety among users. Swanepoel (2014) also found a ststistical significance between support given by the family and relapse. Githae (2015) additionally found that relapse was negatively linked to a family member's aggression. While although Razali, Madon, Juhari, & Samah (2016) found that there is a strong relationship amid family support and relapse tendency, they also found that the higher the support of the family, the higher the tendency to recur. They added that the aid provided by family members could be too much or even inadequate to help recovering abusers remain sober.

The family systems theory ,developed by Munichin (1974), also confirms this findings because it explains how the dynamics, rules and interactions of a whole family affect each family member's behavior. Therefore, if there are triads and dual groups in a family that are biased against the member in recovery, then he or she likely to seek the unmet need outside the family; probably amonngst people who influence him or her to use the drugs.

# 5.2.3 Extent to which Support from the family, Self-efficacy and Relapse of Young Recovering Addict

In the current study though, most of the respondents were found to have had a high self-efficacy; 59 (76.6%) of the respondents had a high self-efficacy, while 21(23.4%) of the respondents had a low self-efficacy. The results indicated that family support is a significant influencer of self-efficacy (t = 19.035; p = 0.034). Further, the results also showed that family support is also a significant predictor of relapse (t = 17.848; p = 0.028). Further analysis indicated that a unit increase in family support would lead to a 40.7% increase in self-efficacy ( $\beta = 0.407$ ). Additionally, a unit increase in family support would lead to a 38% decrease in chances of relapse ( $\beta = -0.380$ ).

These findings are related to Nikmanesh, Baluchi, & Motlagh, (2016) findings which indicated that self-efficacy foresees of addiction relapse alterations and social support also foresees their changes in addiction recovery. They also found that in self-efficacy beliefs, the two groups, with and without relapse of addiction, were different. The average self-efficacy rating in the non-relapse community was more than the relapse group. Family involvement and help were also found to be significant predictors of positive effects such as confidence and self-efficacy by Siedlecki, Salthouse, Oishi, & Jeswani, (2014). In another study Litt & Kadden, (2011), found that self-efficacy was a relatively strong indicator of abstinence from alcohol usage post-treatment. Birgen (2013) also found that there is a an association amid family support, self efficacy and relapse occurrence. Especially if the emotions expressed by the family towards the individual in recovery are supportive and sensitive.

These findings are illustrated by the family systems theory as it states that positive family interactions for example towards or with an individual in recovery from addiction like appraisals, increases the individuals self belief in capability to change and hence ensures consistence abstinence.

#### 5.3 Conclusions

One can deduce that most of youths recovering from drug addiction are below the age of 35 years, with most of them being males. These youths are well educated even though most of them are unemployed. Additionally, the youths recuperating from addiction to drugs in the rehabilitation centres do have a high self-efficacy. The high self-efficacy can be influenced by the amount of support being received from the family. It can also be concluded that increasing support given by the family would reduce the chances the youths relapsing.

Further, the results showed that positively changing the age and status of employment also positively affects the self-efficacy of the youths in recovery. Finally, one can conclude that an increase in education level and in status of employment would significantly reduce the chances of relapsing among the youths in recovery.

#### **5.4 Recommendations**

The following suggestions were listed:

- 1. Addiction treatment facilities should help family members of the individual recovering from addiction (IP) understand the dynamics of addiction. They should help the family identify the problem in the family that he/she is representing so that upon discharge the IP can go home to a stable and supportive environment.
- 2. Addiction counselors should consider facilitating family support for their clients in recovery after discharge as an approach of avoiding relapse.
- 3. Individuals recuperating from substance addiction should be assisted to understand the role their family's interaction and dynamics plays in their recovery process. This will enable them to identify and mitigate interactions and dynamics that could contribute to their relapse.
- 4. NACADA should design policies that will benefit addiction treatment practitioners in the service delivery geared towards relapse prevention. For example, policies facilitating an increase in the self-efficacy of recovering individuals.
- 5. A comparative study should be conducted in other areas with high cases of drug abuse among the youths.

#### REFERENCES

- Adinoff, B. T. (2010). Time to Relapse Questionnaire (TRQ): a measure of sudden relapse in substance dependence. *American Journal of Drug and Alcohol Abuse*, 36:140-149.
- Adinoff, B. T. (2010). Time to Relapse Questionnaire (TRQ): a measure of sudden relapse in substance dependence. *American Journal of Drug and Alcohol Abuse*, 36:140-149.
- Ajila, C., & Olutola, A. (2007). Impact of parents' socio-economic status on university students' Academic Performance. *Life Journal of Educational Studies*, 7(1):31:39.
- American Psychological Association (APA). (2013). *Diagnostic Statistical Manual* (DSM) V. Washington DC: APA.
- American Psychological Association (APA). (2013). *Diagonistic Statistical Manual (DSM) V.* Washington DC: APA.
- American Society of Addiction Medicine. (2011, 12 15). Retrieved from The Definition of Addiction: http://www.asam.org/advocacy/find-a-policy-statement/view-policystatement/public-policy-statements/2011/12/15/the-definition-of-addiction
- American Society of Addiction Medicine. (2011, 12 15). Retrieved from The Definition of Addiction: http://www.asam.org/advocacy/find-a-policy-statement/view-policystatement/public-policy-statements/2011/12/15/the-definition-of-addiction
- Appiah, R., Danquah, S. A., Nyarko, K., Ofori-atta, A. L., & Aziato, L. (2016). Precipitants of Substance Abuse: A Qualitative Exploration. *Journal of drug issues*, 2.
- Appiah, R., Danquah, S. A., Nyarko, K., Ofori-atta, A. L., & Aziato, L. (2016). Precipitants of Substance Abuse: A Qualitative Exploration. *Journal of drug issues*, 2.
- Arshat, Z., & Ismail, N. (2017). Effects of Family Relationships on Adolescents Self-Control and self-efficacy. *International Journal of Humanities and Social Science Invention*, 48-51.
- Arshat, Z., & Ismail, N. (2017). Effects of Family Relationships on Adolescents Self-Control and Self-Efficacy. *International Journal of Humanities and Social Science Invention*, 48-53.
- Barber, J. G. (2002). Social Work with Addictions 2nd edition. New York: Palgrave Macmillan.

- Barber, J. G. (2009). Social work with addictions. New York: Palgrave Macmillan.
- Beck, A. T., Wright, F. D., Newman, C. F., & Leise, B. S. (1993). *Cognitive therapy of substance abuse*. New York: Guilford press.
- Bhisma, R. M., & Mahendra, S. W. (2016). Resident self-efficacy to regardless of drug addiction through resident characteristics in Tanah Merah Rehabilitation Center, Samarinda. *International Journal of Medical Science and Public Health* / 2016 / Vol 5 / Issue, 2366-2372.
- Birgen, J. (2013). A Survey of Factors In Relapse Among Alcoholics In Selected Rehabilitation Centers In Nairobi, Kenya. Nairobi: Moi University Publishers.
- Birgen, J. (2013). A survey of factors in relapse among alcoholics in selected rehabilitation centers in nairobi, kenya. Nairobi: Moi University Publishers.
- Campos, M. D., Fisher, G. L., & Roget, N. A. (2009). Relapse . *Encyclopedia of substance abuse prevention, treatment and recovery*, 2: 772-775.
- Campos, M. D., Fisher, G. L., & Roget, N. A. (2009). Relapse. *Encyclopedia of Substance Abuse Prevention, Treatment and Recovery*, 2: 772-775.
- Chepkwony, S. J., Chelule, E., & Barmao, A. (2013). An Investigation into Prevalence and Factors Contributing To Relapse among Alcoholics in Selected Rehabilitation Centres. *International Journal of Innovative Research and Development, 3*.
- Chepkwony, S. J., Chelule, E., & Barmao, A. (2013). An Investigation Into Prevalence And Factors Contributing To Relapse Among Alcoholics In Selected Rehabilitation Centres. *International Journal of Innovative Research and Development*, 3.
- Chesang, R. K. (2013). Drug abuse among the youth in Kenya. *International Journal of Scientific & Technology Research*, 2(6), 126-131.
- Cibulskytė, M., & Staskevičienė, L. Z. (2017). The changes of self-efficacyand perceived social support of addicted to alcohol women and men during treatment period. *International Journal of Psychology:*, 23-40.
- Cooper, D. R., & Schindler, P. S. (2011). Business research methods (11th ed.). New York: McGraw-Hill.
- Copello, A., Ilbanga, A., Oxford, J., Templeton, I., & Velleman, R. (2010). The 5 step Method: A research-based programme of work to helpfamily members affected by a relative's alcohol or Drug misuse. *Drugs, Education, Prevention and Policy*, 17.

- Cresswell, J. W., & Clark, V. L. (2011). *Designing and conducting mixed methods research*. Los Angeles: Sage.
- Dorard, G., Bungener, C., Corcos, M., & Berthos, M. (2013). Self-esteem, coping, percieved social support in young adults ith a cannabis dependent disorder. *Encephale*, 13.
- Fayazi, S., Rokhafroz, D., Gheibizadeh, M., Hakim, A., & Sayadi, N. (2015).
- Personal, Familial, and Social Factors Contributing to Addiction Relapse,. *Jentashapir J Health Res*, 12-15.
- Gathaiya, N. W. (2011). Factors associated with relapse in patients with schizophrenia at Mathari hospital, Nairobi. Nairobi: University of Nairobi publishers.
- Gathu, R. K. (2013). Trends and Patterns of Emerging Drugs in Kenya: A Case study in Mombasa and Nairobi Counties. Nairobi: NACADA.
- Genetic Science Learning centre. (2008, December 1). Retrieved from Environmental Risk Factors of Addiction: http://learn.genetics.utah.edu/content/addiction/fact
- Githae, E. N. (2015). Relationship amid Family Expressed Emotion And Relapse Occurence Among Inpatient Alcoholics In Nairobi County, Kenya. Nairobi: Kenyatta University publishers.
- Githae, E. N. (2015). Relationship amid family expressed emotion and relapse occurrence among inpatient alcoholics in nairobi county, kenya. Nairobi: Kenyatta University publishers.
- Gitterman, A., & Germain, C. B. (2008). *The Life Model of Social Practice: Advances in thoery and practice*. New York: Columbia University press.
- GülaçtÕ, F. (2010). The effect of perceived social support on subjective well-being. *Procedia Social and Behavioral Sciences* 2, 3844–3849.
- Gurung, R.A.R (2006). Coping and Social Support. Health Psychology: A Cultural Approach. Belmont, CA: Thomson Wadsworth. Pp 131-17
- Hayaki, J., Herman, D. S., Hagerty, C. E., de Dios, M. A., Anderson, B., & Stein, M. D. (2011). Expectancies and self-efficacy mediate the effects of impulsivity on marijuana use outcomes: An application of the acquired preparedness model. *Addiction Behavior*, 36(4):389–96.
- Heinz, A. J., Wu, J., Witkiewitz, K. H., Epstein, D. H., & Preston, K. L. (2019). Marriage and relationship closeness as predictors of cocaine and heroin use. Addictive Behaviors, 34, 258-263.

- Hendershot, C. S., Witkiewitz, K., George, W. H., & Marlatt, A. G. (2011). Relapse prevention for addictive behaviors. *Substance Abuse Treatment, Prevention, and Policy*, 6, 1-17.
- Hendershot, C. S., Witkiewitz, K., George, W. H., & Marlatt, A. G. (2011). Relapse prevention for addictive behaviors. *Substance Abuse Treatment, Prevention, and Policy*, 6, 1-17.
- Higgings, S. T. (2014). *Measuring Inconsistency in Meta Analyses*. London: University of Cardiff.
- Higgings, S. T. (2014). *Measuring Inconsistency in Meta Analyses*. London: University of Cardiff.
- Hubbard, S. P. (2014). Overview of 1-Years Follow-Up outcomes in the Drug Abuse Treatment outcomesStudies (DATOS) Pschology of Addictive Behaviours. Germany: *Journal of Public Health*.
- Huckle, T., You, R., & Casswell, S. (2010). Socio-economic status predicts drinking patterns but not alcohol-related consequences independently. *Addiction*, 105, 1192–1202.
- Huerta, M., & Borgonovi, B. F. (2010). Education, alcohol use and abuse among young adults in Britain. *Social Science & Medicine*, 71(1), 143-151.
- Ibrahim, F., Kumar, N., & Samah, A. B. (2011). Self Efficacy and Relapsed Addiction Tendency: An Empirical Study. *Soc Sci*, 82-277.
- Ilze, S. (2014). The cause of relapse among young African adults following in patient treatment for drug abuse in the Guateng province. Guateng: University of Pretoria.
- Ilze, S. (2014). The cause of relapse among young african adults following in patient treatment for drug abuse in the Guateng province. Guateng: University of pretoria.
- Johnston, L., O'Malley, ,. P., Bachman, J. G., & Schulenberg, J. E. (2011). Monitoring the Future national survey results on drug use, 1975–2010. Volume II: College students and adults ages 19–50. . MI: Institute for Social Research, The University of Michigan.
- Kadden, R. M., & Litta, M. D. (2011, July 29). *The Role of Self-Efficacy in the Treatment of Substance Use Disorders*. Retrieved from HHS Public Access: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3179802/

- Kairanya, L. N. (2010). Factors Hindering Treatment of Drug Abusers In Selected Drug Treatment And Rehabilitation Centers In Nairobi Province, Kenya. Nairobi: Kenyatta University.
- Kairanya, L. N. (2010). Factors hindering treatment of drug abusers in selected drug treatment and rehabilitation centers in nairobi province, kenya. Nairobi: Kenyatta University.
- Kamaliya, N. (2014). The Relationship Amid Social Support And Subjective Well-being On Women in Poverty. Malang: UIN Malang Publishers.
- Kathomi, J. K. (2018). Relationship amid Family Structure, Attitude towards School and Academic Performance In Core Subjects Among Public Secondary School Students In Dagoretti South Sub-County In Nairobi. Nairobi: University of Nairobi.
- Kathomi, J. K. (2018). Relationship amid family structure, attitude towards school and academic performance in core subjects among public secondary school students in dagoretti south sub-county in nairobi. Nairobi: University of Nairobi.
- Kathuri, J. N., & Pals, D. A. (1993). *An introduction to educational research*. Njoro, Kenya: Egerton University Press.
- Kessler, R. C.; McLeod, J. D. (1984). "Sex differences in vulnerability to undesirable life events". *American Sociological Review.* **49** (5): 620–631. CiteSeerX 10.1.1.455.9669. doi:10.2307/2095420. JSTOR 2095420.
- Kenya Central Bureau of Statistics . (2009). *Kenya Population and Housing Census*. Kiambu: Government Printers.
- Kolbe, K. (2009). "Self-efficacy results from exercising control over personal conative strengths".
- Korlakunta, A., Chary, S. R., & Reddy, P. K. (2012). Reasons for relapse in patients with alcohol dependence. *AP Journal of Psychological Medicine*, 4-108.
- Korlakunta, A., Chary, S. R., & Reddy, P. K. (2012). Reasons for relapse in patients with alcohol dependence. *Journal of Psychological Medicine*, 4-108.
- Korlakunta, A., Chary, S. R., & Reddy, P. K. (2012). Reasons for relapse in patients with alcohol dependence. *Journal of Psychological Medicine*, 4-108.
- Kothari, C. R. (2009). Research methodology: Methods and techniques (5nd ed.). New Delhi: New Age International.

- Leahy, R. L. (2003). Cognitive therapy techniques: A practitioners guide. New York: Guilford Press.
- Leise, B. S. (2014). *Clinical work with substance abusing clients*. New York: Guilford Press.
- Leise, B. S. (2014). *Clinical work with substance abusing clients*. New York: Guilford Press.
- Litt, M. D., & Kadden, R. M. (2011). The role of self-efficacy in the treatment of substance use disorders. *Addiction Behavior*, 36(12):1120–6.
- Manuel, J. K., Hagedorn, H. J., & Finney, J. W. (2011). Implementing evidence based psychosocial treatment in specialty substance use disorder care. *Psychology of Addictive Behaviors*, 225-237.
- Manuel, J. K., Hagedorn, H. J., & Finney, J. W. (2011). implementing evidence based psychosocial treatment in speciality substance use disorder care. *Psychology of Addictive Behaviors*, 225-237.
- Marlatt, G. A., Parks, G. A., & Witkiewitz, A. (2002). Clinical guidelines for implementing relapse prevention: A guideline. In The behavioral health recovery management project (pp. 1-49). Seatle, WA: Addictive Behaviors Research Centre.
- Marlatt, G. A., Witkiewitzz, K., Marlott, G. A., & Donovan, D. M. (2005). *Relapse Prevention: Maintenance strategies in treatment of addictive behaviors*. New york: Guilford press.
- Martin, G., & Kats, V. (2003). Families and work in transition in 12 Countries, 1980-2001. *Families and Work in Transition*, 126, 3-32.
- Martin, T., Lewis, T., Joshua-Martin, J., & Sinnot, T. (2010). Client Family-member participation is associated with improved residential treatment program completion at an International drug and alcohol treatment center. *Journal of Groups in Addiction & Recovery. Volume 5 Issue 1*, p34-44, DOI:
- Mgendi, C. (1998). Corruption and drugs in Kenya. *Africa Recovery*, 1-9.
- Mohamad Noor, N. B. (2017). A Study on Rehabilitated Drug Addicts and Society Acceptance towards a Rehabilitated Life. *International Journal of Academic Research in Business and Social Sciences*, 600-614.
- Mwangi, M., & Apollos. (2007). Changing family structures and their implications on gender roles in Nakuru. Nakuru: Apollos.

- Nathaniel, J. (2014). The Role of the Dorsolateral Pre Frontal Cortex: Evidence from the effects of contextual constraints in a sentence completion. New York: Wiley and Sons.
- Nathaniel, J. (2014). The Role of the Dorsolateral Pre Frontal Cortex: Evidence from the effects of contextual constraints in a sentence completion. New York: Wiley and Sons.
- National Campaign Against Drug Abuse (NACADA). (2003). *Handbook on prevention of Drug and Substance Abuse in Kenya*. Nairobi: NACADA.
- Nicholas, M. P. (2010). Family Therapy, Concepts and Methods (9th ed.). New York: Prentice Hall.
- Nikmanesh, Z., Baluchi, H. M., & Motlagh, A. A. (2016). The Role of Self-Efficacy Beliefs and Social Support on Prediction of Addiction Relapse. *International Journal of High Risk Behavior Addiction*, 1-6.
- Nikmanesh, Z., Baluchi, M. H., & Motlagh, P. A. (2017). The Role of Self-Efficacy Beliefs and Social Support on Prediction of Addiction Relapse. *International Journal of High Risk Behavior Addiction*, 1-6.
- Njoki, K. M. (2013). Drug and Substance Abuse In Secondary Schools In Kenya. A Case Study Of Kiambu County. Kiambu: University Of Nairobi.
- Njoki, K. M. (2013). Drug and substance abuse in secondary schools in kenya. A case study of kiambu county. Kiambu: university of nairobi.
- Norcross, J. C., Krebs, P. M., & Prochaska, J. O. (2011). Relapse prevention maintainance strategies in treatment of addictive behaviors. *Journal of clinical psychology*, 143-154.
- (NACADA), N. C. (2013). Trends and Patterns of Emerging Drugs in Kenya: A Case study in Mombasa and Nairobi Counties. Nairobi and Mombasa: National Campain Against Drug Abuse (NACADA).
- Orford, J., Velleman, R., Copello, A., Templeton, L., & Ibanga, A. (2010). The experiences of affected family members: A summary of two decades of qualitative research. *Drugs, Education, Prevention and Policy*, 44-62.
- Osmany, M., Ali, M. S., Rizvi, S., Khan, W., & Gupta, G. (2014). Percieved social support and coping among Alcohol and Cannabis dependents and non-dependents. *delhi Psychiatry Journal*, 375-400.
- Patrick, M. E., Wightman, P., & Schoeni, R. F. (2012). Socioeconomic Status and Substance Use Among Young Adults: A Comparison Across Constructs and Drugs. *National Institute on Alcohol Abuse and Alcoholism*, 1-11.

- Potgieter, M. C. (1998). *The Social Work Process: Development to empower people*. Cape town: Mills Litho.
- R.L. Hubbard, S. P. (2014). Overview of 1-Years Follow-Up outcomes in the Drug Abuse Treatment outcomesStudies (DATOS) Pschology of Addictive Behaviours. Germany: Journal of Public Health.
- Razali, A., Madon, Z., Juhari, R., & Samah, K. A. (2016). The Relationship amid the Social Environmental Factor and the Tendency to Relapse Among Former Drug Addicts. *International journal of pharmacy and pharmaceutical research*, 327-341.
- Repetti, RL, Taylor, S. E, Seeman, T. E (2002). Risky families: Family Social environments and the physical health of offspring. Psychological Bulletin. 128(2): 330-336
- Rosdiana, M. B., & Suwarto, W. M. (2016). Resident self-efficacy to regardless of drug addiction through resident characteristics in Tanah Merah Rehabilitation Center, Samarinda. *International Journal of Medical Science and Public Health*, 2366.
- Schafer, G. (2011). Family Functioning in Families with Alcohol and Other Drug Addiction. *Social Policy Journal of New Zealand, Issue 37*.
- Schuster, T. L., Kessler, R. C., & Aseltine, R. H. (1990). Supportive interactions, negative interactions, and depressed mood. American Journal of Community Psychology, 18(3), 423-438.
- Sereta, B. N., Amimo, F. A., & Ouma, P. (2016). An Assessment of Effectiveness of Drug Rehabilitation Programs in Kisii. *Journal of Health Education Research & Development*, 7.
- Sereta, B. N., Amimo, F. A., & Ouma, P. (2016). An Assessment of Effectiveness of Drug Rehabilitation Programs in Kisii. *Journal of Health Education Research & Development*, 7.
- Siedlecki, K. L., Salthouse, T. A., Oishi, S., & Jeswani, S. (2014). The Relationship Amid Social Support and Subjective WellBeing Across Age. *National institute of Health*, 1-20.
- Sigelman, C. K., & Rider, E. A. (2006). *Life-span Human Development*. Belmont: Thomson Wadsworth.
- Sigleman, C. K., & Rider, E. A. (2006). *Life Span Human Development 5th Ed.* Belmont : Thomson Wadsworth.

- Swanepoel, I. (2014). The causes of relapse amongst young African adults following inpatient treatment for drug abuse in Guateng Province. Guateng: Uniiversity of Pretoria publishers.
- (SACENDU), S. A. (1996 2013, July). Alcohol and drug abuse treatment admissions in South Africa. Retrieved from Sahealthinfo.org: http://www.sahealthinfo.org/admodule/sacendu.html
- (SACENDU), S. A. (1996 2013, July-June 19/10/2018). *Monitoring alcohol and drug abuse treatment admissions in South Africa*. Retrieved from Sahealthinfo.org: http://www.sahealthinfo.org/admodule/sacendu.html
- Taghizadeh, F., & Cherati, J. Y. (2013). Procrastination and Self-Efficacy Among Intravenous Drug Users on a Methadone Maintenance Program in Sari City, Iran. *Iran Journal of Psychiatry behavioral science*, 2-7.\
- Taylor, S.E. (2011). Social support: A Review. The Handbook of Healthy psychology. NewYork: Oxford University Press. Pp 189-214
- Taylor, S.E.; Sherman, D.K.; Kim, H.S.; Jarcho, J.; Takagi, K.; Dunagan, M.S. (2004). Culture and Social Support: Who Seeks It and Why? . *Journal of Personality and Social Psychology*. 87 (3): 354–362
- Taylor, J., Lioyd, D. A., & Warheit, G. J. (2006). Self-derogation, peer factors, and drug dependence among a multiethnic sample of young adults. *Journal of Child and Adolescent Substance Abuse*, 15(2), 31-51.
- Uchino, B. (2009). Understanding the links between social support and Physical Health: A life-span perspective with emphasis on the separability of perceived and received support. *Perspectives on Psychological Science*. 4(3): 236-255.
- Urbanoski, K. A., Jelly, K. F., Hoeppner, B. B., & Slayamaker, V. (2011). The role of therapeutic alience in substance use disorder treatment for young adults. *journal of substance abuse treatment*, 42(1-8).
- United Nations Office on Drugs and Crime (UNODC), U. N. (2005). W.H.O. Expert Committee on dependence producing drugs. Kenya: United Nations.
- Vaux, A. (1988). Social Support: Theory, Research and Interventions. My, NY: Praeger.7
- Wills, T.A., Margaret, Clark. (1991). Social support and interpersonal relationships. *Prosocial Behavior, Review of Personality and Social Psychology.* 12: 265–289.

- Wills, T.A., Blechman, E.A.; Brownell, K.D. (1998). Social support. *Behavioral medicine and women: A comprehensive handbook*. New York, NY: Guilford Press. pp. 118–128.
- Wenzel, A., Leise, B., Beck, A. T., & Freidman, W. D. (2012). *Group cognitive therapy for addictions*. New York: Guilford Press.
- West, R. (2009). Predictors of successful completion of family treatment drug court programs: An archival investigation. *Dissertation Abstracts International Section Humanities and Social Sciences*, pp. 3870. Retrieved from Dissertation Abstracts International Section Humanities and Social Sciences: http://ehis.ebscohost.com/ehost/detail?vid=100&sid=e1fe9346-7bb4-4846-b9e4-0b083830ac47%40sessionmgr114&hid=101&bdata=JnNpdGU9ZWhvc3Qt bGl2ZQ%3d%3d#db=psyh&AN=2009-99070-145
- Westhuizen, V. D., Alpaslan, A. H., & De Jager, M. (2013). Aftercare to chemically dependent addolescents: An Exploration of their needs. *Health SA Gesondheid*, 18(1)1-11.
- Williams, K. (2013). To assess the role of Coping skills, Self-efficacy and Social Support in Addiction Recovery. Dublin: Dublin Business School Publishers.
- Williams, K. (2013). To assess the role of Coping skills, Self-efficacy and Social Support in Addiction Recovery. Dublin: Dublin Business School Publishers.
- Zhang, Y., Feng, B., Geng, W., Owens, L., & Xi, J. (2016). Overconfidence" versus "helplessness": A qualitative study on abstinence self-efficacy of drug users in a male compulsory drug detention center in China. *Substance Abuse Treatment, Prevention, and Policy*, 11-29.

### **APPENDICES**

## **Appendix I: Questionnaire**

THE RELATIONSHIP BETWEEN FAMILY SUPPORT, SELF-EFFICACY AND RELAPSE OCCURENCE AMONG YOUTHS RECOVERING FROM DRUG ADDICTION IN SELECTED REHABILITATION CENTRES OF LIMURU SUBCOUNTY.

Thank you for agreeing to take part in this study. The purpose of the questionnaire' is to examine the effects of family support on self-efficacy and relapse occurrence among youths recovering from drug addiction in Limuru sub county. The information given will solely be used for academic purposes and will be treated with confidentiality and anonymity. The questionnaire is supposed to take approximately five minutes give or take.

## **SECTION 1: DEMOGRAPHIC INFORMATION**

1. Age				
18-21 [ ] 22- 25	5[] 26-29[]	30-35 [ ]	36-39 [ ]	
2. Gender				
Male [ ] Femal	e [ ]			
3. Education leve	el			
Primary [ ]	Secondary [ ] Colle	ege [ ] Under	graduate [ ]	Post graduate [
]				
4. Employment S	Status			
Unemployed [ ]	Self-employee [ ]	Casual laborer	[ ] Permanent	t employee [ ]

# **SECTION 2: FAMILY SUPPORT**

5. The following are statements on <b>family support</b> . Please read each statement ca	refull	y an	d <b>tic</b>	k
either <b>4,3,2 or 1</b> .				
Where: $4 = $ 'not at all', $3 = $ 'a little, $2 = $ 'some', $1 = $ 'a lot'.				
STATEMENTS			2	1
i) My family members really care about me				
ii) My family members really understand the way I feel about things				
iii) I can rely on my family to help me if I have a serious problem				
iv) I can open up to my family if I need to talk about my worries				
v) I feel my family understands the dynamics and nature of addictions				
vi) My family makes too many demands on me				
vii) I find my family lets me down when I am counting n them				
viii) My family communicates opinions, thoughts and feelings sensitively to me				
ix) My family encourages me to engage in sober recreational activities				
x) My family criticizes me				
xi) My family members get on my nerves				
xii) My family controls every decision I make				
xiii) My family members do not financially support me to meet my needs				
xiv) My family members are not a good source of company				
xv) My family members do not understand the dynamics of addiction				

# **SECTION 3: SELF EFFICACY**

6. The following are statements on <b>self-efficacy</b> . Please read each statement carefully and <b>tick</b> either 7,6,5,4,3,2 or 1. Where: 7= 'certainly yes',6= 'Very likely yes', 5= Probably yes 4 =							
'Really can't say, 3 = 'Probably no, 2 = 'Very likely no, 1 = 'certainly no STATEMENTS		6	5	4	3	2	1
i) Imagine that you are going to a party where you will meet new people. You feel that drug use will relax you and make you more confident. Could you avoid drug use?				-		1	
ii) Imagine that you have just blown a good job, you are home alone and sad, would you give in to the urge to take drugs which are in the house?							
iii) Imagine that you are home with a loved one and feeling angry after a fight, you want to make up but at the same time you and to get stoned or loaded, if you had promised yourself that you would go straight for a 2 months and you still have 3 weeks to go. Could you resist the urge to take the drugs?							
iv) Imagine that you are feeling good and have no responsibilities for a couple of days, the only thing that you see against getting a bit stoned or loaded is that you have promised yourself that you would go for a 2 months and you still have 3 weeks to go. Would you take drugs?							
v) Imagine it is late you cannot sleep and there are drugs available in the house. You have decided not to use drugs. Could you resist the urge to use drugs to help you go to sleep?							
vi) Imagine you are home with your loved one and very angry after a fight. You are tempted to get back at your partner by getting stoned/loaded. Would you give into the temptation?							
vii) Imagine that a very important relationship has just ended and you are very sad. Would you give into the urge to take drugs?							
viii) Imagine you have run into two friends who are celebrating a win with drugs. Could you resist their urging to join them in drug use?							
ix) Imagine that you are at a party and you feel uptight. Most people seem to be having a good time. you are tempted to use drugs to looses up, would you?							
x) Imagine that you promised yourself to stay straight for two months but you have just blown your five week record with one hit or drink. Would the situation lead you to take a second one?							
xi) Imagine that you have managed to stay straight for a near record time but last night you blew it. Because of last night you are feeling weak. Would you take drugs tonight?							
<ul><li>xii) Imagine that you are home alone and sad. Could you resist the urge to go out and find some drugs?</li><li>xiii) Imagine that a good friend has accused you of being insensitive. Now</li></ul>							
you are feeling hurt and tempted to use drugs. Could you resist?  xiv) Imagine that a good friend is feeling miserable he wants you to join him in a heavy discussion and drug use to pick his spirits up. Could you							
resist the urge to take drugs?  xv) Imagine that you are home alone, it is a dull weekend with nothing in particular to look forward to. You are bored. Would you give in to the							
urge to use drugs							

# **SECTION 4: RELAPSE**

7. The following are statements on <b>relapse</b> . Please read each statement carefully and	tick	eith	ner	
4,3,2 or 1.				
Where: 4 = 'Strongly agree', 3 = 'agree', 2 = 'Disagree', 1 = 'Strongly disagree'.				
STATEMENTS			2	1
i) Having a family that I can express my worries to has helped me to control my				
desire to use my drug of choice				
ii) Proper communication from my family members has helped me to stay away				
from triggers to using my drug(s) of choice				
iii) My family members understanding the nature of addiction has helped me to				
avoid thinking about using my drug(s) of choice				
iv) Encouragement and confidence from my family in my capability to remain sober				
has enabled me to abstain from thinking about using my drug(s) of choice				
v) Financial support from my family has helped me to avoid using my drug(s) of				
choice				
vi) Company from my family members has enabled me to avoid reminiscing my				
drug using days				
vii) Inability to express my worries and concerns to my family has caused me to use				
my drug(s) of choice				
viii) My family lacking confidence in my ability to remain sober has caused me to				
desire to use my drug(s) of choice				
ix) Lack of proper communication from my family members has caused me to go				
back to using my drug(s) of choice				
x) My family lacking understanding of the nature of addiction has caused me to use				
my drug(s) of choice				
xi) Lack of financial support from my family has caused me to go back to using my				
drug(s) of choice				
xii) Lack of trust from my family in my ability to manage my life and personal				
affairs has caused me to desire using my drug(s) of choice				
xiii) Lack of good company from my family members has caused me to reminisce				
about my drug(s) using days				
xiv) Lack of encouragement from my family members to remain sober has caused				
me to use my drug(s) of choice				
xv) My family being there for me has not enabled me to avoid triggers of using my				
drug(s) of choice	Ì			l

Thank you for your time!

### **Appendix 2: University Authorization/Introduction Letter**



### UNIVERSITY OF NAIROBI

FACULTY OF ARTS
DEPARTMENT OF PSYCHOLOGY

Telegrams: Varsity Nairobi Telephone: 3318262 ext.28439 Telex: 22095 P.O. BOX 30197 NAIROBI KENYA

28/06/2019,

The Rehabilitation Center Limuru Sub-County

### RE: WANGITHI ISABEL KINYUA - C50/89030/2016

ENT OF PSYCH

The above named is a student in the Department of Psychology undertaking a Masters degree in Psychology at the University of Nairobi. She is doing a project on "Effects of Family support on self-efficacy and Relapse occurrence among youths recovering from drug addiction in selected rehabilitation centers of Limuru sub-county Hospital." The requirement of this course is that the student must conduct research project in the field and write a Project.

In order to fulfill this requirement, I am introducing to you the above named student for you to kindly grant her permission to collect data for her Masters Degree Project.

Yours Sincerel

Dr. Luke Odiemo ERSITY OF NA

Chairman,

Department of Psychology

Appendix 3: University Letter to the National Commission for Science,

## **Technology and Innovation (NACOSTI)**



## UNIVERSITY OF NAIROBI

**FACULTY OF ARTS** DEPARTMENT OF PSYCHOLOGY

Telegrams: Varsity Nairobi Telephone: 318262 ext.28439

Telex: 22095

P.O. BOX 30197 NAIROBI KENYA

June 28, 2019

National Commission for Science, Technology and Innovation P.o. Box 30623 Nairobi

Dear Sir/Madam

### RE: WANGITHI ISABEL KINYUA - C50/89030/2016

The above named person is a duly registered student in the Faculty of Arts at the University of Nairobi. She is seeking a research permit from your office.

Kindly accord her the necessary assistance to allow her collect data.

Thank you in advance for your cooperation.

Yours Sincerely

Dr. Luke Odemburversfry OF

Chairman,

Department of Psychology

**Appendix 4: Government Research Permit** 





#### NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Ref No: 640772

Date of Issue: 18/September/2019

### RESEARCH LICENSE



This is to Certify that Ms., Isabel Kinyua of University of Nairobi, has been licensed to conduct research in Kiambu on the topic: The Relationship Between family Support, Self-Efficacy and Relapse Occurence Among youths Recovering from Drug addiction in selected rehabilitation centres of Limuru Sub-County, for the period ending: 18/September/2020.

License No: NACOSTI/P/19/219

640772

Applicant Identification Number

Steprior

Director General NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Verification QR Code



NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.

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

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

### CONDITIONS

- 1. The License is valid for the proposed research, location and specified period
- 2. The License any rights thereunder are non-transferable
- 3. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before commencement of the research
- Excavation, filming and collection of specimens are subject to further necessary clearence from relevant Government Agencies
   The License does not give authority to transfer research materials
   NACOSTI may monitor and evaluate the licensed research project

- 7. The Licensee shall submit one hard copy and upload a soft copy of their final report (thesis) within one of completion of the research
- 8. NACOSTI reserves the right to modify the conditions of the License including cancellation without prior notice

National Commission for Science, Technology and Innovation off Waiyaki Way, Upper Kabete, P. O. Box 30623, 00100 Nairobi, KENYA Land line: 020 4007000, 020 2241349, 020 3310571, 020 8001077 Mobile: 0713 788 787 / 0735 404 245 E-mail: dg@nacosti.go.ke / registry@nacosti.go.ke Website: www.nacosti.go.ke