

Relationship Between Social Support and Depression among Individuals Undergoing
Rehabilitation from Drug and Substance Use in Rehabilitation Centres in Ongata Rongai,
Kajiado County, Kenya.

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DECLARATION

I, the undersigned do declare that the thesis is my original work and it is not attained through collaborative effort. It has not been previously presented to any other higher learning institution. The sources used in the document have been appropriately cited and duly acknowledged in full.

I do agree that this thesis could be accessible for references and duplication at the discretion of the University.

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Signature.....

Date.....

We hereby certify that the thesis is original peace of work, and fulfills all the University requirements.

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Date.....

DEDICATION

This work is dedicated to my loving husband Mr. Lugano, my children Dr. Allan with his wife Lizzie, Brolin, and Adrian, as well as my grandchildren Luke, Summer and Chloe. I thank my family for their constant encouragement and prayers towards completing this study. May God richly bless you all.

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ABSTRACT

Social support is a fundamental component that may facilitate healing and recovery for drug and substance use addicts. This study investigated the relationship between social support and depression among individuals undergoing rehabilitation from drug and substance use in rehabilitation centres in Ongata Rongai, Kajiado County, Kenya. It focused on four objectives: to find out levels of social support, to examine levels of depression, to examine the relationship between demographic characteristics and depression, and to establish the relationship between social support and depression among individuals undergoing rehabilitation for drug and substance use in Ongata Rongai, Kajiado County, Kenya. The research was informed by social support theory and the Beck theory of depression. The target population for this study was 800 drug and substance use addicts. The sample size was 287 participants. The study used the simple random sampling technique. The Berlin Social Support Scale (BSSS) and the Beck Depression Inventory (BDI-II) were used to collect data. Data were analyzed using descriptive and inferential statistics; utilizing SPSS version 25. Ethical consideration has been adhered to. The findings revealed that a majority (88%, $n = 242$) of the participants were at high level of social support, while (12%, $n = 32$) were at moderate level of social support. In addition, 14.7% of the participants had no depression, 28.5% of the participants were at mild mood disturbance, 11.0% of the participants were at borderline clinical depression, 23.7% of the participants scored moderate depression, 16.4% had severe depression, while 5.7% of the participants were at the extreme depression. There was a weak significant negative correlation ($r = -.272$, $p = .000 \leq 0.05$) between age and depression. There was a significant association between level of education and depression ($p = 0.015 < 0.05$). The study established that there was a moderate significant relationship ($r = -.364$, $p = .000 \leq 0.05$) between social support and depression among individuals undergoing rehabilitation from drug and substance use in rehabilitation centres in Ongata Rongai, Kajiado County, Kenya. The study recommended that rehabilitation centres should include vigorous mental health services like regular psychiatric evaluations, counseling, and individualized therapy sessions to directly address depression levels among clients.

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ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immunodeficiency Syndrome
AMA	The American Medical Association
ACSU	Antenatal Care Service Umuziga
ACHA	American Collage Health Association
ADHD	Attention Deficit Hyperactivity Disorder
BDI	Becks Depression Inventory
BSSS	Berlin Social Support Scale
CBT	Cognitive Behavioral Therapy
EPDS	Edinburgh Postnatal Depression Scale
FIDU	Female Injecting Drug Users
HIV	Human Immunodeficiency Virus
IDP	Internally Displaced Persons
KCPA	The Kenya Counselling and Psychological Association
NASCOSTI	The National Commission of Science, Technology and Innovation
NACADA	National Authority for the Campaign against Alcohol and Drug Abuse
NHIF	The National Hospital Insurance Fund
NGO	Non-Governmental Organizations
SUD	Substance Use Disorder
SPSS	Statistical Package for the Social Sciences
TU-ISERC	The Tangaza University Institutional Scientific Ethics Review Committee
UPR	Unconditional Positive Regard
WHO	The World Health Organization

OPERATIONAL DEFINITION OF TERMS

Social Support: This entails the broader aspect of emotional bonding and connectedness individuals receive and/or the material gain they enjoy from family, friends and other significant others. Comprises positive words and actions offered to individuals who have gone through rehabilitation treatment after usage of drug and substance (Mason, 2022). In this study, social support would mean being visited with friends and relatives and receiving words of encouragement within rehabilitation centers.

Depression: Depression is a mood (affective) disorder which could be mild, moderate or severe, and recurrent in a person (Afen et al., 2022). A person who is depressed exhibits five or more symptoms over a course of two weeks. In this study it refers to symptoms such as: prolonged sadness, loss on interest in things ones enjoyed, suicidal ideation and isolation.

Rehabilitation Centre: An institution where people who experience symptoms of drug and substance addiction obtain treatment and have recovery (Cohen, 2022). In this study, it refers to secluded drugs and substance treatment centers located in Ongata Rongai, Kajiado County, Kenya.

Drug and Substance Use: Refers to excessive use of psychoactive drugs as alcohol, pain medication or illegal drugs (Kelly & Hoepfner, 2023). In this context it refers to the use of drugs and substance excessively and inappropriately.

OPERATIONALIZATION OF CONCEPTUAL VARIABLES

Social Support:

In this study, social support would mean a measure of three levels of scores, which are based on Berlin Social Scale (BSSS): Higher scores range from 70-120.

Moderate scores range from 40-69.

Low scores range from 1-39.

Depression:

In this study, Becks Depression Inventory (BDI-II) will be used to determine levels of depression among the participants of this study. The levels are;

1-10 _____ These ups and downs considered normal

11-16 _____ Mild mood disturbance

17-20 _____ Borderline clinical depression

21-30 _____ Moderate depression

31-40 _____ Severe depression

Over 40 _____ Extreme depression

CHAPTER ONE

INTRODUCTION

1.1 Introduction

The chapter presents the background to the study, statement of the problem, and purpose of the study. It further gives the objectives and the research questions, research hypothesis, the significance of the study, scope and delimitation of the study and assumptions. It finally gives a summary of the entire study.

1.2 Background to the Study

The interplay between social support and depression is particularly critical for individuals undergoing treatment for drug and substance use disorders (Smith et al., 2019). As individuals navigate the challenges of recovery in rehabilitation centers, the presence or absence of social support can shape their mental health trajectory, underscoring the need for integrated support systems within treatment frameworks. Social support is one of the most important needs that people have that significantly affects their wellbeing. This is especially necessary for people who are coping with existential problems like mental illness, such as addiction or depression (Kugbey & Atefoe, 2015). Adams (2017) view social support as having a network of friends or relatives that a person can seek help from in time of need or crisis. Social support works toward edifying the quality of human life as people are encouraged to face their challenges in life instead of living a life of avoidance and denial. This could be carried out through emotional appraisal as well as material provisions by people close to those experiencing stressful moments associated with different situations in one's life. Isolation and depression can be exacerbated by a lack of social

support, and depression can further entice certain individuals to turn to drug and substance use (SUD) as a coping mechanism (Bello, 2015).

People may experience recurrent episodes of mild, moderate, or severe depression (Afen et al., 2022). Major depressive disorder was categorized using the Statistical Manual of Mental Disorders (DSM-5) in order to establish a diagnosis, which was approved by the American Psychiatric Association (APA, 2013). A person who is depressed exhibits five or more symptoms over the course of two weeks. The symptoms of depression may include sadness, disturbed sleep, low self-worth, fluctuations in appetite for food, significant weight loss or weight gain, restlessness, suicidal ideation or suicidal attempt and lack of concentration in significant activities.

In the modern era, one of the most important concerns for psychologists is the connection between depression and social support among drug and alcohol users undergoing treatment. According to Thoits (2011), social support is a crucial component that may help drug and substance addicts maintain their mental wellbeing, and lack of it may lead to mental illnesses like depression. This is further supported by Kugbey et al. (2015) who argues that social support is essential and that it has proved to be a protective factor against stress in life as well as a facilitator of health and wellness. According to The World Health Organization (2014), evidence shows that social support is one of the highest contributing factor to mental wellness, and quick recovery for the drug and substance users. It was further shown that low social and economic support are systematically associated with increased rates of depression among drug addicts.

In Spain, in a cross-sectional study, Gabarrell-Pascuet et al. (2023) examined the relationship between depression and suicidal ideation during the COVID-19 lockdown, as well as the moderating effect of social support. The population's percentages were 22%, 28%, 26%, 20%,

and 3% for the age groups of 18–34, 35–49, 50–64, 65–79, and 80+, respectively. Some 43.9% of the participants of the study were male. The mean of depression was at 3.95, and the prevalence was 2.8%. Individuals with major depressive disorder (PHQ-8 \geq 10) were more frequently females, from 18 to 34 years old; had a lower educational level, less social support, and poorer physical health; as well as reporting a higher proportion at 7.9%. The study established that participants with lower levels of social support (3–8) and with had depressive symptoms above the major depressive disorder cut-off score (PHQ8 = 10.5, CI 95% 8.5, 12.5 at social support = 8). Important conclusions from the study were found. This current study, however, has focused on a special population, the drug and substance use individuals in the rehabilitation center; the other study, however, focused on the link between (SUD) and depression during the COVID-19 lockdown, and the findings may not be generalized in the Kenyan setting.

In the Middle East, studies carried out by Mohamed et al. (2020), focused on the assessments of anxiety and depression among (SUD) patients: a case-control study. The mean age of the participants was 28.1 years. A majority belonged to the moderate socioeconomic status (52%). Reports showed that 72% of them had severe depression in comparison to 6% of the control group ($p < 0.001$). Also, 7% of the treatment group did not have depressive symptoms in comparison to 64% of the control group ($p \leq 0.001$). It was additionally indicated that a majority (83%) of the participants struggling with drugs were polydrug addicts; they patronized several types of substances, for example, tramadol, cannabis, opiates, alprazolam, heroin, nalbuphine, while 17% of them patronized tramadol. Some of the drug users (68%) prefer the oral way, while 32% of the respondents patronized drugs through several ways such as oral inhalation injection. Pertaining the duration of substance use, 93% of the patients used a drug for more than a year. The study established that lack of social support and the experience of depression interfered by

slowing the healing process of addiction among individuals with addiction. An investigation within clinical substance abuse populations indicate the association between depression and (SUD) ($p \leq 0.001$). This study cannot be generalized in the Kenyan setting since these are different geographical locations, hence requires the need for the current study.

In Egypt, Mohamed et al. (2020), in their study reported that drug and substance use among addicts in the rehab was at 7.25%. It was further revealed that about 50% of people were affected by substance use, 37% of alcohol users, 50% of drug users who also had at least severe mental illness, 29% abused alcohol and drugs and substance. These statistics are a reflection of the prevalence of SUD and gives further insight on relationship between social support and depression.

In Sub-Saharan Africa, Asante and Appiah (2021) contend that some of the population experience mental health related issues. Most of the mental health hospitals were not fully equipped with the basic tools for treatment. This included treatment and recovery support material. Asante and Appiah (2021) in Ghana give insight on social support as a critical component towards recovery of drug and substance use individuals. Using a descriptive qualitative method, eight participants (directors and senior recovery practitioners) from eight Non-Governmental Organizations (NGOs) in southern Ghana were purposively selected and then interviewed face-to-face using semi-structured interview guide. The outcome of the study showed that (NGOs) provided 3 main services which are: treatment of drug addiction (through psychotherapy and recovery capital), re-integration of recovered individuals into society, advocacy and awareness creation in schools and communities. It was further revealed that a majority of family members do not visit their keen in the rehabilitation centers and neither do they participate in their treatment and recovery process. Besides this, there has been lack of social support by some family members

towards relatives who have been discharged from mental facilities. Thus, lack of social support was discovered to be one of the factors that induced prolonged recovery for the substance and drug use addicts.

Due to the qualitative nature of the study and its narrow focus on a small sample size, the findings may not be applicable to a larger population. The current study examined the association between social support and depression among drug and substance use individuals in rehabilitation facilities with the goal of embracing the quantitative technique of research in order to use a large number of participants in rehabilitation centers, Ongata Rongai, Kajiado County, Kenya.

Among other studies carried out in the Sub-saharan Africa, in Nigeria, Babobola et al. (2021), conducted a study based on social support and depression among people living with Human immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) in addition with drug and substance use addicts. The scholars brought into perspective the aspect of social support among the participants of the study. They established that lack of social support increased the risk of depression ($p = 0.01$). The results of their studies indicated that a majority (95.7%) of the participants got social support and more than half (53.6%) of the respondents had a strong social support.

Among Nairobi medical school residents, a study on social support and depression was conducted: 53.4% of participants were men, with a mean age of 31.8 years. A majority of people (70.4%) reported having mild depression symptoms, followed by moderate symptoms (12.7%) and severe symptoms (16.9%). Moreso, (61.6%) of the people reported moderate stress and strong social support (71.8%). The educational environment was rated as more positive than negative by 46.3% of residents. The overall findings reflect moderate levels of depressive symptoms and stress. The students were at risk of abusing various substances, hence, efforts should be made to

help understand and maintain high levels of social support. This may help reduce the prevalence of depressive symptoms, and stress (Shah, Laving, & Kumar, 2021). While various local studies have yielded significant findings, they have largely overlooked individuals struggling with drug and substance use, who may concurrently be experiencing depression and inadequate social support. The current study sought to address this gap.

1.3 Statement of the Problem

Drug and Substance abuse is a severe global health issue which places a major socio economic and public health burden on both modern and rural life style. Globally, substance use disorders are a significant public health issue, affecting millions and leading to high rates of depression (The World Health Organization, 2022). The relationship between social support and depression is critical in understanding the psychological well-being of individuals undergoing rehabilitation for substance use disorders (Britt, 2022). Social support within rehabilitation centers often comes from peers, family, and staff. Studies indicate that perceived social support correlates with lower levels of depression and better treatment adherence (Berkman & Glass, 2021).

In the USA, studies have demonstrated that social support from family and peers significantly reduces depression among individuals in rehabilitation (Hankerson, 2022). Programs that foster family involvement during treatment have reported improved mental health outcomes. Similarly, studies in Europe indicate that social networks in rehabilitation settings vary significantly, impacting depression levels differently, and another study in the UK showed that formal social support from counselors and informal support from peers equally contributed to lower depression rates (Taylor, 2023). Furthermore, a study in Nigeria integrated traditional support systems into rehabilitation, significantly reduced depression ($p \leq 0.05$) among people with drug and substance addiction (Adeyemi et al., 2023).

Based on reports from the administrative centers of rehabilitation of individuals with addiction in Rongai (2024), intake admission forms indicate that a majority (85%) of the rehabilitees had indicated issues such as, loneliness, guilty feelings, stigma and rejection. Some have gone through deep losses and estranged relationships. Reports revealed that 94.8% of the rehabilitees stated that they do not get support from families and friends. Rather, quite often, they are judged, discriminated, and not taken seriously by some family members, friends and their peers due to their life style of addiction. This is a critical challenge that calls for investigation.

Additional reports demonstrate that in the year (2019), out of the total number of 15 rehabilitees that were successfully rehabilitated, 5 of the rehabilitees relapsed. Also, in the year 2021, reports indicate that 19 that were rehabilitated, 6 rehabilitees relapsed. The total numbers of relapsed between (2019) and (2021) was 11 (Administrative centers of rehabilitation for addiction individuals in Rongai, 2023). These reports are quite worrying which called for an investigation. With the various issues and statistics revealed from the drug and substance use rehabilitation centers, this gave the justification for this study as it aimed to find out the relationship between social support and depression among individuals undergoing rehabilitation from drug and substance use in rehabilitation centres in Ongata Rongai, Kajiado County, Kenya.

1.4 Purpose of the Study

The purpose of the study was to investigate the relationship between social support and depression among individuals undergoing rehabilitation from drug and substance use in rehabilitation centres in Ongata Rongai, Kajiado County, Kenya.

1.5 General Objective

The general objective of this study was to establish the relationship between social support and depression among individuals undergoing rehabilitation from drug and substance use in rehabilitation centres in Ongata Rongai, Kajiado County, Kenya.

1.5.1 Specific Objectives

The specific objectives of the study were to:

1. To find out levels of social support among individuals undergoing rehabilitation from drug and substance use in rehabilitation centres in Ongata Rongai, Kajiado County, Kenya.
2. To examine levels of depression among individuals undergoing rehabilitation from drug and substance use in rehabilitation centres in Ongata Rongai, Kajiado County, Kenya.
3. To determine the relationship between demographic characteristics and depression among individuals undergoing rehabilitation from drug and substance use in rehabilitation centres in Ongata Rongai, Kajiado County, Kenya.
4. To establish the relationship between social support and depression among individuals undergoing rehabilitation from drug and substance use in rehabilitation centres in Ongata Rongai, Kajiado County, Kenya.

1.6 Research Questions

This study sought to respond to the following questions:

1. What are the levels of social support among individuals undergoing rehabilitation from drug and substance use in rehabilitation centres in Ongata Rongai, Kajiado County, Kenya?

2. What are the levels of depression among individuals undergoing rehabilitation from drug and substance use in rehabilitation centres in Ongata Rongai, Kajiado County, Kenya?
3. What is the relationship between demographic characteristics of respondents and depression among individuals undergoing rehabilitation from drug and substance use in rehabilitation centres in Ongata Rongai, Kajiado County, Kenya?
4. What is the relationship between social support and depression among individuals undergoing rehabilitation from drug and substance use in rehabilitation centres in Ongata Rongai, Kajiado County, Kenya?

1.7 Significance of the Study

Adu and Bandaru (2023), describe significance of the study as a written statement that explains why the research under study is important. It validates why the need for the particular study; how relevant the study is to the researcher and what contributions it will make to other readers.

Individuals in Rehabilitation with Challenges of addiction may significantly help people with addiction challenges who could be seeking help in rehab by creating awareness of the relationship between social support and depression.

Drug and Substance Rehabilitation Centers Administrators may benefit from this study by gaining a deeper insight on relationship between social support and depression among drug and substance use persons in rehabilitation centers. Findings could help develop programs that address the need for social support in rehabs in offering treatment tailor made to meet clients in relation to depression levels.

Communities whose members have addiction issues; The research findings could offer assistance to the communities that are affected with addiction challenges through

psychoeducation and sensitization programs on how to offer the required social support in a more skillful manner. This information could offer further assistance to the practice of psychologist in addressing addiction issues in collaboration with significant others who are related to individuals with addiction challenges by enhancing social support as an approach to rehabilitation treatment.

Government ministry of health, through the National Authority for the Campaign against Alcohol and Drug Abuse (NACADA), this study could help the Ministry of Health develop policies tailored towards treatment and recovery programs of individuals undergoing drug and substance use treatment in rehabilitation centers. This may include incorporating social support in their policy document as part of the approach in the treatment plan.

Researchers: Knowledge gained from this research study may be added to the existing body of knowledge in addiction treatment and recovery programs of people with addiction challenges in rehabilitation centers.

1.8 Scope and Delimitations of the Study

According to Theofandi and Fountouki (2015), delimitations are the boundaries of the work that ensures the study's objectives are attainable and that the authors are essentially setting the bounds. They examine the limits that the investigator would choose to employ. Delimitation of this study took into account some of the exclusions and it gave a clear perspective what the study involved.

The study was specifically conducted among substance use individuals in rehabilitation centers in Ongata Rongai, Kajiado County in Kenya. This study only sampled those individuals undergoing rehabilitation on an admission program within rehabilitation centres. This study focused on both male and female in addiction within the age bracket of 18 to 60 years old.

In terms of delimitation, the study was precisely restricted to two variables which were: “social support” and “depression”. In line with the four specific objectives, levels of social support, levels of depression, the relationship between the demographic characteristics and depression and lastly, the relationship between Social Support and Depression in treatment of addiction within Rehabilitation centres in Ongata Rongai, Kajiado County, Kenya.

1.9 Assumption of the Study

This study was based on the following assumptions that:

1. The participants would be interested in responding to questions adequately.
2. The participants would respond in an honest and sincere way to all the questions in the questionnaire.
3. Data would adequately answer the research questions.

1.10 Chapter Summary

An overview of the widespread perception of social support worldwide was provided in this chapter. Second, by focusing on Ongata Rongai, Kajiado County, Kenya, the research also provided an overview of depression on a local, regional, and worldwide scale. Additionally, the chapter has emphasized the statement of the problem, the study's purpose, the objectives, the research questions, and, lastly anticipated results. A literature review is the main topic of the following chapter.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents theoretical literature review appropriate for the study. It gives an empirical literature review in line with the four objectives of the study. It further presents the conceptual framework, followed by the chapter summary.

2.2 Theoretical Literature Review

According to Kivunja (2018), a theory is a generalized assertion of facts or ideas that make claims, provide an explanation for, or predict relationships or interactions between or among events within the parameters of important underlying assumptions that the theory expressly attempts to provide. This section articulates the theories informing this study. They include; social support theory and Beck's theory of depression. They were used to explain the two variables which are social support and depression among addicts in rehabilitation centers.

2.2.1 Social Support Theory

Francis T. Cullen (1994), is credited with developing the Social Support Theory, which maintains that social support is a critical component that significantly lowers an individual's risk of engaging in criminal activity and other antisocial behaviors. The theory holds that social support in the form of supportive societies and relationships could help in lessening of crime rates and deviant behavior among human beings. Cullen (1994) asserts that social support fosters criminal justice and social control, while Cao et al. (2010), stressed the need of funding social support systems in order to deter crime or lessen the likelihood of criminal activity. The theory further postulates that the more a human being gets social support from their social networks, the

less likely they will engage in antisocial or criminal behaviors and the more positive they will live in harmony with oneself and other human beings.

In addition, having family, friends, and coworkers nearby during difficult times is essential for providing social support. This helps individuals change their behavior and foster long-term mental health (Isingi et al., 2021). Social support comprises of social resources which people depend on to deal with problems (Thoits, 1995). Cullen et al. (1999), argues that social support requires conveying human, cultural, material, and social capital between persons as well as community members. Support is regularly provided informally, through social relationships, but support could also be provided officially by a body with an official status, like government assistance programs or the justice system.

The theorist, Cullen (1999), further contends that social support enables people to nurture self-controlled behavior, regulate their anger and build strong social bonds that in the long-run results in reduced cases of mental illnesses, criminal behaviors and addiction issues. Social support has short-term and long-term impact on drug and substance use persons. In the long-term, social support could help individuals in addiction meet their basic needs and through this, it may stimulate positive behavior change. This helps reduce incidences of deviant and addictive behavior (Thoits, 2011). For example, people with drug and substance use addiction who get various social support systems are likely to indulge less in drug and substance use (addiction), as compared to those who do not obtain social support at all. Secondly, when drug and substance users get social support from their social networks, there is a likelihood of speedy recovery from the addiction.

The Social Support Theory is imperative in this study since it shows that social support improves human behavior. For example, social support could help a person with addiction

challenge have the mental capacity to embrace the willingness and readiness to change. When social support is provided, it may help in protecting the drug users from stress or depression as well as other antisocial behaviors, thereby limiting the issue of addiction in the family and the society at large.

One of the weaknesses of social support theory is that social support can be erratic. Ideally, if an individual could learn to stand alone, and take control of one's life, and not be reliant on others for meaningful life endeavors. This theory fails to explain an individual's experience of depression and the interpretation individuals make when they are faced with depression. Due to this weakness, the study further employed the Aaron Beck theory of depression to explain the phenomenon of depression.

2.2.2 Aaron Beck's Theory of Depression

The theory of depression was propounded by Beck in the year 1967. Beck argues that when people suffer from depression, there is a high chance they perceive events in so much negative ways. He admitted three basic approaches to be liable for depression: the first is the cognitive triad (this is bad automatic thinking), the second is the negative self-schema, and then the errors in logic (i.e., faulty information processing). For example, depressed people may perceive themselves as helpless, worthless and inadequate. Their understanding of worldly happenings is done in an unrealistic negative and defeatist way (Beck, 1967).

Figure 1: *The circle of a depressed individual*



Source: Beck (1967).

Figure 1 explains the circle of persons struggling with depression, according to Beck (1967). During the interaction of the three circle components, they are inclined to interfere with a person's normal cognitive functioning, and this could pave way for impairment. According to Beck (1967), a person prone to depression may cultivate a bad self-schema, and such a mindset may lead to the patronization and utilization of drug and substance use, as a way of coping with some difficult personal issues. Consistent patronization and utilization of drug and substance may lead to mental health issue like addiction.

Furthermore, Beck (1967) asserts that traumatic experiences, such as witnessing a loved one die, being sexually abused, or being raped, can cause unfavorable schemas to be ingrained in children. It is true that some stressful life circumstances might result in unfavorable schema. When negative schemas are activated, an individual may experience illogical thinking and cognitive biases taking over their thoughts. For example, persons with negative self-schemas are likely to make logical errors in their thinking, focus selectively on certain aspects of an event and simultaneously disregard information that is pertinent. They may disregard vital information like the danger of drug taking and the danger of relating with irresponsible peers. When a person disregards dangerous information that could be beneficial to them, the likelihood of being introduced to unhelpful habits like drug and substance use could be high. Their negative thinking

about the self, the world and the future may bring about depression. They may try to use drugs and other illegal substances as possibly easy and quick ways of coping. Such consistent habits may breed addiction which is detrimental to them.

Additionally, Beck (1967) for example gave some explanation about logical errors. Arbitrary inference: which is a negative conclusion in the absence of supporting facts. Selective abstraction: which is concentrating on the worst aspects of a situation. Magnification as well as minimization: this is making problems look bigger than they are. If they have a solution, they make it smaller. Personalization: these are negative occurrences of life are construed as their fault. Dichotomous thinking: everything is seen as black and white. There is no other possibility (Beck, 1967), example, when an addict's mind is full of negative thoughts, it affects the mood, and such thoughts could persist even in the face of differing positive solution to one's situation.

This research intended to apply Beck's theory of depressions in order to help comprehend the population under investigation. Thus, the two theories complement each other.

2.3 Empirical Literature Review

This section concentrates on the appropriate literature review in line with the research objectives which are; levels of social support, levels of depression among addicts, relationship between social support and depression, and to establish the relationship between demographic characteristics and depression among individuals undergoing rehabilitation from drug and substance use.

2.3.1 Levels of Social Support among Individuals Undergoing Rehabilitation for Drug and Substance Use

Addiction is a problem of behavior and psychology that can lead to extraordinary consequences in terms of social, mental, and physical aspects of life. Relapse prevention is greatly aided by the patient's family, spouse, peers, and neighborhood. According to Horvath et al. (2019a), drug and substance use addiction are medical issues which require primary and secondary interventions. Social support becomes very crucial, as it possibly enhances recovery and healing. Social support has been recognized to be an essential aspect of the drug addiction recovery and relapse prevention processes. Social support refers to the existence and size of a social network, and the extent to which people are connected within a social network, such as the number of social ties (quality of the relationships) and the features of the social exchanges between individuals. Relationships with family, friends, and members in organizations might contribute to social integration. Hence, social support may be seen as any process through which social relationships make people live the way they would have wanted to (Horvath et al., 2019a).

In Saudi Arabia, Zaid (2020), in his research holds that addiction therapists have incorporated aspects of social care to prevent emotional relapse. For instance, by enabling a client's family to understand the importance of providing a healthy diet and a hygienic sleeping place to reforming drug and substance abusers. He pointed the significant role of an immediate family support, the support of peers and friends, offering varieties of support such as emotional support, spiritual support, psychological support, financial support, physical support. It was found that among some groups of addicts were at low level (40%) of social support, and this contributed immensely by preventing recovery and healing, and increase in relapses. The researchers revealed that if a client's family frequently proved their confidence in a patient's ability to follow the treatment regimen, the individual in addiction was more likely to follow through with the

proposed medications and therapy that may lead to healing. The researcher held that fully knowledgeable families, peer groups, and communities can demonstrate to be good support systems against relapse. Spiritual, emotional, and social support organizations were also found as good resources. This was a good finding that was carried out in the outskirts of Africa, whereas, this present study was carried out at Ongata Rongai, in Kajiado County, Kenya.

In Uganda, a study was carried out by Amandru et al. (2020), on adolescent resilience, social support and drug abuse; a case of Koboko District, West Nile. The authors state that drug abuse has been with people for some time and it is one of the biggest causes of morbidity and mortality among adults and younger adults in Uganda. It was estimated that 5% of Ugandans are dependent on drugs and substance use, with over 68% percent being young adults. They made it known that social support for individuals in addiction is a fundamental in their recovery and healing. The more social support one can draw from family and friends, the more flexible and resilient the person can be in stressful situations. Findings further pointed that the mean score for addicts on social support was ($M = 38.4$ $SD = 10.4$). This revealed that individuals in addiction had low level of social support. This reality of low social support may have contributed in several relapses of addicts. The study focused on adolescent resilience, social support and drug abuse, whereas, the current study specifically focused on the relationship between social support and depression among drug and substance use individuals in rehabilitation centers in Ongata Rongai, Kajiado County, Kenya.

In Kenya, a study was conducted by Sereta et al. (2016), on an assessment of effectiveness of drug rehabilitation programs in Kisii County- Kenya. They held that approximately 200 million (5%) people of the world's population between the ages of 15 and 64 years have either been forced or willingly sought after the help of rehabilitation centers for behavioral changes. These

rehabilitation centres over the years have admitted drug users into their rehabilitation programs meant to bring about behavior change among the rehabilitees. It was found that the major factor that contributed to addiction among the youth was peer pressure, activated by need for acceptance and approval from their fellow peers. Peer pressure accounts for (21-42%) influences in all types of drugs and substance used. It was also found that social support for the rehabilitees was at 11.6%, which is quite indicative that the drug users were at low level of social support in their recovery processes. The study concentrated on the assessment of effectiveness of drug rehabilitation programs in Kisii, while this current study was aimed at assessing the levels of social support among the addicts in the rehabilitation centers in Ongata Rongai, Kajiado County, Kenya.

2.3.2 Levels of Depression among Individuals Undergoing Rehabilitation from Drug and Substance Use in Rehabilitation Centres

In contemporary times, psychologists are keen in paying attention to addiction has an illness and also the possibility of depression being experienced by the drug and substance addicts in rehabilitation centers. Depression is possibly an additional burden to the addicts which could extend the time of one's recovery. Afen et al. (2022), state that depression is a mood (affective) disorder which could be mild, moderate or severe, and recurrent in a person. The Statistical Manual of Mental Disorders (DSM-5) recognized by the American Psychiatrist Association (APA, 2013) classified major depressive disorder to make a diagnosis. A depressed person experiences five or more symptoms for a period of two weeks. Depressive symptoms include sadness, feelings of guilt or low self-worth, disturbed sleep, lack of appetite or too much appetite, feelings of tiredness, significant weight loss or too much weight gain, restlessness, suicide or suicidal ideation or suicidal attempt and lack of concentration in one's activities.

In the United Kingdom, national survey of 1, 2000 university students found that 80% of students reported experiencing stress, 55% reported anxiety and 49% reported depression (Brown, 2016). Similarly in the UK, Birtel et al. (2015), did a study that focused on “stigma and social support in substance abuse: Implications for mental health and well-being”. This was among 64 drug and substance use addicts, aged between 18 and 64. The findings of the study showed that the addicts experienced moderate to high levels of perceived stigma (M=2.94), social support (M=5.06) and sleep quality (M=3.20); moderate levels of shame (M=2.97) and self-esteem (M=2.35); and low to moderate levels of internalized stigma (M=2.00), and depression and anxiety (M=1.06). This was an interesting study that took place in the UK. However, the sample size of the study was very small (64), while this present study focused on a larger sample size of 200 participants in Africa, particularly in Kenya, and has investigated the levels of depression among drug and substance use individuals in rehabilitation centers in Rongai, Kajiado County.

In Egypt, Mohamed et al. (2020), noted that anxiety and depression were among the most common problems reported by persons seeking treatment for drug addiction. Primary psychiatric symptoms persist behind detoxification and remission of addictive behavior. Mohamed and colleagues in their research on the assessment of anxiety and depression among substance use disorder patients: a case-control study found that 72% of the study sample size was found to have severe depression in comparison to 6% of the control group ($p < 0.001$). It is worth noting that only 7% of the SUD group did not have depressive symptoms in comparison to 64% of the control group ($p \leq 0.001$). It was discovered that lifetime prevalence of any substance use in Egypt differs between 7.25% and 14.5%. Substance use disorders, mood, and anxiety disorders are widespread among the general population and are associated with substantial social, economic, and health loss.

In Kenya, a study was carried out by Jacquelin (2014) who investigated the prevalence of depression among female injecting drug users (FIDUs): study of a drop-in Rehabilitation Center in Nairobi County. The study established that introduction to drug use was more widespread among young female adults, with 94% of the respondents being aged below 40 years and the highest number of drug users falling in the age bracket 26 - 30 years at (28.2%). This further indicated that injecting drug users (IDU) among females cut across all ages in spite of the fact that it was more widespread among young adults. A majority of the respondents (81.9%) were out of the marriage institution with the highest number of drug users being single women, followed by separated women at 52% and 47% respectively. The percentage of respondents with depressive disorder symptoms fell between the levels of borderline clinical depression to extreme depressive symptoms was 86.6% (129), which is very high level of depression. These results indicate that the prevalence of depressive disorders among the participants was very high. This revealed that female drugs users had high levels of depression. Often, depression was reported to be the major cause of most mental disorders among substance users. The study by Jacquelin only focused on the females. This present study looked at both the females and the males, by investigating the levels of depression among individuals undergoing rehabilitation from drug and substance use in rehabilitation centers in Rongai, Kajiado County, Kenya.

2.3.3 Relationship between Demographic Characteristics and Depression among Individuals Undergoing Rehabilitation from Drug and Substance Use in Rehabilitation Centres

The American College Health Association (2013) affirmed that mental health issue like depression affected youth who are at the same time students. The research indicated that 14% of college youths experienced depression, and some were noted to be affected by drug and substance use. Since these youths were students, their academic activities were also affected. Bisson (2017)

conducted a study among the college students of Abilene Christian University in the USA, investigating the effect of anxiety and depression on young adults who were possibly struggling with addiction issue. The study established that depression was the most common issue that interferes with students' academic success.

Equally in the USA, McGovern et al. (2023), conducted a study on the association between depression and substance use among primary care patients with comorbid medical and behavioral health conditions. The study was carried out among a sample of 2409 patients from 41 geographically dispersed and diverse primary care clinics. The findings indicated that there was a significant association ($P < .001$) between duration of addiction and depression among the participants. The studies conducted by Bisson (2017) and McGovern et al. (2023), were carried out in another geographical location, and this may not be applicable in the Kenya context, hence the current study seeks to address duration of addiction and depression in the Kenyan context.

In Nigeria, John (2021) conducted research on demographic characteristics, level of drug use, and self-esteem among female students in Kaduna State. It was argued that drug use was a global problem that affected many individuals. He stated that drug use was a fast-growing global problem that is a threat in all nations, with people of different ages and genders struggling with depression and addiction to drug and substance use. It was established that 1 out of 20 people between the ages of 15 and 65 years old (nearly 246 million) had patronized an illegal drug that possibly resulted to addiction and more consequences like depression. It was also found in the study that age and depression had no relationship ($P = .892 \geq 0.05$). It was therefore conclusively stated that there exists a relationship between history of mental illness and self-esteem score among female college students of different ages in Kaduna, Nigeria ($p = 0.00$). The study was among the female students, while this present study was carried out among the male and female

individual undergoing rehabilitation from drug and substance use in rehabilitation centres, Ongata Rongai, Kajiado County, Kenya.

With regards to gender and depression, studies revealed that females experienced high clinical depression than the males. A recent study conducted by Afen et al. (2022), among students of Africa Nazarene University in Kenya, confirmed that females had borderline clinical depression, while the males were at mild mood disturbance. There also appears to be an important gender difference in comorbidity patterns with women, compared to men, having higher degrees of comorbid major depression (52% vs. 32%). On the other hand, further findings pointed that the frequency rates of an alcohol use disorder are more than twice as great for males as for the females. The study held that the consequences of alcohol abuse as well as dependence are not only more severe but also additionally rapid in females. Consequently, gender dissimilarities with regard to alcohol and its toxic effects have become progressively researched. Several studies have shown that women develop higher blood alcohol concentrations than men after drinking equivalent amounts of alcohol per kilogram of their body weight. It was found that there was a significant relationship between gender, age and depression ($P = 0.01 \leq 0.05$). Women with depressive disorders are more likely to engage in substance use leading to bizarre behaviors (UNODC, 2018; Boykoff, 2010).

In Kenya, Jacob (2017) submitted that in 2016, depressive disorders accounted for 2% of global disability adjusted life years varying by region, age and gender with more than 44 million dailies attributable to depressive disorders. Kenya was said to have higher number of populations with depression. Research carried out by Jacob (2017) stated that an approximation statistic of 1.9 million Kenyans was sick with depression related to substance abuse. The study further suggested Kenya as being placed the 6th country in Africa with cases of depressive disorders. Depressive

disorders may have far-reaching implications especially to affected women since they cannot manage their lives as well as families. Depressive disorders are characterized by the presence of sad, empty, or irritable mood, accompanied by somatic and cognitive changes that significantly distress the individual's capacity to function to one's maximum potentials (Kaburia, 2022).

Regarding age and depression, research conducted by Afen (2022), equally in Kenya, showed that participants within the age bracket 18-23 had a mean score of $M = 18.3514$, and standard deviation $SD = 15.00023$, revealing a borderline clinical depression, students within the age bracket 24-28 had a mean score $M = 27.1207$, and standard deviation $SD = 17.52600$ revealing moderate depression. Additional findings indicated that there was a positive significant relationship between age, gender and depression ($P = 0.01 \leq 0.05$). Othieno et al. (2014) conducted a study among 923 University of Nairobi students; concentrating on the impact of depression. Depressive symptoms were noted to be 33.5% in male students, while the female students were 39.0%. Thus, the various studies emanated from the University settings, among students with issues related to depression, whereas this study concentrated on individuals undergoing rehabilitation from drug and substance in rehabilitation centres, in Kajiado County, Kenya.

Kaburia et al. (2022) conducted a study, focusing on the relationship between depressive disorders and substance use among women in addiction recovery in Kiambu County, Kenya. This was among 36 participants. Kiambu County is one of the counties in Kenya, having the highest number of recovery centers with significant number of females undergoing treatment and rehabilitation. Females who are unemployed face challenges of poverty, low self-esteem, shame, and guilty leading to low life satisfaction hence at high risk of depressive disorders and eventually they resort to substance use as a coping mechanism. The research findings revealed that a

majority of the respondents' depressive disorders related with drug use among women in addiction recovery in Kiambu County with a mean of 2.61 and standard deviation of 1.215. With regards to age, those who fell within the age bracket 26-35 years old were 25.0%, and were reported to have been struggling with mental health issues like depression. The study used a smaller sample size of 36 participants with a response rate of 100%. This present study sought to make use of a larger number of participants of 287, investigating relationship between demographic characteristics and depression among drug and substance use individuals in rehabilitation centers, in Kajiado County, Kenya.

Onyango et al. (2023), investigated the prevalence of Symptoms of PTSD among Inpatients with Substance Use Disorders in Drug Rehabilitation Centres in Nairobi. The researchers employed a correlational design within a quantitative framework, involving 178 participants; 91% males and 9% females. The findings showed no significant relationship between participants' highest education level and the prevalence of depression ($\chi^2(3, N = 178) = 1.983, p = .576$). Additional results indicated that individuals with less than a high school education reported the highest rates of depressive symptoms (58.3%), followed by those with university degrees (49.1%), college graduates (44.6%), and high school graduates (37.8%).

2.3.4 Relationship between Social Support and Depression among Individuals Undergoing Rehabilitation from Drug and Substance Use in Rehabilitation Centres

Social support network is one of the greatest sources that could contribute meaningfully in the healing and recovery of an addict. Where there is sufficient social support and non-judgmental attitude, depression may hardly be experienced by an addict. Social support plays an integral role in the individual's life, and affect physical and psychological health in a positive manner. Relapse could occur where there is lack of social support in all ramifications.

Based on the global perspective, for example, in Sweden, Stone et al. (2012), contended that majority of young addicts and people with drug and alcohol issues suffered from concurrent mental health issues, referred to as co-occurring disorders. Externalizing disorders such as Conduct Disorder (CD) and attention deficit hyperactivity disorder (ADHD) appear to be the most common mental health problems, but internalizing disorders such as depression, dysthymia and anxiety also commonly occur. Swedish studies have addressed the association between drug use, social support and mental health problems among the young people. It was further pointed that 50% to 90% of young people with drug and alcohol problems also had extensive mental health problems, and that 90% of girls and 81% of boys met the criteria for at least one psychiatric disorder in addition to their substance use problems.

A study was carried out by Richert et al. (2012), which investigated mental health problems among young people in substance abuse treatment centers in Sweden. According to the findings, self-reported mental health problems were common among the young people in the study. A relatively large percentage of the total group (34–54%) reported issues such as concentration difficulties, sleeping difficulties, anxiety, and the link between social support and depression were found. It was found that social support and depression were strongly related ($P=0.001 \leq 0.05$) among young drug and substance addicts. More findings from the study showed that young people with early onset of drug use were significantly more likely to report concentration difficulties (OR= 1.555), and difficulty in controlling aggressive behaviors (OR=1.576), in comparison with those who did not report early onset of drug use. People with an early onset of drug use were significantly less likely to be older (OR=0.857). Young people with poly drug use were significantly more likely to report anxiety (OR=1.358), concentration difficulties (OR=1.434), hallucinations (OR=1.652) and traumatic life events (OR=1.302) in

comparison with those not reporting poly drug use. People with poly drug use were also significantly more likely to be older (OR=1.296). The study analysis revealed little about the interconnection between social support and depression, and it was also conducted among young people with substance use problems. However, this present research investigated the relationship between social support and depression among individuals undergoing rehabilitation from drug and substance use in rehabilitation centres in Rongai, Kajiado County, Kenya.

Regionally, the pain of psychological illness like depression is possibly even more felt by the drug and substance addicts. In Nigeria, Babobola et al. (2021), conducted a study on social support and depression in patients being at a general hospital South-South, Nigeria. The results further reflected that there was a significant relationship between social support and depression ($\chi^2=18.38$, $df=2$, $p=0.03$). In multivariate regression, absence of social support ($B =2$, $120 = P = 0.001$, OR = 8,3.27) was a significance predictor for depression.

A study carried out in Uganda by Strongminds (2016) revealed that by year 2015, over 1800 women were diagnosed with depressive illnesses. The study further showed that an estimation of 86% of women was treated through therapy intervention. The same study projected that by year 2025 an approximate number of two million women with depressive issues will have been treated. Previous study by Amandru (2014) on adolescent resilience, social support and drug abuse a case of Koboko District, West Nile, Uganda. The study outcomes indicated a significant positive relationship between social support and resilience $r = .157$; $p = .029$. Since the p value (.029) is smaller than the level of significance (.05), the hypothesis was retained; and found no relationship between social support and drug abuse $r = .045$; $p = .303$. Since the p value (.303) was greater than the level of significance (.05), the hypothesis was rejected; and no relationship between resilience and drug abuse $r = .068$; $p = .223$. Since the p value (.223) was greater than the

level of significance (.05), the hypothesis was rejected. This was an interesting study. It however did not specifically disclose the relationship between social support and depression. It was upon this justification the present research investigated the relationship between social support and depression among individuals undergoing rehabilitation from drug and substance use in rehabilitation centres in Rongai, Kajiado County, Kenya.

In Kenya, The United Nations Office on Drugs and Crime (UNODC, 2018) acknowledged that older people report a greater use of substances such as khat in diverse forms (miraa and muguka) and cannabis (bhanga and hashish), while drugs that have become accessible in Africa more recently, like cocaine and heroin, are stated to be used more regularly between the ages of 18 and 24. Khat and cannabis continue to be the 2 most often used substances among the general public, with those aged 25 to 35 having the highest lifetime and recent use rates. The lifetime use of cocaine, heroin, and prescription drugs is also about three times higher among people under the age of 36 than it is in people over the age of 36.

A study was carried out by Kaburia (2022) on relationship between depressive disorders and substance use among women in addiction recovery in Kiambu County, Kenya. The findings revealed that there was a relationship between depressive disorders symptoms (domestic violence, feeling guilty and feeling worthless) and substance use among women in addiction recovery in Kiambu County. The correlation coefficient for association between domestic violence and Substance Use was $r=.603$ with $P=0.000$; the coefficient for association between feeling guilty and substance use was $r= 0.588$ with $P=0.000$; and the coefficients for association between feeling worthless and substance use was $r = 0.575$ with $P=0.000$. This implies that the association between domestic violence and feeling of guilt that was likely to lead to substance use was $r=$

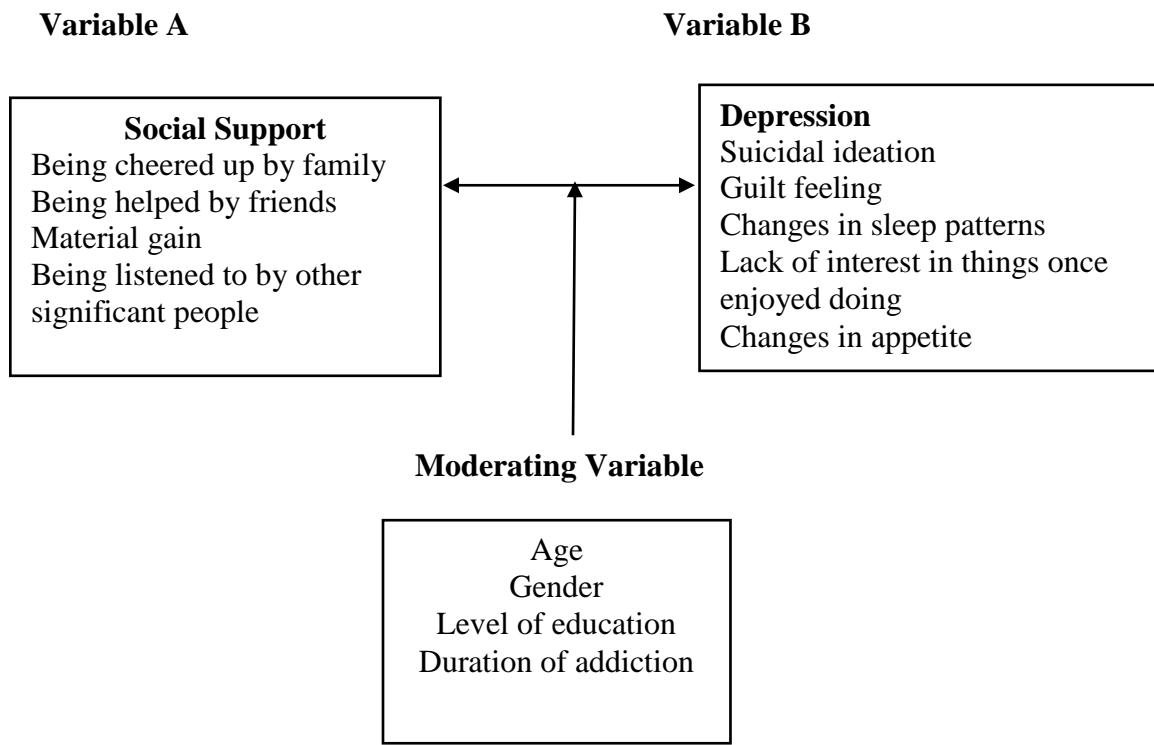
0.623 with $P=0.000$. The correlation coefficient between feeling guilty and feeling worthless likely to lead to substance use among women in addiction recovery ($r=0.645$, $P=0.000$).

Similarly, a study carried out by Shah et al. (2021), on social support and depression among medical school residents in Nairobi. The results showed that there was strong relationship between depressive symptoms and perceived social support sleep ($r = 0.683$, $p = 0.002$), and low perceived social support ($r = 2.19$, $p = 0.001$) were all substantially linked with depression, based on multivariate analysis. The study by Kaburia (2022) did not consider whether there is a relationship between social support and depression among individuals undergoing rehabilitation from drug and substance use in rehabilitation centres. The study was basically centered on the women in addiction recovery. The study conducted by Babobola et al. (2021), focused on social support and depression in “patients with (HIV)”, whereas, this present study focused on drug and substance use individuals. The various gaps provided the justification for the current study.

2.4 Conceptual Framework

This is seen as a symbolic illustration of an abstract idea, which utilizes diagrams to describe the interrelationship between variables (Selvam, 2017; Orodho, 2009). The conceptual framework for this research proposed a relationship between social support and depression, and then the possible influence of the moderating variables.

Figure 2: Conceptual Framework



Source: Researcher (2024)

Based on Figure 1, this research aims at investigating relationship between social support and depression. It consists of variable A and variable B. The conceptual framework is offered on the reason that the variable A, which is social support has a probable relationship with variable B, which is depression, and the possible influence of moderating variables such as age, gender, level of education, duration of addiction among the drug use and substance addicts.

Social support entails the broader aspect of emotional bonding and connectedness individuals receive, or the material gain an individual enjoy from family, friends and other significant others, and it comprises of the following indications; being cheered up by others, getting help from others, being liked, being listened to. While depression is a mood disorder

which could be mild, moderate or severe, and recurrent in humans, and it comprises of the following indications; having suicidal ideation, guilty feeling, feeling irritated and lack of interest.

2.5 Chapter Summary

This chapter presented the theoretical literature review relevant for the study. It was guided by two theories namely; social support theory Aaron Beck theory of depression. The section further carried out empirical literature review, linking the research objectives which were; to find out levels of social support among addicts in rehabilitation centers, to investigate the levels of depression among individuals undergoing rehabilitation from drug and substance use in rehabilitation centers, to examine the relationship between social support and depression, and the demographic characteristics and depression which has been illustrated in the conceptual framework. The next chapter looks at the methodology for this study.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

The chapter discusses the epistemology, research design, study location, target population, sampling design, sampling procedure, and sample size determination are all briefly explained in this chapter. Additionally, it covers methods for acquiring and analyzing data, research instruments, pre-testing of instruments, validity, and reliability of instruments. The chapter deliberates on the ethical consideration and the envisaged outcomes of the study, then followed the chapter summary.

3.2 Epistemology of the Study

The scientific study of knowledge is called epistemology. It is a collection of guidelines that concentrates on what counts as educational knowledge and how it is obtained, keeping it apart from ideas, views, and assumptions (Garrow & Hasenfeld, 2015; Oliver, 2010). This quantitative study made use of the positivist approach, which has the advantage of showing universal principles and observable facts that may be recorded (Crowther & Lancaster, 2012). Positivism is based on the view that science offers a logical way of discovering empirical truth. This strategy showed a high level of structured data gathering and a big sample size, and it utilized a quantitative means of gathering and measuring the data. Collins (2010) argues that positivism believes that factual knowledge is gained through observation and measurement. In this stance, the focus of the study was neither social support nor depression but the relationship between the two study variables.

3.2 Research Design

This study adopted quantitative research method which deals with numbers and figures. This method of research design is based on data driven objective which allows researchers to make predictions hence making it easier for data computing instruments to process data efficiently even on larger sample size. It used the correlational research design whereby quantitative data were scored and measured, then interpreted so as to address the research problem. Rose et al. (2012) hold that correlation research shows the degree of association between the research variables rather than causative connectivity. In this stance, this study investigated the relationship between social support and depression among individuals undergoing rehabilitation from drug and substance use in rehabilitation centres in Ongata Rongai, Kajiado County, Kenya. Based on statistical results of the study, conclusion about the population was drawn.

3.3 Location of the Study

The study was carried out in Ongata Rongai, Kajiado County, Kenya. The county has twenty-five (25) wards and five (5) sub counties. The county covers an area of 21,292.7 km² (9square) with a recorded population of 1,117,840. It has a population density of 51 persons per square kilometer. The county borders Nairobi and extends to Tanzania further South. Its main town is Kajiado town, Kitengela town and Magadi town but the most active part is Ongata Rongai Town. Its major attraction is wildlife which Amboseli Game Reserve sits upon it has an estimate of 40 rehabilitation centers. There are 3,161,79 households with an average of 3.5 persons per household (Kenya National Bureau of Statistics 2019).

The climate and average weather year-round in Kajiado Kenya report about arid and semi-arid climatic conditions. It has short warm summers and cold season. The winters are chilly and

cloudy. The temperatures vary from 54F to 82 F. It is a fairly dry and dusty area throughout the year but with a lot of business and farming activities. The participants of the study are situated in Ongata Rongai town and its environs. This includes: Kiserian, Masai lodge, Olekasasi, Upper Karen and Ngong Town. Ongata Rongai has a population composition of people from various ethnic background and it is a cosmopolitan region. Part of the population have original historical ownership of the land while some are immigrants from other parts of the country who have bought land and settled permanently. There are also other economic generating activities that make the place a hub of business that has also attracted the Asian communities and the Europeans. They engage in businesses like managing hardware shops, real estates, schools and other recreational facilities like hotels (Kajiado County Government, 2020).

There was a scarcity of localized empirical research on the psychological well-being of individuals undergoing rehabilitation in this specific region. Conducting this study addressed a critical knowledge gap, offering context-specific evidence that can inform interventions and policymaking. The numbers of relapses in the rehabilitation centers in Ongata Rongai are quite worrying and this called for an empirical investigation. Based on the various relapses and reports from the administration personnel of rehabilitation, this gave the justification for this study.

3.4 Target Population

The target population must have distinct characteristics that allow all the units in the sum total to be eligible for involvement in the study. It is an entire group of people or subjects about which some information is required to be ascertained (Banerjee & Chaudhury, 2010). The target population for this study was 800 drug and substance use addicts within Ongata Rongai, Kajiado

County Kenya. They are within the age range of 18-60 years old. The participants came from five rehabilitation centers within Kajiado County, Kenya.

3.6 Sampling Design

This section presents a sampling procedure which entail sampling technique, the sample size determination and sampling frame.

3.6.1 Sampling Technique

This study used the multi-stage sampling method. In the first sampling stage, the researcher adopted purposive sampling to select the rehabilitation centers within Ongata Rongai, Kajiado County Kenya. Padgett (2017) describes purposive sampling as an intentional selection of participants or settings because they possess essential information that is most relevant to the research objectives, ensuring that the data collected is highly informative and valuable.

In the second stage, the researcher used the simple random sampling technique in selecting the participants. Aggarwal and Ranganathan (2019) posit that simple random sampling allows the researcher to randomly select a subset of individuals from a target population where each member of the group has equal chances of being chosen for participation in the research. Simple random technique is usually used in quantitative research, and this permitted the researcher to select suitable number of participants for statistical analysis of the study. The precise number of participants who took part in the survey were selected from the rehabilitation center. Pieces of paper were used and there was a caption “yes” and “no” in the pieces of papers. The students who picked “yes”, were invited to part take in the study, and those who pick “no” were not invited to participate in the study.

3.6.2 Sample Size Determination

This is the number of research respondents, observation elements or items that a researcher intends to examine in order to allow generalization of the results to the bigger population (Bryman, 2016). The formula of Krejcie and Morgan (1970) was used to figure out sample size of the study. The formula comes as follow:

$$S = \frac{x^2NP(1 - P)}{d^2(N - 1) + x^2P(1 - P)}$$

Where;

S = stands for the requisite sample size

x^2 = the table value of Chi-square for 1 degree of freedom at the desired confidence level (i.e 3.841)

N= the population size

P= the population proportion (0.50 is used to provide the maximum sample size)

1 – P = estimated percentage of failures

d^2 = square of the utmost allowance for inaccuracy between the true percentage and sample proportion (in the study, it is set at 5%)

Hence, based on the target population of study 800 and applying a 95% confidence interval with an approximate error of 0.05, the results are processed in the calculation as; -

$$S = \frac{1.96^2 \times 800 \times 0.5(1-0.5)}{0.05^2 \times 1900 + 1.96^2 \times 0.5(1-0.5)} = \frac{768.32}{2.9579} = 260.8$$

The sample size of this study was therefore rounded up to 261 participants of drug and substance use addicts. Based on the concern of attrition, 10% of 261 was added. In this regard, 10% of 261 = 26. Therefore, a total of 287 participants were invited to take part in this study.

3.6.3 Sampling Frame

This entails the list of the entire population of a researcher’s interest from which the sample is picked (Bryman, 2016). Table 1 shows the possible sampling size of participants with drug and substance addiction in rehabilitation centers in Ongata Rongai.

Table 1: Rehabilitation Centers

Locations	Target Population	Percentile	Sample Size
Masaai Lodge	150	18.7%	56
Olerai	235	29.3%	84
Umoja	125	15.7%	44
Kware	115	14.4%	41
Olepolos	175	21.9%	62
Total	800	100%	287

Source: Researcher (2024)

In Table 1, the target population of this study was the drug and substance use addicts in rehabilitation centres in Ongata Rongai gotten from five locations. Thus, in order to arrive at the sample size of each of the locations; the target population of each location was divided by the total population of the study (800) and then multiplied by the total sample size of 287. Based on this, the target population at Olepolos was 175, having 21.9 % followed by the sample size of 62. The target population at Olerai was 235, taking 29.3% and the sample size of 84. Also, the target population for Kware was 115, utilizing 14.4%, and having the sample size 41. Umoja was 125, being 15.7%, then making use of the sample size of 44. The target population of Masaai Lodge

was 150, having 18.7%, and then using the sample size of 56. Hence, based on the target population of 800, the sample size of this study was 287 of the drug and substance use addicts in rehabilitation center, Rongai, at Kajiado County, Kenya.

3.7 Research Instruments

A research instrument is a tool used by researchers to collect data in order to respond to research questions (Flick, 2017). In this regard, questionnaires with scales were used in this research to gather information from the respondents. Questionnaire were used to acquire data on both variable “A” and variable “B” respectively. The questionnaire had three sections. The first section collected demographic details of participants, the second section focused on social support and the third section gathered data on depression. The Berlin Social Support Scales (BSSS) and the Beck Depression Inventory (BDI-II) were used to collect data. The Berlin Social Support Scales (BSSSs) was developed by Schulz and Schwarzer (2003). This is a 24 items questionnaire that is made up of six distinct scales that gauge six different parts of social support, which are: (1) perceived availability of assistance; (2) need for support; (3) seeking support; (4) actually receiving support; (5) providing support; and (6) protective buffering.

Social support scales are measured on 5-point Likert scale and scored, where 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, and 5 = Strongly Agree. Add scores on all the 24 items. The highest possible score is 120, lowest score is 23. Higher scores range from 70-120, moderate scores from 40-69, and low scores are 1-39.

Furthermore, Beck depression inventory was formulated by Aaron Beck (1967). It is a 21-item scale, that is divided into six sub-sections showing levels of depression. The highest possible score a participant could get is 63, while the lowest possible score any participant could attain is

0. Add up the score for each of the 21 questions by counting the number to the right of each question marked. In this research, scores between 17 and above were taken as depression.

Score _____	Levels of Depression
1-10 _____	These ups and downs are considered normal
11-16 _____	Mild mood disturbance
17-20 _____	Borderline clinical depression
21-30 _____	Moderate depression
31-40 _____	Severe depression
Over 40 _____	Extreme depression.

3.7.1 Reliability of Instrument

According to Pratt and Yeziarski (2018), reliability of an instrument is the test of extent to which the tool yields consistent outcomes after being applied repeatedly. It measures the precision, repeatability, and credibility of a research tool. The Berlin Social Support Scale (BSS) was seen to be reliable, as established by DiMillo et al. (2017), in their research that was conducted among 137 English and French language melanoma patients in Canada. In the validation sample (melanoma patients; N=137), internal consistency for subscales was: Cronbach's alpha for perceived social support (8 items) = .83, for received social support (overall score, 11 items) = .83, for need for support (4 items) = .63, for seeking support (5 items) = .81, and for protective buffering (6 items) is .82. The Beck Depression Inventory (BDI-II) was used in research by Makhubela (2016) among students from South Africa. The BDI-II was found with high levels of internal consistency and reliability (Cronbach's $\alpha = .84$).

3.7.2 Validity of Instrument

This is a process of validation of the instrument so as to increase the level of dependability for accurate information (Vogel & Draper, 2017). The validity of the Berlin Social Support Scale (BSS) was confirmed in a number of studies by Schulz and Schwarzer (2003; 2004) among adults in the USA (N= 1,187), Spain (N= 302) as well as Japan (N= 281). The BDI-II was also validated in a study carried out by Makhubela (2016) among students from Limpopo and Pretoria in South Africa, and it was confirmed to be valid for use.

3.7.3 Pre-testing of Instrument

Pre-test is a method that is used to check whether the, design, wording, are clear to the participants before the actual study is conducted (Mugenda & Mugenda, 2013). This study carried out a pre-test to ascertain their internal consistency and coefficients, and ensured that the instruments tested what they are expected to test. The pretest of the research instruments of this study was conducted in Lower Kabete among individuals undergoing rehabilitation from drug and substance use in rehabilitation centres. This study used 10% of the sample size of 287. Mugenda and Mugenda (2003) recommended that 1-10% of pre-test sample was enough. Therefore, 10% of 287 = 29. The researcher put into consideration the ethical principles required and as well sought approval from the relevant authorities during the pre-testing of the instruments. Results of the reliability test show that the Berlin Social Support Scales (BSSS) had an alpha of $\alpha = .743$, having the total number of 24 items, and this is considered acceptable. The Beck Depression Inventory (BDI-II) had an alpha of $\alpha = .864$, having a total number of 21 items, which is considered to be good.

3.8 Data Collection Procedure

In order to safeguard smooth and well-organized data collection; the researcher got the relevant approvals before embarking fieldwork data collection. First, the researcher obtained a letter of authorization from the Tangaza University Institutional Scientific Ethics Review Committee (TU-ISERC). Secondly, the researcher further needed approval from the National Council of Science, Technology and Innovation (NACOSTI). Lastly, the researcher sought letter of authorization from the study's different locations of the rehabilitation centres in Ongata Rongai.

After obtaining the necessary approvals and institutional consent, the researcher contacted the administrators of the respective rehabilitating centers that participated in the study, seeking their permission and consent to recruit the participants. Once the consent was granted by the administrators, the researcher suggested suitable timings when the rehabilitees may be available to be gathered so as to respond to the questions without interference with their routine program.

In addition, the researcher obtained respondents' informed consent. Two degree-holders were recruited as research assistants, and both got training in the distribution, completion, and collecting of questionnaires. Questionnaires were distributed to the participants at various centres. The participants subsequently waited within the rehabilitation centres until the questionnaires were filled and they were allocated adequate time of 35 minutes so as to respond to the questions effectively. There was a debrief session after the exercise to address any triggers by a professional counselling psychologist.

3.9 Data Analysis

In this research, data was analysed using descriptive and inferential statistics respectively. To set up a scientific analysis of the data, the IBM statistics 25 edition of Statistical Packages for the Social Sciences (SPSS) will be used. Table 2 gives the steps in analysing the research data.

Table 2: Data Analysis

Data analysis of:	Variable type	Purpose of the test	Type of the test
Demographic characteristics	Categorical	Gather information about demographics Characteristics	Descriptive Statistic; frequencies, percentiles.
Objective 1	Scale	To measure the levels	Descriptive statistical score
Objective 2	Scale	To measure the levels	Descriptive statistical score
Objective 3	One scale and one categorical	Test relationship between one scale variables and categorical variables	Pearson's Correlation Coefficient/Chi-square
Objective 4	Two Scales	Test relationship between two scales	Pearson's Correlation Coefficient analysis

Source: Researcher (2024)

According to table 2, descriptive statistic was used to gather demographic information of participants of this research using frequencies and percentages. Inferential statistics, for instance,

the Pearson's product moment coefficient correlation analysis was used. A probability value of ≤ 0.05 was considered statistically significant. The first objective which was; levels of social support and the second objective which is; levels of depression were scored and measured respectively using descriptive statistics scores so as to gauge their levels, then presented in summary tables using frequencies and percentages.

The third objective of the study, which was to examine the relationship between demographic characteristics and depression among individuals undergoing rehabilitation from drug and substance use, was analysed using the Pearson's product moment correlation analysis on age and gender, and the Chi-square test to analyse levels of education and duration of addiction among the participants of this study. Similarly, the Pearson's product moment correlation analysis was employed to analyse the fourth objective, which sought to establish the relationship between social support and depression among individuals undergoing rehabilitation from drug and substance use in rehabilitation centres in Ongata Rongai, Kajiado County, Kenya.

3.10 Data Management

Data management refers to the systematic process of collecting, storing, organizing, and maintaining data to ensure its accuracy, accessibility, and security throughout its lifecycle. This involves implementing policies and procedures for data governance, quality, and protection to facilitate effective use and compliance with regulatory standards (Ahlfeldt, 2015; Kitchin, 2014). To safeguard against potential data breaches during both collection and analysis, the researcher implemented security measures, including passwords and secure backup devices. The researcher was committed in maintaining the integrity of participant data while sharing the results. The final document could be stored digitally in the Tangaza University repository for access by academics,

instructors, and students. Additionally, physical copies of the collected data would be secured in a locked cupboard in a designated area after the final thesis defence.

3.11 Ethical Considerations

Ethical considerations are principles that aid guide research and obtaining information based on the best practices of conducting empirical social studies (Heyvaert et al., 2016). The researcher obtained ethics clearance from the Tangaza University Institutional Scientific Ethics Review Committee (TU-ISERC). Permission was sought from National Commission of Science, Technology and Innovation (NACOSTI), letters of authorization was taken from the five rehabilitation centres. Some of the important principles were adhered to and these include; voluntary participation, informed consent, anonymity, protection of respondents, confidentiality as well as no deception. The researcher informed the participants about the essence of this research and the need for voluntary participation. The researcher protected the respondents from any possible harm due to their involvement in the research by making sure their actual names and other sensitive personal information is not captured in the questionnaire during data collection.

Pertaining to the principle of confidentiality and anonymity, personal details of the respondents were not requested. The participants were briefed on the right to terminate participation at any stage of the data collection. They were encouraged to seek clarifications at any given time and be free to withhold any personal information they may not be willing to disclose to the researcher, and there was no any form of negative consequences on such. The researcher expects to recruit two research assistants who are degree holders, so as to assist in the distribution of the questionnaires. The participants were allocated 35 minutes to respond to the questionnaire. There was a debriefing at the end of the activity and this was facilitated by a professional counselling psychologist.

3. 12 Chapter Summary

The chapter presented explanations of the research methodologies. It looked at the epistemology, research design, study location, target population, sampling design, sampling technique, and sample size calculation. It also discussed the research tools, pre-testing of tools, validity, reliability, and methods for data collection and data analysis. It finally discussed ethical issues. Then next chapter focuses on the findings of the study.

CHAPTER FOUR

FINDINGS

4.1 Introduction

This chapter presents the findings of the study. It begins with the response rate on the research questionnaires. It further articulates the demographic characteristics of participants, and ends with findings of the study in relation to the objectives of the study respectively, and then the chapter summary.

4.2 Response Rates

This section shows the response rate of the questionnaires distributed to the research participants of the study. Table 3 presents the response rates.

Table 3: *Response Rate*

Sample Size	Distributed Questionnaires	Returned Questionnaires	Missing Questionnaires	Spoiled Questionnaires	Valid Questionnaires	%
287	287	278	9	4	274	95.4%

In Table 3, the sample size of this study was 287. Out of the 287 questionnaires that were distributed to the participants of the study, 278 were returned to the researcher, 9 of the questionnaires were missing, and 4 of the questionnaires were spoilt and hence discarded. The remaining 274 questionnaires were properly filled and were used for analysis. Hence, this study had a 95.4% response rates. Groves et al. (2018), suggest that a response rate of 70% or above is regarded as excellent, demonstrating strong engagement and dependable data quality. Such a response rate typically reflects a representative sample of the target population, enabling accurate inferences and generalizations about the study area.

4.3 Demographic Characteristics

Data was gathered under the following demographics of age, gender, level of education and duration of addiction. The findings for demographic characteristics of participants of this study are tabulated in Table 4.

Table 4: Demographic Characteristics

Age	Frequency	Percentages
18-23	56	20.4%
24-28	53	19.3%
29-33	85	31.0%
34-38	38	13.9%
39-43	20	7.3%
44 and above	22	8.0%
Total	274	100%
Gender		
Male	179	65.3%
Female	95	34.7%
Total	274	100%
Levels of education		
KCSE	65	23.7%
Certificate	25	9.1%
Diploma	102	37.2%
BA	68	24.8%
MA	13	4.7%
PHD	1	.4%
Total	274	100%
Duration of addiction		
1-2 Years	58	21.2
3-4 Years	79	28.8
5 Years and Above	135	50.0%
Total	274	100%

As seen in table 4, the data indicate that the participants fall within the age range of 29–33 years, making up 31.0% of the total sample. This suggests that individuals in this age range are the most engaged. Combining 18–23 and 24–28 ages categories, also represents a significant portion (39.7%) of respondents, indicating strong participation from younger adults. The least

represented group is the 39–43 age range (7.3%). This distribution could imply that this research appeals more to younger and early-middle-aged individuals. With regards to gender,

The data reveals a gender imbalance among the respondents, with male participants (65.3%, n = 179) significantly outnumbering female participants (34.7%, n = 95). Males constitute nearly two-thirds of the total sample, while females represent just over one-third. This disparity suggests that males were either more available or more interested. It may also reflect gender representation in the population being admitted in the rehabilitation centers.

Levels of education showed that 37.2% held a diploma, making it the most common level of education among the respondents. A smaller proportion had achieved master's degrees (MA) at 4.7%, while only 0.4% had attained a PhD. These results suggest that a significant number of individuals in rehabilitation centers had access to tertiary education, with a notable portion holding diplomas or higher qualifications. This may reflect broader trends in education accessibility or indicate that drug and substance use issues affect individuals across various educational backgrounds, including those with advanced academic achievement.

Duration of addiction revealed that half of the respondents (50.0%, n =135) had been struggling with drug and substance addiction for five years or more, indicating a significant portion of long-term addiction cases, while 21.2% had experienced addiction for 1 to 2 years. This distribution of duration of addiction suggests that a substantial number of participants in rehabilitation centers were dealing with prolonged addiction, which could have more severe psychological, physical, and social consequences. The high percentage of long-term addicts may also reflect delayed intervention or barriers to accessing treatment earlier.

4.4 Levels of Social Support among Individuals Undergoing Rehabilitation from Drug and Substance Use in Rehabilitation Centres in Ongata Rongai, Kajiado County, Kenya

The first objective of this study was to find out the levels of social support among drug and substance use addicts in rehabilitation center in Ongata Rongai, Kajiado County, Kenya. Scores were computed using descriptive statistics in order to measure the levels of social support among the participants. The highest possible score is 115, lowest score is 23. Scores from 70 and above = High social support, scores ranging from 40-69 = Moderate social support, and scores from 1-39 = Low social support. The outcomes of the analysis are presented in Table 5.

Table 5: *Levels of Social Support among Drug and Substance Use Individuals in Rehabilitation Centres*

Levels	Frequency	Percentages
Low	0	0%
Moderate	32	12.0%
High	242	88.0%
Total	274	100%

The data reveals that the majority of drug and substance use addicts (88%, n = 242) in the rehabilitation center report having a high level of social support, while (12%, n = 32) experienced a moderate level, and none of the participants report low social support. These findings indicate that most individuals in the center are surrounded by strong social support systems, possibly including family, friends, counselors, or community programs. The presence of high social

support is a positive and encouraging factor in the recovery process, as it could facilitate better treatment outcomes, improved mental health, and reduced relapse rates.

Further, a descriptive analysis was carried out in order to establish the exact level of social support among individuals undergoing rehabilitation from drug and substance use in rehabilitation centres in Ongata Rongai, Kajiado County, Kenya.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Social Support	274	41.00	142.00	82.0511	11.84937
Valid N (listwise)	274				

As shown in the descriptive statistical analysis, results indicate that the participants had a means score of ($M = 82.0511$, $SD = 11.84937$). Owing to the level of support as specified by Schulz and Schwarzer (2003), scores from 70 and above means “high social support”. This outcome implies that the participants of this study were at high level of social support.

4.5 Levels of depression among Individuals Undergoing Rehabilitation from Drug and Substance Use in Rehabilitation Centres in Ongata Rongai, Kajiado County, Kenya

The second objective of this study was to examine levels of depression among drug and substance use addicts in rehabilitation centers in Ongata Rongai, Kajiado County, Kenya. Descriptive statistical analysis was used to carry out this investigation, in which data were computed and scored so as to gauge the levels. The highest possible score a participant could get is 63, while the lowest possible score any participant could attain is 0. Scores ranging from 1-10 are considered normal ups and downs of life (no depression), scores ranging from 11-16 = Mild mood disturbance, 17-20 = Borderline clinical depression, 21-30 = Moderate depression, scores ranging from 31-40 is seen as severe depression, while scores of over 40 = Extreme depression. The results of the analysis are given in table 6.

Table 6: Levels of Depression among Drug and Substance Use Individuals in Rehabilitation Centers

Levels	Frequency	Percentages
Ups and downs of life (considered normal)	39	14.7%
Mild mood disturbance	78	28.5%
Borderline clinical depression	30	11.0%
Moderate depression	75	23.7%
Severe depression	40	16.4%
Extreme depression	12	5.7%
Total	274	100%

The data in table 6, indicates that a significant proportion of drug and substance use addicts in rehabilitation centers were at different levels of depression, in which 56.8% of the participants were at the borderline to extreme levels of depression, which includes moderate (23.7%), severe (16.4%), and extreme (5.7%) cases of depression among the participants of this study, while 14.7% (n = 39) of the participants were in normal ups and downs of life, suggesting they may not currently have clinical depression. The findings ranging from borderline clinical depression to extreme depression underscore the need for concern on possible integrated treatment approaches that address both addiction and mental health concerns.

Additionally, a descriptive analysis was conducted to ascertain the exact level of depression among the participants of this study.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Depression	272	.00	45.00	20.5404	10.29448
Valid N (leastwise)	272				

These findings point that the participants had the mean score of (M = 20.5404, SD = 10.29448). According to the BDI- II, a score of 17-20 = borderline clinical depression. Thus, the participants of this study were exactly at the borderline clinical depression.

4.6 Relationship between Demographic Characteristics and Depression among Individuals Undergoing Rehabilitation from Drug and Substance Use in Rehabilitation Centres in Ongata Rongai, Kajiado County, Kenya

The third objective of this study was to determine the relationship between demographic characteristics and depression among drug and substance use individuals in rehabilitation centers in Ongata Rongai, Kajiado County, Kenya. The Pearson's Correlation Coefficient and the Chi-square test were used to conduct the analysis. The outcomes are illustrated in table 7.

Table 7: Relationship Between Age and Depression among Drug and Substance Use Individuals

		Age	Depression
Age	Pearson Correlation	1	-.272**
	Sig. (2-tailed)		.000
	N	274	274
Depression	Pearson Correlation	-.272**	1
	Sig. (2-tailed)	.000	
	N	274	274

		Gender	Depression
Gender	Pearson Correlation	1	.102
	Sig. (2-tailed)		.092
	N	274	274
Depression	Pearson Correlation	.102	1
	Sig. (2-tailed)	.092	
	N	274	274

		Duration of Addiction	Depression
Duration of Addiction	Pearson	1	-.036
	Correlation		
	Sig. (2-tailed)		.549
	N	274	274
Depression	Pearson	-.036	1
	Correlation		
	Sig. (2-tailed)	.549	
	N	274	274

Chi-Square Tests on Level of Education and Depression

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	268.019 ^a	220	.015
Likelihood Ratio	245.492	220	.115
Linear-by-Linear Association	.573	1	.449
N of Valid Cases	274		

a. 266 cells (98.5%) have expected count less than 5. The minimum expected count is .00.

According to table 7, with regards to age, results show a significant negative correlation ($r = -.272$, $p = .000 \leq 0.05$) between age and depression among drug and substance use addicts in rehabilitation centres. The Pearson correlation coefficient of -0.272 suggests a weak inverse relationship: This implies that as age increases, levels of depression tend to decrease slightly.

Based on gender, the analysis shows a weak positive no significant correlation ($r = .102$, $p = .092 \geq 0.05$) between gender and depression among drug and substance use addicts in rehabilitation centers. However, the p-value is 0.092 , which is greater than the conventional threshold of 0.05 , meaning the relationship is not statistically significant. This implies that depression can be experienced by any gender, male or female.

Further, the correlation between duration of addiction and depression was weak and negative ($r = -0.036$), and the p-value of 0.549 indicates that this relationship is not statistically significant, and this suggests that depression is not necessarily determined by duration of addiction.

The Pearson Chi-Square test shows a statistically significant association between level of education and depression among drug and substance use addicts ($p = 0.015 < 0.05$). This suggests that the distribution of depression levels vary meaningfully across different education levels. Individuals with different educational backgrounds may experience depression differently, possibly due to varying life opportunities, coping mechanisms, and possible access to support systems.

4.7 Relationship between Social Support and Depression among Drug and Substance Use Addicts in Rehabilitation Centres in Ongata Rongai, Kajiado County, Kenya

The fourth objective of this study aimed to establish the relationship between social support and depression among drug and substance use addicts in rehabilitation centres in Ongata Rongai, Kajiado County, Kenya. The Pearson's Correlation Coefficient was used to carry out the analysis. The findings are demonstrated in table 8.

Table 8: Relationship Between Social Support and Depression Among Drug and Substance Use Addicts in Rehabilitation Centres

		Social support	Depression
Social support	Pearson Correlation	1	-.364**
	Sig. (2-tailed)		.000
	N	274	274
	Pearson Correlation	-.364**	1
Depression	Sig. (2-tailed)	.000	
	N	274	274

** . Correlation is significant at the 0.01 level (2-tailed).

As shown in table 8, the Pearson’s Correlation Coefficient revealed that there was a moderate negative significant relationship ($r = -.364$, $p = .000 \leq 0.05$) between social support and depression among drug and substance use addicts in rehabilitation centers among drug and substance use addicts in rehabilitation centres in Ongata Rongai, Kajiado County, Kenya. This inverse outcome indicates that as social support increases, depression levels tend to decrease. Strong social support plays a protective role against depression in individuals undergoing rehabilitation from drug and substance abuse.

4.8 Chapter Summary

This chapter presented the findings of the study. It began with the response rate to the research questionnaires, further described the demographic characteristics of the participants, and concluded with the findings of the study in relation to its respective objectives. The next chapter focuses on the discussion of findings.

CHAPTER FIVE

DISCUSSIONS

5.1 Introduction

This chapter discusses the findings of the study, in line with the objectives of the study which are: levels of social support among drug and substance use addicts in rehabilitation centers, levels of depression among drug and substance use addicts in rehabilitation centers, relationship between demographic characteristics and depression among drug and substance use addicts in rehabilitation centers, and establish the relationship between social support and depression among drug and substance use addicts in rehabilitation centers in Ongata Rongai, Kajiado County, Kenya.

5.2 Levels of Social Support among Individuals Undergoing Rehabilitation from Drug and Substance in Rehabilitation Centres in Ongata Rongai, Kajiado County, Kenya

The first objective of this study was to find out the levels of social support among drug and substance use addicts in rehabilitation center in Ongata Rongai, Kajiado County, Kenya. Findings revealed that the majority of drug and substance use addicts (88%, n = 242) in the rehabilitation center reported high level of social support, while 12% (n = 32) experienced a moderate level of social support, and none of the participants reported low social support. These results suggest that most of the participants in the rehabilitation center are possibly surrounded by strong support systems, which may include family, friends and counselors. The presence of high social support is a positive and encouraging factor in the recovery process, as it is likely linked to better treatment outcomes, and a reduced relapse rate.

The findings of the current study were lower and differed from the finding by Zaid (2020) in Saudi Arabia. It was found that 40% of addicts were at low level of social support, and this contributed immensely by preventing recovery and healing, and increase in relapses, while the current study revealed 0% low level of social support among the participants of this study.

The finding of the current study is dissimilar with the finding by Amandru et al. (2020), in Uganda. It was established that the participants of the study had a mean score of 38.4 (SD =10.4). This revealed that drug and substance use people had low level of social support, whereas, the current indicated a zero score on low level of social support.

This study's outcome is not consistent with the finding of Sereta et al. (2016), in Kenya. While the present study found zero score on low social support, the finding by Sereta et al. revealed that 11.6%, of the addicts were at low level of social support in their recovery processes.

This study's findings offer valuable insight into the role of social support in the recovery process. Social support is widely recognized as a critical factor in addiction recovery, often associated with positive treatment outcomes, reduced relapse rates, and improved psychological well-being (Tracy & Wallace, 2016). The high percentage of individuals perceiving strong social support could reflect the effectiveness of integrated support systems within rehabilitation centers or strong external networks such as family, friends, or peer support groups. Research has shown that individuals in recovery who receive robust emotional and instrumental support tend to be more motivated to maintain sobriety and adhere to treatment protocols (Tracy & Wallace, 2016). Korcha et al. (2016), contends that individuals in recovery homes revealed that perceived benefits of abstinence, when coupled with strong social support, particularly through 12-step involvement and expansive social networks significantly predicted recovery.

Rehabilitation centers possibly provide structured environments that foster strong social support. The structured environments could include group therapy sessions, peer support groups, and communal living arrangements, which encourage the development of supportive relationships among individuals undergoing similar recovery journeys. Such environment likely reduces feelings of isolation and promotes healing, both of which are vital for sustained recovery. In addition, access to counselors, therapists, and medical professionals within rehabilitation centers ensures that individuals receive comprehensive care tailored to their needs. The professionals assist in developing aftercare plans, which may include continued therapy, support group participation, and strategies for managing potential triggers, thereby extending the support system beyond the rehabilitation period (New Horizons Recovery Centre, 2025).

Thus, the absence of participants reporting low social support in the current study may suggest either the inclusivity of supportive environments within the facility or a self-selection bias, where individuals without support may be less likely to seek or remain in structured rehabilitation programs. This underscores the importance of designing interventions that not only treat addiction but also foster or rebuild support networks for those who may lack them.

5.3 Levels of Depression among Individuals Undergoing Rehabilitation from Drug and Substance Use in Rehabilitation centres in Ongata Rongai, Kajiado County, Kenya

The second objective of this study was to examine levels of depression among drug and substance use addicts in rehabilitation centers in Ongata Rongai, Kajiado County, Kenya. The data indicates that half (56.8%) of the participants were at the borderline to extreme levels of depression which includes moderate (23.7%), severe (16.4%), and extreme (5.7%) cases of depression, whereas, 14.7% (n = 39) of the participants of this study were in normal ups and downs of life, and this implies that they may not have clinical depression. These results highlight

that inasmuch as the majority of the participants may be receiving strong social support, depression is still prevalent among some individuals undergoing rehabilitation for substance use. The fact that half of the participants fall into the borderline to extreme depression categories possibly suggests that mental health challenges are deeply intertwined with substance addiction. The various levels of depression could impact the effectiveness of rehabilitation efforts, as individuals struggling with depression may face greater difficulty in engaging fully with treatment programs, maintaining motivation for recovery, and avoiding relapse.

The finding of this study is consistent with the finding by Mohamed et al. (2020), in Egypt, who reported that 72% of the study sample size was found to have severe depression, although this percentage is higher in comparison to that of the current study, which revealed that 16.4% of the participants had severe depression. This study's finding by Jacquelin (2014) in Kenya, whose study reported depression, that ranges from borderline clinical depression to extreme depression, being at 86.6% (n = 129), although, the result was a higher percentage in comparison to the findings of the present study.

Depression among individuals undergoing rehabilitation for drug and substance use revealed in the present study is a significant concern, with many experiencing a spectrum from borderline to severe depressive symptoms. This co-occurrence complicates treatment and recovery, as each condition can exacerbate the other. Brice (2024) contends that depressive symptoms among addicts in the rehabilitation centers can slow recovery process, making recovery more challenging. Compton and Shim (2015) affirm that many addicts entering rehab face a web of psychosocial stressors, including losses from broken relationships, legal problems, financial strain, and unemployment, history of trauma or abuse. These factors contribute to a chronic sense of despair and low self-worth, fueling borderline depressive symptoms. The loss of deep

connection can lead to deep loneliness, guilt, and shame, all of which are core features of depression. Individuals may feel unworthy of love or believe they have irreparably damaged their chances for meaningful connection.

Severe and extreme depression among the participants of this study is a critical public health concern, as the co-occurrence of depression and addiction could significantly complicate therapeutic interventions. Koob and Volkow (2016), amplify this by asserting that severe and extreme depression in drug users is not merely a secondary concern but a central feature of many addiction cases that requires sufficient attention.

Based on extreme depression among individuals in addiction, Volkow et al. (2016), posit that substance abuse alters brain chemistry. When a person who uses drug and substance enters a rehab and stops using drugs or alcohol, the brain goes through withdrawal, which can lead to intense depressive episodes. In addition, many of such persons enter rehab with underlying mental health disorders like major depression. Substance use may have been a form of self-medication. Removing the substance can leave these conditions exposed and untreated, making depressive symptoms more extreme. The authors further point that. Facing life without the substance can be terrifying for some addicts. The fear of relapse, rebuilding a life from scratch, or not being able to cope without drugs can cause extreme depression. Admission to rehabs often comes with major life changes such as loss of relationships, jobs, freedom as well as identity, and these losses can trigger or deepen depression. A drug user may also be faced with guilt and shame about their past behavior, which could further intensify depression (Volkow et al., 2016).

Thus, extreme depression among addicts in rehabilitation centers may not merely be a side effect of quitting substances; it could be a multifaceted response to profound biological, psychological, and social disruptions. The process of withdrawal, the surfacing of underlying

mental health disorders, the emotional burden of loss, and the stress of adapting to a new, sober environment likely contribute to intense depressive episodes in the rehab. Recognizing and treating this depression is critical for recovery, as untreated mental health challenges significantly elevate the risk of relapse and hinder long-term healing.

5.4 Relationship between Demographic Characteristics and Depression among Individuals Undergoing Rehabilitation from Drug and Substance Use in Rehabilitation centres in Ongata Rongai, Kajiado County, Kenya

The third objective of this study was to determine the relationship between demographic characteristics and depression among individuals undergoing rehabilitation from drug and substance use in rehabilitation centres in Ongata Rongai, Kajiado County, Kenya. Findings on age show a weak significant negative correlation ($r = -.272$, $p = .000 \leq 0.05$) between age and depression among drug and substance use addicts in rehabilitation centers. This suggests a weak inverse relationship, which implies that as age increases, levels of depression tend to decrease.

Based on gender, result shows no significant correlation ($r = .102$, $p = .092 \geq 0.05$) between gender and depression among drug and substance use addicts in rehabilitation centers. This point toward that depression can be experienced by any gender, whether male or female. Further, there was a weak negative insignificant correlation between duration of addiction and depression ($r = -0.036$, $p = 0.549 \geq 0.05$), and this suggests that depression is not necessarily determined by duration of addiction.

There was a significant association between level of education and depression among drug and substance use addicts ($p = 0.015 < 0.05$). This suggests that the distribution of levels of depression vary meaningfully across different education levels among the participants of this study. Individuals with different educational backgrounds may experience depression in a

different way, possibly due to varying life opportunities, and the ability to cope with existential experiences.

The finding of the current study differs with the finding by McGovern et al. (2023), in the USA. While the current study found that there was a weak negative insignificant correlation between duration of addiction and depression, the finding of McGovern et al. (2023) indicated that there was a significant association ($P < .001$) between duration of addiction and depression among the participants. The findings of the current study are dissimilar with the findings by John (2021) in Nigeria. While the current study found negative but significant relationship between age and depression, the findings by John revealed that age and depression have no relationship ($P = .892 \geq 0.05$). The finding of the present study contradicts the findings by Afen (2022) in Kenya, whose study indicated that there was a positive significant relationship between age, gender and depression ($P = 0.01 \leq 0.05$). The finding of the current study did not align with the findings of Onyango et al. (2023) in Kenya. Their result showed no significant relationship between participants' highest education level and the prevalence of depression ($\chi^2 (3, N = 178) = 1.983, p = .576$) among inpatients with substance use disorders in drug rehabilitation centers in Nairobi.

One possible explanation regarding finding on negative correlation between age and depression is that younger individuals may experience higher levels of depression during rehabilitation compared to older counterparts. This could be due to several factors: younger people with addiction challenge may have less coping experience, more difficulty adapting to the constraints of rehab life, or may face greater uncertainty about their future. In contrast, older individuals may have developed better emotional resilience or have a stronger motivation for recovery due to life experiences or family responsibilities. Saban et al. (2014), affirm that younger individuals in treatment for substance use disorders were more prone to experiencing depressive

symptoms, possibly due to lower emotional regulation capacity and increased psychosocial stressors

With regards to the findings on gender and depression, this suggests that while there may be a slight tendency for gender to be associated with variations in depression levels, the relationship is not strong, and it is not statistically significant at the conventional alpha level of 0.05. This implies that gender does not play a major role in influencing the severity or prevalence of depression within this specific population. Both male and female persons with drug and substance use addiction in rehabilitation centers appear to experience depression at comparable rates, or at least not in a way that is consistently different to be captured by a statistically significant correlation.

This finding is consistent with some previous studies that have reported minimal or no gender differences in depression among substance use populations, particularly in controlled environments like rehabilitation centers, where shared experiences and stressors such as withdrawal symptoms, restricted freedom and past trauma may overshadow gender-based psychological differences (Kelly, 2014). However, Kuehner (2017) submits that other literature has often shown higher rates of depression among females in general populations, including among those with substance use disorders.

Regarding findings on level of education and depression, one possible explanation is that individuals with lower levels of education may have reduced access to coping mechanisms, mental health literacy, or economic resources, which can exacerbate feelings of hopelessness, low self-worth, and depression (Murphy et al., 2010). Conversely, it is possible that the participants of this study with higher education may be better equipped with knowledge and skills to understand their condition, seek help, and engage meaningfully with therapeutic interventions. The

significant relationship underscores the need for targeted psychological support for individuals with lower education levels in rehabilitation settings.

Looking at duration of addiction, the lack of a significant correlation could also imply that depression among people in drug and substance use addiction is influenced more by acute psychosocial stressors or pre-existing mental health conditions than the sheer duration of substance use. Hasin et al. (2011), put it that, individuals in rehabilitation may be at varying stages of recovery, and some may experience improved mood due to therapeutic interventions, skewing the overall relationship between addiction duration and depression. The finding of the present study may be indicating that duration alone may not be a reliable predictor of depressive symptoms in clinical populations.

5.5 Relationship between Social Support and Depression among Individuals Undergoing Rehabilitation from Drug and Substance Use in Rehabilitation Centres in Ongata Rongai, Kajiado County, Kenya

The fourth objective of this study aimed to establish the relationship between social support and depression among individuals undergoing rehabilitation from drug and substance use in rehabilitation centres in Ongata Rongai, Kajiado County, Kenya. Finding revealed that there was a moderate, negative, and significant relationship ($r = -.364$, $p = .000 \leq 0.05$) between social support and depression among drug and substance use addicts in rehabilitation centers: This negative outcome shows that as social support increases, depression levels decrease.

The finding of this study is consistent with the finding by Richert et al. (2012), in Sweden. It was found that social support and depression were strongly and significantly related ($P=0.001 \leq 0.05$) among young drug and substance addicts. The present study's outcome is related to the finding by Babobola et al. (2021), in Nigeria. The results revealed that there was a significant

relationship between social support and depression ($\chi^2=18.38$, $df=2$, $p=0.03$). In multivariate regression, absence of social support ($B = 2, 120 = P = 0.001$, $OR = 8,3.27$) was a significance predictor for depression among the participants of the study. The finding of the current study is consistent with the finding by Shah et al. (2021) in Kenya. The results demonstrated a strong relationship between perceived social support and depressive symptoms ($r = 0.683$, $p = 0.002$), and low perceived social support ($r = 2.19$, $p = 0.001$) was substantially linked with depression, based on multivariate analysis.

Strong social support plays a protective role against depression in individuals undergoing rehabilitation for drug and substance abuse. McKellar (2022) argues that rehabilitation is a psychologically taxing process often accompanied by emotional turmoil, including feelings of guilt, shame, isolation, and low self-worth. These emotional burdens significantly increase the risk of depression. In addition, social support contributes to recovery in several key ways: It provides emotional validation and encouragement, which helps reduce feelings of loneliness and hopelessness. It fosters a sense of belonging and acceptance, essential for restoring self-esteem. It often involves practical support, making the recovery journey more manageable (McKellar, 2022).

Further, these results emerging from the present study aligns with a substantial body of literature underscoring the protective role of social support in mitigating psychological distress, particularly depression, among individuals with substance use disorders (SUDs) (Chen, 2023). Abiola et al. (2015), established that social support whether from family, friends, and community play a vital role in promoting emotional well-being and resilience among those recovering from addiction. Social support acts as a buffer against the adverse psychological effects of stress, which is particularly important for addicts undergoing rehabilitation, who often experience feelings of

isolation, shame, and hopelessness. Moreover, Scoglio et al. (2024), affirm that social support has been found to moderate decreases in substance use and PTSD symptoms during treatment, highlighting its role in enhancing treatment outcomes for individuals with co-occurring disorders. Conversely, low levels of social support are linked to negative health outcomes, posing additional challenges to recover. Otieno et al. (2020), note that studies in sub-Saharan Africa and globally have shown that higher perceived social support is associated with lower depression scores among recovering rehabilitees (Abiola et al., 2015).

5.6 Chapter Summary

This chapter presented the findings of the study in alignment with its objectives, which were to examine the levels of social support among individuals undergoing rehabilitation from drug and substance use in rehabilitation centres, assess the levels of depression among this population, analyze the relationship between demographic characteristics and depression, and determine the association between social support and depression among individuals undergoing rehabilitation from drug and substance use in rehabilitation centres in Ongata Rongai, Kajiado County, Kenya.

CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This chapter gives the summary of the findings of the study and the conclusions respectively. It also proposes policy recommendations, followed by future research recommendations.

6.2 Summary of Findings

This study investigated the relationship between social support and depression among individuals undergoing rehabilitation from drug and substance use in rehabilitation centres in Ongata Rongai, Kajiado County, Kenya. The study had a 95.4% response rates. The majority of participants fall within the age range of 29–33 years, making up 31.0% of the total sample. Combining 18–23 and 24–28 age categories, also represents a significant portion (39.7%) of respondents. While the least represented group is the 39–43 age range (7.3%). The data revealed that the male participants (65.3%, n = 179) were more than the female participants (34.7%, n = 95). Levels of education indicated that 37.2% of the participants held a diploma. A smaller proportion had achieved master's degrees (MA) at 4.7%, while only 0.4% had attained a PhD. Findings on duration of addiction demonstrated that half (50.0%, n =135) of the respondents had been addicted for five years or more, while the rest had experienced addiction for less than five years, with 28.8% addicted for 3–4 years and 21.2% for 1–2 years.

Findings on first objective revealed that majority of the participants (88%, n = 242) in the rehabilitation center report having a high level of social support, while (12%, n = 32) experienced a moderate level,

The second objective outcome indicated that 56.8% of the participants were at borderline to extreme levels of depression, which includes moderate (23.7%), severe (16.4%), and extreme (5.7%) cases of depression, while 14.7% (n = 39) of the participants were in normal ups and downs of life.

The third objective of the study showed a weak significant negative correlation ($r = -.272$, $p = .000 \leq 0.05$) between age and depression among drug and substance use addicts in rehabilitation centers. There was a weak positive no significant correlation ($r = .102$, $p = .092 \geq 0.05$) between gender and depression among drug and substance use addicts in rehabilitation centers. There was negative correlation between duration of addiction and depression ($r = -0.036$), and the p-value of 0.549. There was a significant association between level of education and depression among the participants of this study ($p = 0.015 < 0.05$).

The outcome of the fourth objective revealed that that there was a moderate, negative and statistically significant relationship ($r = -.364$, $p = .000 \leq 0.05$) between social support and depression among drug and substance use addicts in rehabilitation centers

6.3 Conclusion

The study concluded that the majority of individuals in rehabilitation centers reported high levels of social support, suggesting the presence of strong interpersonal and community networks. Despite this, over half of the participants were found to be experiencing varying degrees of depression, ranging from moderate to extreme, highlighting the mental health challenges that persist among individuals recovering from drug and substance use.

There was a moderate negative significant relationship between social support and depression. This indicates that higher levels of social support are associated with lower levels of depression, emphasizing the crucial role of emotional and social support systems in the recovery

process. Social support plays a vital role in mitigating depression among individuals in rehabilitation centers. Strengthening support systems could therefore be an effective strategy for improving mental health outcomes in addiction recovery. This study underscores the importance of integrating psychosocial support into rehabilitation programs to address depression and enhance recovery outcomes among drug and substance use addicts.

6.4 Recommendations

The followings are practical recommendations drawn from the outcomes of this study, focusing on: individuals struggling with drug and substance use, the administration of rehabilitation centres, counseling psychologists, and the Ministry of health:

Individuals struggling with drug and substance use: In the rehabilitation centres, special attention should be given to the 12% participants with moderate social support, developing formal peer-support initiatives, where clients with strong recovery progress mentor newer clients, fostering supportive relationships that can buffer against depression.

The administration of rehabilitation center: Since a majority of the participants had high social support, the rehabilitation center may continue nurturing these networks (family, friends, and peer groups) through regular engagement programs like family therapy sessions, peer mentorship, and community support groups. The rehabilitation center may set up structured aftercare programs such as alumni support groups, community-based recovery programs, and periodic check-ins to ensure that high social support continues even after clients leave the rehabilitation center. Rehabilitation centers should include robust mental health services like regular psychiatric evaluations, counseling, and individualized therapy sessions to directly address depression levels among clients. Rehabilitation centers may introduce systematic screening for depression upon admission and periodically throughout treatment to identify those

at moderate, severe, or extreme risk early and tailor interventions accordingly. After discharge, continue offering depression management support through outpatient counseling, virtual therapy sessions, or community-based mental health programs to prevent relapse.

Counseling psychologists may be invited by the rehabilitating centers to offer therapy sessions specifically targeting participants who were at border line clinical depression to extreme levels of depression, allowing participants to share experiences, and build hope together in a supportive environment.

The Ministry of health: Should consider employing counseling psychologists as a way of enhancing mental and psychological support for individuals undergoing rehabilitation for drug and substance use. This may significantly help the individuals handle academic depression.

6.5 Recommendations for Future Study

Qualitative study may be conducted so as to explore factors contributing to depression among drug and substance use addicts in rehabilitation centers in Kenya.

Studies could combine quantitative and qualitative methods to capture deeper insights into personal experiences of social support and depression among drug and substance use addicts in rehabilitation centers in Kenya.

A comparative study could be carried out between two counties in Kenya so as to examine whether similar patterns exist or if regional differences affect social support and depression among addicts in rehabilitation centers.

Future research could differentiate between types of social support (emotional, instrumental, informational, companionship) in order to understand which type is most effective in reducing depression among recovering addicts in rehabilitation centers.

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- .

APPENDICES

Appendix I: Introduction Letter

Tangaza University College

April 24, 2024

Dear participant,

I am a master's degree student in Counselling Psychology at Tangaza University College, Nairobi, Kenya. I am conducting a study investigating the relationship between social support and depression among drug and substance use addicts in rehabilitation centers in Ongata Rongai, Kajiado County, Kenya. This study is undertaken in partial fulfilment of a degree in Masters of Arts in Counselling Psychology.

I am kindly requesting you to partake in this research by answering series of questions. This will take about 25 minutes. Please read and understand the questions before answering. Partaking in this research is voluntary and there are no monetary rewards. All information given will be strictly confidential. Your identity will not be revealed. Withdrawal from participation at any time is permissible without any consequence.

Thank you for your time.

Yours sincerely,

Nancy Lugano

Appendix II: Informed Consent

Title of Research: Relationship between Social Support and Depression among Drug and Substance Use Addicts in Rehabilitation Centers in Ongata Rongai, Kajiado County, Kenya.

- This study is being carried out as a requirement for Masters in Counselling Psychology at Tangaza University.
- The study has been permitted by the two study supervisors (contact:iysma@tangaza.org)
- The study shows no risk to participants and covers no deception. It takes roughly 30-45 minutes to complete the questionnaires.
- The task requires a participant to respond to some series of questions.
- All information will be treated as confidential. The results are anonymous and there will be no identification of participants and no participant's results will be presented individually but only in aggregate form.
- Please do not write your name on the forms or questionnaires.
- Participation in this study is strictly voluntary and there is no monetary or any other kind of compensation. Participant has the right to withdraw from the study at any time.
- The researcher will protect the participants from any possible harm due to their involvement in the research by ensuring confidentiality, privacy and by maintaining anonymity.

Name of the researcher: Nancy Esther Lugano (REG NO: YS79/00029/2022)

Position of the researcher: Student in Masters in Counselling Psychology programme

Address of the University:

Tangaza University, P.O Box 15055-00509, Langata, Nairobi, Kenya.

Telephone number of the Researcher: 0722497127

Signed by researcher..... **Date:**.....

Statement to be Signed by the Participant of the Study

I confirm that the researcher has carefully clarified in detail the nature of the study and the nature of task which I am requested to carry out. I confirm that I have had enough opportunity to ask questions about this exercise.

I understand that my involvement is voluntary and that I may withdraw at any time during the project, without having to give a reason.

I for that reason, agree to take part in this project, by participating in the study.

Signed by participant..... **Date**.....

Appendix III: Participant's Questionnaire

Section A: Demographic information

This questionnaire has three sections which are: section 1= Demographics characteristics, section 2 = Social support, and section 3 = Beck Depression Inventory. All the information shared is strictly confidential. You are free to stop taking part at any time you choose. Please remember it is not an exam, so your honest answers will be valued.

Kindly answer all questions by ticking the most appropriate response in placing a tick (✓) in the appropriate box.

1. Age:

- | | |
|--------------|--------------------------|
| 18-23 | <input type="checkbox"/> |
| 24-28 | <input type="checkbox"/> |
| 29-33` | <input type="checkbox"/> |
| 34-38 | <input type="checkbox"/> |
| 39-43 | <input type="checkbox"/> |
| 44 and above | <input type="checkbox"/> |

2. Gender:

- | | |
|-----------|--------------------------|
| A. Male | <input type="checkbox"/> |
| B. Female | <input type="checkbox"/> |

3. Duration of addiction: kindly indicate by writing

4. Level of education

- | | |
|-------------|--------------------------|
| KCSE | <input type="checkbox"/> |
| Certificate | <input type="checkbox"/> |
| Diploma | <input type="checkbox"/> |
| BA. | <input type="checkbox"/> |
| MA. | <input type="checkbox"/> |
| PhD. | <input type="checkbox"/> |

Section B: Social Support Scale

Below are lists of statements that indicate social support. Kindly indicate your degree of agreement with the following statements by circling each for an item on a scale ranging from 1-5, where 1 = Strongly Disagree, 2 = Disagree, 3= Undecided, 4 = Agree, and 5 = strongly Agree

Strongly
Disagree

Strongly
Agree

1. There are some people who truly like me.	1	2	3	4	5
2. Whenever I am not feeling well, other people show me that they are fond of me.	1	2	3	4	5
3. Whenever I am sad, there are people who cheer me up.	1	2	3	4	5
4. There is always someone there for me when I need comforting.	1	2	3	4	5
5. I know some people upon whom I can always rely.	1	2	3	4	5
6. When I am worried, there is someone who helps me.	1	2	3	4	5
7. There are people who offer me help when I need it.	1	2	3	4	5
8. When everything becomes too much for me to handle, others are there to help me.	1	2	3	4	5
9. When I am down, I need someone who boosts my spirits.	1	2	3	4	5
10. It is important for me always to have someone who listens to me.	1	2	3	4	5
11. Before making any important decisions, I absolutely need a second opinion.	1	2	3	4	5
12. I get along best without any outside help.	1	2	3	4	5
13. In critical situations, I prefer to ask others for their advice.	1	2	3	4	5
14. Whenever I am down, I look for someone to cheer me up again.	1	2	3	4	5
15. When I am worried, I reach out to someone to talk to.	1	2	3	4	5
16. If I do not know how to handle a situation, I ask others what they would do.	1	2	3	4	5
17. Whenever I need help, I ask for it.	1	2	3	4	5
18. This person showed me that he/she loves and accepts me.	1	2	3	4	5
19. This person was there when I needed him/her.	1	2	3	4	5
20. This person comforted me when I was feeling bad.	1	2	3	4	5
21. This person left me alone.	1	2	3	4	5
22. This person did not show much empathy for my situation.	1	2	3	4	5
23. This person complained about me.	1	2	3	4	5
24. This person took care of many things for me.	1	2	3	4	5

Source: Schulz and Schwarzer (2003)

Section C: Beck's Depression Inventory

Indicate your degree of agreement with the following statements by ticking the appropriate answer. Each number has four sections. Kindly tick one in each section

No.	Statements	Values	Tick where appropriate
25	I do not feel sad	0	
	I feel sad	1	
	I am sad all the time and I cannot snap out of it	2	
	I am so sad and unhappy that I can't stand it.	3	
26	I am not particularly discouraged about the future	0	
	I feel discourage about the future	1	
	I feel I have nothing to look forward to	2	
	I feel the future is hopeless and that things cannot improve.	3	
27	I do not feel like a failure	0	
	I feel I have failed more than the average person	1	
	As I look back on my life, all I can see is a lot of failures	2	
	I feel I am a complete failure as a person...p.27	3	
28	I get as much satisfaction out of things as I used to.	0	
	I don't enjoy things the way I used to	1	
	I don't get real satisfaction out of anything anymore	2	
	I am dissatisfied or bored with everything	3	
29	I don't feel particularly guilty	0	
	I feel guilty a good part of the time.	1	
	I feel quite guilty most of the time	2	
	I feel guilty all of the time	3	
30	I don't feel I am being punished	0	
	I feel I may be punished	1	
	I expect to be punished	2	
	I feel I am being punished	3	
31	I don't feel disappointed in myself	0	
	I am disappointed in myself	1	
	I am disgusted with myself	2	
	I hate myself	3	
32	I don't feel I am any worse than anybody else	0	
	I am critical of myself for my weaknesses or mistakes	1	
	I blame myself all the time for my faults	2	

	I blame myself for everything bad that happens	3	
33	I don't have any thought of killing myself	0	
	I have thoughts of killing myself, but I would not carry them out	1	
	I would like to kill myself	2	
	I would kill myself if I had the chance	3	
34	I don't cry any more than usual	0	
	I cry more now than I used to	1	
	I cry all the time now	2	
	I used to be able to cry, but now I can't cry even though I want to	3	
35	I am no more irritated by things than I ever was	0	
	I am slightly more irritated now than usual	1	
	I am quite annoyed or irritated a good deal of the time	2	
	I feel irritated all the time	3	
36	I have not lost interest in other people	0	
	I am less interested in other people than I used to be	1	
	I have lost most of my interest in other people	2	
	I have lost all of my interest in other people	3	
37	I make decisions about as well as I ever could	0	
	I put off making decisions more than I used to	1	
	I have greater difficulty in makings more than I used to	2	
	I can't make decisions at all any more	3	
38	I don't feel that I look any worse that I used to	0	
	I am worried that I am looking old or unattractive	1	
	I feel there are permanent changes in my appearance that make me look unattractive	2	
	I believe that I look ugly	3	
39	I can work about as well as before	0	
	It takes an extra effort to get started at doing something	1	
	I have to push myself very hard to do anything	2	
	I can't do any work at all	3	
40	I can sleep as well as usual	0	
	I don't sleep as well as I used to	1	
	I wake up 1-2 hours earlier than usual and find it hard to get back to sleep	2	
	I wake up several hours earlier than I used to and cannot get	3	

	back to sleep		
41	I don't get more tired than usual	0	
	I get tired more easily than I used to	1	
	I get tired from doing almost anything	2	
	I am too tired to do anything	3	
42	My appetite is no worse than usual	0	
	My appetite is not as good as it used to be	1	
	My appetite is much worse now	2	
	I have no appetite at all anymore	3	
43	I haven't lost much weight, if any, lately	0	
	I have lost more than five pounds	1	
	I have lost more than ten pounds	2	
	I have lost more than fifteen pounds	3	
44	I am no more worried about my health than usual	0	
	I am worried about physical problems like aches, pains, upsets stomach or constipation	1	
	I am very worried about physical problems and it's hard to think much else	2	
	I am worried about my physical problems that I cannot think of anything else	3	
45	I have now noticed any recent change in my interest in sex	0	
	I am less interested in sex than I used to be	1	
	I have almost no interest in sex	2	
	I have lost interest in sex completely	3	

Source: Becks (1967)

Appendix IV: Scoring of Scales

Social support scale

Social support scale is a 24 items questionnaire that is made up of six distinct scales that gauge six different parts of social support, which are: (1) perceived availability of assistance; (2) need for support; (3) seeking support; (4) actually receiving support; (5) providing support; and (6) protective buffering.

Social support scales are measured on 5-point Likert scale and scored, where 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, and 5 = Strongly Agree. Add scores on all the 24 items. The highest possible score is 120, lowest score is 1. Higher scores range from 70-120, moderate scores from 40-69, and low scores are 1-39.

Beck depression inventory

Beck depression inventory is a 21-item scale, that is divided into six sub-sections showing levels of depression. The highest possible score a participant could get is 63, while the lowest possible score any participant could attain is 0. Add up the score for each of the twenty-one questions by counting the number to the right of each question you marked. In this study, a score between 17 and above will be considered as depression.

Total Score_____Levels of Depression

1-10_____These ups and downs are considered normal

11-16_____Mild mood disturbance

17-20_____Borderline clinical depression

21-30_____Moderate depression

31-40_____Severe depression

Over 40_____Extreme depression

Appendix V: Permission to use the Berlin Social Support Scales (BSSS)

21 July, 2024

Dear Schulz and Schwarzer,

I am a Master's degree student at Tangaza University, Nairobi. Tangaza University is one of the Universities in Kenya. Presently, I am embarking on my research: Investigating the relationship between social support and depression among drug and substance use addicts in rehabilitation centers in Rongai, Kajiado County, Kenya. I have come across your publication and have noticed that your BSSSs will contribute meaningfully to my research. In this regard, I humbly wish to seek your permission to use your scale (BSSS) in my research. I strongly affirm your contribution in the field of Psychology.

Sincerely,

Nancy Esther Lugano

YS79/00029/2022 Tangaza University

Appendix VI: Permission to use Beck Depression Inventory (BDI-II)

21 July, 2024

Dear Aaron Beck,

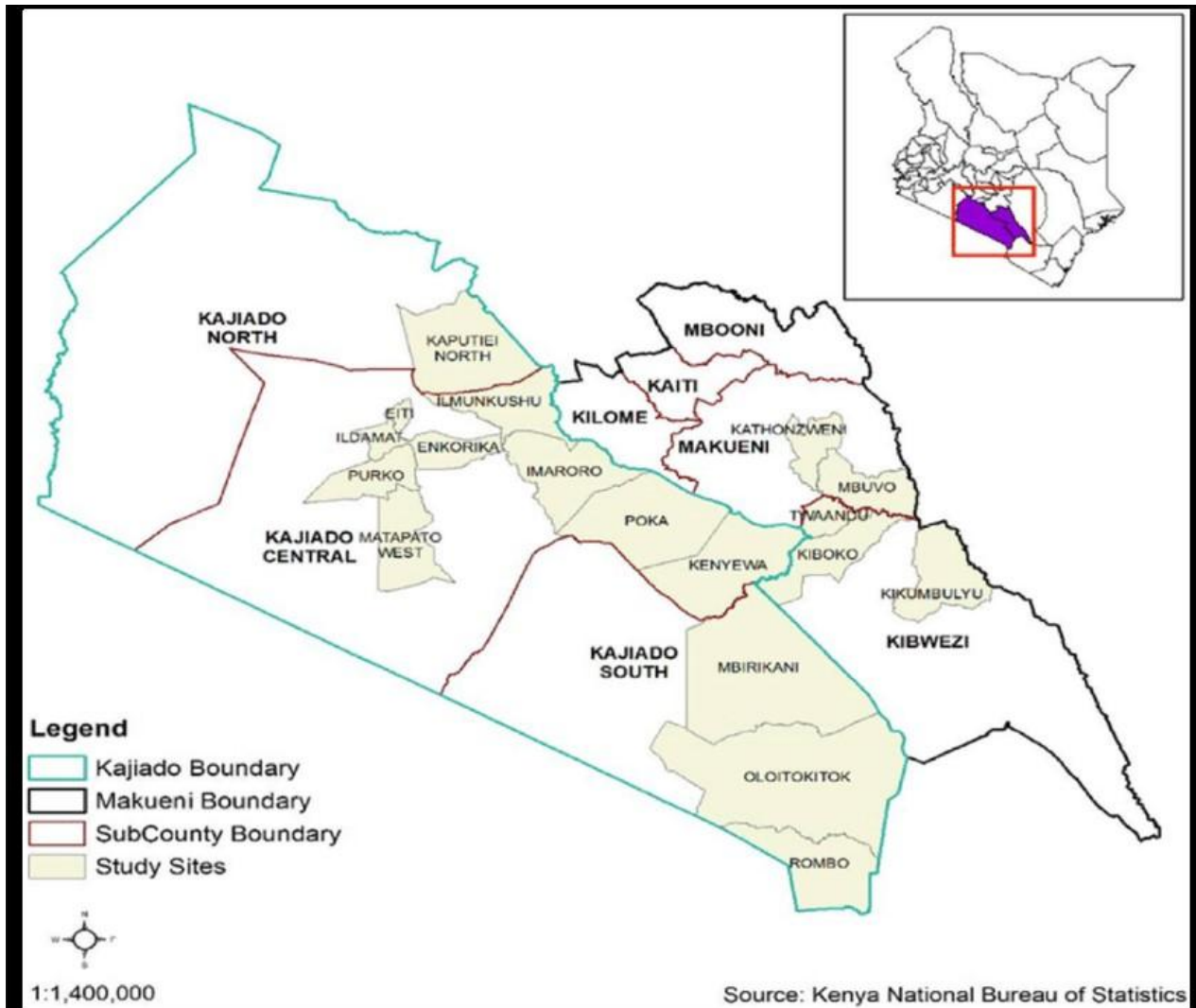
I am a Master's degree student at Tangaza University, Nairobi. Tangaza University is one of the Universities in Kenya. At the moment, I am carrying out my research: Examining the relationship between social support and depression among drug and substance use addicts in rehabilitation centers in Rongai, Kajiado County, Kenya. This research is one of the requirements for the award of Degree of Master of Arts in Counseling Psychology. In the course of exploring academic resources, I came across your publication and your Depression Inventory (BDI-II). I think that it will be appropriate to my study and wish to seek your permission to use it. I thank you for your good contribution in the arena of Psychology.

Sincerely,

Nancy Esther Lugano

YS79/00029/2022 Tangaza University

Appendix VII: Map of Kajiado County



Appendix VIII: Anti-Plagiarism Report

14% Overall Similarity

The combined total of all matches, including overlapping sources, for each database.

Filtered from the Report

- ▶ Bibliography
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Olivia

Integrity Flags

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Our system's algorithms look deeply at a document for any inconsistencies that would set it apart from a normal submission. If we notice something strange, we flag it for you to review.

A Flag is not necessarily an indicator of a problem. However, we'd recommend you focus your attention there for further review.

Appendix IX: TU-ISERC Approval



TANGAZA UNIVERSITY

Teaching Minds, Touching Hearts, Transforming Lives.....

REF: TU/ISERC2025/01/0043

14th January 2025

To: NANCY ESTHER LUGANO, **Reg. No.** Reg. No. 20/00885

Dear Nancy,

Re: "RELATIONSHIP BETWEEN SOCIAL SUPPORT AND DEPRESSION AMONG DRUG AND SUBSTANCE USE ADDICTS IN REHABILITATION CENTERS IN ONGATA RONGAI, KAJIADO COUNTY, KENYA".

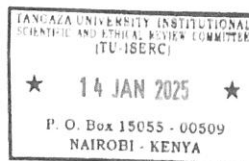
This is to inform you that TU-ISERC has reviewed and approved your above research proposal. Your application approval number is *TU/ISERC2025/01/0043*. The approval period is **14th January 2024 – 15th January 2026**. This approval is subject to compliance with the following requirements;

1. Only approved documents including (informed consents, study instruments, MTA) will be used
2. All changes including (amendments, deviations, and violations) are submitted for review and approval by TU-ISERC.
3. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to TU-ISERC within 72 hours of notification.
4. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to TU-ISERC within 72 hours
5. Clearance for export of biological specimens must be obtained from relevant institutions.
6. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
7. Submission of an executive summary report within 90 days upon completion of the study to TU-ISERC.

Prior to commencing your study, you will be expected to obtain a research license from the Body authorised to issue such licenses from your country and also obtain other clearances needed.

Yours sincerely

Dr. Daniel M. Kitonga (Ph.D., MBA)
Chair, TU - ISERC



Appendix X: Recommendation for Research Permit



TANGAZA UNIVERSITY

Teaching Minds, Touching Hearts, Transforming Lives
OFFICE OF THE CHAIRMAN

TANGAZA UNIVERSITY INSTITUTIONAL SCIENTIFIC AND ETHICS REVIEW COMMITTEE

E-mail: iserc@tangaza.ac.ke Website: www.tangaza.ac.ke

OUR Ref: TU/ISERC2025/01/0043

Date: 14th January 2025

The Commission Secretary,
National Commission for Science, Technology and Innovation
P.O. Box 30623,
Nairobi – Kenya.

Dear Sir/Madam,

Re: Recommendation for Research Permit – NANCY ESTHER LUGANO

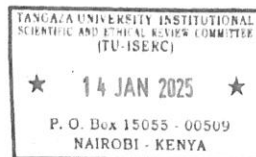
This is to confirm that NANCY ESTHER LUGANO is a PI in a researcher protocol which was submitted to TU-ISERC for review. The protocol was reviewed and approved for research permit.

Nancy wishes to carry out research under the title "*RELATIONSHIP BETWEEN SOCIAL SUPPORT AND DEPRESSION AMONG DRUG AND SUBSTANCE USE ADDICTS IN REHABILITATION CENTERS IN ONGATA RONGAI, KAJIADO COUNTY, KENYA*".

I strongly recommend **NANCY ESTHER LUGANO** to the Kenya National Commission for Science, Technology and Innovation for issuance of a research permit. The permit will enable her to proceed to data collection for her study. Thanking you in advance for your cooperation.

Yours sincerely,

Dr. Daniel M. Kitonga (Ph.D., MBA)
Chairperson, TU-ISERC



P.O. Box 15055 - 00509 Langata, Nairobi Kenya
Tel +254 20 8097667 / 0732 897 000 / 0733 685 059 / 0722 204 724 / 0714 610 777

Email: inquiries@tangaza.ac.ke
Website: www.tangaza.ac.ke

Appendix XI: Nacosti Research License


REPUBLIC OF KENYA


NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY & INNOVATION

Ref No: **963218** Date of Issue: **25/February/2021**

RESEARCH LICENSE



This is to Certify that Ms. Nancy Esther Lugano of Tangaza University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2011 (Rev.2014) in Kajiado on the topic: Relationship between Social Support and Depression among Drug and Substance Use Addicts in Rehabilitation Centers in Ongata Rongai, Kajiado County, Kenya, for the period ending : 25/February/2026.

License No: **NACOSTI/P/25/104326**

963218
Applicant Identification Number


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.

See overleaf for conditions

THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013 (Rev. 2014)
Legal Notice No. 108: The Science, Technology and Innovation (Research Licensing) Regulations, 2014

The National Commission for Science, Technology and Innovation, hereafter referred to as the Commission, was established under the Science, Technology and Innovation Act 2013 (Revised 2014) herein after referred to as the Act. The objective of the Commission shall be to regulate and assure quality in the science, technology and innovation sector and advise the Government in matters related thereto.

CONDITIONS OF THE RESEARCH LICENSE

1. The License is granted subject to provisions of the Constitution of Kenya, the Science, Technology and Innovation Act, and other relevant laws, policies and regulations. Accordingly, the licensee shall adhere to such procedures, standards, code of ethics and guidelines as may be prescribed by regulations made under the Act, or prescribed by provisions of International treaties of which Kenya is a signatory to.
2. The research and its related activities as well as outcomes shall be beneficial to the country and shall not in any way;
 - i. Endanger national security
 - ii. Adversely affect the lives of Kenyans
 - iii. Be in contravention of Kenya's international obligations including Biological Weapons Convention (BWC), Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), Chemical, Biological, Radiological and Nuclear (CBRN).
 - iv. Result in exploitation of intellectual property rights of communities in Kenya
 - v. Adversely affect the environment
 - vi. Adversely affect the rights of communities
 - vii. Endanger public safety and national cohesion
 - viii. Plagiarize someone else's work
3. The License is valid for the proposed research, location and specified period.
4. Neither the license nor any rights thereunder are transferable.
5. The Commission reserves the right to cancel the research at any time during the research period if in the opinion of the Commission the research is not implemented in conformity with the provisions of the Act or any other written law.
6. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before commencement of the research.
7. Excavation, filming, movement, and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
8. The License does not give authority to transfer research materials.
9. The Commission may monitor and evaluate the licensed research project for the purpose of assessing and evaluating compliance with the conditions of the License.
10. The Licensee shall submit one hard copy, and upload a soft copy of their final report (thesis) onto a platform designated by the Commission within one year of completion of the research.
11. The Commission reserves the right to modify the conditions of the License including cancellation without prior notice.
12. Research, findings and information regarding research systems shall be stored or disseminated, utilized or applied in such a manner as may be prescribed by the Commission from time to time.
13. The Licensee shall disclose to the Commission, the relevant Institutional Scientific and Ethical Review Committee, and the relevant national agencies any inventions and discoveries that are of National strategic importance.
14. The Commission shall have powers to acquire from any person the right in, or to, any scientific innovation, invention or patent of strategic importance to the country.
15. Relevant Institutional Scientific and Ethical Review Committee shall monitor and evaluate the research periodically, and make a report of its findings to the Commission for necessary action.

National Commission for Science, Technology and
Innovation(NACOSTI),
Off Waiyaki Way, Upper Kabete,
P. O. Box 30623 - 00100 Nairobi, KENYA
Telephone: 020 4007000, 0713788787, 0735404245
E-mail: dg@nacosti.go.ke
Website: www.nacosti.go.ke

Appendix XII: Letter of acceptance for Research Data Collection

ST PETERS EMPOWERMENT & RECOVERY NGONG
CARE INSTITUTION
NGONG-KISERIAN RD (FOREST LANE) OPP NASHEPA GARDENS
P.O.BOX 1121-00208 NGONG HILLS
TEL: 0725-622-811 / 0780-400-359
EMAIL: stpetersempowerment2020@gmail.com
Empowerment through program

Date:

TO WHOM IT MAY CONCERN,

TANGAZA UNIVERSITY,
PO. BOX 150555-00509,
NAIROBI.
14th /March/ 2025

RE: A LETTER OF ACCEPTANCE FOR RESEARCH DATA COLLECTION

This is to confirm that Ms. Nancy Esther Lugano, a postgraduate student at Tangaza University College, has been granted permission to conduct research at our facility. She is duly authorized under the Science, Technology and Innovation Act, 2013 (Revised Edition), and holds a valid research clearance certificate from the National Commission for Science, Technology and Innovation (NACOSTI), Ref. No. 963238.

Her approved research title is: *"Relationship Between Social Support and Depression Among Drug and Substance Use Addicts in Rehabilitation Centres in Ongata Rongai, Kajiado County, Kenya."* Prior to data collection, all participants will undergo a sensitization session. Counselling support will be available for any participant experiencing distress. The study will adhere to all ethical guidelines and will not disrupt our operations.

FOR DIRECTOR

ST. PETERS EMPOWERMENT & RECOVERY NGONG
CARE INSTITUTION
DATE: 14/3/25

ST. PETERS EMPOWERMENT AND RECOVERY NGONG.

Appendix XIII: Research Permission for Ms. Nancy Esther



TEL: 0705-313670/0710627996
ADDRESS: 2636 – 01000
WEB: www.newdawn.co.ke
EMAIL: info@newdawn.co.ke

TANGAZA UNIVERSITY COLLEGE,
P.O.BOX 15055-00509,
NAIROBI-KENYA.

DATE: 30th /February/2025

RE: RESEARCH PERMISSION FOR MS. NANCY ESTHER LUGANO

This is to confirm that Mrs. Nancy Esther Lugano, a postgraduate student at Tangaza University College, has been granted permission to conduct research at our facility—New Dawn Treatment Centre—located at Kware, Kajiado County

Mrs. Lugano has been licensed to carry out this research under the provisions of the Science, Technology and Innovation Act, 2013 (Revised Edition 2013), and is in possession of a valid research clearance certificate from the National Commission for Science, Technology and Innovation (NACOSTI), Ref. No. 963238.

Her approved research topic is: **“The Relationship Between Social Support and Depression Among Drug and Substance Use Addicts in Rehabilitation Centres in Ongata Rongai, Kajiado County, Kenya.”**

Kindly note that prior to data collection; all participating individuals will undergo a sensitization program. Additionally, therapy sessions will be provided for any participants who may experience distress during the course of the study. All ethical considerations will be strictly observed, and that this research will not interfere with the institution’s scheduled programs and daily operations.

Should you have any questions or require further clarification, please do not hesitate to contact us.



Sincerely,

Mr. Job Kithinji

Clinical service director.

New Dawn Treatment and Rehabilitation.

Appendix XIV: Research Permission-Emmanuel Treatment and Resource Centre

Dear Sir,

RE: RESEARCH PERMIT FOR - NANCY ESTHER LUGANO

Your **TU/ISERC2025/01/0043** T refer, the above named, Nancy Esther Lugalo has been permitted to carry out research as stated in your recommendation letter at Emmanuel Treatment and Resource Center.

She has shared with us the process of data collection which is in line with our ethics.

Please, do not hesitate to contact us for any clarification.

Faithfully,



Janepher Odeuo



Program

Manager ETRC

Emmanuel Treatment and Resource Centre, PO Box 57626- 00200, Nairobi-Kenya.
Tel: +254 722455963 +254 788131381 Email: info@etrcenter.org

Appendix XV: Reconnect Rehabilitation Center



P.O. Box 849- 00517 Nairobi Kenya Tel. +254 725 590369 / +254 727 856 818
Email: reconnectionrc@gmail.com Location: Ongata Rongai Machuria Area

TANGAZA UNIVERSITY COLLAGE,

P.O.BOX 15055-00509,

NAIROBI-KENYA

DATE: 22ND May, 2025

RE: RESEARCH PERMISSION FOR MS. NANCY ESTHER LUGANO T.

This is to confirm that Mrs. Nancy Esther Lugano, a postgraduate student at Tangaza University College, has been granted permission to conduct research at our center located at Kware area, Ongata Rongai, Kajiado County.

Her research topic is: “The Relationship between Social Support and Depression among Drug and Substance Use Addicts in Rehabilitation Centers in Ongata Rongai, Kajiado County, Kenya.”

Kindly note, prior to data collection; all participating individuals will undergo a sensitization program. Additionally, therapy sessions will be provided for any participants who may experience distress during the study.

All ethical considerations will be observed, and that this research will not disrupt the institution’s scheduled programs.

Sincerely,

Director

Dr. Pacifica Onyancha

Consultant Psychiatrist

Reconnect Rehabilitation Center.