ASSESSMENT OF WILLPOWER AS A SELF-REGULATORY MECHANISM IN ALCOHOL USE DISORDER RECOVERY: A CASE STUDY OF HAVEN RECOVERY CENTRE, ELDORET, KENYA

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DECLARATION

I declare that this document and the research that it describes are my original work and that they have not been presented in any other university for academic work.

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DEDICATION

This research work is dedicated to my mother Christine Rotich for her unconditional love, advice and support. To my dear brothers and sisters for their encouragement and to my lovely children.

Above all, I dedicate this work to our almighty God who showers us His blessings in our everyday lives, especially for the strength, courage, patience, wisdom, time, and guidance in realization of this work.

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ABSTRACT

Substance use disorder (SUD), which requires complex behavioral, social, and psychological changes during rehabilitation, remains a significant global public health concern. Despite extensive research on rehabilitation strategies, the role of willpower defined as the ability to control impulses, make deliberate choices, and sustain motivation has received little attention, particularly regarding how sociodemographic factors influence its use and effectiveness**.** This study examined the function of willpower in recovery among AUD clients at Haven Recovery Centre in Eldoret. The overarching objective of this study was to evaluate the effectiveness of willpower-based strategies in supporting recovery from substance use disorders among clients enrolled at Haven Recovery Centre. Cognitive-based theory and self-determination theory guided the research. A concurrent triangulation mixed-methods design was employed, integrating qualitative data from staff interviews and structured open-ended questionnaires with quantitative data from 27 sampled clients from a population of 174 persons at the haven recovery centre. Descriptive statistics summarized client characteristics, and inferential statistics examined relationships between recovery outcomes, sociodemographic, and willpower. Strategies such as self-efficacy, habit stacking, delayed gratification, goal-setting, and self-monitoring were found to best support relapse prevention, treatment adherence, emotional stability, and social reintegration. Consistent social support and participation in counseling or peer support improved outcomes, and younger clients and those with higher education levels tended to use these strategies more effectively. From IBM SPSS Statistics results indicate that willpower can be developed through structured rehabilitation programs as well as being an individual trait. Combining cognitive-behavioral techniques, motivational support, and socio-emotional reinforcement enhanced recovery outcomes, highlighting the importance of tailored and supportive interventions. The study recommends incorporating willpower-focused training into rehabilitation programs, adjusting strategies to sociodemographic characteristics, and involving families and support networks to promote sustainable recovery and reduce relapse among clients with AUD.

DEFINITION OF TERMS

Addiction recovery: Refers to the sustained effort by clients to overcome alcohol dependence, measured by their continued participation in treatment and progress toward abstinence.

Client: Refers to any individual receiving and offering treatment and rehabilitation services for alcohol use disorder at Haven Recovery Centre in Eldoret.

Motivation: Refers to the level of willingness and commitment of clients to engage in recovery programs, as assessed through self-reported participation and adherence to treatment activities.

Recovery: Refers to the process of maintaining abstinence and improving physical, psychological, and social well-being among clients enrolled at Haven Recovery Centre, as observed during the rehabilitation period.

Substance addiction: Refers to the continued dependence on alcohol or other substances among clients, as indicated by their history of repeated use and difficulty in stopping despite undergoing treatment.

Substance Use Disorder (SUD): Refers to a condition identified among clients at Haven Recovery Centre who exhibit problematic alcohol use that interferes with their daily functioning, as recorded in clinical or self-reported data.

Willpower: Refers to the ability of clients to resist alcohol consumption and control cravings, as measured through their responses to questionnaire items on self-control and abstinence behavior.

LIST OF ACRONYMS AND ABBREVIATIONS

ACC – Anterior cingulate cortex

AUD – Alcohol use disorder

CBT – Cognitive-behavioral therapy

CET – Cognitive evaluation theory

OIT – Organismic integration theory

PFC – Prefrontal cortex

SDT – Self-determination theory

SPSS – Statistical Package for the Social Sciences

SUD – Substance Use Disorder

WHO – World Health Organization

VTA – Ventral tegmental area

MI – Motivational interviewi

CHAPTER ONE
INTRODUCTION

1.1 Introduction

Chapter one provided the foundation for the study by introducing the context, problem, and purpose of the research on willpower as a self-regulatory mechanism in alcohol use disorder recovery at Haven Recovery Centre, Eldoret. It outlines the background of substance use disorder and highlights the importance of internal resources, particularly willpower, alongside therapeutic interventions and social support. The chapter clearly states the research problem, objectives, and questions, justifying the study's significance both practically and theoretically. It also defines the scope, specifying the population and variables under investigation, and acknowledges potential limitations, such as reliance on self-reported data and the focus on a single centre. Overall, it sets the stage for examining how clients develop, apply, and sustain willpower in recovery, while linking these processes to.

1.2 Background of the study

Human societies had long interacted with psychoactive substances for cultural, social, medicinal, and recreational purposes. Across different civilizations, substances had been incorporated into celebratory gatherings, religious rites, and communal bonding activities due to their ability to elevate mood or induce relaxation. However, misuse arises when individuals consume these substances as a way of coping with stress, emotional discomfort, or life challenges. Over time, prolonged use impairs cognitive functioning, distorts judgment, and fosters dependence, as substances become a primary coping mechanism (Substance Abuse and Mental Health Services Administration, 2019).

From a global perspective, substance use disorder remained a major public health concern. Commonly misused substances include alcohol, tobacco, cannabis, opioids, cocaine, stimulants, sedatives, inhalants, and hallucinogens (World Health Organization, 2018). Among these, alcohol was the most widely consumed psychoactive substance worldwide and contributed significantly to the global burden of disease through its association with mental health disorders, injuries, and chronic illnesses. Harmful alcohol use had been linked to increased rates of anxiety,

depression, impaired judgment, and risky behaviors, making it a critical issue requiring coordinated international interventions and policy responses.

At the regional level, particularly in Africa, alcohol use disorder continues to rise due to rapid urbanization, socio-economic pressures, and changing cultural norms. The increasing availability and affordability of alcoholic beverages, coupled with limited access to mental health and rehabilitation services, had exacerbated the problem. Alcohol misuse in the region was associated with social disruption, reduced productivity, family instability, and increased health risks. Additionally, stigma surrounding substance use disorders often prevents individuals from seeking timely treatment, further worsening outcomes. These challenges highlight the need for culturally responsive prevention and intervention strategies within the African context.

At the national level in Kenya, alcohol remained the most prevalent substance of abuse and contributed significantly to public health and social challenges (NACADA, 2022). Many individuals perceive alcohol use as a means of stress relief or social enhancement; however, prolonged misuse leads to adverse physical, psychological, and social consequences. These include anxiety, depressive symptoms, mood instability, and, in severe cases, suicidal ideation. Alcohol misuse also negatively affects social relationships, occupational functioning, nutrition, immunity, and overall safety, particularly when associated with risky behaviors (Umberson et al., 2010). The persistence of these effects underscores the importance of effective intervention strategies, policy enforcement, and accessible rehabilitation services in the country.

In response to the growing burden of alcohol use disorder, various rehabilitation approaches and treatment settings had been developed. Residential rehabilitation programs provide structured environments with 24-hour supervision, intensive therapy, and medically supervised detoxification, especially for individuals with severe dependence or co-occurring disorders (American Society of Addiction Medicine, 2015). Outpatient programs, on the other hand, allow individuals to continue with daily responsibilities while receiving treatment through approaches such as cognitive-behavioral therapy, motivational interviewing, peer support, and relapse-prevention training (Substance Abuse and Mental Health Services Administration, 2019). Faith-based rehabilitation programs further incorporate spiritual guidance and community support to enhance recovery outcomes (Johnson,

2022). Despite these options, barriers such as high treatment costs, stigma, and emotional resistance continue to limit access to care (Duckworth, 2018; National Institute on Drug Abuse, 2020).

Within these treatment contexts, the concept of willpower had gained increasing attention as a key psychological resource in addiction recovery. Willpower refers to the capacity to regulate impulses, emotions, and behaviors in pursuit of long-term goals. In the context of alcohol use disorder, it enables individuals to resist cravings, delay gratification, and remain committed to recovery. While early theoretical perspectives viewed willpower as an innate internal drive (Freud, 1915), contemporary psychology emphasizes its role in self-regulation and the ability to resist short-term temptations in favor of long-term outcomes (APA, 2018). Neurological studies further indicate that prolonged substance use impairs brain regions such as the prefrontal cortex, ventral tegmental area, nucleus accumbens, and anterior cingulate cortex, which were responsible for decision-making, impulse control, and reward processing (Volkow et al., 2016; Schultz, 2016; Nestler & Malenka, 2004; Bush et al., 2000; Khantzian, 1985). This impairment explains the challenges individuals face in maintaining self-control during recovery.

Recent studies suggest that willpower played a significant role in initiating treatment, maintaining adherence, and achieving long-term recovery outcomes (Rehabs.com, 2023). Individuals with higher levels of self-discipline were better able to manage cravings, avoid triggers, and adopt healthier coping strategies. When supported through counseling, structured programs, and social support systems, willpower contributed to emotional resilience and sustained sobriety. Furthermore, psychological constructs such as self-control and grit were increasingly recognized as modifiable traits that can be strengthened through interventions such as goal-setting, cognitive restructuring, mindfulness, and self-monitoring (Duckworth et al., 2020).

Despite growing recognition of willpower as a critical factor in addiction recovery, there remained a research gap in understanding how individuals with alcohol use disorder practically apply willpower strategies within rehabilitation settings, particularly in the Kenyan context. Limited studies had examined how socio-demographic factors influence the effectiveness of willpower in recovery processes. Therefore, this study sought to address this gap by assessing willpower as a self-

regulatory mechanism among clients recovering from alcohol use disorder at Haven Recovery Centre in Eldoret, Kenya, and examining how these strategies contribute to sustained recovery and long-term sobriety.

1.3 Statement of the Problem

Alcohol Use Disorder (AUD) was a complex condition influenced by biological, psychological, and environmental factors. Genetic predispositions, neurochemical imbalances, and changes in brain functioning interact with emotional, cognitive, and social influences to sustain addictive behaviors. These factors limit the effectiveness of personal determination alone, showing that recovery was not simply a matter of willpower. Neurobiological impairments, particularly in the prefrontal cortex responsible for decision-making and impulse control, as well as disruptions in the brain's reward system, reduce an individual's ability to resist substance use (National Institute on Alcohol Abuse and Alcoholism, 2021). External influences such as peer pressure, social expectations, economic challenges, and family responsibilities further complicate recovery. Consequently, relying solely on willpower may create unrealistic expectations and contribute to guilt or discouragement when relapse occurs (American Psychological Association, 2020).

Individuals with AUD differ in age, gender, socioeconomic status, education level, and duration of substance use, and these factors affect both addiction and recovery. Younger individuals may adapt more easily to structured interventions, while older individuals may face challenges associated with long-term habits or health conditions. Education influences understanding of treatment, and socioeconomic status affects access to resources and social support. These differences highlight the need to examine how personal and social factors shape the role of willpower in recovery.

Willpower was also often misunderstood and lacks a clear definition, frequently being used interchangeably with motivation, resilience, and self-control. Baumeister and Tierney (2011) describe willpower as a limited cognitive resource that can become depleted, making it insufficient as the sole mechanism for sustained recovery. Viewing relapse as a failure of willpower ignores the neurological and environmental barriers individuals face and underscores the importance of structured interventions that strengthen self-regulation.

Despite its significance, there was limited research on how individuals with AUD in Kenyan rehabilitation settings understand and apply willpower during recovery. This study therefore sought to examine how clients at Haven Recovery Centre in Eldoret perceive and utilize willpower and how it influences their participation in treatment and early recovery outcomes. The findings were expected to contribute to context-specific knowledge and inform strategies that enhance recovery and reduce relapse.

1.4 Purpose of the study

The purpose of this study was to examine how willpower contributed to recovery among clients with alcohol use disorders at Haven Recovery Centre in Eldoret. The research sought to explore how individuals' self-regulatory abilities and personal determination, in combination with their sociodemographic characteristics, influence the use of recovery strategies, engagement in treatment, and overall recovery outcomes.

1.5 Research study objectives

The overarching objective of this study was to evaluate the effectiveness of willpower-based strategies in supporting recovery from substance use disorders among clients enrolled at Haven Recovery Centre.

1.5.1 Specific objectives of the study

The study was guided by the following specific objectives:

1. To analyze the socio-demographic characteristics of clients with substance-use disorders at Haven Recovery Centre, Eldoret.

2. To examine the willpower techniques employed by clients during treatment at the facility.

3. To assess how effective the identified willpower strategies were in promoting recovery among clients with substance use disorders.

4. To examine how socio-demographic attributes relate to the effectiveness of willpower-based recovery techniques among clients at Haven Recovery Centre.

1.6 Research questions

To achieve the objectives of the investigation, the following research questions were developed:

i. What were the socio-demographic characteristics of clients with alcohol use disorders at Haven Recovery Centre, Eldoret?

ii.What willpower techniques did clients employ during treatment at Haven Recovery Centre, and how were these strategies applied in their recovery process?

iii.How effective were the willpower strategies used by clients in promoting recovery from alcohol use disorders at Haven Recovery Centre?

iv.How did clients' socio-demographic characteristics influence the effectiveness of willpower-based recovery strategies at Haven Recovery Centre?

1.7 Significance of the study

The findings of this study demonstrate that willpower can play a substantial role in supporting recovery from substance use disorders. Results indicated that treatment outcomes improved when clients integrated willpower-enhancing skills into their rehabilitation journey. Those who consistently practiced willpower techniques such as self-regulation, coping strategies, and discipline reported fewer relapse tendencies and showed stronger resilience when confronted with triggers.

Moreover, the study revealed that the incorporation of willpower-based methods into counseling sessions enhanced client engagement and motivation. Counselors who encouraged deliberate self-control strategies observed greater commitment to therapy, improved emotional management, and increased client confidence in achieving sobriety. These changes contributed to better personal functioning, strengthened family relationships, and improved social reintegration.

Given these findings, the study recommends that rehabilitation facilities adopt structured willpower training as part of their treatment frameworks. Such integration could provide a practical foundation for enhancing recovery outcomes and inform future research examining the broader implications of willpower in addiction treatment.

1.8 Scope of the Study

This study focused on assessing how willpower influences recovery among clients with alcohol use disorders at Haven Recovery Centre in Eldoret, Kenya. The research targeted individuals undergoing treatment for dependencies involving substances such as alcohol with other commonly misused drugs. Emphasis was placed on understanding how clients conceptualized willpower, the degree to which they employed willpower-driven strategies, and how these strategies interacted with psychological and social factors influencing recovery.

The study examined various elements related to willpower usage, including motivation, coping mechanisms, spiritual practices, social support, and treatment adherence. Additionally, it explored how demographic variables such as age, gender, education level, and duration of substance use affected clients' ability to apply willpower in their recovery efforts.

The research covered a period of six months and involved adult clients who had been enrolled in treatment for at least one month. A mixed-methods research design was used: structured questionnaires generated quantitative data, while interviews and focus group discussions provided qualitative insights into clients lived experiences and perceptions. A triangulation approach helped strengthen the consistency and reliability of the findings.

This study did not evaluate the effectiveness of specific therapeutic interventions explicitly designed to enhance willpower, such as motivational interviewing or cognitive-behavioral therapy. Instead, it focused on clients' existing perceptions and use of willpower within the rehabilitation program. It also did not conduct post-discharge follow-ups; therefore, long-term relapse patterns or sustained abstinence were beyond the study's scope. Finally, the research did not explore neurobiological aspects of willpower nor compare different theoretical models of addiction recovery.

Nonetheless, the results provide valuable insight into the psychological aspects of recovery and highlight willpower as an important internal resource supporting abstinence and improved treatment adherence. The study proposes that rehabilitation facilities integrate structured strategies such as goal-setting, reflective exercises, and positive reinforcement to strengthen clients' willpower during recovery.

1.9 Delimitation of the Study

According to Ofanidis and Fountouki (2018), delimitations represent the boundaries set by researchers to maintain clarity and focus within a study. For this research, the scope was intentionally limited to examining how specific willpower techniques such as stress management, exercise, and habit formation contribute to recovery from substance use disorders.

Although numerous psychological, environmental, and social variables influence rehabilitation, the study concentrated exclusively on willpower as the primary variable of interest. Other potentially influential factors such as family therapy, medication-assisted treatment, and community reintegration programs were acknowledged but not explored in detail, as their inclusion would had broadened the study beyond the intended focus.

The study relied on two main psychological theories: Self-Determination Theory (SDT) and Cognitive Behavioral Theory (CBT). SDT emphasizes autonomy and intrinsic motivation as drivers of sustained behavior change, while CBT focused on modifying thought patterns that undermine self-regulation. Although other models like the Transtheoretical Model or Social Learning Theory could had informed the research, they were excluded to maintain theoretical coherence.

Geographically, the study was limited to Haven Recovery Centre in Eldoret. While this provided an opportunity for an in-depth examination of the specific institutional setting, it restricted the generalizability of the findings to other rehabilitation centers with different structures and cultural contexts.

Additionally, the study concentrated on clients actively enrolled in treatment and did not account for long-term outcomes after discharge. As a result, the research presents a snapshot of willpower use during treatment, without assessing its sustainability in the months or years following rehabilitation.

In summary, the delimitations helped create a focused investigation into willpower as a distinct psychological mechanism supporting recovery, while acknowledging the presence of broader factors influencing substance use disorders.

1.10 Limitations of the Study

The study's findings were based on data collected exclusively at Haven Recovery Centre during a specific time period, and therefore reflect the conditions existing at that time. These results may not be fully replicable in other centers or future periods due to differences in treatment structures, client populations, or external factors influencing recovery.

Data collection occurred over a relatively short three-month period, which limited the number of participants able to contribute detailed accounts of their experiences with willpower and self-control. This time frame also captured primarily short-term recovery experiences, rather than long-term outcomes, which may had influenced the depth of insights gathered.

Although the concept of willpower had broad relevance to multiple life domains, the study narrowed its emphasis to willpower in relation to recovery from substance use primarily alcohol and cigarette dependence, which was most common among clients at the center. Consequently, the findings may not accurately represent individuals recovering from other addictions such as opioids, cannabis, or behavioral addictions.

Differences in therapeutic approaches, counseling styles, peer dynamics, and support structures within Haven Recovery Centre may also had shaped clients' perceptions and experiences of willpower. These contextual variations limit the broader applicability of the findings to other treatment institutions.

Furthermore, the cross-sectional design of the study did not allow for follow-up assessments, preventing evaluation of whether willpower-based strategies were sustained after discharge. As such, the findings reflect immediate treatment experiences rather than long-term patterns of abstinence or relapse.

In conclusion, while the study provided meaningful insights into the role of willpower during treatment, its design, timeframe, and sample characteristics naturally limit the extent to which the results can be generalized to other settings or types of addiction.

1.11 Assumptions of the Study

The study initially assumed that willpower techniques were systematically emphasized as part of the formal treatment approach at Haven Recovery Centre.

However, it became evident during data collection that willpower, while recognized within the therapeutic environment, was not explicitly implemented as a structured intervention. Instead, elements of willpower emerged indirectly through peer support, motivational talks, group therapy sessions, and counselor guidance, all of which encouraged clients to practice self-control and resilience. These findings indicate that willpower was present in practice but not integrated as a deliberate therapeutic model.

The study also assumed that all participants would willingly engage with the research tools and provide honest, complete responses. In reality, some clients were hesitant to discuss personal issues due to emotional discomfort or privacy concerns. Others withdrew from the process or offered incomplete answers, leading to a slightly lower-than-expected response rate and the exclusion of some data sets.

Another assumption was that the three-month data collection period would be sufficient to gather comprehensive information. However, this timeframe proved limiting, particularly for clients at the early stages of treatment who had not yet fully developed or applied willpower-based coping strategies. As a result, the data reflected only a partial view of the recovery process.

Despite these constraints, the study produced valuable insights into how willpower functions within addiction treatment. It became clear that willpower supports abstinence and motivation, but its effectiveness was heavily influenced by external factors such as counselor support, treatment environment, and peer encouragement.

In summary, although the study's assumptions were only partially met, this provided a realistic understanding of how willpower operates within the recovery process at Haven Recovery Centre. The experience highlighted the importance of acknowledging institutional and psychological contexts when examining behavioral mechanisms in addiction recovery.

1.12 Theoretical Framework

This study was guided by theoretical perspectives that explain how individuals regulate behavior and sustain change during recovery from Alcohol Use Disorder (AUD). Understanding willpower as a self-regulatory mechanism requires a framework that integrates both motivational processes and cognitive-behavioral mechanisms. The study was anchored on two complementary theories: Self-

Determination Theory (SDT) and Cognitive Behavioral Theory (CBT). These frameworks provide a comprehensive basis for understanding how willpower develops, was sustained, and contributed to recovery among clients at Haven Recovery Centre in Eldoret, Kenya. By combining motivational and cognitive-behavioral perspectives, the study captures both the internal drivers and practical strategies of self-regulation, which were critical for effective treatment and long-term sobriety.

1.12.1 Self-determination theory

Self-Determination Theory (SDT), developed by Deci and Ryan (2000), was a macro-theory of human motivation that explains how individuals initiate, sustain, and internalize behaviors. The theory posits that optimal functioning and persistence in challenging tasks, such as recovery from substance-use disorders, were achieved when three fundamental psychological needs autonomy, competence, and relatedness were satisfied (Ryan & Deci, 2017). Autonomy refers to the individual's sense of control over their actions, competence reflects confidence in managing challenges, and relatedness involves the presence of supportive social relationships. The fulfillment of these needs enhances intrinsic motivation, which was essential for sustaining recovery behaviors and strengthening willpower over time.

SDT incorporates sub-theories such as Cognitive Evaluation Theory (CET) and Organismic Integration Theory (OIT), both sub-theories of Self-Determination Theory, explain how motivation develops and was sustained. CET emphasizes the role of the social environment in shaping motivation, suggesting that individuals who feel supported and capable were more likely to internalize positive behaviors (Deci & Ryan, 1985). In rehabilitation settings, involving clients in decision-making and goal-setting promotes autonomy and strengthens commitment to recovery. OIT explains how externally motivated behaviors, such as entering treatment due to family or legal pressure, can gradually become internalized and aligned with personal values (Ryan & Deci, 2000).This internalization process was critical in transforming short-term compliance into long-term commitment, thereby reinforcing willpower as a stable psychological resource.

SDT was relevant to this study as it explains how internal motivation influences the development and sustainability of willpower among clients with AUD. At Haven

Recovery Centre, clients' ability to maintain sobriety depends not only on external interventions but also on their intrinsic motivation, sense of control, and supportive relationships. The theory helped in understanding how clients internalize recovery behaviors and remain committed to long-term sobriety.

Despite its strengths, SDT had limitations. It was often criticized for difficulties in measuring constructs such as autonomy and intrinsic motivation objectively. Additionally, the theory may not fully account for cultural differences, particularly in collectivist societies where decision-making was influenced more by social norms than individual autonomy (Chirkov, 2009). Furthermore, SDT places significant emphasis on internal motivation, which may overlook structural barriers such as poverty, stigma, and limited access to treatment services that affect recovery outcomes.

1.12.2 Cognitive Behavioural Theory (CBT).

Cognitive Behavioral Theory (CBT), developed by Aaron Beck (1960s; Beck, 2011), provided a framework for understanding how thoughts, emotions, and behaviors interact to influence human functioning. The theory posits that maladaptive cognitions contribute to psychological problems, including substance-use disorders .Cognitive Behavioral Therapy (CBT) was based on the premise that distorted or dysfunctional thoughts reinforce emotional distress and maladaptive behaviors, thereby sustaining addictive patterns. CBT sought to identify and restructure these negative thought processes to promote healthier emotional responses and adaptive behaviors (Beck, 2011). In the treatment of Alcohol Use Disorder (AUD), CBT helped individuals understand the relationship between their thoughts, feelings, and substance use, enabling them to develop more effective coping mechanisms (McHugh et al., 2010).

CBT employs techniques such as cognitive restructuring, behavioral activation, skills training, and relapse prevention to strengthen self-regulation. These interventions help individuals recognize triggers, challenge irrational beliefs, and adopt healthier coping strategies. Through repeated practice, clients develop improved impulse control, decision-making abilities, and emotional regulation, all of which contribute to sustained recovery and reduced risk of relapse (Beck, 2011; Carroll & Kiluk, 2017).For example, clients learn to replace maladaptive thoughts about alcohol use with healthier coping mechanisms such as mindfulness or seeking social support.

CBT was applicable to this study as it provided practical strategies through which willpower can be developed and strengthened among clients at Haven Recovery Centre. The theory explains how clients can actively regulate their thoughts and behaviors to resist cravings, manage triggers, and maintain sobriety. It also highlights the role of structured interventions in reinforcing self-control and promoting long-term behavioral change.

Although CBT was widely used and evidence-based, it had some limitations. The approach tends to focus heavily on cognitive processes and may overlook deeper emotional, social, or unconscious factors influencing addiction. It also requires a certain level of cognitive ability and active participation, which may be challenging for individuals with severe substance dependence or low educational levels. Additionally, CBT can be time-intensive and may not fully address external factors such as environmental stressors or socioeconomic constraints that affect recovery.

Integration of the theories

By combining the principles of Self-Determination Theory (SDT) and Cognitive Behavioral Theory (CBT), this study adopted a comprehensive theoretical framework that addressed both the motivational and cognitive-behavioral dimensions of willpower in the recovery process. The integration of these two theories provided a broader understanding of how individuals struggling with alcohol use disorder initiate, maintain, and sustain their recovery journey. This combined perspective was important because recovery from substance abuse is a complex process that requires not only internal motivation but also practical behavioral and cognitive strategies.

Self-Determination Theory contributed to the understanding of the motivational aspect of recovery by explaining why individuals engage in recovery behaviors and what drives them to sustain those behaviors over time. The theory emphasized the importance of intrinsic motivation, personal autonomy, competence, and relatedness in influencing behavior change. In the context of alcohol use disorder recovery, SDT helped to explain how clients developed the internal desire and commitment to stop substance use and maintain sobriety despite challenges and temptations.

On the other hand, Cognitive Behavioral Theory provided insight into the cognitive and behavioral processes involved in self-regulation during recovery. CBT explained how individuals identified negative thoughts, challenged harmful beliefs, and replaced destructive behaviors with healthier alternatives. Through this theoretical lens, willpower was understood as a skill that could be strengthened through consistent practice, self-awareness, and behavioral adjustment. CBT therefore offered practical strategies that clients could use to manage cravings, avoid relapse, and maintain focus on recovery goals.

The integration of SDT and CBT was particularly relevant to this study because it created a balance between understanding the "why" and the "how" of recovery. While SDT explained the reasons behind an individual's motivation to recover, CBT explained the techniques and processes through which that motivation was translated into action. This combination allowed the study to capture both the psychological drive and the behavioral discipline required in the recovery process.

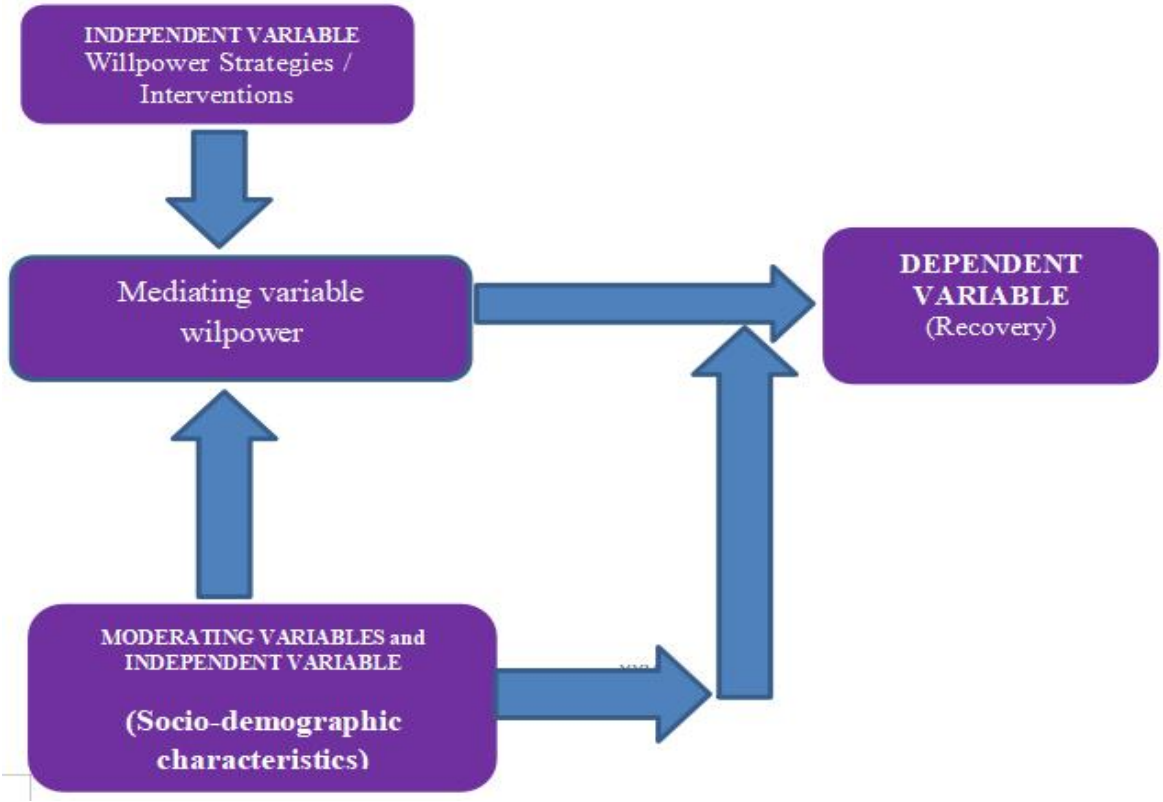
Together, these theories provided a holistic understanding of willpower as a self-regulatory mechanism in alcohol use disorder recovery. They highlighted that successful recovery is not solely dependent on the desire to change, but also on the ability to control thoughts, emotions, and behaviors in ways that support long-term sobriety. The integrated theoretical framework therefore enabled the study to examine both the internal motivational factors and the practical coping strategies that support sustained sobriety among clients at Haven Recovery Centre.

This integrated approach strengthened the study by providing a solid foundation for analyzing the relationship between willpower strategies, socio-demographic characteristics, and recovery outcomes. It also helped in understanding how motivation and behavioral regulation interact in shaping the recovery experiences of clients undergoing rehabilitation.

1.12.3 Conceptual Framework

Figure 1

Conceptual Framework of the study



1.12.4 Discussion of the Conceptual Framework

The conceptual framework illustrates the relationship between willpower strategies/interventions, willpower, socio-demographic characteristics, and recovery from Alcohol Use Disorder (AUD).

Willpower was the independent variable and refers to an individual's ability to exercise self-control, regulate emotions, and resist alcohol use. Stronger willpower was expected to enhance the recovery process.

Willpower strategies/interventions include rehabilitation programs, counseling, Cognitive Behavioral Therapy (CBT), motivational enhancement, and relapse prevention techniques. These interventions were designed to strengthen willpower and improve self-regulation.

Recovery was the dependent variable and represents positive outcomes such as abstinence, reduced alcohol use, improved psychological well-being, and better social

functioning. The framework assumes that higher levels of willpower contribute to better recovery outcomes.

Socio-demographic characteristics such as age, gender, education level, marital status, employment status, and duration of alcohol use act as moderating variables. These factors may strengthen or weaken the relationship between willpower and recovery by influencing an individual's ability to benefit from treatment and maintain sobriety.

The arrows in the framework indicate that willpower strategies/interventions enhance willpower, which in turn influences recovery. Socio-demographic characteristics moderate this relationship, affecting the extent to which willpower contributed to successful recovery.

1.13 Chapter Summary

This chapter presented the theoretical and conceptual foundations of the study on willpower as a self-regulatory mechanism in the recovery of individuals with Alcohol Use Disorder (AUD). The chapter was anchored on Self-Determination Theory and Cognitive Behavioral Theory, which explain the role of motivation, self-regulation, and behavioral change in the recovery process.

The chapter also discussed the conceptual framework, which illustrates the relationship between willpower strategies/interventions, willpower, socio-demographic characteristics, and recovery outcomes among clients at Haven Recovery Centre, Eldoret. Willpower was identified as the central construct influencing an individual's ability to initiate, sustain, and maintain recovery behaviors.

The framework further recognized that willpower can be strengthened through interventions such as goal-setting, counseling, self-monitoring, and peer support, while socio-demographic characteristics, including age, gender, education level, and duration of substance use, may influence the effectiveness of these strategies. Recovery outcomes were reflected through treatment adherence, emotional stability, relapse prevention, and social reintegration.

Overall, the chapter provided a theory-based framework for understanding how willpower and related factors influence recovery from AUD and established the foundation for the study's data collection, analysis, and interpretation of findings.

CHAPTER TWO
LITERATURE REVIEW

2.0 Introduction

Chapter two presents the literature review, covering both general and empirical research relevant to willpower and substance use disorder recovery. It examined the neurobiological foundations of addiction, the role of cognitive and behavioral therapies, and the effectiveness of various willpower strategies such as habit stacking, delayed gratification, and mindfulness. The chapter also explored socio-demographic influences on recovery and highlights the gaps in current research, particularly the lack of studies on willpower as a distinct, trainable resource in Kenyan rehabilitation contexts. The review provided the theoretical and conceptual grounding for the study, linking Self-Determination Theory and Cognitive Behavioral Theory to the operationalization of willpower in recovery.

2.1 General literature review

Substance use disorder (SUD) was a chronic and relapsing condition characterized by compulsive engagement in drug-seeking behaviors despite adverse consequences affecting physical health, social functioning, and psychological well-being (American Psychiatric Association, 2022; Volkow & Boyle, 2018). Recovery from SUD was a multifaceted process influenced by a combination of biological, psychological, social, and environmental factors (Kelly, Bergman, Hoeppner, Vilsaint, & White, 2017). While therapeutic interventions and external support networks were essential for achieving and maintaining recovery, there was growing recognition of the significance of internal personal resources, particularly willpower, in sustaining long-term abstinence (Baumeister & Heatherton, 1996; Baumeister & Tierney, 2011). Willpower, in the context of addiction recovery, encompasses an individual's capacity to regulate impulses, adhere to treatment protocols, resist substance-related cues, and engage in adaptive behaviors that promote overall health and well-being (Baumeister, Vohs, & Tice, 2007; Duckworth, Gendler, & Gross, 2016).

Neurobiological Foundations of Addiction and Willpower

Addiction was increasingly understood as a neurobiological disorder rather than a mere behavioral failing or moral weakness. According to Volkow (2011), chronic

exposure to addictive substances alters the brain's reward circuitry, particularly affecting dopamine pathways within the mesolimbic system, and induces structural and functional impairments in the prefrontal cortex (PFC). The PFC played a central role in executive functions such as planning, decision-making, impulse control, and behavioral regulation—functions that were critical for maintaining abstinence and achieving recovery goals. Volkow and Goldstein (2011) further demonstrated through neuroimaging studies that individuals with SUD exhibit widespread PFC dysfunction, characterized by reduced behavioral control, weakened connectivity with limbic structures, and heightened reactivity to substance-related cues.

Neurobiological adaptations associated with substance use disorder alter the brain's reward and motivational systems, resulting in increased salience of drug-related cues and reduced sensitivity to natural rewards such as social relationships, occupational success, and recreational activities (Volkow, Koob, & McLellan, 2016; Koob & Volkow, 2010). These changes contribute to compulsive drug-seeking behaviors and weaken an individual's capacity for executive control and self-regulation over substance use (Goldstein & Volkow, 2011). In addition, developmental neuroscience research indicated that adolescents were particularly vulnerable to the effects of psychoactive substances due to the ongoing maturation of the prefrontal cortex, which was critical for decision-making, impulse control, and behavioral regulation (Casey, Jones, & Hare, 2008; Spear, 2013). This heightened vulnerability increases the risk of neuroadaptations that reinforce addictive behaviors during this developmental stage.

Exposure during this period can result in persistent deficits in inhibitory control, judgment, and emotional regulation, further complicating recovery trajectories (Volkow et al., 2016).

Despite these challenges, neuroplasticity offers hope for recovery. Studies suggest that behavioral interventions, pharmacological treatments, and structured social support can enhance functional recovery of the PFC, improve executive function, and restore self-regulatory capacities over time (Volkow & Koob, 2015). This insight provided a critical foundation for understanding the interaction between neurobiological impairments and the exercise of willpower in SUD treatment.

Role of Cognitive and Behavioral Therapies in Enhancing Willpower

Cognitive Behavioral Therapy (CBT) had been widely recognized as an effective evidence-based intervention for enhancing self-regulation and supporting behavioral change among individuals with substance use disorder (SUD). A comprehensive review by Magill et al. (2020), synthesizing nearly three decades of empirical research, demonstrates that CBT improves recovery outcomes by strengthening cognitive and behavioral coping mechanisms. These include problem-solving skills, emotional regulation, cognitive restructuring, and strategies for managing exposure to substance-related cues and high-risk situations (Magill et al., 2020; McHugh, Hearon, & Otto, 2010). Through these mechanisms, CBT helped individuals interrupt automatic, impulsive responses to drug-related stimuli and strengthens executive functioning processes such as planning, inhibitory control, and decision-making (Beck et al., 2011).

Although CBT consistently showed positive effects on self-regulatory capacity, the literature suggests that further comparative research was needed to establish whether these improvements were uniquely attributable to CBT or were shared across other structured psychosocial interventions (Magill et al., 2020; McHugh et al., 2010). Nonetheless, existing evidence strongly supports CBT as a central intervention in fostering adaptive behavioral change and reinforcing self-control processes that underpin sustained recovery.

Motivational Interviewing (MI) represents another key therapeutic approach that enhances willpower by strengthening intrinsic motivation and personal agency in behavior change. Rubak et al. (2005), in a systematic review and meta-analysis, found MI to be more effective than traditional advice-giving in approximately 75% of behavioral change studies, including those targeting substance use. MI facilitates recovery by resolving ambivalence, increasing readiness for change, and promoting alignment between behavior and personal values and long-term goals (Miller & Rollnick, 2013). This process enhances core self-regulatory capacities such as self-efficacy, goal commitment, and emotional readiness, which were essential for sustaining behavioral control during recovery (Lundahl et al., 2010).

Unlike directive or prescriptive interventions, MI emphasizes autonomy, collaboration, and empathy, thereby strengthening individuals' sense of responsibility and self-awareness. These factors were critical in reinforcing intrinsic motivation and sustaining willpower during the more challenging phases of recovery, particularly when individuals were exposed to craving triggers or relapse risk situations.

When combined, CBT and MI provide a comprehensive framework for promoting self-regulation and strengthening willpower in individuals with SUD. MI acts as a catalyst by increasing motivation and readiness for change, while CBT supplies practical skills and strategies to maintain abstinence, manage triggers, and regulate behavior. This integrative approach addresses both the motivational and cognitive-behavioral aspects of recovery, thereby enhancing treatment adherence and supporting sustainable behavioral change.

These therapies often incorporate strategies specifically designed to reinforce willpower, including the identification of high-risk situations, development of coping mechanisms, and enhancement of self-efficacy. According to Prochaska and DiClemente (1983), willpower was most effective when integrated into a broader behavioral strategy rather than relied upon as a standalone solution. Techniques such as relapse prevention, recognition of triggers, and skills training complement willpower enhancement, producing more consistent and enduring recovery outcomes.

2.2 Empirical Literature Review

This section focused on the review, summary, and analysis of empirical studies that were conducted in relation to the objectives of this study. The emphasis of this section was on examining previous research that had collected empirical data relevant to the subject under investigation. Empirical literature was important in this study because it provided practical evidence and findings from earlier studies, which helped in understanding the nature of substance abuse recovery and the role of willpower strategies among clients undergoing rehabilitation.

The purpose of reviewing empirical literature was to establish what had already been studied, identify the gaps that existed, and create a foundation upon which the current study was based. Through this review, the researcher was able to compare findings from different studies and relate them to the current research problem. This made it

possible to strengthen the understanding of the variables under study and their relationship in the context of substance abuse recovery.

The empirical studies reviewed in this section were guided by the four objectives of the study, which formed the basis for the investigation. These objectives were designed to provide a clear understanding of the issues under examination and to answer the research questions systematically.

The first objective sought to establish the socio-demographic characteristics of the clients at Haven Recovery Center. This objective aimed at understanding the background characteristics of the clients, since socio-demographic factors play an important role in influencing behavior, decision-making, and recovery outcomes. Understanding these characteristics was necessary in order to provide a clear picture of the population under study.

The second objective focused on identifying the willpower strategies used by clients during their recovery from substance abuse at Haven Recovery Center. This objective aimed at examining the different approaches and methods employed by the clients as they worked toward overcoming substance dependency. The identification of these strategies was essential in understanding how individuals managed the recovery process.

The third objective sought to determine the frequency with which clients with substance use disorders at Haven Recovery Center-Eldoret utilized these willpower strategies. This objective was important because it provided insight into how often such strategies were practiced and the consistency with which clients relied on them during the recovery journey. Frequency of use was considered a key factor in understanding the effectiveness and sustainability of the recovery strategies.

The fourth objective was to assess the relationship between willpower strategies and socio-demographic characteristics among clients at Haven Recovery Center in Eldoret. This objective aimed at establishing whether there was a connection between the personal and social characteristics of the clients and the strategies they employed in their recovery process. Understanding this relationship was important in explaining variations in recovery experiences among different clients.

Therefore, this section presented empirical evidence in line with these objectives and provided a detailed analysis of the available studies to support the current research. The review of empirical literature was essential in guiding the study and ensuring that it was grounded on existing knowledge while addressing the identified research problem.

2.2.1 Socio-demographic characteristics of clients with substance use disorders

A population or group of people were described by their social and demographic characteristics, which were referred to as socio-demographic factors. These elements were frequently employed in studies to comprehend how various demographic and social groups may experience or be impacted by a given phenomenon (Haan and Mendez, 2018). These helped to identify potential patterns such as younger clients respond differently to willpower-based approaches than older clients, or that clients with higher levels of education were more likely to successfully utilize willpower in their recovery.

Social psychologists Baumeister et al. (2007) examined the relationship between self-control and socio-demographic characteristics, highlighting how willpower operates as a limited resource that can be depleted and subsequently restored, similar to a muscle. Their analysis indicated that demographic factors such as age, socioeconomic status, gender, and cultural background interact in complex ways to shape an individual's capacity for self-regulation and decision-making. Age was particularly significant, as patterns of substance use and recovery trajectories tend to differ across developmental stages, including adolescence, young adulthood, and later adulthood. Gender also played an important role, with male and female clients often experiencing recovery differently due to variations in social expectations, gender roles, and biological influences. Socioeconomic status further contributed to these differences by affecting access to treatment resources, social support systems, and exposure to environmental stressors, all of which can influence recovery outcomes among individuals with substance use disorder.

Health psychologist McGonigal (2011) used socio-bio-demographic traits to group her patients in order to better understand how our ideas, feelings, and actions can affect our mental health and decision-making abilities. She demonstrated how willpower was not only a virtue but also a mind-body reaction, and how it can be

enhanced by a variety of practices like mindfulness, exercise, sleep, and diet. Marital Status was a social factor showing if the client was single, married, divorced, widowed, or in a relationship as this was a significant factor in recovery hence. Level of education of clients that was if they had studied up to primary school, secondary school, college, and university can influence access to resources, understanding of health information, and coping mechanisms hence recovery in general.

Willpower techniques used by SUD Clients in their Recovery

Willpower techniques were exercises and strategies that were intended to strengthen self-control and the ability to resist impulses, cravings, or temptations. Understanding how habits were formed was the foundation of the habit stacking notion. Cue, routine, and reward all play a part in the formation of habits (Lally et al., 2010). By building a new habit on top of an old one, people can establish a powerful cue that sets off the desired action, which makes it simpler to incorporate into daily life. Behavioral psychology principles, especially the concept of reinforcement, were consistent with habit stacking. According to Skinner (1953), when a new habit was connected to an established routine, the old habit acts as a cue, and the reward for finishing the new habit can reinforce both behaviors.

Through the reduction of the cognitive load involved in starting new activities, this reinforcement can strengthen willpower. As explained by Fogg, (2019). He emphasised the need to pair a desired habit with an existing one in order to establish a new. He gave an example of “After I brush my teeth, I will meditate for two minutes. This technique usually identify existing habits, linking new healthy habits to existing ones, focus on small, achievable steps, building chains of habits and lastly integrating with other therapeutic approaches such as CBT, MI, and relapse prevention. It can be a valuable tool for helping clients implement the skills and strategies they learn in therapy this technique was not a short-term intervention. It's a process that requires consistent effort and practice over time. The duration of habit stacking in therapy will vary depending on the individual client's needs and progress. Clients may continue to use habit stacking techniques long after they had completed formal therapy as a way to maintain their recovery and build a healthy, fulfilling lifestyle.

Gollwitzer and Sheeran (2006), in a comprehensive meta-analysis of 94 independent studies, examined the effectiveness of implementation intentions in enhancing goal attainment. Their findings demonstrate that forming structured "if–then" plans, in which individuals predefine situational cues and link them to goal-directed responses, significantly increases the likelihood of successful goal achievement across diverse behavioral domains. This effect was found to be consistent across different research designs, measurement approaches, and types of goals, indicating that implementation intentions represent a robust and generalizable self-regulation strategy (Gollwitzer & Sheeran, 2006; Sheeran et al., 2013).

The mechanism underlying this effect lies in the automation of goal-directed behavior, whereby planned responses were triggered more efficiently when relevant situational cues were encountered. This enhances action initiation, improves resistance to distractions, and strengthens the ability to disengage from goals that were no longer feasible or beneficial (Gollwitzer, 1999; Achtziger et al., 2008). In addition, implementation intentions help reduce the cognitive load associated with decision-making, thereby conserving self-regulatory resources and supporting sustained effort across multiple goals over time (Baumeister et al., 2007; Duckworth et al., 2016).

Overall, the evidence suggests that structured planning strategies not only improve immediate goal attainment but also reinforce broader self-regulatory capacity, making them particularly relevant for promoting long-term behavioral change and recovery processes in contexts such as substance use disorder (SUD) (Gollwitzer & Sheeran, 2006; Webb & Sheeran, 2007).

Delay gratification was a crucial willpower technique that had important ramifications for behavior modification and self-control. Its efficacy in forecasting favorable life outcomes, especially in the contexts of addiction and health, was supported by empirical data (Duckworth and Seligman, 2005). In order to improve self-control and foster long-term success, practitioners can create techniques by comprehending the cognitive and emotional elements that affect delay ability. Future studies should keep examining the subtleties of delay gratification and how it might be used in a variety of contexts and demographics. Mischel (2014) on willpower approaches, the conclusion were that one might reframe unfavourable teachings to stay motivated and concentrated since delays in gratification enable people to withstand instantaneous

temptation to indulge in any kind of craving. Furthermore, grit and tenacity as a willpower method were the subject of Duckworth et al, (2018) in that a person may maintain abstinence with persistence and drive. Brewer et al. (2013) looked at mindfulness as a means of kicking addictive behaviours in previous studies. Focusing on how mindfulness can lower cravings by tampering with the brain's reward system, the study discovered that this was important for willpower-related addiction methods.

Key element of motivation and behavior modification was self-efficacy, which was the conviction that one can succeed in particular circumstances or complete a job. Setting and completing difficult goals was more common among those who had high self-efficacy (Locke & Latham, 2002). A high level of self-efficacy increases the likelihood of success by facilitating the application of successful coping mechanisms in the face of adversity. Self-efficacious people were better at handling stress and anxiety, which can normally weaken willpower.

The use of willpower techniques can be very helpful in the context of SUD recovery. People who use these techniques were more likely to stay sober and avoid relapsing, according to research (Marlatt and Donovan, 2005). For instance, self-efficacy can reveal patterns and triggers of substance use, and habit staking can assist people in defining their recovery objectives. While habit stacking might not be a standalone, manualized therapy, its principles were widely used within SUD treatment to help individuals develop and maintain healthy habits that support long-term recovery.

2.2.2 Effectiveness of willpower techniques utilized

Baldwin et al. (2022) investigated how self-control tactics compared to pure willpower in fostering consistent goal-directed behavior. In their large-scale field study of over 19,000 students, they discovered that people who used structured self-control techniques such as changing their environment to reduce temptations or planning tasks ahead of time performed significantly better than those who relied solely on inner determination. These data show that deliberate self-control improves perseverance and performance, providing insights into SUD rehabilitation. Similar tactics in addiction therapy, such as avoiding high-risk areas, creating attainable goals, and exercising stimuli control, can improve recovery outcomes by lowering reliance on momentary willpower and increasing long-term behavioral change.

Milkman and Laibson (2018) expanded on this notion, claiming that willpower alone was insufficient for long-term self-control, especially when individuals confront recurrent temptations. In their review, Beyond Willpower: Strategies for Reducing Self-Control Failures, they stressed the effectiveness of structured behavioral strategies like precommitment, habit building, and contextual alteration. These tactics lessen cognitive strain and decision fatigue, both of which were frequently associated with relapse in addiction treatment. Their findings were consistent with modern SUD treatment techniques, in which interventions such as cognitive-behavioral relapse prevention and contingency management use similar concepts to improve self-regulation and maintain sobriety.

Similarly, Pidgeon and Monteath (2013) studied whether deliberate exercise can improve willpower. In their randomized control pilot trial, participants completed tasks aimed at developing self-control over time, such as maintaining posture, managing emotions, or avoiding little temptation. The researchers discovered early evidence that regular practice of self-control actions increases overall willpower capability. This showed that systematic activities, like as craving delay tactics, mindfulness training, or frequent goal monitoring, can help people build resilience against temptations and stay sober. Their findings lend support to the notion that willpower was trainable rather than fixed, emphasizing the significance of treatment programs that actively promote self-discipline and emotional regulation in recovery.2016).

Hofmann et al., (2014) in their research stated that when willpower strategy improves there was followed favorable behavioral results resulting from encouraging environments. The effectiveness of these strategies depends in large part on individual characteristics and contextual elements. They recommended that subsequent investigations ought to persist in examining the subtleties of willpower strategies and their implementations in various demographics and environments.

2.2.3 Relationship between social demographic characteristics and the effectiveness of willpower techniques

According to Moffitt et al. (2011), an individual's age can influence the effectiveness of strategies aimed at strengthening willpower. Younger individuals often face greater challenges in exercising self-control due to ongoing developmental factors, whereas

older adults tend to exhibit stronger self-regulatory capacities. In practical terms, older individuals were generally better able to sustain self-discipline and implement willpower-enhancing techniques successfully.

Similarly, research by Matud (2024) indicated that gender can shape the effectiveness of willpower-based approaches. Men often favor coping strategies that focus on solving problems directly, whereas women may be more inclined toward emotion-centered coping methods. These differences suggest that men and women might respond differently to various interventions: men may achieve better outcomes through structured goal-setting, while women might benefit more from programs emphasizing social support and relational reinforcement.

Educational attainment also played a significant role in determining how effectively individuals can apply willpower strategies (Zimmerman & Schunk, 2008). Higher levels of education were commonly associated with greater knowledge of health behaviors and enhanced self-regulation. Individuals with more formal education were often better equipped to utilize cognitive strategies, such as planning and goal-setting, which can amplify the success of willpower-focused interventions.

2.3 Summary of the Knowledge Gap

Although addiction research continues to expand, a significant gap remained in understanding the specific function of willpower in the treatment of substance use disorders (SUD). Much of the existing literature such as the widely cited work of Volkow and Koob (2015) focused on addiction as a long-term brain condition characterized by damaged executive functions, weakened decision-making abilities, and difficulties in controlling impulses. While this neurobiological explanation clarifies why people with SUD struggle with self-regulation, it provided little guidance on how willpower can be strengthened or restored during treatment. This leaves a conceptual void, as current models recognize diminished self-control but did not specify how this psychological resource might be rebuilt through therapy.

In light of this gap, the present study shifts focus by viewing willpower as a flexible and trainable psychological capacity, rather than a fixed trait impaired by the disorder. By repositioning willpower at the centre of the inquiry, the study moves beyond describing neurological limitations and instead explored how willpower can be

cultivated and supported throughout recovery. This reorientation allows the study to address an important theoretical oversight in mainstream addiction frameworks.

A further limitation in existing research was the tendency to combine willpower with broader constructs such as motivation, perseverance, or self-efficacy. Interventions like Cognitive Behavioral Therapy (CBT) and Motivational Interviewing (MI) had been proven to enhance self-regulation and overall motivation (Miller & Rollnick, 2013), yet few studies investigate willpower as a standalone factor. As Baldwin et al. (2022) demonstrated, systematic self-control strategies often produce better outcomes than relying on willpower alone, raising questions about whether willpower independently contributed to improved recovery or whether it was overshadowed by other psychological mechanisms. To address this empirical ambiguity, the current study deliberately distinguishes willpower from related concepts, allowing a clearer assessment of its unique contribution to relapse prevention and treatment success.

Another major shortcoming in existing literature was the limited number of longitudinal studies that examine how willpower changes throughout the recovery process. Although self-control training had been shown to enhance willpower in non-clinical populations (Pidgeon & Monteath, 2013), little was known about whether similar improvements occur among individuals undergoing addiction treatment. This gap was significant because understanding the development and maintenance of willpower across time can guide more tailored and psychologically grounded treatment approaches. To respond to this gap, the candidate structures the study to monitor willpower trajectories across different recovery stages, examining whether it increases, declines, or stabilizes as clients progress through treatment.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

Chapter three details the research methodology, explaining the study design, which adopted a mixed-methods approach to capture both quantitative trends and qualitative experiences. It describes the study population, sampling techniques, and the instruments used for data collection, including questionnaires and semi-structured interviews. The chapter outlines the procedures for data administration, recording, and management, as well as ethical considerations such as informed consent, confidentiality, and participants' rights. It also explains the techniques used for data analysis, linking methods to the study objectives and ensuring reliability and validity of findings.

3.2 Research Design

The study adopted a convergent parallel mixed-methods design, where quantitative and qualitative data were collected simultaneously, analyzed separately, and then integrated to provide a comprehensive understanding of willpower in recovery. This design was selected because understanding the role of willpower in recovery requires both measurable patterns and deep, personal interpretations that cannot be captured through a single method. Quantitative data alone would offer numerical trends but fail to reveal the lived experiences behind those patterns, while qualitative data alone would lack the statistical rigor needed to establish broader relationships. Integrating the two therefore provided a more comprehensive and balanced examination of how willpower influences recovery outcomes.

The quantitative component employed the Chi-square test to determine whether significant associations existed between categorical variables such as demographic factors, treatment engagement, and recovery progress. This method was suitable for identifying objective trends and testing relationships that contribute to relapse or sustained abstinence. In parallel, the qualitative strand used thematic analysis to explore participants' subjective experiences, perceptions, and challenges regarding willpower during recovery. Triangulation was applied to cross-validate themes emerging from different participants, enhancing credibility and reducing bias.

Using a concurrent triangulation strategy allowed the study to compare and integrate findings from both strands during interpretation, creating a fuller and more nuanced understanding of the phenomenon. Statistical outcomes were enriched by participants' narratives, enabling the researcher to interpret not only whether relationships existed, but why they occurred. This methodological choice was therefore essential for capturing the complex, multidimensional nature of willpower, motivation, and behavior change within substance use recovery.

3.3 Research site

The research was conducted in Uasin Gishu County, Eldoret, located in western Kenya (coordinates 0.51° N, 35.33° E). The study site, Haven Recovery Centre, is situated in Illula, approximately 8 kilometers east of Eldoret town. The centre serves individuals with substance use disorders from diverse socio-economic, political, religious, and cultural backgrounds, admitting an average of five clients per day. Participants ranged in age from 18 years to adulthood, with no exclusion based on gender, religion, or social status. The site was selected because it provided a representative cross-section of individuals undergoing recovery, allowing for the collection of comprehensive bio-demographic and experiential data necessary for this study. Its structured recovery programs and accessible population made it an ideal location to examine the effectiveness of willpower in supporting sustained behavioral change.

3.4. Target Population

The study focused on individuals connected to the Haven Recovery Centre, a rehabilitation facility that accommodates people undergoing treatment for substance use disorders. The primary population of interest comprised clients who had completed at least three months in the program, a period widely recognized across global rehabilitation standards as the minimum required for consistent behavioral change and therapeutic benefit. These clients were considered suitable because they had experienced enough of the program's routines, treatment processes, and self-regulation strategies to provide meaningful insights into the role of willpower in recovery. This time frame also ensured that participants had sufficient exposure to interventions that might influence self-control and motivation, making their input valuable for understanding the dynamics of recovery.

In addition to clients, the population also included staff members who directly contribute to the rehabilitation process. Two spiritual leaders responsible for offering motivational sessions and spiritual counseling were part of this group, as their daily interactions with clients positioned them well to comment on patterns of motivation, discipline, and persistence. Six professional counselors were also included because they oversee therapeutic sessions, client assessments, and progress monitoring. The counselors maintain comprehensive admission and treatment records and therefore acted as key informants on client characteristics, behavioral changes, and adherence to treatment programs.

The Center's security personnel formed another important segment of the target population. Four officers responsible for enforcing discipline and maintaining order were included because they regularly interact with clients admitted voluntarily and those admitted under pressure from family. Their insights provided a unique perspective on compliance, resistance, and behavioral presentation among clients at different stages of willingness and denial.

The client population was diverse and included two distinct groups: those who voluntarily sought help after repeated unsuccessful attempts to stop substance use independently, and those admitted involuntarily by family members, often while intoxicated. Gender balance was considered to ensure fair representation. No restrictions were imposed based on ethnic origin, religion, socio-economic background, or geographic residence. All clients meeting the criteria were considered capable of contributing to the study. This inclusive approach ensured that the population reflected the real characteristics of individuals who seek rehabilitation services and provided a broad foundation for understanding how willpower interacts with recovery environments.

3.5 Study Sample

A study sample represents a smaller group selected from a broader population for the purpose of generating findings that reflect the characteristics of the whole. In this research, the sample was drawn to mirror the diversity of clients and staff within the Haven Recovery Centre. The intent was to ensure that the perspectives captured were sufficiently varied to allow reliable generalization to the entire population. This

approach allowed for both quantitative measurement and qualitative insights to be obtained from individuals who truly reflected the phenomenon of interest.

According to established scholarly principles, a good sample should possess qualities similar to the population it was drawn from, enabling accurate interpretation and extrapolation of results. A well-selected sample also ensures that statistical results were dependable and that qualitative insights arise from participants who genuinely reflect the phenomenon under study. To achieve this, the inclusion criteria focused on clients who had completed the initial three-month rehabilitation phase, as well as staff with direct roles in client management and support.

Additionally, considerations were made to avoid bias. Heterogeneity was valued, as it enriches the analysis and ensures perspectives from different personal backgrounds, levels of motivation, types of substance use, and recovery experiences were captured. The sample therefore included individuals from various age groups, genders, and recovery profiles. By involving both clients and staff, the study sample became robust enough to provide both experiential and professional viewpoints on the influence of willpower during treatment.

3.5.1 Sampling Procedure

Sampling for this study followed established methodological guidance on how best to select participants from a defined population. The process began with clearly identifying the groups from which participants would be drawn. A combination of purposive and stratified sampling was used to ensure depth and representativeness. Purposive sampling made it possible to intentionally select participants who were able to provide the most relevant information, such as clients actively engaged in the recovery process or counselors who directly facilitated treatment sessions. These individuals were chosen specifically because their experiences aligned with the study's objective of understanding how willpower contributed to recovery outcomes.

Stratified sampling, on the other hand, helped to organize the population into meaningful subgroups. For example, voluntary and involuntary clients were treated as distinct strata, as they enter rehabilitation under different motivational circumstances. Gender balance was also addressed through stratification to avoid skewed representation. Similarly, staff categories such as counselors, pastors, and security

personnel were considered separate strata to ensure each functional group contributed to the data set.

Once the strata were established, participants within each group were selected proportionately to ensure that no subgroup dominated the findings. This approach enhanced both the representation and credibility of the final sample. By combining purposive and stratified techniques, the research ensured that participants not only met specific inclusion criteria but also reflected the diversity present within the Haven Recovery Centre. This mixture strengthened the study's validity by allowing multiple perspectives to illuminate how willpower manifests and varies across different contexts and roles within the rehabilitation setting.

3.5.2. Sample Size Determination

Determining the appropriate sample size was a critical step in research because it affects the precision, reliability, and generalizability of the study's findings. A sample that was too small risks producing results with high sampling error, while a sample that was too large may unnecessarily consume time and resources. Several scholarly guidelines were considered before arriving at the final sample size.

Although some researchers recommend a minimum of 100 participants for descriptive studies, such recommendations apply primarily to large populations. In cases where the population was smaller and more defined as with a rehabilitation centre statistical formula tailored for limited populations provide more accurate estimations. This study adopted the coefficient of variation method, widely recognized in methodological literature and outlined by Nassiuma. The method bases the sample size on acceptable ranges of variability and allowable error.

The formula applied was as follows:

$$n = (N * C^2) / (C^2 + (N - 1) * e^2)$$

Where n represents the required sample size, N was the population size, C was the coefficient of variation, and e was the standard error.

For this research, the following values were used: N = 174 (the maximum number of clients accommodated at the Centre), C = 0.21, and e = 0.02. Substituting these values into the formula produces the following calculation:

$n = (174 * 0.21^2) / (0.21^2 + (174 - 1) * 0.02^2)$

$n = (174 * 0.0441) / (0.0441 + 173 * 0.0004)$

$n = 7.6734 / (0.0441 + 0.0692)$

$n = 7.6734 / 0.1133$

$n \approx 27$

Justification for Selecting a Sample Size of 27

The minimum sample size of 27 was considered sufficient to achieve both statistical validity and practical feasibility. Firstly, this number satisfies the requirements of the coefficient of variation formula, balancing acceptable variability with a manageable standard error, thereby reducing the likelihood of sampling bias. Secondly, the number allowed the inclusion of both voluntary and involuntary clients, as well as key staff members, ensuring diversity in perspectives and comprehensive coverage of experiences relevant to the research objectives. Thirdly, given the logistical constraints of the Centre, including participant availability and the intensive nature of rehabilitation programs, a sample size of 27 was achievable while still yielding reliable and meaningful insights. The combination of statistical derivation and purposive selection ensures that the study sample was representative, credible, and capable of supporting robust conclusions regarding the role of willpower in recovery.

Overall, the process of determining the sample size, selecting participants, and ensuring representation through stratification and purposive sampling contributed to the methodological rigor of the study. It allows for the collection of rich, multifaceted data while maintaining the precision necessary for meaningful analysis and conclusions.

3.5.3 Sampling techniques

Stratified sampling will be a major technique in this research whereby the population will be divided into stratus such as clients, pastors, security personnel and counsellors based on shared characteristics on the recovery of clients with SUD. This division ensures that each subgroup was represented proportionally in the final sample. Judgmental sampling being a non-probability sampling technique will be used to select participants based on their own judgment or knowledge about the population

and the research question. The researcher deliberately chooses individuals who they believe were most likely to provide valuable information or represent the characteristics of interest. This method was often used in qualitative research or exploratory studies when the goal was to gain in-depth insights from specific individuals or groups, rather than to generalize findings to an entire population. This method was particularly useful when studying a diverse population, as it helped to avoid over- or under-representing certain groups and allows for more accurate analysis of differences between subgroups despite judgmental being considered as a bias practise in this research it will only be used in choosing specific clients randomly but with a target.

3.5.4 Sampling frame

This was a list of all elements in the population from which the sample was drawn. This sampling frame helped in error reduction by ensuring sample selected accurately represent the entire population hence improving reliability and validity of the research findings.

Table 1

Sample and actual population at haven recovery Centre-Eldoret

Sub groups	Actual figures	Sample figures
Pastors	4	2
Security personnel	8	4
Counselors	12	6
Persons with SUD	150	15
TOTAL POPULATION	174	27

3.6 Data Collection

3.6.1 Data Collection Instruments

This study will adopt the use of open-ended and closed questionnaire to collect primary data from all targeted respondents from Haven recovery centre. Secondary data will be obtained from admission office files, close monitoring and evaluation

using observation method of persons with SUD and from already documented data. Security personnel at different stages will provide a qualitative data that will be useful in the study. This comprehensive approach will ensure a thorough investigation, utilizing a well-adapted questionnaire for persons with SUD and tailored interview formats for pastors, security personnel and counselors, hence a clear understanding of the study objectives. Questionnaires for clients will contain five sections such as socio –demographics which contains bio data of the clients, entry level which will enable the researcher to know if the client was at the rehabilitation centre came there forcefully or willingly willpower techniques section which will help the researcher to know if clients were aware of willpower techniques and how frequent did they apply during their stay at the Centre. Section four will explore all the relationship between socio-demographic characteristics and willpower techniques and lastly general opinion section for addressing and identification of new gab in the field recovery of persons with SUD. For pastors, counsellors and security personnel interview questions will had five questions that were related to their area of specialization and how was it related to the recovery of people with SUD.

3.6.2 Data collection procedure

Data collection in this study followed a systematic, structured process designed to ensure that relevant information was obtained to answer the research questions and draw credible conclusions. Following Creswell (2014), data collection was aligned with the study's mixed-methods design, ensuring both ethical rigor and methodological appropriateness. To gather quantitative data, structured questionnaires were used, as emphasized by Tamarozzi et al. (2019), who highlight that questionnaires cover a broad scope, were cost-effective, and help minimize bias by reducing the researcher's direct influence on responses. Qualitative data were collected through semi-structured interviews, allowing participants to express personal experiences and perceptions regarding willpower, motivation, and recovery outcomes.

Prior to the main data collection exercise, permission was formally sought from the management of Haven Recovery Centre through written requests. This included outlining the study objectives, methodology, and ethical measures. Participants were provided with detailed informed consent forms, explaining the purpose of the study,

the voluntary nature of participation, confidentiality measures, and the option to withdraw at any time without consequences. Anonymity was ensured by coding responses and securely storing all collected data.

Once consent was obtained, the researcher introduced themselves to the participants, clearly explaining the study's purpose, scope, and expectations. Emphasis was placed on voluntary participation, confidentiality, and the ethical handling of sensitive information. Collaboration with the Center's staff was essential to identify eligible participants, provide introductions, and encourage participation. Staff assisted with initial screening to ensure that participants met inclusion criteria, including a minimum stay of two months, availability, and willingness to participate.

3.6.3 Primary Data Collection

Primary data for this study were collected directly from clients at Haven Recovery Centre in Eldoret using a mixed-methods approach, which integrated both quantitative and qualitative techniques in order to provide a comprehensive understanding of willpower in substance use disorder (SUD) recovery. The quantitative component involved the use of structured questionnaires designed to capture socio-demographic characteristics, the frequency and application of willpower-related strategies, adherence to treatment schedules, and observable recovery outcomes. These questionnaires were administered face-to-face within a private and controlled environment at the Centre to ensure confidentiality, minimize external influence, and enhance participant comfort during response provision. A trained research assistant or supervisor was present during administration to clarify items where necessary and to ensure accurate comprehension of the questions. Completed questionnaires were collected in paper format and subsequently entered into a secure electronic database for further analysis.

The qualitative component consisted of semi-structured interviews aimed at exploring participants lived experiences of recovery, with particular emphasis on their perceptions of willpower, the challenges encountered during the recovery process, and the strategies employed to maintain abstinence. Interviews were conducted in a quiet and private room within the Centre to encourage openness, reduce distractions, and facilitate detailed narrative responses. With participants' informed consent, all interviews were audio-recorded to ensure accurate capture of responses. In addition,

field notes were taken during each session to document non-verbal cues, emotional expressions, and contextual observations that could enrich the interpretation of the data. The use of open-ended questions allowed participants to freely express their experiences while enabling the researcher to probe further for deeper insights where necessary.

To ensure data integrity and reliability, rigorous data management procedures were implemented throughout the research process. Questionnaire data were carefully checked for completeness and consistency at the point of collection and again during data entry to minimize errors. All physical documents, including completed questionnaires and consent forms, were securely stored in locked cabinets, while electronic data were password-protected and restricted to authorized members of the research team only. Qualitative interview recordings were transcribed verbatim and prepared for thematic analysis, while quantitative data were organized and analyzed using statistical software such as SPSS and Microsoft Excel.

3.6.4 Secondary Data Collection

In addition to primary data, secondary data were collected to complement and contextualize the findings. This included a review of Centre records such as attendance logs, treatment reports, relapse records, and demographic files, which provided objective information on participants' treatment history and recovery trajectories. Furthermore, scholarly sources including peer-reviewed journal articles, books, and prior empirical studies on substance use disorders, willpower, and recovery interventions were reviewed to strengthen the theoretical and empirical grounding of the study. Information extracted from these sources was systematically organized using a data extraction framework that captured the source, key variables, and relevance to the study objectives. To enhance credibility, information from secondary sources was cross-checked across multiple references to ensure consistency and reliability.

3.6.5 Ethical Considerations in Data Collection and Management

Ethical considerations were strictly observed throughout the data collection and management process in accordance with established research guidelines. All participants provided informed consent prior to participation in both questionnaires

and interviews, after being adequately informed about the purpose of the study, their rights, and the voluntary nature of participation. Anonymity was maintained by removing identifying information from all data sets, and confidentiality was ensured through secure storage of both physical and digital records. Audio recordings and transcripts were handled exclusively by the research team, and all data were managed in a manner that upheld accuracy, integrity, and security, including careful transcription, double-entry verification for quantitative data, and controlled access to electronic files.

3.6.6 Piloting of Research Instruments

To assess reliability and clarity of the instruments, a pilot study was conducted following Willis (2008), who recommends a pilot sample of at least 10% of the main study sample. Accordingly, seven respondents at Victory Rehabilitation Centre in Kericho were involved in piloting the questionnaire. The pilot exercise aimed to identify potential difficulties in understanding or interpreting questions, evaluate the appropriateness of questionnaire length, and uncover any ambiguities that might affect data quality. Feedback indicated that the instruments were understandable, appropriately structured, and comprehensive, confirming both reliability and validity. Following this pilot, the main data collection was conducted at Haven Recovery Centre, Eldoret, from 1st June 2025 to 30th August 2025.

Self-reported perceptions of willpower were treated as reliable indicators of recovery outcomes through several methodological measures. First, triangulation was employed, combining quantitative questionnaire data with qualitative interview insights. This approach allowed cross-validation of participant responses. Second, instruments included multiple items targeting similar constructs of willpower, motivation, and behavioral persistence, thereby reducing measurement error. Third, participants were familiar with the Centre's routines, having spent at least two months in treatment, which improved the accuracy and credibility of their self-assessments. These measures collectively enhanced confidence that self-reports reflected genuine experiences rather than socially desirable responses.

While findings suggest that willpower played an important role in recovery, the study also observed its limitations, consistent with Baumeister's model of ego depletion, which posits that self-control was a finite psychological resource that can be

exhausted. Participants demonstrated moments of high self-regulation interspersed with lapses, particularly during stressful situations or when external support was limited. This aligns with the ego depletion framework, indicating that although willpower was essential, it was more effective when complemented by structured behavioral strategies, environmental support, and motivation-enhancing interventions such as counseling and peer encouragement.

Findings from Haven Recovery Centre also reveal similarities and differences with studies conducted in Western rehabilitation contexts. Like Western programs, structured routines, motivational sessions, and professional counseling enhance clients' ability to exercise willpower. However, the reliance on community and spiritual support in Haven Centre was more pronounced, reflecting contextual variations in social and cultural support systems. Moreover, voluntary versus involuntary admission dynamics were particularly influential in shaping perceived willpower, a factor less emphasized in Western studies where admissions were predominantly voluntary. These contextual distinctions highlight the need for culturally sensitive adaptations of self-regulation and behavioral interventions in non-Western settings.

3.6.7 Instrument Reliability

The reliability of a research instrument refers to the degree to which it consistently produces stable and dependable results when applied under similar conditions. In this study, reliability will be assessed using the Cronbach's alpha coefficient, which was a widely recognized method for evaluating internal consistency of responses obtained through questionnaires (Bayraktar et al., 2008). This method was particularly suitable because it requires only a single administration of the instrument, allowing the researcher to determine how closely related the set of items were as a group, thereby providing a measure of their coherence and consistency.

Cronbach's alpha values range from 0 to 1, where higher values indicate greater internal consistency among the items in the questionnaire (Orodho, 2003). A high alpha coefficient implies that the items effectively measure the same underlying construct, which, in this study, relates to factors influencing willpower and recovery from substance use disorders. According to Hanauer et al. (2016), an alpha value of 0.70 or above was generally considered acceptable for demonstrating sufficient

reliability. To ensure the instrument meets this standard, a pretest will be conducted with seven respondents, and the significance level will be set at 0.05. This pretesting procedure will help identify any ambiguities or inconsistencies in the questionnaire items, allowing necessary adjustments before the main data collection. Ensuring the reliability of the research instrument was essential for generating credible findings that accurately reflect participants' experiences and perceptions regarding willpower during recovery.

3.6.8 Instrument Validity

Validity was defined as how accurately a method can measure what it was intended to measure. Face and content validity were considered for this study. Content validity refers to the representative of the items on the instruments as they relate to the entire domain or universe of the content being measured (Rothman et al., 2009). Sartori (2010), defined face validity as the appeal and appearance of the instrument. To have content validity, the measure must sample adequately the domain the researcher claims it measures and argue that 'instruments validation can be improved through expert's judgment'. In this study the research supervisor who were experts in the subject were involved in ascertaining the content validity. Furthermore, after pre-testing the administered questionnaires they were assessed for validity. The pretesting helped ensure that the tools meet the credibility, dependability, transferability and conformability qualities as required in the research.

3.7 Data analysis

The information obtained for this study was examined descriptively and inferentially, with the key tools being Chi-square tests, tables, and charts. The analysis approach sought to summarize clients' socio-demographic characteristics, determine the application of willpower strategies, and investigate the relationship between socio-demographic parameters and the efficacy of these techniques among clients with substance use problems.

The socio-demographic information gathered was descriptive in nature, with factors such as age, gender, level of education, and marital status. The study included calculating frequencies and percentages to determine how many clients fit into each category. These descriptive statistics gave a good picture of the general characteristics

of the respondents. To summarize continuous variables, central tendency measures such as mean and median age were generated. The findings of this investigation were presented using tables to depict numerical distributions and bar and pie charts to visually illustrate the proportions of different groups, so improving clarity and interpretation.

Clients with substance use disorders used willpower strategies, which were then descriptively assessed to establish the amount and frequency of use for each approach. To determine whether there were significant connections between customers' socio-demographic factors and their use of willpower strategies, the Chi-square test of independence was performed. This statistical test was appropriate since the two sets of variables—demographic characteristics and consumption levels were categorical. The Chi-square test was used to examine whether differences in technique utilization were due to characteristics such as gender, age group, or educational level.

Additionally, Chi-square tests were used to investigate the association between sociodemographic factors and perceived efficiency of willpower tactics. This helped determine whether particular demographic groups found specific tactics more effective than others. For example, the test indicated if the efficiency of tactics such as delayed gratification or habit stacking differed considerably among clients of different ages or educational-levels.

To ensure accuracy, data was meticulously cleaned and prepped before being analyzed. This included screening for missing values, deleting duplicates, and categorizing data based on variables. The data analysis was conducted using Microsoft Excel and SPSS (Statistical Package for the Social Sciences). Excel was primarily used for data entry, cleaning, and preliminary organization, including creating tables and charts to visualize trends. SPSS was used for more advanced statistical analysis, including descriptive statistics (frequencies, percentages, means, and standard deviations) and inferential tests (such as correlations or cross-tabulations) to examine relationships between sociodemographic characteristics, willpower strategies, and recovery outcomes. This combination ensured efficient computation, accurate analysis, and clear presentation of the research findings. At last, information was displayed in both tabular and graphic formats. Tables were used to describe frequencies, percentages, and Chi-square values, and bar and pie charts were

employed to visually illustrate socio-demographic distributions and correlations between variables. This complete approach resulted in a clear, dependable, and visually appealing depiction of the results.

3.8 Legal and Ethical Consideration

Prior to commencing the study, the researcher sought and obtained the necessary permissions and approvals from both the African Nazarene University and the Haven Recovery Centre, where the research was to be conducted. Formal authorization letters were secured from both institutions to ensure that the data collection process complied with institutional regulations and ethical research standards. Additionally, approval from the Board of Directors at the Haven Recovery Centre provided the researcher with formal access to the facility and its clients, thereby allowing for the systematic collection of relevant data within an ethically approved framework.

The study adhered strictly to ethical principles as outlined by Resnik (2011), which emphasize informed consent, confidentiality, anonymity, and respect for participants. Each participant was fully informed about the purpose and objectives of the study, the procedures involved, and any potential risks or benefits associated with participation. Participants were also made aware of their right to withdraw from the study at any point without any repercussions. Sufficient time was provided for participants to ask questions and make informed decisions about their voluntary participation, ensuring that consent was freely given and fully informed.

Maintaining confidentiality and anonymity was a central ethical concern throughout the study. Personal information and responses were handled with the utmost discretion. All data collected were coded to remove identifying details, thereby guaranteeing that individual participants could not be traced in any reports or publications. Secure storage measures were implemented to protect the information, and the data were exclusively used for the purposes of this academic research.

The researcher also conducted the study with a high level of academic integrity, ensuring transparency and honesty at all stages, including data collection, analysis, and reporting. Care was taken to avoid any form of fabrication, falsification, or plagiarism, and the accuracy of the findings was prioritized to ensure that the results genuinely reflected the participants' experiences and perspectives.

Furthermore, cultural sensitivity was observed during the research process. The researcher recognized and respected the cultural backgrounds and diversity of all participants, which helped establish trust and rapport, thereby facilitating the collection of authentic and comprehensive information.

Overall, all ethical and legal procedures were meticulously followed to safeguard participants' rights, dignity, and welfare. By adhering to these ethical standards, the research was conducted responsibly and contributed meaningfully to the understanding of willpower and recovery among individuals with substance use disorders, while upholding the highest standards of scholarly conduct.

CHAPTER FOUR
DATA PRESENTATION AND DATA ANALYSIS

4.1 Introduction

Chapter Four presented the analysis and interpretation of research findings. Quantitative data from questionnaires were coded, cleaned, and analyzed using SPSS and Microsoft Excel. Data cleaning involved checking for completeness, consistency, and accuracy, with double-entry verification used to minimize errors. The final data set was analyzed using descriptive statistics, mainly frequency distributions, to summarize socio-demographic characteristics, willpower strategies, and recovery outcomes. Findings were presented in tables and charts for clarity.

Qualitative data from interview guides were transcribed verbatim, organized, and analyzed thematically. The analysis involved repeated reading of transcripts to identify recurring patterns related to willpower techniques, relapse triggers, coping strategies, and recovery experiences. Verbatim quotations were retained to support themes and reflect participants' lived experiences. For example, Respondent R2 stated, "When I follow my daily routine strictly, I don't get time to think about drugs," while Respondent R5 noted, "I tell myself I will act later, and most times the craving disappears," and Respondent R7 explained, "I now believe I can control myself because I have stayed clean for months."

Quantitative data were analyzed using descriptive statistics, while qualitative data were analyzed thematically. The two sets of findings were integrated to provide a comprehensive understanding of how willpower strategies and sociodemographic factors influence recovery outcomes.

Triangulation was achieved by comparing questionnaire data, interview responses, and Centre records to enhance validity. For instance, high use of self-efficacy strategies (75%) aligned with participants' reported confidence in resisting relapse, while habit stacking (70%) was consistently reflected in descriptions of structured daily routines used to maintain recovery.

4.2 Response Rate

In research, response rate refers to the proportion of participants who provide usable data relative to the total number of individuals invited to participate in the study. The

Council of American Survey Research Organizations (CASRO, 1980s) emphasizes the importance of this metric as an indicator of the reliability and representativeness of survey-based research. The response rate was calculated using the formula:

Response Rate = (Number of Responses / Total Number of Invited Participants) × 100

A higher response rate increases the likelihood that the sample accurately reflects the target population, thereby enhancing the credibility and generalizability of the study's findings. Conversely, a low response rate may introduce bias, reduce representativeness, and compromise the reliability of conclusions.

For this study, participants were drawn from clients who had spent at least two months at Haven Recovery Centre. Staff members, including two pastors, six counselors, and four security personnel, were also included. Clients comprised two groups: twenty-six individuals who voluntarily sought rehabilitation and twenty-six individuals who were brought to the Centre under other circumstances. Including participants with at least two months of engagement ensured they had sufficient exposure to the Centre's interventions and could provide informed, meaningful responses.

Table 2

Response Rate of Questionnaires

Response Category	Pastors	Pastors %	Counsellors	Counsellors %	Security	Security %	Clients	Clients %
Distributed questionnaires	2	100	5	100	4	100	30	100
Returned and usable questionnaires	2	100	6	83	4	50	15	50
Unreturned and unusable questionnaires	0	0	1	17	0	50	15	50

Note. This showed a minimum threshold of 50%, which aligns with Sekaran and Bougie (2020) suggesting that response rates at or above 50% mitigate significant non-response bias.

4.3 Clients' Socio Demographics

Socio-demographic variables such as age, gender, marital status, educational background, and length of substance use were critical in understanding recovery outcomes. Collecting this data contextualizes participants' experiences and allows for interpretation of how individual characteristics may influence the effectiveness of willpower strategies.

4.3.1 Clients' Gender

The study sought to establish gender targeted clients at Haven recover Centre, Eldoret Uasin Gishu County, Kenya as shown in the table below.

Table 3

Clients Gender

Gender	Number of Respondents (n)	Percentage (%)
Percentage (%)	17	72
Percentage (%)	7	28
Total	24	100

Note. From table 3 were male 72% and 28 % were female this indicated that there was a gender imbalance. This may be attributed to the fact that the majority of clients at the Centre were male.

4.3.2 Clients' Age

The study sought to establish the age of 27 selected clients at the at Haven recovery Centre Eldoret Uasin Gishu county, Kenya out of which only 24 of them responded well.

Table 4: Clients' Age

Age Factor	Number of Respondents (n)	Percentage (%)
18–35 years	19	80
36 years and above	5	20
Total	24	100

Note. From the results above the youth dominated the study sample than the elderly this was because most of the clients at the haven recovery Centre were the youth.

4.3.4 Marital status Information

The study sought to establish the marital status of clients at the at Haven recovery Centre Eldoret Uasin Gishu county, Kenya.

Table 5

Marital status

Marital Status	Number of Respondents (n)	Percentage (%)
Married	8	37
Single	16	63
Total	24	100

Note. From the results obtain it was evident that married clients were less compared to the single this came as result of many factors such as most admitted clients were not stable with relationships due to the use of alcohol.

4.3.5 Academic qualification and their profession

The study sought to establish the academic qualification of clients at the at Haven recovery Centre Eldoret Uasin Gishu county, Kenya.

Table 6

Academic Qualifications

Academic qualification	Number	Percentage (%)
Tertiary level	7	28.3
Secondary	16	67.4
Primary	1	4.3
Total	24	100

4.4 client's entry level

The study sought to establish the clients entry behavior at Haven recovery Centre Eldoret Uasin Gishu county, Kenya .

Table 7

Client's Entry level

client's	Entry level	(Number of %)
Forced	16	70
Willing	8	30
Total	24	100

Note. From the above results those who sought help willingly were only 30% of the total population interviewed and the majority were those brought to the Centre forcefully.

4.5 Willpower techniques and how frequent they were utilized by the client

The study sought to found which willpower techniques were utilized at the center and how frequent was it applied by all the respondents at Haven recovery Centre Eldoret Uasin Gishu County, Kenya. The results were as follows

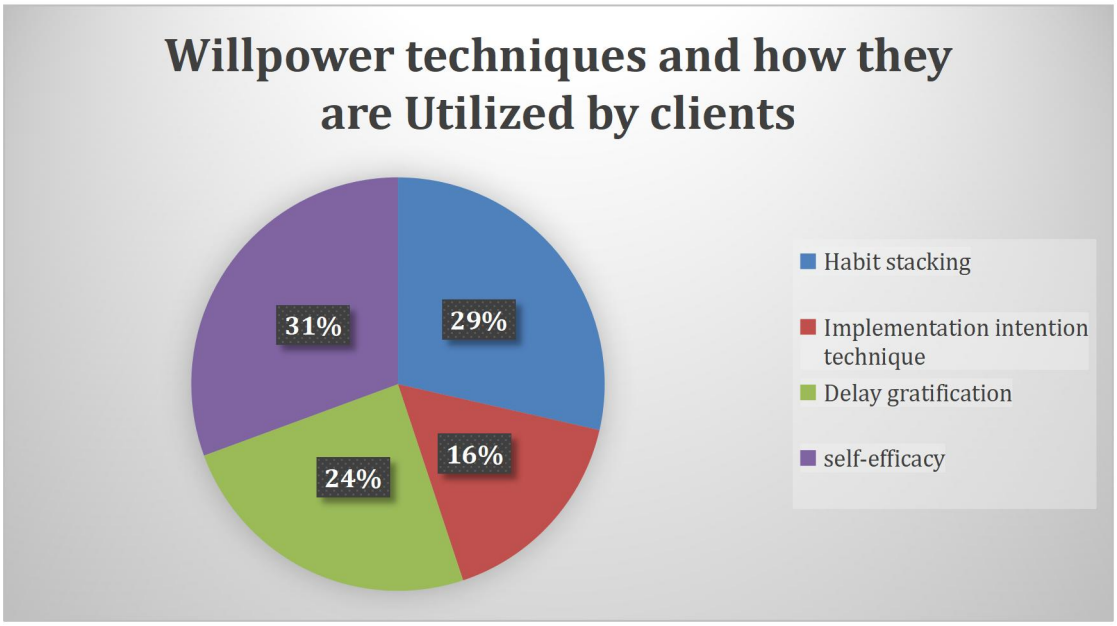
Table 8

Willpower Technique

Willpower technique	Frequency of their applicability in %
Habit stacking	70
Implementation intention technique	40
Delay gratification	60
Self-efficacy	75

Figure 2

Chart showing willpower techniques and how they were utilized by clients



4.6 Relationship between social demographic characteristics and the effectiveness of willpower techniques among the Respondents

This information was collected from all the four major respondents so as to see if any of sociodemographic characteristics has any correlation with the willpower techniques and will.

4.7 Perception on effectiveness of willpower techniques

Table 9

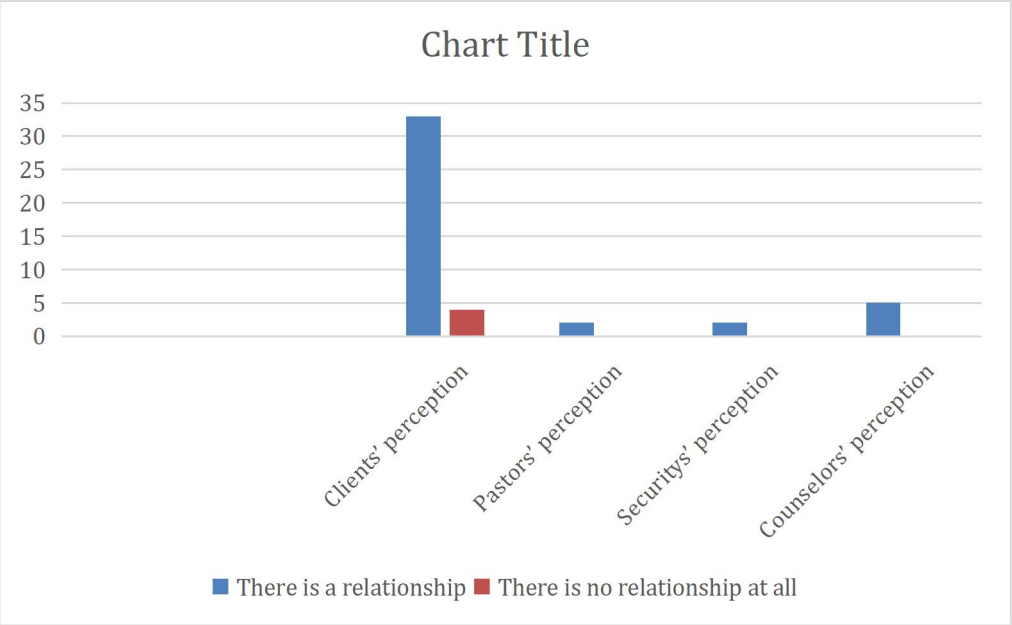
Perception on effectiveness of willpower techniques

Respondent Group	There was a relationship, n	There was no relationship at all, n
Clients' perception	13	2
Pastors' perception	2	0
Security personnel's perception	4	0
Counselors' perception	6	0
Total	25	2

Note. Here is the bar chart representing the opinions on the existence of a relationship across different respondent groups. The green bars indicate those who believe there was a relationship, while the red bars showed those who believe there was no relationship at all.

Figure 3

Perception in existence of a relationship



4.8 Routines that promotes use of willpower techniques

The exercise was carried out on pastors and counselors who ensured the implementation of willpower techniques when dealing with clients at Haven recovery Centre and the following routine were identified.

Table 10

Pastors Routine

Pastors routines	Counselors routines
Daily spiritual devotions	Motivational talks

4.9 Inferential statistics on the relationship between social demographic characteristics and the effectiveness of willpower techniques among the respondents

The inferential statistical analysis examining the relationship between clients' socio-demographic characteristics and the effectiveness of willpower techniques in the recovery process at Haven Recovery Centre, Eldoret, Uasin Gishu County, Kenya were discussed here. Socio-demographic factors such as age, gender, education level, and marital status may influence how individuals apply self-regulation strategies and sustain behavioral change. To determine whether these factors were associated with the effectiveness of willpower-based recovery techniques, Chi-square (χ^2) tests were conducted on categorical variables.

Table 11

Relationship between Socio-Demographic Characteristics and Effectiveness of Willpower Techniques (n = 24)

Socio-Demographic Variable	Category	Effective Willpower Techniques n (%)	Ineffective Willpower Techniques n (%)	χ^2 Value	df	p-value	Interpretation
Gender	Male	10 (59%)	7 (41%)	0.09	1	0.76	Not significant
	Female	5 (71%)	2 (29%)				
Age	Below 35 yrs	11 (58%)	8 (42%)	0.36	1	0.55	Not significant
	Above 35 yrs	4 (80%)	1 (20%)				
Education Level	Primary	0 (0%)	1 (100%)	7.33	2	0.03	Significant
	Secondary	10 (63%)	6 (37%)				
	Tertiary	5 (71%)	2 (29%)				
Marital Status	Single	10 (63%)	6 (37%)	0.14	1	0.71	Not significant
	Married	5 (63%)	3 (37%)				

Note. Chi-square (χ^2) tests were used to determine the association between socio-demographic factors and the effectiveness of willpower techniques. Significant associations were indicated when $p < 0.05$.

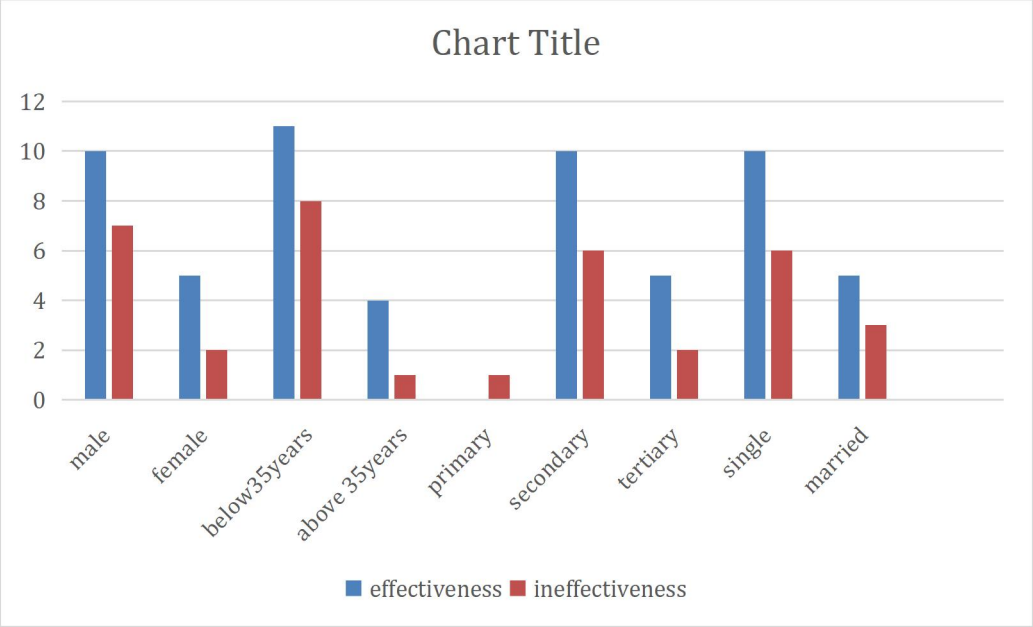
Table 12

Simplifies this work as follows

Category	Effective, n (%)	Ineffective, n (%)
Gender		
Male	10 (59%)	7 (41%)
Female	5 (71%)	2 (29%)
Age		
Below 35 years	11 (58%)	8 (42%)
Above 35 years	4 (80%)	1 (20%)
Education Level		

Figure 4

Relationship between Socio-Demographic Characteristics and Effectiveness of Willpower Techniques



The analysis of socio-demographic characteristics in relation to the effectiveness of willpower techniques when several significant themes were seen in the examination of respondents' willpower tactics' efficacy. Although this difference was not statistically significant ($\chi^2 = 0.09$, $p = 0.76$), female participants reported slightly better efficacy (71%) than male participants (59%). The effectiveness was highest among those over 35 (80%) compared to those under 35 (58%), although there was no significant correlation between age and effectiveness ($\chi^2 = 0.36$, $p = 0.55$). However, there was a strong correlation between education level and willpower efficacy ($\chi^2 = 7.33$, $p = 0.03$); respondents with secondary education (63%) and tertiary education (71%) were better at using the approaches, whereas those with only a primary education (0%) could not. In terms of marital status, both married and single respondents showed comparable efficacy (about 63%), suggesting no discernible impact. Overall, these results imply that while some sociodemographic traits, especially education, influence the efficacy of willpower strategies, age, gender, and marital status have little bearing on their use.

In this case, the inferential analysis revealed that education level was an important factor in predicting the success of willpower strategies among Haven Recovery Centre clients. This suggests that clients with greater educational levels may have a better comprehension of self-regulation skills, resulting in more successful recovery results. Other variables, such as age, gender, and marital status, had no significant influence, implying that willpower tactics can be used universally across these categories. These findings encourage the use of targeted therapies that improve self-control and provide additional support to clients with lower levels of education in order to maximize recovery success.

In summary, bias was minimized through triangulation with quantitative data, peer debriefing, member checks, and reflective journaling. This ensured credibility and reliability of qualitative findings. Self-Determination Theory (SDT) which emphasizes intrinsic motivation and autonomy, explained why voluntarily engaged clients exhibited stronger willpower. Cognitive Behavioral Therapy (CBT) complements SDT by providing structured techniques to modify maladaptive behaviors. SDT focused on internal motivation, while CBT emphasizes skill-based behavioral change. The integration of both approaches provided a comprehensive

framework for understanding recovery, although conflicts arise if intrinsic motivation was insufficiently supported by CBT interventions. Willpower Effectiveness was measured via self-reports, staff observations, and relapse monitoring. Triangulating these methods validated findings and ensured reported willpower aligned with observable outcomes.

The findings obtained aligned with Western programs regarding structured routines and professional counseling. However, the Haven Recovery Centre emphasizes community and spiritual support, reflecting cultural differences. Voluntary versus involuntary admission also influenced willpower perception, a dynamic less emphasized in Western studies.

Lastly, the research limitations included small sample size, reliance on self-reported data, and the context-specific nature of Haven Recovery Centre. Involuntary client participation may have affected accuracy of self-reported willpower measures. Despite these limitations, the findings offer valuable insights into willpower-based recovery interventions.

CHAPTER FIVE
DISCUSSIONS, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

This chapter presented a comprehensive discussion of the findings obtained from the study and relates them to the objectives of the research as well as to existing empirical and theoretical literature. The discussion was based on the data collected from clients at Haven Recovery Center and focused on the role of willpower in supporting recovery from substance use disorders (SUD). Specifically, the chapter examined how socio-demographic characteristics influence the understanding, application, and effectiveness of various willpower techniques used during the recovery process. The findings were interpreted within the framework of Self-Determination Theory (SDT) and Cognitive Behavioral Theory (CBT), which guided the study and provided a basis for understanding the relationship between personal motivation, behavioral change, and sustained recovery.

The chapter further explores how different willpower strategies contribute to improved treatment adherence, emotional regulation, relapse prevention, and successful reintegration into society. It also examined the extent to which educational attainment, age, gender, and marital status influence the effectiveness of these strategies among individuals undergoing rehabilitation. By comparing the study findings with previous scholarly work, the chapter demonstrated areas of agreement and divergence while highlighting the practical implications for rehabilitation practice.

Finally, the chapter summarizes the major findings, draws conclusions based on the evidence generated by the study, and provides recommendations for rehabilitation centers, policymakers, counselors, and other stakeholders involved in substance use disorder management. Suggestions for future research were also presented to encourage further investigation into the relationship between willpower and recovery, particularly within the Kenyan rehabilitation context.

5.2 Discussion of Findings

5.2.1 Socio-demographic characteristics and recovery

The study established that the majority of participants were young males aged between 18 and 35 years, most of whom were unmarried and had attained secondary education. The predominance of younger participants supports previous studies that identify young adulthood as a high-risk period for substance use and addiction due to increased experimentation, peer influence, identity exploration, and incomplete development of self-regulatory mechanisms. Young adults often experience numerous social and psychological transitions, making them particularly vulnerable to experimenting with psychoactive substances. These developmental challenges increase the likelihood of substance use becoming habitual if effective coping mechanisms were not developed early.

This finding was consistent with Spear (2013), who argued that the adolescent and young adult brain was particularly susceptible to risky behaviors because the prefrontal cortex, which governs impulse control, planning, and decision-making, was still developing. Similarly, Volkow et al. (2016) reported that younger individuals were more vulnerable to substance use disorders because of heightened sensitivity to rewarding stimuli and greater engagement in risk-taking behaviors. The current findings therefore reinforce existing evidence that younger people constitute a population requiring targeted prevention and rehabilitation interventions aimed at strengthening self-regulation and healthy decision-making.

The study also found that educational attainment influenced the understanding and application of willpower strategies. Participants with secondary and tertiary education appeared to adopt structured techniques such as habit stacking and implementation intentions more readily than those with lower educational levels. Individuals with higher educational attainment may possess stronger analytical skills, improved comprehension of therapeutic concepts, and greater ability to translate rehabilitation guidance into practical daily routines. Consequently, they may found it easier to understand the rationale behind behavioral interventions and consistently apply them throughout the recovery process.

This finding agrees with Baumeister et al. (2007), who suggested that self-regulation and decision-making were influenced by cognitive and socio-demographic factors, including educational exposure. The statistical analysis further revealed that education level had a significant relationship with the effectiveness of willpower techniques, supporting the argument that individuals with higher educational attainment may possess better problem-solving abilities, planning skills, and self-management capacities that facilitate successful recovery.

Although the majority of participants were unmarried, the statistical analysis did not establish a significant association between marital status and the effectiveness of willpower techniques. This finding contrasts with studies suggesting that family responsibilities and social support enhance recovery outcomes but may indicate that structured rehabilitation programs can provide alternative support systems that compensate for the absence of family-based motivation. Within rehabilitation settings, clients often benefit from peer relationships, counseling sessions, mentorship, and organized therapeutic activities that collectively provide encouragement and accountability. These institutional support systems may reduce differences that would otherwise arise from variations in marital status.

Overall, the findings suggest that socio-demographic characteristics, particularly education, influence the manner in which individuals understand and apply willpower strategies. However, effective rehabilitation programs can reduce disparities by providing structured guidance, supportive relationships, and opportunities for developing self-regulatory skills regardless of personal background.

5.2.2 Willpower techniques and frequency of use

The findings revealed that self-efficacy was the most frequently applied willpower strategy, followed by habit stacking, delayed gratification, and implementation intentions. The prominence of self-efficacy was consistent with Bandura's (1997) theory, which emphasizes that individuals who believe in their ability to perform a behavior were more likely to persist in the face of obstacles and setbacks. Confidence in one's ability to overcome challenges enables individuals to maintain commitment to recovery even when confronted with cravings, emotional distress, or environmental triggers.

Similarly, Gist and Mitchell (1992) argued that self-efficacy enhances resilience and commitment to long-term goals by strengthening confidence in personal capabilities. Individuals who possess high levels of self-efficacy were more likely to approach difficult situations with determination rather than fear of failure. The current findings also agree with Magill et al. (2020), who identified confidence in one's ability to maintain abstinence as a critical factor in successful substance use disorder recovery. Participants who believed they could resist substance use demonstrated greater consistency in treatment participation and reported improved confidence in managing daily recovery challenges.

The widespread use of habit stacking among participants supports the notion that integrating positive behaviors into existing routines promotes behavioral consistency and long-term adherence to recovery practices. Habit stacking allows individuals to associate desired behaviors with already established routines, making positive behaviors easier to maintain over time. Participants reported incorporating healthy habits such as journaling, prayer, exercise, and counseling preparation into their daily schedules, thereby reducing opportunities for engaging in harmful behaviors.

This finding aligns with the self-regulation framework proposed by Baumeister et al. (2007), which suggests that repeated practice of adaptive behaviors gradually strengthens self-control and improves behavioral consistency. Through continuous repetition, positive habits become increasingly automatic, reducing the cognitive effort required to maintain recovery-oriented behaviors.

Delayed gratification was also commonly reported, indicating that participants were willing to sacrifice immediate pleasure for long-term recovery goals. This observation supports the strength model of self-control, which views the ability to resist immediate temptations as an essential component of successful behavioral regulation. Individuals recovering from substance use disorders often face situations where immediate cravings compete with long-term aspirations such as improved health, restored family relationships, and stable employment. Participants who practiced delayed gratification demonstrated greater willingness to prioritize these long-term benefits over temporary satisfaction.

Although implementation intentions were the least frequently used strategy, participants who applied structured "if-then" plans reported greater preparedness for high-risk situations. These structured plans enabled participants to anticipate potential triggers and prepare appropriate coping responses before encountering them. Rather than relying solely on spontaneous decision-making, they developed practical strategies for avoiding relapse in situations involving stress, peer pressure, or emotional distress.

This finding was consistent with Gollwitzer and Sheeran (2006), whose meta-analysis demonstrated that implementation intentions significantly improve goal attainment by linking anticipated situations with predetermined responses. The findings therefore suggest that combining multiple willpower strategies may strengthen recovery outcomes by addressing different dimensions of self-regulation. Rather than depending on a single technique, participants benefited from integrating self-efficacy, habit stacking, delayed gratification, and implementation intentions into a comprehensive approach to recovery.

5.2.3 Effectiveness of willpower in recovery

The study found that the application of willpower strategies was associated with positive recovery outcomes, including reduced relapse, improved adherence to treatment, greater emotional stability, and enhanced social functioning. These findings support Baumeister et al. (2007), who argued that self-control enables individuals to regulate impulses and maintain behaviors that promote long-term goals. Effective self-regulation allows recovering individuals to make healthier decisions even when confronted with difficult emotional or social circumstances.

Similarly, Gollwitzer and Sheeran (2006) reported that structured planning strategies reduce dependence on spontaneous motivation and improve persistence in goal-directed activities. By establishing clear behavioral plans and maintaining consistent routines, individuals become less vulnerable to momentary fluctuations in motivation that could otherwise contribute to relapse.

The findings also agree with Magill et al. (2020), who established that cognitive and behavioral interventions strengthen coping skills and improve self-regulatory capacity among individuals recovering from substance use disorders. Participants who

consistently practiced self-efficacy, delayed gratification, and habit stacking reported fewer relapse episodes and greater engagement in rehabilitation activities, suggesting that internal motivation contributed significantly to sustained recovery. Their commitment to treatment was reflected in improved attendance at counseling sessions, increased participation in therapeutic activities, and greater willingness to implement positive behavioral changes.

The present study further demonstrated that external support systems reinforce the effectiveness of willpower strategies. Daily devotions, mentorship, journaling, peer support, and structured rehabilitation programs were identified as important mechanisms for strengthening self-control. These supportive interventions provided encouragement, accountability, emotional reassurance, and practical guidance that complemented participants' personal determination. They also created environments in which clients could openly discuss challenges, celebrate progress, and learn effective coping skills from counselors and peers.

This finding supports Rubak et al. (2005) and Miller and Rollnick (2013), who found that interventions promoting intrinsic motivation and personal responsibility enhance long-term behavioral change. Motivational interviewing, mentorship, and supportive counseling strengthen clients' confidence while encouraging ownership of the recovery process. The results therefore indicate that willpower alone may not be sufficient and was most effective when supported by a conducive recovery environment characterized by consistent guidance, social support, and structured therapeutic interventions.

5.2.4 Influence of socio-demographics on willpower application

The study examined whether socio-demographic characteristics influenced the application and effectiveness of willpower techniques among clients undergoing rehabilitation at Haven Recovery Centre. Statistical analysis revealed that education level was significantly associated with the effective use of willpower strategies, whereas gender, age, and marital status were not statistically significant predictors of successful application. These findings suggest that although demographic characteristics may shape individuals' experiences and perspectives, educational attainment played a more direct role in determining how effectively clients understand, adopt, and consistently apply evidence-based recovery strategies.

The significant influence of education supports the findings of Baumeister et al. (2007), who emphasized that cognitive resources and self-regulatory abilities were shaped by individual characteristics and learning experiences. Individuals with higher educational attainment were generally better positioned to comprehend therapeutic concepts, follow structured treatment plans, and implement behavioral strategies such as habit stacking, implementation intentions, and delayed gratification. Education may also enhance problem-solving skills, critical thinking, and the ability to evaluate the long-term consequences of behavior, all of which contribute positively to sustained recovery.

The absence of significant relationships between age, gender, and marital status and the effectiveness of willpower techniques partially contradicts previous studies that associate these factors with differences in addiction experiences and recovery outcomes. Some earlier research has suggested that older individuals may possess greater emotional maturity, married individuals may benefit from stronger family support, and gender differences may influence coping mechanisms during recovery. However, these patterns were not supported by the findings of the present study.

One possible explanation was that participation in a structured rehabilitation program provides relatively equal opportunities for all clients to develop self-regulatory skills regardless of demographic background. Through counseling, mentorship, peer support, therapeutic activities, and routine behavioral monitoring, participants receive similar interventions designed to strengthen willpower and encourage personal growth. Consequently, the influence of demographic differences may become less pronounced within a supportive rehabilitation environment.

This observation was consistent with contemporary recovery models that emphasize therapeutic engagement, intrinsic motivation, and personal commitment as stronger predictors of successful recovery than demographic characteristics alone. The findings therefore suggest that although educational attainment may enhance the application of willpower strategies, effective rehabilitation depended largely on creating environments that enable all clients to develop the necessary cognitive and behavioral skills for long-term recovery.

Overall, the findings demonstrate that while socio-demographic characteristics, particularly education level, may influence the application of willpower strategies, successful recovery depended largely on the interaction between personal self-regulation, therapeutic interventions, and supportive recovery environments. Rehabilitation programs should therefore continue providing individualized care that considers clients' educational backgrounds while ensuring equal access to evidence-based interventions for all participants.

5.3 Summary of main findings

The study found that willpower played a significant role in supporting recovery among clients with substance use disorder at Haven Recovery Centre, Eldoret. The findings demonstrated that self-efficacy, habit stacking, delayed gratification, and implementation intentions were important willpower strategies used by participants, with self-efficacy emerging as the most frequently applied technique. This suggests that confidence in one's ability to overcome challenges serves as a strong foundation for maintaining recovery and resisting relapse.

The study further established that the consistent application of these strategies was associated with improved treatment adherence, reduced relapse risk, enhanced emotional stability, and better social reintegration. Participants who regularly practiced these techniques reported greater commitment to rehabilitation activities, improved emotional control, and increased confidence in managing situations that could potentially trigger substance use. These findings reinforce the importance of strengthening self-regulatory capacities throughout the rehabilitation process.

Education level was found to have a significant influence on the effective use of willpower techniques, while age, gender, and marital status did not showed statistically significant relationships with the effectiveness of these strategies. This finding indicates that educational attainment may improve individuals' understanding and implementation of structured behavioral interventions without diminishing the importance of providing equal rehabilitation opportunities to all clients regardless of demographic background.

Qualitative findings also revealed that participants relied not only on personal determination but also on external supports such as counseling, mentorship, structured

routines, peer support, journaling, and spiritual practices to strengthen their self-control. These external support systems complemented internal motivation by providing accountability, encouragement, guidance, and emotional support throughout the recovery journey. The integration of personal effort with institutional and social support appeared to create a more comprehensive approach to relapse prevention and long-term behavioral change.

Overall, the study concluded that willpower was a key resource in the recovery process; however, its effectiveness was enhanced when combined with structured rehabilitation interventions and supportive social environments. Sustainable recovery therefore depended on the interaction between individual commitment and external systems that reinforce positive behavioral change and encourage continued personal development.

5.4 Conclusions

This study concluded that willpower constitutes a fundamental element in the recovery of individuals with substance use disorders. It functioned both as an inherent personal attribute and as a set of cognitive and behavioral strategies that can be developed and strengthened through structured rehabilitation interventions. The findings demonstrate that recovery was not solely dependent on an individual's determination but also on the ability to cultivate practical self-regulation techniques that support consistent behavioral change over time.

At Haven Recovery Centre, the consistent application of techniques such as self-efficacy, habit stacking, delayed gratification, and implementation intentions was associated with improved management of cravings, sustained abstinence, and overall therapeutic progress. Self-efficacy strengthened clients' belief in their ability to exert personal control over their behaviors, habit stacking facilitated the establishment of consistent routines supportive of recovery, while delayed gratification enabled clients to prioritize long-term recovery objectives over immediate temptations. Implementation intentions further enhanced preparedness by enabling clients to anticipate high-risk situations and develop appropriate coping responses before encountering them.

Collectively, these strategies enhanced participants' persistence, emotional regulation, confidence, and resilience against relapse triggers. The findings suggest that the combination of multiple willpower techniques creates a stronger foundation for recovery than reliance on a single strategy. Individuals who consistently applied these approaches demonstrated greater engagement in rehabilitation activities and improved capacity to overcome challenges encountered during treatment.

The findings align with the principles of Self-Determination Theory (SDT), which emphasize autonomy, competence, and relatedness as key drivers of intrinsic motivation. They also support the assumptions of Cognitive Behavioral Theory (CBT), which advocates the restructuring of maladaptive thought patterns and the development of adaptive coping behaviors through guided reflection, behavioral practice, and continuous self-monitoring. Together, these theoretical perspectives provide a comprehensive explanation for how willpower contributed to sustained behavioral change among individuals recovering from substance use disorders.

Socio-demographic characteristics, particularly education, were found to influence the understanding and practical application of willpower strategies, emphasizing the need for rehabilitation programs to tailor interventions to individual client profiles. However, the findings also demonstrate that structured rehabilitation environments can reduce the influence of demographic differences by providing clients with equal opportunities to develop self-regulatory skills and adaptive coping mechanisms.

Ultimately, sustainable recovery was best achieved when personal motivation was supported by structured institutional guidance, mentorship, therapeutic counseling, peer encouragement, and socially reinforcing environments. The study therefore concluded that willpower should be viewed not as an isolated personal characteristic but as a dynamic capacity that can be strengthened through appropriate therapeutic interventions and continuous social support.

5.5 Recommendations

Based on the findings of this study, rehabilitation centers should prioritize the integration of structured willpower development modules within their treatment programs. These modules should focus on strengthening self-efficacy, promoting delayed gratification, encouraging implementation intentions, and fostering

sustainable positive habits through activities such as guided goal-setting, behavioral tracking, reflective journaling, routine monitoring of progress, and regular self-assessment. Such interventions can strengthen clients' capacity for self-regulation and increase their confidence in maintaining long-term recovery.

Additionally, post-discharge workshops and peer support programs should be implemented to reinforce the strategies learned during rehabilitation, maintain client engagement, and reduce the likelihood of relapse. Recovery extends beyond residential treatment; therefore, continuous follow-up services and community-based support systems were essential for sustaining behavioral change after clients return to their normal environments.

Capacity building for rehabilitation staff was equally important. Counselors, psychologists, social workers, and peer mentors should undergo continuous professional training in evidence-based behavioral theories, including Self-Determination Theory and Cognitive Behavioral Theory, to enhance their ability to guide clients effectively. Professional development should also emphasize empathetic communication, structured mentorship, motivational interviewing, and relapse prevention strategies. These competencies will contribute to creating therapeutic environments characterized by trust, accountability, respect, and emotional safety.

Interventions should also be customized to reflect clients' socio-demographic and psychological profiles. Factors such as educational background, age, marital status, personal experiences, and cultural context should inform the design and delivery of recovery strategies to ensure that interventions remain relevant and responsive to individual needs. Although education emerged as the only statistically significant demographic factor, individualized care remains essential because recovery experiences differ from one client to another.

The incorporation of family therapy, mentorship programs, faith-based initiatives where appropriate, and community support networks can further strengthen external reinforcement mechanisms, ensure continuity of care, and promote long-term recovery outcomes. Collaboration between rehabilitation centers, families, healthcare providers, community organizations, and policymakers will contribute to more

sustainable recovery by creating supportive environments that reinforce positive behavioral change beyond the rehabilitation setting.

5.6 Suggestions for further research

Future studies should examine the integration of willpower-focused strategies with external support systems across diverse rehabilitation contexts, evaluating the interaction between internal self-regulation and environmental reinforcement. Such research would provide a deeper understanding of how personal determination and external influences jointly contribute to successful recovery from substance use disorders.

Comparative research between Kenyan rehabilitation centers and Western rehabilitation programs could provide valuable insights into cultural, structural, and systemic differences in recovery outcomes. Such comparisons may identify best practices that can be adapted to improve rehabilitation services within different social and cultural settings while recognizing contextual differences in treatment delivery.

Longitudinal investigations tracking the long-term sustainability of willpower-based interventions would provide critical evidence regarding the effectiveness of structured cognitive and behavioral strategies in maintaining sobriety over extended periods. Following clients after discharge would enable researchers to determine whether improvements observed during rehabilitation were maintained in everyday life and identify factors associated with continued recovery or relapse.

Additionally, future research could explore the role of gender, education, family support, socioeconomic status, and psychological resilience in moderating the effectiveness of willpower interventions. Such studies would provide further guidance for the development of individualized, evidence-based, and context-sensitive rehabilitation programs that address the diverse needs of clients recovering from substance use disorders.

Finally, researchers should consider using mixed-methods and multi-center study designs involving larger and more diverse participant populations. Such approaches would improve the generalizability of findings and contribute to a more comprehensive understanding of the relationship between willpower, socio-demographic factors, and recovery outcomes in both Kenyan and international rehabilitation settings.

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APPENDICES

Appendix 2: Informed consent

Sellah Jesang Rotich,

P.O Box 937-30100,

Eldoret.

0707674867.

December 2024.

Dear Parent/ Guardian,

REF: INFORMED CONSENT OF PASTORS, COUNSELORS, SECURITY PERSONNEL AND PERSONS WITH SUBSTANCE USE DISORDER (SUD) PARTICIPATING IN RESEARCH ENTITLED

This letter seeks your consent concerning the mentioned academic research. All information given and gathered will be handled with utmost confidentiality and anyone can withdraw at any stage without prior warning, should he or she wish to do so.

The information given will only be used for the sole purpose of Education. Your participation to this field of knowledge is highly appreciated.

Thank you.

Yours Faithfully, DATE:

Sign: ---------- Sign----------

Sellah Jesang Rotich. Researcher Respondent

Appendix 2: Research tool

The Questionnaire

1. ASSESSMENT OF WILLPOWER DRIVEN RECOVERY AMONG CLIENTS WITH SUBSTANCE USE DISORDER

Dear respondent,

I am a student at Africa Nazarene University studying counselling psychology and I am carrying out the above study at Haven Recovery Centre. You are kindly requested to complete the questionnaire below to participate in the study. Please read each statement and tick the answer which indicates how much the statement applies to you. All information will be treated with utmost confidentiality. Do not indicate your name on the questionnaire.

Thank you.

Instructions to the respondent

- ✓ **Tick where appropriate.**
- ✓ **Fill where appropriate kindly don't leave any blank space.**
- ✓ **Do not write your name on this sheet.**

SECTION ONE: SOCIO –DEMOGRAPHICS

Gender	Male	
	Female	
Age	20- 35	
	36 and above	
Family	Married	
	Single	
	Others	
Academic Level	Tertiary	
	Secondary	
	Primary	
Profession		

SECTION TWO: ENTRY LEVEL.

a. Were you convinced to come to rehabilitation centres yes

No

b. If yes was is it by a Relative ☐ Friend,

Employer ☐ Other ☐

SECTION THREE: WILLPOWER TECHNIQUES.

a. **Identify the willpower techniques that you have exercised at the centre during your recovery period.**

Willpower techniques	**Tick what you have exercised**
Habit stacking technique (adding a positive habit to your daily routine)	
Implementation intensions technique (planning ahead what you will do when tempted to use alcohol/drug)	
Delay gratification technique (Waiting for a bigger reward instead of choosing instant pleasure)	
Self-efficacy technique (Believing in your ability to stay strong)	
Others	Name them:

b. **How often are these willpower techniques utilized by clients with substance use disorders?**

Willpower techniques	**Ratting**			
	Frequently	**Ones**	**None**	**Not sure**
Habit stacking technique (adding a positive habit to your daily routine)				
Implementation intensions technique (planning ahead what you will do when tempted to use alcohol/drug)				
Delay gratification technique (Waiting for a bigger reward instead of choosing instant pleasure)				
Self-efficacy technique (Believing in your ability to stay strong)				
Others				

SECTION FOUR: RELATIONSHIP BETWEEN SOCIO-DEMOGRAPHIC CHARACTERISTICS AND WILLPOWER TECHNIQUES

1. Does your gender hinder you from utilizing any of the four willpower techniques? If yes state how

2. Does your marital status hinder you from implementing in any of the willpower techniques? If yes state how

3. Does your profession play a key role in you implementing in any of the willpower techniques? If yes state how

4. Does your education level hinder your from practicing in any of the willpower techniques? If yes state how

SECTION FIVE: GENERAL OPINION

a. What is your general opinion on willpower?

THANK YOU FOR YOUR TIME.

2. INTERVIEW GUIDE OR FOCUS GROUP DISCUSSION.

Dear respondent,

I am a student at Africa Nazarene University studying counselling psychology and I am carrying out the above study at Haven Recovery Centre. You are kindly requested to respond to the following questions in order to participate in the study. All information will be treated with utmost confidentiality.

Thank you.

ASSESSMENT OF WILLPOWER DRIVEN RECOVERY AMONG CLIENTS WITH SUBSTANCE USE DISORDER

a) INTERVIEW GUIDE FOR PASTORS

Kindly tell me about:

Your job title_____

1. What are some of challenges you experience with people with SUD?

   ……
   ……

2. What kind of interventions do you apply when faced with such challenges?

   ……
   ……

3. What are your major routines concerning spiritual well being of people with SUD?

……
……

4. Is there any relationship with spiritual matters and individual willpower?

   ……
   ……

5.What is your general opinion on willpower?

THANK YOU FOR YOUR TIME.

3. INTERVIEW GUIDE FOR COUNSELORS

Dear respondent,

I am a student at Africa Nazarene University studying counselling psychology and I am carrying out the above study at Haven Recovery Centre. You are kindly requested to respond to the following questions in order to participate in the study. All information will be treated with utmost confidentiality.

Thank you.

Kindly tell me about:

Your job title_____

1. What are some of challenges you experience with people with SUD?

   ……
   ……

2. What kind of interventions do you apply when faced with such challenges?

   ……
   ……

3. What are your major routines dealing willpower of people with SUD?

   ……
   ……

4. Is there any relationship with recovery and individual willpower?

   ……
   ……

5. What is your general opinion on willpower?

   ……
   ……

THANK YOU FOR YOUR TIME.

4. INTERVIEW GUIDE FOR SECURITY PERSONNEL

Dear respondent,

I am a student at Africa Nazarene University studying counselling psychology and I am carrying out the above study at Haven Recovery Centre. You are kindly requested to respond to the following questions in order to participate in the study. All information will be treated with utmost confidentiality.

Thank you.

Kindly tell me about:

Your job title_____

1. What are some of challenges you experience with people with SUD?

   ……

2. What kind of interventions do you apply when faced with such challenges?

   ……

3. What ages of people with SUD have disciplinary issues regularly?

Age 20-35	Age 36 and above

4. After what period of stay do people with SUD bring out most disciplinary cases?

   ……

5. Which gender of people with SUD has disciplinary issues regularly?

Male	Female

THANK YOU FOR YOUR TIME.

Appendix 3: Research permission

AFRICA NAZARENE
UNIVERSITY

P.O.Box: 53067 - 00200
Nairobi, Kenya.
Tel: 020 252 7170/1 - 5
Email: vc@anu.ac.ke
www.anu.ac.ke

7th May, 2025

TO WHOM IT MAY CONCERN

RE: RESEARCH PERMIT: SELLAH JESANG ROTICH STUDENT NO. 18S03DMCP005

Sellah Jesang Rotich Reg. No. (18S03DMCP005) is a Bonafide postgraduate student at Africa Nazarene University in the School of Humanities and Social Sciences – Counseling Psychology department. She is pursuing a Master's degree in Counseling Psychology. This program entails Coursework and Thesis. She has successfully completed coursework and defended her thesis proposal entitled:

"Assessment of Willpower Driven Recovery Among Clients with Substance Use Disorder: A Case Study of Haven Recovery Centre- Eldoret".

Any assistance accorded to her to facilitate data collection and complete her thesis will be highly appreciated.

Faithfully,

Prof. Orpha Ongiti
Dean of Postgraduate Studies & Director Institute of Research.

HAVEN RECOVERY CENTRE

P.O. Box 3192

ELDORET KENYA

Email,havcentre@gmail.com

Date: 14.5.2025

PERMISSION TO CONDUCT RESEARCH

This is to certify that Ms. Sellah Jesang Rotich, a student at African Nazarene University, has been granted permission to conduct research at Haven Recovery Centre for a period of three (3) months, starting from 1st June 2025 to 31st August 2025.

The research undertaken by Ms. Rotich forms part of her academic requirements and involves the study of assessment of willpower driven recovery among clients with substance use disorder:

During this period, she is authorized to collect data under the supervision and guidance of the Centre's management, ensuring that all participants' rights, confidentiality, and anonymity are respected in accordance with ethical research standards.

We hereby confirm that Haven Recovery Centre has facilitated access to the clients and environment necessary for this study and supports the research activities as outlined.

This document serves as formal acknowledgment of Ms. Rotich's permission to undertake the study within our facility.

We extend our best wishes for the successful completion of her research.

Official Stamp



REPUBLIC OF KENYA

NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY & INNOVATION

Ref No: 299973

Date of Issue: 16 /March/2026

RESEARCH LICENSE



This is to Certify that Miss.. SELLAH JESANG ROTICH of Africa Nazarene University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Uasin-Gishu on the topic: ASSESSMENT OF WILLPOWER DRIVEN RECOVERY AMONG CLIENTS WITH SUBSTANCE USE DISORDER: A CASE STUDY OF HAVEN RECOVERY CENTRE- ELDORET for the period ending : 16/March/2027.

License No: NACOSTI/P/26/4184709

299973

Applicant Identification Number

Ag. Director General
NATIONAL COMMISSION FOR
SCIENCE.TECHNOLOGY &
INNOVATION

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Scan the QR Code using QR scanner application.

See overleaf for conditions

Appendix 4: Research site

