

**CAPITAL UNIVERSITY OF SCIENCE AND
TECHNOLOGY, ISLAMABAD**



**Impact of the Community
Reinforcement Approach on Self-esteem,
Social Support and Quality of Life,
among Males with Substance Use
Disorder in Rehabilitation Center**

by

Nayab Kanwal

A thesis submitted in partial fulfillment for the
degree of Master of Science

in the

Faculty of Management & Social Sciences

Department of Psychology

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This thesis is dedicated to my parents, who have supported me unconditionally. I am eternally grateful for their encouragement throughout my academic journey. Above all, I thank Allah for the strength, wisdom, and guidance granted to me, making this achievement possible. I am forever thankful for the blessings and the spiritual support received throughout this endeavor.



CERTIFICATE OF APPROVAL

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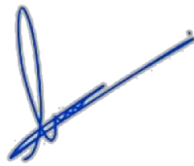
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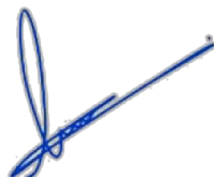
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Abstract

Substance use is a global issue, causing over 3 million deaths annually and severely affecting mental health and quality of life. Effective interventions are needed in Pakistan, where more than 7 million people are affected. This study used a quasi-experimental one-group pre-post design to assess the impact of the Community Reinforcement Approach (CRA) on self-esteem, social support, and quality of life in men aged 18-55 years with Substance use disorders (SUD) in rehabilitation centers. A purposive sample of 33 participants was evaluated using the Rosenberg Self-Esteem Scale, the Multidimensional Scale of Perceived Social Support (MSPSS), and the Quality of Life-BREF (QoL-BREF). The results indicated statistically significant improvements in the domains of self-esteem, social support and quality of life, including psychological health, physical health, and social relationships $p < .001$, while no significant change was observed in environmental health ($p = .103$). These findings suggest that CRA effectively improves self-esteem, social support, and quality of life among men with SUD in Pakistan, supporting its potential as a treatment intervention and providing a foundation for further research and resource allocation.

Keywords: Community Reinforcement Approach (CRA), Substance Use Disorder (SUD), Self-Esteem, Social Support, and Quality of Life.

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Abbreviations

A-CRA	Adolescent Community Reinforcement Approach
CUD	Cannabis Use Disorder
CRA	Community Reinforcement Approach
CRAFT	Community Reinforcement and Family Training
MSPSS	Multidimensional scale of perceived social support
QoL	Quality of life
RSE	Rosenberg Self-Esteem
SCT	Social Conative Theory
SUD	Substance Use Disorder
TMM	Minnesota Treatment Method

Chapter 1

Introduction

1.1 Background of the Study

Addiction, a pervasive and often overlooked issue, extends from rehabilitation centers to broader communities, manifesting through substances and behaviors that drive individuals toward dependency despite profound psychological, physical, and social consequences ([National Institute on Drug Abuse, 2024](#)). This widespread impact underscores the urgent need to understand the multifaceted nature of substance use disorders (SUD), which affect not only individuals but also families, communities, and healthcare systems ([World Health Organization, 2024](#)).

Substance use disorder is not merely a personal struggle; it is a complex public health problem. SUD encompasses various forms, such as alcohol, opioid, and stimulant use disorders, each varying in severity and requiring evidence-based targeted treatment approaches ([American Psychological Association, 2024](#)). Substance use disorder is not merely a personal struggle; rather, it is a complex public health challenge. To address it effectively, understanding SUDs requires a multidimensional framework that considers the interplay of biological, psychological, and social factors ([Bolton, 2023](#)).

In recent years, there has been a significant 20% increase in global substance use, now affecting approximately 292 million individuals, among whom 13.9 million inject drugs, exposing them to a 14-fold higher risk of HIV and resulting in nearly a 50% infection rate for hepatitis C ([United Nation Office of Drug and Crime, 2024](#)).

Substance use is no longer just a challenge; it's a global emergency demanding urgent attention and causing over 3 million deaths each year, 2.6 million from alcohol and 0.6 million from psychoactive drugs, with men disproportionately bearing the brunt of this escalating crisis ([World Health Organization, 2024](#)). As highlighted by [Paul et al. \(2024\)](#), the alarming mortality rate underscores the severity of the issue and provides a critical foundation for exploring the broader psychological, social, and health-related consequences of substance use.

Turning to the national context, the situation in Pakistan is particularly alarming. An estimated 7 million people suffer from substance use disorders, including 4 million cannabis users and 2.7 million opioid users ([United Nations Office on Drugs and Crime, 2022](#)). Heroin use is widespread, with over 800,000 Pakistanis aged 15 to 64 using the drug and consuming approximately 44 tons annually. The problem is further exacerbated by Pakistan's proximity to Afghanistan, a major drug-producing country, and by the increasing prevalence of injection drug use, which has contributed to rising HIV and hepatitis transmission rates ([Chuadry et al., 2022](#)).

To commence, Pakistan has approximately 183,705 people living with HIV, the epidemic is primarily concentrated among high-risk groups such as people who inject drugs and those engaged in unsafe practices, while increasing its spread to the general population through bridging networks that link these vulnerable groups to the broader community ([United Nations Aids, 2020](#)). Among drug users in Pakistan, 78% are male and 22% female, highlighting a significant gender disparity, while the rising prevalence of injection drug use continues to fuel increasing HIV infection rates ([Channer, 2024](#)).

Moreover, the severe health problems associated with drug use, such as lung and heart diseases, cancer, and infections like HIV and hepatitis C highlight the pressing need for comprehensive and effective interventions ([United Nations Office on Drugs and Crime, 2020](#)). Injection drug use (IDU) is a major contributor to hepatitis B (HBV) and hepatitis C (HCV) transmission in Pakistan due to the sharing of unsterilized needles, particularly in high-risk regions like Punjab and Sindh, highlighting the need for targeted harm reduction strategies and public health interventions ([Mehmood et al., 2019](#)). These health challenges highlight the need

for holistic approaches that go beyond medical treatment to address individuals' overall well-being.

Compounding these challenges, Pakistan's escalating drug overdose crisis, which claims over 700 lives daily, is compounded by challenges such as inadequate infrastructure, a shortage of skilled professionals, weak enforcement of drug treatment regulations, mismanagement of treatment centers, and the absence of specialized addiction psychiatrists, all of which highlight the critical need for evidence-based interventions, stricter regulation, improved medical training, and a comprehensive public health strategy to address these gaps effectively (Mustafa, 2024).

The rehabilitation infrastructure in Pakistan faces serious challenges. Prevailing myths, resource limitations, and insufficient professional oversight undermine effective treatment and reintegration. To improve outcomes, a collaborative approach involving government bodies, healthcare professionals, and community stakeholders is essential (Alhammad et al., 2022).

Societal misconceptions hinder the rehabilitation system in Pakistan, systemic barriers such as inadequate resources and professional oversight, and ineffective law enforcement, requiring a collaborative approach involving government, healthcare professionals, and communities, along with evidence-based interventions, awareness campaigns, and improved economic opportunities to enhance rehabilitation outcomes (Anjum et al., 2024). The increasing surge in substance use not only requires immediate action, but also underscores the broader implications on mental health and cognitive function (Majid, 2023). The burden is compounded by systemic issues such as a complex interplay of legal, social, and institutional challenges. The growing drug addiction problem in Pakistan is worsened by strict anti-narcotics laws that conflict with Sharia principles, societal disregard for these laws, misuse by law enforcement and a lack of sufficient government efforts for treatment and rehabilitation, with experts advocating legal reforms, harm reduction programs, and decriminalization to effectively address the crisis (Uddin and Rahman, 2021). In this context, further reports indicate that drug use, particularly cannabis and psychedelics, is associated with increased mental health disorders, including psychiatric conditions and suicide attempts (United Nation Office of Drug and Crime, 2024). Additionally, substance use disorders (SUDs) can lead

to significant cognitive and behavioral changes, with long-term use resulting in persistent alterations in memory, learning, and concentration, and exacerbating symptoms of other mental health disorders ([Eske, 2023](#)). This escalating crisis highlights the urgent need to address substance use and its profound effects on individuals' mental well-being and overall quality of life, as well as its broader impact on communities.

In addition, prevailing societal misconceptions, combined with systemic challenges such as inadequate resources, lack of professional oversight, and ineffective enforcement mechanisms, significantly hinder the rehabilitation system in Pakistan, thereby necessitating a coordinated response involving governmental agencies, healthcare professionals, and community stakeholders through the integration of evidence-informed practices, strategic awareness initiatives, and the promotion of sustainable economic opportunities to strengthen rehabilitation outcomes ([Alhammad et al., 2022](#)).

Addressing Substance Use Disorder in Pakistan necessitates comprehensive prevention and treatment strategies, such as national surveys, enhanced rehabilitation services, public awareness campaigns, and stricter law enforcement ([Majid, 2023](#); [United Nations Office on Drugs and Crime, 2022](#)). The issue is largely driven by peer pressure and socioeconomic challenges, disproportionately affecting low-income males and highlighting the urgent need for targeted interventions ([Mehwish, 2021](#)).

The increasing prevalence of substance use disorder in Rawalpindi and Islamabad is significantly influenced by factors such as family structure, literacy, economic status, and social pressures, highlighting the need for more effective intervention strategies ([Mubashir et al., 2024](#)).

The growing prevalence of drug addiction in Pakistan highlights various risk factors for drug addiction in Pakistan, such as early initiation of drugs, family disputes, peer pressure, depression, stress, self-medication, and gender bias in treatment, calling for alternative approaches such as psychosocial support centers and mental health education to combat substance abuse and its underlying causes ([Ghazal, 2019](#)).

Drug addiction in Pakistan is an increasingly alarming issue, exacerbated by a combination of factors such as the easy availability of cheap drugs, family issues such as parental disputes and poverty, mental health struggles, peer pressure, toxic relationships, sociocultural norms, study pressures, and genetic predispositions, making it essential to address these underlying causes through targeted interventions, mental health education, and comprehensive support systems, to reduce the prevalence of addiction and guide affected individuals towards recovery before their dependence worsens ([Majid, 2023](#)).

The rise in SUD rates in Rawalpindi and Islamabad is influenced by family structure, literacy, economic status, and social pressures, with drug availability and socioeconomic issues exacerbating the crisis and impacting well-being and self-esteem ([Younus et al., 2022](#)). Empirical evidence highlights a range of psychosocial risk factors influencing addiction relapse among Pakistani men, including insufficient social support, pervasive stigma, personality traits such as high neuroticism and low conscientiousness, adverse family dynamics, and societal pressures, all of which interact in complex ways to shape recovery outcomes and emphasize the need for culturally tailored intervention strategies ([Malik et al., 2023](#)). Integrating self-esteem, social support, and quality of life into the discussion further enriches our understanding of addiction treatment.

Self-esteem, for this study, is operationally defined as an individual's overall evaluation of self-worth and personal value, encompassing both positive and negative self-perceptions and reflecting their level of self-confidence and self-acceptance ([Rosenberg, 1965](#)). Perceived social support refers to the extent to which individuals believe that they receive emotional and instrumental support from their social network. ([Zimet et al., 1988](#)). Whereas in this study, quality of life is operationally defined as an individual's subjective assessment of their well-being across multiple domains, including physical health, psychological functioning, social relationships, and environmental conditions, as shaped by their personal goals, expectations, and cultural context ([World Health Organization, 2012](#)).

To support individuals with substance use disorders, treatment services must adapt quickly and implement practical strategies ([Aslam, 2020](#)). In Pakistan, substance use disorders are often linked to mental health issues like depression and anxiety,

highlighting the need for public awareness, improved access to evidence-based treatments, and strong social support systems (Khalid et al., 2020; Younus et al., 2022). Factors such as inadequate treatment facilities, easy drug access, and lack of awareness worsen the crisis (Jabeen et al., 2022). Rehabilitation centers are crucial for providing care and support, but face challenges like drug availability and social influences, emphasizing the need for more comprehensive treatment services (Anwar et al., 2023).

In Addition, rehabilitation centers are crucial for overcoming drug addiction and require a comprehensive strategy to address drug overdoses in Pakistan, including prescription restrictions, parental supervision, educational campaigns, family support, emergency services, quality treatment, safe medication disposal, naloxone availability, community-based prevention, and improved rehab centers (Ochani et al., 2023). Despite this, there is a significant gap in understanding how targeted therapeutic approaches like the Community Reinforcement Approach (CRA) impact psychological and social outcomes such as self-esteem, social support, and quality of life in rehabilitation settings (Khalid et al., 2024).

To bridge this gap, this study aims to address this gap by investigating the impact of the Community Reinforcement Approach on self-esteem, social support, and quality of life among male SUD adult patients aged 18-55 years old in rehabilitation centers, providing insights into the impact of CRA on recovery outcomes and improving treatment strategies.

1.2 Theoretical Framework

1.2.1 Social Cognitive Theory

Social Cognitive Theory (SCT), developed by Albert Bandura (1986), provides a comprehensive framework for understanding how behavior, environmental factors, and cognitive processes such as self-beliefs interact in the context of substance use disorder (SUD) rehabilitation. According to SCT, self-esteem, social support, and quality of life are interlinked constructs that can significantly influence recovery

outcomes (Bandura, 1986). These constructs are particularly relevant in the application of the Community Reinforcement Approach (CRA), which seeks to modify the environment and social interactions to support behavior change (Meyers et al., 2021).

Psychological construct in SUD treatment, reflecting an individual's overall subjective emotional evaluation of their worth. Research indicates that self-esteem is closely linked to treatment outcomes, where higher levels of self-esteem are associated with better recovery prospects (Johnson et al., 2023). CRA interventions, by providing positive social reinforcement and skill-building opportunities, can foster significant improvements in self-esteem among SUD patients. This is supported by recent studies showing that CRA's focus on engaging patients in rewarding non-substance-related activities promotes a positive identity and enhances self-esteem (Clark et al., 2022; Cao and Liang, 2020).

Social support plays a pivotal role in the effectiveness of SUD treatment. SCT posits that a supportive social environment can enhance self-efficacy and provide the resources needed to cope with recovery challenges. Within the framework of CRA, interventions are designed to enhance the quality and quantity of the patient's social network, which is crucial for sustained recovery. Empirical studies have demonstrated that enhanced social support within CRA programs leads to better adherence to treatment protocols and reduced rates of relapse (Williams and Smith, 2024; Cohen and Singh, 2022).

Quality of life (QoL) is an overarching goal of SUD treatment, encompassing physical, psychological, and social well-being. CRA directly addresses these components by integrating medical, psychological, and social services to cater to the holistic needs of SUD patients. Research supports that improvements in QoL following CRA interventions are significant, with patients reporting better physical health, psychological state, and social relationships. These improvements are linked to the comprehensive nature of CRA, which adjusts the individual's environment to facilitate a healthier lifestyle (Anderson et al., 2025; Khalid et al., 2024).

The integration of SCT with CRA provides a robust model for SUD treatment. By focusing on environmental and social context modifications, CRA aligns with the

SCT emphasis on the importance of observational learning, social reinforcement, and ecological mastery in fostering behavioral change. This theoretical synergy is supported by findings from recent studies, which indicate that interventions based on SCT and CRA not only improve individual psychological states like self-esteem but also enhance social support systems and overall quality of life, thereby promoting a more effective and sustainable recovery from SUD (Roberts and Michaels, 2023).

1.3 Conceptual Framework

Figure 1.1 illustrates a conceptual framework for applying the Community Reinforcement Approach (CRA) in a research or therapeutic context, showcasing CRA's process and anticipated outcomes as an intervention. The framework showcases the process of CRA and its anticipated outcomes, with a structured, step-by-step process to ensure effectiveness.



FIGURE 1.1: Conceptual Framework

The conceptual framework underpinning this study was informed by the Community Reinforcement Approach (CRA), a comprehensive behavioral intervention designed to promote recovery by systematically enhancing an individual's environmental and social reinforcements. In the present study, CRA was operationalized through key components including functional analysis, behavioral skills training, vocational guidance, social and recreational counseling, and relationship counseling. These elements were implemented to facilitate positive behavioral change and strengthen protective psychosocial factors.

Specifically, the intervention aimed to enhance self-esteem, improve perceived social support, and ultimately contribute to an elevated quality of life among participants undergoing substance use rehabilitation. The framework guided the hypothesis that the structured application of CRA would positively influence these outcome variables by promoting adaptive functioning and fostering a supportive recovery environment.

The CRA components were integrated across sessions to help participants identify and replace maladaptive behaviors, develop interpersonal competencies, and build sustainable social networks. Through this framework, the study explored how reinforcing positive behaviors and enhancing social support systems could contribute to psychological well-being and long-term recovery

1.4 Gap Analysis

Despite the extensive research on substance use disorders (SUD) and their profound effects on mental health, cognitive functioning, and overall quality of life (Zada et al., 2022; Eske, 2023). There is a significant gap in understanding the specific effects of therapeutic interventions, particularly within rehabilitation settings in Pakistan. Effective addiction prevention is linked to high social support and self-confidence, underscoring the importance of incorporating these factors into intervention strategies (Bahrani, 2019).

Existing studies emphasize the critical role of self-esteem, quality of life, and social support in the recovery process (Zada et al., 2022; Armoon et al., 2022). There is a scarcity of research that investigates the impact of targeted interventions like the Community Reinforcement Approach (CRA) on these outcomes. Most of the literature has focused on the prevalence, causes, and general treatment of substance abuse, with limited attention to how specific interventions can enhance recovery outcomes, especially in a culturally specific context like Pakistan (Chquadry et al., 2022). The Community Reinforcement Approach (CRA) has been widely recognized for its effectiveness in promoting positive behavioral changes and improving treatment retention rates (Khalid et al., 2020). However, its specific impact on

psychological and social dimensions such as self-esteem, social support, and quality of life among SUD patients remains under-explored in Pakistan (Khalid et al., 2020). This gap is particularly concerning given the rising substance abuse rates in the country, where social and cultural factors significantly influence both the development of SUD and the recovery process (Channer, 2024; Mubashir et al., 2024). Despite CRA's success in various contexts, research on its long-term effects on key outcomes in the Pakistani population is lacking, hindering the development of tailored, sustainable treatment strategies (Khalid et al., 2024; Ochani et al., 2023).

1.5 Problem Statement

Despite the extensive research on Substance Use Disorder (SUD) and its widespread impact on mental health, physical health, and quality of life, there is a notable gap in the literature concerning the effectiveness of specific therapeutic approaches in addressing these challenges within the context of Pakistan. The rising prevalence of substance use, particularly among males in Pakistan, underscores the urgent need for targeted interventions that go beyond traditional treatment methods.

Although rehabilitation centers are crucial in treating SUD, there remains a significant lack of understanding regarding the specific impact of therapeutic approaches, such as the Community Reinforcement Approach (CRA), on critical psychological and social outcomes like self-esteem, social support, and quality of life. Existing studies have highlighted the importance of these factors in the recovery process, yet evidence on how CRA specifically influences these dimensions is limited, particularly within Pakistan's unique cultural and socio-economic context. Given high substance use rates and declines in quality of life, self-esteem, and social support among SUD patients in Pakistan, this study investigates CRA's effectiveness in improving these outcomes, contributing to more effective, culturally sensitive treatment strategies for drug rehabilitation.

1.6 Research Objectives for This Study

Objectives of the study are as follows:

Research objective 1: To evaluate the impact of the CRA on self-esteem, social support, and quality of life among males with substance use disorder following the intervention.

Research objective 2: To evaluate the impact of demographic factors such as age, education, employment status, marital status, and family background on the treatment outcomes of males with substance use disorder in a rehabilitation center.

1.7 Research Questions

This research answers the following questions:

Research Question 1:

What is the impact of the Community Reinforcement Approach CRA on self-esteem among male patients with SUD during their rehabilitation?

Research Question 2:

What is the impact of the Community Reinforcement Approach (CRA) on social support among male patients with Substance Use Disorder (SUD) during their rehabilitation?

Research Question 3:

What is the impact of the Community Reinforcement Approach (CRA) on the quality of life for male patients with Substance Use Disorder (SUD) during their rehabilitation?

Research Question 4:

What is the influence of demographic factors such as age, education, employment status, marital status and family background on the treatment outcomes of males with substance use disorder in a rehabilitation center?

1.8 Proposed Hypotheses

1. **H1:** There will be a significant difference in self-esteem among males with Substance Use Disorder at the post-intervention stage compared to the pre-intervention stage.
2. **H2:** There will be a significant difference in social support among males with Substance Use Disorder at the post-intervention stage compared to the pre-intervention stage.
3. **H3:** There will be a significant difference in quality of life among males with Substance Use Disorder at the post-intervention stage compared to the pre-intervention stage.
4. **H4:** There will be significant differences in the treatment outcomes of males with substance use disorder in a rehabilitation center based on demographic factors such as age, education, employment status, marital status, and family background

Chapter 2

Literature Review

The Community Reinforcement Approach (CRA), developed by [Azrin \(1976\)](#) and later expanded by [Meyers and Smith \(2001\)](#), is rooted in Behavioral Theory. This theory posits that behavior is influenced by its consequences, which can be positive (rewards) and negative ([Institute, 2019](#)).

The Community Reinforcement Approach (CRA) employs operant conditioning and integrates theories such as Social Learning Theory, Motivational Enhancement Theory, Social Reinforcement Theory, Health Behavior Change Models, and Ecological Systems Theory, using techniques like functional analysis, sobriety sampling, behavioral skill training, job skills training, social recreational counseling, and relapse prevention training to reduce substance use by restructuring the social environment and engaging patients in rewarding activities, with evidence showing it can significantly improve various aspects of an individual's life, including quality of life ([Meyers et al., 2011](#)).

The Community Reinforcement Approach (CRA) has been adapted to meet individual needs, demonstrating its flexibility in various cultural contexts. While CRA shows strong evidence for short-term effectiveness, it is less frequently compared with other empirically supported treatments ([Institute, 2019](#)).

Recent studies in Pakistan underscore CRA's adaptability and effectiveness within diverse cultural contexts. For instance, ([Hussain et al., 2023](#)) found that an Indigenously Adapted CRA (IA-CRA) led to significantly higher abstinence rates

and improved mental health outcomes among male patients with substance use disorders. Additionally, (Archer et al., 2020) found that high-quality Community Reinforcement and Family Training (CRAFT) interventions, including individual therapy and thorough therapist training, were more effective in engaging individuals with substance use disorders and resulted in higher treatment entry rates.

Saghir (2024) adapted the Community Reinforcement Approach (CRA) for drug addiction treatment in Pakistan by integrating Islamic teachings on morality, emotional management, and psychological well-being, along with culturally relevant therapeutic interventions, demonstrating that this culturally tailored approach significantly improved treatment outcomes, including higher abstinence rates, better management of comorbidities, and a lower relapse rate at six-month follow-ups compared to traditional treatment methods; this adaptation highlights CRA's flexibility in addressing local needs, with the incorporation of Islamic principles contributing to participants' enhanced quality of life, happiness, and long-term recovery, further supported by its positive impact when combined with the Minnesota Treatment Method (TMM), showcasing its cost-effectiveness and alignment with existing research.

In a study by Mehr et al. (2024), the effectiveness of the Adolescent Community Reinforcement Approach (A-CRA) in treating Cannabis Use Disorder (CUD) among Iranian adolescents was examined. The results demonstrated that A-CRA led to significant improvements in several areas, including increased rates of abstinence, reduced frequency of cannabis use, fewer substance-related problems, and lower levels of psychological distress. Moreover, adolescents in the A-CRA group showed improvements in health-promoting behaviors and positive changes in their relationships with their mothers. These findings highlight the multifaceted benefits of A-CRA, supporting its efficacy in addressing both substance use and the psychological and social factors related to adolescent CUD (Mehr et al., 2024). Despite challenges such as a small sample size and treatment engagement issues, the study highlights the CRA's potential benefits and recommends further research and adaptation to local cultural contexts (Khalid et al., 2020, 2024). Adding to this, a randomized controlled trial by Khalily (2021) confirmed CRA's effectiveness

in reducing cannabis use frequency and increasing abstinence periods. However, it also called for further investigation into its long-term efficacy and generalization. Therapists trained in CRA, A-CRA, or CRAFT value the flexibility of these treatment approaches, which allow for adjustments in session structure, sequencing, and focus on addressing individual client needs, enabling therapists to prioritize areas such as employment or social life when clients are not ready to confront substance use, while maintaining clear expectations directly, direct guidance, and the setting of limits to encourage behavior change through positive

In 2011, the Adolescent Community Reinforcement Approach (A-CRA) was rated as promising based on studies by [Godley et al. \(2006\)](#); [Slesnick et al. \(2015\)](#), and this rating was upheld in 2020 after a re-review by Crime Solutions using an updated scoring instrument, indicating the program has some evidence of achieving its intended outcomes. Integrating self-esteem, social support, and quality of life into the discussion further enriches our understanding of addiction treatment.

Self-Esteem

In this context, self-esteem an individual's overall evaluation of self-worth and personal value, encompassing both positive and negative self-perceptions and reflecting their level of self-confidence and self-acceptance([Rosenberg, 1965](#)). The relationship between self-esteem, social support, and quality of life plays a crucial role in enhancing addiction treatment and recovery outcomes. Individuals with substance use disorder (SUD) experience lower self-esteem compared to nondrug users, with low self-esteem that exacerbates substance use problems and increases feelings of inadequacy ([Muomah et al., 2020](#)). In addition, higher self-esteem and social support are associated with lower addiction tendencies ([Bahrani, 2019](#)).

Social Support

Perceived social support is the extent to which individuals believe that they receive emotional and instrumental support from their social network. ([Zimet et al., 1988](#)).

Social support mitigates the adverse effects of substance use disorders (SUDs) on quality of life, which are marked by diminished physical and mental health due to social dysfunctions and severe biopsychosocial challenges (Armoon et al., 2022). It has become a critical factor, and people suffering from substance use disorder (SUD) have experienced significantly lower levels, which in turn negatively affected their quality of life (QoL) (Birkeland et al., 2021). Social support is essential for SUD recovery and prevention of relapse, enhancing the quality of life by addressing challenges related to emotional, social, and isolation (Zaidi, 2020).

Quality of life

Quality of life is an individual's subjective assessment of their well-being across multiple domains, including physical health, psychological functioning, social relationships, and environmental conditions, as shaped by their personal goals, expectations, and cultural context (World Health Organization, 2012). In this light, individuals with substance use disorder in Pakistan report significantly lower Quality of Life with 77.6% perceiving their QoL as poor, highlighting the need for targeted interventions and further research (Zada et al., 2022). The decline in quality of life is closely linked to substance use disorders' effects on mental health, which lower self-esteem and create a harmful cycle that exacerbates addiction, emphasizing the need to address self-esteem for better recovery (Tarawneh et al., 2023).

Higher self-esteem is associated with an improved quality of life and better-coping abilities, which can prevent relapse (Yasmeen et al., 2024; Tarawneh et al., 2023). Following, Razaq et al. (2020) found that self-esteem significantly impacts the quality of life among adolescents, both addicted and non-addicted. Their research indicates that high self-esteem helps adolescents resist drug addiction and mitigates negative stressors. Tarawneh et al. (2023) demonstrated a strong positive correlation between self-esteem and quality of life among drug addicts, suggesting that targeted interventions to boost self-esteem could improve recovery outcomes and calling for further research with diverse populations. Yasmeen et al. (2024) supported this view by highlighting the need for early interventions and professional training to boost self-esteem and support long-term recovery. Integrating

self-esteem, social support, quality of life, and CRA in addiction treatment underscores the importance of a multifaceted approach. Addressing mental health issues, improving social support, and fostering positive self-concept are crucial to improving abstinence motivation and quality of life for individuals with substance use disorders. More research is needed to refine these approaches and ensure their effectiveness in diverse populations and contexts.

Chapter 3

Research Methodology

3.1 Research Design

This study employed a quantitative quasi-experimental design, specifically a one-group pretest-post test model, to assess the effectiveness of the Community Reinforcement Approach (CRA) in treating substance use disorders (SUD). The primary focus is on measuring changes in self-esteem, social support, and quality of life among male participants diagnosed with SUD, both prior to and following the treatment. This design enables a comparison of these variables within the same group of participants, allowing for the evaluation of any shifts in self-esteem, social support, and overall quality of life as a result of the CRA intervention.

3.2 Sampling Method

A purposive sampling approach is used to select male patients receiving treatment for substance use disorders at Hero Health Rehabilitation Center in Islamabad, focusing on participants relevant to the study's objectives and accessible within the context.

3.3 Sample Size

A purposive sampling approach is used to select male patients at Hero Health Rehabilitation Center in Islamabad. The sample size was 33 participants. Whereas for quasi-experimental designs, a sample size of at least 30-50 participants is typically recommended ([Maciejewski, 2020](#)).

3.4 Site

The research was conducted at Hero Health Rehabilitation Center in Islamabad. This site was chosen due to its accessibility and suitability for administering the CRA intervention to male patients with substance use disorders.

3.5 Participant Characteristics

This section outlines the demographic profile and conditions for participant inclusion or exclusion in the study, focusing on males aged 18 to 55 with Substance Use Disorder (SUD), aiming to evaluate the impact of the Community Reinforcement Approach (CRA).

3.5.1 Inclusion Criteria

Participants in this study were males aged 18 to 55 years old, representing the demographic most affected by Substance Use Disorders (SUD), as highlighted in recent studies ([United Nation Office of Drug and Crime, 2024](#)). The selection criteria focused on first-time treatment seekers for SUD involving substances such as alcohol, cocaine, opioids, marijuana, methamphetamine, or nicotine. This ensured that the evaluation of the Community Reinforcement Approach (CRA) was conducted without the influence of prior treatment experiences. Eligible individuals were required to exhibit a clear commitment to the treatment process, as demonstrated through their active engagement in therapy and willingness to adhere to program guidelines. Proficiency in Urdu communication was mandatory to ensure

participants could fully comprehend and participate in therapeutic sessions and assessments. All participants voluntarily provided informed consent after being briefed on the study's purpose, procedures, and their rights as participants.

3.5.1.1 Exclusion Criteria

Individuals who had previously undergone any form of Community Reinforcement Approach (CRA) treatment were excluded to focus on those being introduced to CRA techniques for the first time. Additionally, participants who had been in the current rehabilitation program for three months or longer were excluded, as determined by reviewing their previous treatment plans with the permission of the information holder. Patients who were in the detoxification phase were also excluded from the study to avoid potential confounding effects due to acute withdrawal symptoms or instability during this critical phase of treatment.

3.6 Measures

3.6.1 Demographic Questionnaire

The questionnaire collects participants' age, gender, ethnicity, education, employment status, and marital status to contextualize study results and assess demographic influences on outcomes, while also examining drug use duration, types of substances consumed, relapse frequency, and family systems (nuclear or joint).

3.6.2 The Rosenberg Self-Esteem Scale (RSES)

Developed by [Rosenberg \(1965\)](#), for individuals aged 12 to 65 years. This 10-item scale includes both positively and negatively worded statements, rated on a 4-point Likert scale. Five items are positively worded while five are negatively worded and require reverse scoring. Total scores range from 0 to 30, with scores below 15 indicating low self-esteem, 15–25 indicating normal self-esteem, and above 25 indicating high self-esteem. The original version of the RSES has demonstrated strong psychometric properties, with reported Cronbach's alpha values typically

ranging from 0.77 to 0.88, indicating good internal consistency (Rosenberg, 1965). This 10-item scale measures global self-esteem and has been translated into Urdu by (Rizwan, 2017). The scale has a Cronbach's alpha = 0.92 and strong test-retest reliability ($r = 0.85-0.88$), (Siddiqui, 2019).

3.6.3 Multidimensional Scale of Perceived Social Support (MSPSS)

The 12-item Multidimensional Scale of Perceived Social Support (MSPSS), developed by Zimet et al. (1988), consists of 12 items assessing the perceived sufficiency of social support from family, friends, and significant others in individuals aged 13 to 65. Each subscale score ranges from 4 to 28, while the total score ranges from 12 to 84. A mean score between 1.0–2.9 indicates low support, 3.0–5.0 indicates moderate support, and 5.1–7.0 reflects high perceived support. The original MSPSS shows strong internal consistency with overall Cronbach's alpha = 0.88 and high subscale reliabilities (Family = 0.91, Friends = 0.87, Significant Others = 0.85), along with solid construct and factorial validity (Zimet et al., 1988). The scale demonstrates strong reliability (Cronbach's alpha = 0.87) in its Urdu-translated version by (Rizwan, 2017).

3.6.4 World Health Organization Quality of Life Scale

The WHO Quality of Life-BREF (Urdu Version), developed by the World Health Organization (2003), is a 26-item instrument assessing quality of life across four domains: Physical Health, Psychological Health, Social Relationships, and Environment. It is intended for use with individuals aged 18 years and above. Responses are rated on a 5-point Likert scale, with scoring adjusted for negatively worded items. Domain scores are calculated by averaging relevant items and transforming them to a 0–100 scale, where higher scores indicate better quality of life. The original version has demonstrated excellent psychometric properties, with Cronbach's alpha typically exceeding 0.85 across domains and is validated internationally. The Urdu version has a Cronbach's alpha of 0.86, indicating high internal consistency.

3.6.5 Participant Enrollment Process

Figure 3.1 shows the flow chart that summarizes the enrollment and analysis process for a study evaluating the Community Reinforcement Approach among male SUD patients. Initially, 48 individuals were assessed for eligibility, with 14 excluded due to non-compliance with inclusion criteria or personal choice. The remaining 35 participants were enrolled through purposive sampling and received the intervention. One participant (Lama) dropped out during treatment, leaving 33 participants who completed the study. No participants were lost to follow-up, and all 34 were included in the final analysis, ensuring a comprehensive evaluation of the treatment's effectiveness.

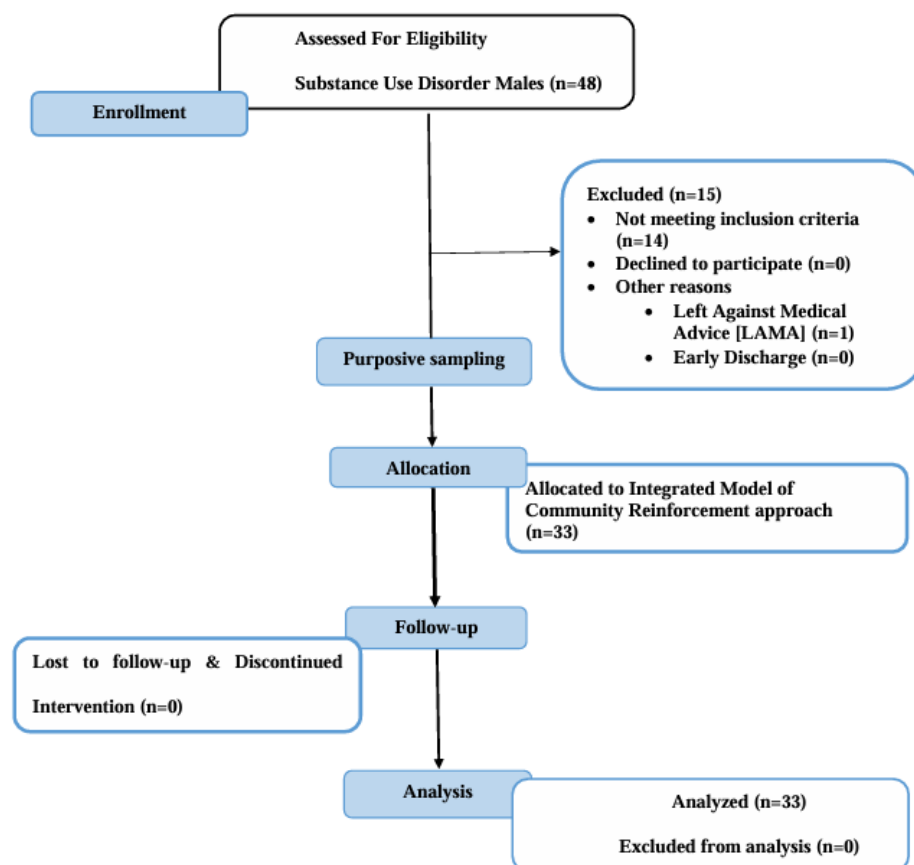


FIGURE 3.1: Flow chart of participant Enrollment

3.7 Procedure

The Community Reinforcement Approach (CRA) is a recommended, evidence-based intervention that enhances various aspects of an individual's life within 4 to 6 weeks by incorporating flexible yet structured interventions, delivered through multiple weekly sessions by a trained therapist (Meyers and Smith, 2001). Collaboration with Hero Health Rehabilitation Center ensured compliance with ethical standards and policies for participant recruitment and data collection. CRA intervention was conducted over six weeks, each session lasted 60 minutes and was held five days a week, with a trained therapist guiding participants through a structured program. Participant interactions and session progress were recorded using structured forms and qualitative notes, adhering to ethical standards for confidentiality and anonymity.

3.7.1 Step 1: Pretest

The first week of the study focused on laying a strong foundation for the intervention, emphasizing rapport building, informed consent, demographic data collection, and baseline assessments. Establishing trust and a sense of safety was prioritized to foster participants' active engagement and openness throughout the process. Informed consent was obtained to ensure participants had a clear understanding of the study's purpose, procedures, potential benefits, and their rights, including the option to withdraw at any time without consequence. This initial phase was critical in creating a supportive environment for the study's progression.

Demographic data were meticulously collected to contextualize the study's results and examine the potential influences of participants' backgrounds on the intervention outcomes. This data included participants' age, gender, ethnicity, education, employment status, and marital status, offering a comprehensive profile of the participants. Additionally, details of their substance use history were gathered, such as the duration of drug use, types of substances consumed, frequency of relapses, and family system type (nuclear or joint). This information was critical for tailoring the intervention to participants' unique circumstances and interpreting

the findings within the broader socio-cultural context. Baseline assessments were conducted using standardized and validated tools to measure key psychological and quality of life indicators. Self-esteem was assessed using the Rosenberg Self-Esteem Scale (RSES), a widely used instrument for evaluating global self-worth. Perceived social support was measured using the Multidimensional Scale of Perceived Social Support (MSPSS), which evaluates support from family, friends, and significant others. Quality of life was assessed through the WHOQOL-BREF, covering physical health, psychological well-being, social relationships, and environmental conditions. These tools provided a reliable baseline to track changes throughout the intervention and to better understand the participants' psychosocial status at the outset. To ensure the integrity of the findings, participants were selected based on strict eligibility criteria. This ensured that the evaluation of the Community Reinforcement Approach (CRA) was conducted without the influence of prior treatment experiences.

3.7.2 Step 2: Intervention

The intervention phase, implemented within the structured environment of a rehabilitation center, spanned six weeks. The goals of counseling during the intervention phase were carefully structured to support recovery and reduce substance use. Over Six weeks in a rehabilitation center, the Community Reinforcement Approach (CRA) has been delivered to address critical aspects of recovery. These included functional analysis to identify triggers and patterns of substance use, sobriety sampling to encourage short-term abstinence, and behavioral skill training to develop effective coping mechanisms. The program also incorporated job skills training to prepare participants for workforce reintegration, social recreational counseling to foster healthy activities, and relapse prevention training to build strategies against future substance use. Each week focused on a distinct theme, equipping participants with tailored tools and continuous support for a successful and sustainable recovery.

3.7.2.1 Week 2 Functional Analysis

Functional analysis, a critical component of the intervention's initial phase, comprehensively explored the participants' substance use patterns. This method aimed to provide insight into the factors perpetuating their behaviors and offered a foundation for fostering change. In the rehabilitation center's structured environment, the therapist conducted the analysis interactively and reflectively.

The primary goal of functional analysis was to explore the underlying dynamics driving substance use and to develop strategies for sustainable behavior change. By examining both the short-term benefits and long-term drawbacks of substance use, participants were guided toward recognizing the impact of their behaviors on their overall well-being.

3.7.2.2 Sampling and Data Collection

Participants were encouraged to provide detailed accounts of their substance use, including the frequency, duration, and circumstances under which they used drugs. This process enabled the therapist to tailor interventions to the unique challenges and needs of each individual.

3.7.2.3 Identifying Triggers:

These included environmental factors such as social pressures, financial stress, or exposure to specific places and individuals associated with substance use.

3.7.2.4 Internal Triggers:

Participants explored emotional and cognitive triggers, such as feelings of anxiety, depression, or negative thought patterns, that contributed to their substance use. The therapist used guided discussions to help participants identify and categorize these triggers, promoting greater self-awareness and understanding of their behaviors.

3.7.2.5 Analyzing Substance Use Behaviors

Participants reflected on the actions associated with their drug use, including rituals, timing, and methods. This analysis was accompanied by an evaluation of the short-term benefits (e.g., temporary stress relief or pleasure) and long-term consequences (e.g., health deterioration, strained relationships, or legal repercussions). By contrasting these factors, participants gained clarity on the impact of their substance use.

3.7.2.6 Exploring Non-Drug-Using Activities

The therapist helped participants identify alternative activities that could replace substance use. These included hobbies, social engagements, and self-care practices that aligned with their interests and values. Participants were encouraged to recognize the potential benefits of these activities, such as improved emotional well-being, social connections, and a sense of accomplishment.

3.7.2.7 Guided Reflections:

Through open-ended questions and motivational interviewing, the therapist facilitated discussions that encouraged participants to examine their behaviors deeply.

3.7.2.8 Visualization Exercises:

Participants visualized scenarios where they engaged in both substance use and alternative behaviors to help them identify patterns and develop actionable insights.

3.7.2.9 Relapse Prevention Planning:

Insights gained from functional analysis were incorporated into early relapse prevention strategies, emphasizing the importance of recognizing and managing triggers effectively.

3.7.2.10 Sobriety Sampling

Sobriety sampling was a key component of the intervention strategy implemented during the initial phase of the rehabilitation program. It served as a motivational tool designed to encourage participants to commit to a short-term period of abstinence from substance use. This approach was aimed at fostering self-efficacy, building confidence, and helping participants recognize the physical and psychological benefits of sobriety.

The primary objective of sobriety sampling was to provide participants with a manageable and achievable goal to experience life without substance use. By setting a realistic timeframe for abstinence, participants could evaluate their ability to maintain sobriety, explore the changes it brought to their well-being, and identify challenges that required further intervention.

3.7.3 Implementation Process

3.7.3.1 Initial Introduction:

The therapist introduced the concept of sobriety sampling during group and individual sessions, explaining its purpose and how it aligned with the overall recovery plan. Participants were reassured that the focus was not on long-term commitment at this stage but rather on exploring the feasibility of short-term abstinence.

3.7.3.2 Goal Setting

Participants were encouraged to set specific, measurable, and realistic goals for their sobriety sampling period. The length of the sampling period was typically one week, depending on individual readiness and circumstances.

3.7.3.3 Structured Support

The therapist provided ongoing support and guidance throughout the sobriety sampling period. Participants were equipped with strategies to manage cravings, cope with triggers, and navigate high-risk situations.

3.7.3.4 Monitoring and Feedback:

Regular check-ins were conducted to monitor participants' progress and provide reinforcement for their efforts. Any lapses were approached as opportunities for learning rather than failures, fostering a nonjudgmental and supportive environment.

3.7.4 Week 2: Behavioral Skills Training

The CRA program primarily focused on addressing behavioral skill deficits in individuals with substance use disorders (SUD), particularly those involving drugs. These deficits were identified through various methods, such as participant conversations, progress tracking on the Goals of Counseling form, and reviewing the functional analysis to examine the role that substance use played in the participant's life. This process allowed therapists to understand the triggers and reinforcement patterns associated with drug use and determine whether participants had the necessary skills to obtain positive reinforcement through healthier alternatives.

3.7.4.1 Skill Deficits and Training

In cases where substance use was used as a means to cope with stress or social pressures, the therapist assessed whether the participant had the communication skills to handle these situations without resorting to drugs. If the participant struggled with forming new social connections or handling stress in healthier ways, problem-solving and social skills training were provided.

3.7.4.2 Communication Skills Training

Communication skills were a central focus of the program, particularly in helping participants improve their ability to express their needs and address issues without resorting to substance use. The CRA model introduced participants to seven communication guidelines, which aimed to help them navigate sensitive conversations with others. These steps, which included being brief, using positive language, and

labeling feelings, were designed to make conversations more constructive and reduce the likelihood of defensive reactions. The therapist would model these skills and then have participants practice them in real-world scenarios. For instance, a participant might have difficulty discussing their need to avoid certain social situations that trigger drug use. Through role-playing and modeling, participants learned how to express their feelings and set boundaries more effectively, reducing the temptation to use substances.

3.7.4.3 Problem-Solving Training

Problem-solving training was another key component of the CRA program. Participants were taught a structured approach to addressing life's challenges without turning to drugs. This process involved defining the problem clearly, brainstorming potential solutions, eliminating undesirable options, selecting one solution to try, and identifying potential obstacles that could interfere with implementation. Participants were encouraged to develop a detailed plan for overcoming these obstacles. By providing participants with a toolkit for managing stressors, the program aimed to reduce the likelihood of substance use as a coping mechanism. Regular follow-up sessions ensured that participants reviewed their progress and refined their strategies as necessary.

3.7.4.4 Drug-Refusal Training

As part of the behavioral skills training, participants were taught specific strategies to refuse drugs in high-risk situations. This involved first enlisting support from their social network to reinforce their commitment to sobriety. The therapist worked with the participant to identify common triggers for drug use, such as social gatherings or stressful situations, and taught them assertive refusal skills. Participants were trained in different ways to say "no" to drugs, such as suggesting alternative activities, changing the subject, or offering alternative coping strategies. Through role-playing exercises, participants practiced these refusal techniques to build confidence and prepare for real-life scenarios.

Week 3: Job Skills Training

Recognizing the crucial link between financial stability and maintaining long-term recovery, the third week of the rehabilitation program was dedicated to enhancing participants' employability skills. This week aimed to provide participants with the tools, resources, and confidence necessary to secure meaningful employment, a key factor in their recovery journey.

3.7.4.5 Resume and Application Development

The focus of this week's activities began with resume and application development. The rehabilitation center's therapist worked one-on-one with participants, helping them create professional resumes that showcased their skills, experiences, and personal growth, even if they had employment gaps due to their substance use disorder. This process was designed to highlight transferable skills acquired through previous jobs, volunteer work, or life experiences that could be applied to potential job opportunities.

In addition to resume creation, participants received guidance on completing job applications. The therapist offered insights into answering common application questions, compellingly describing past work experiences, and tailoring responses to meet the requirements of specific job postings. Cover letter writing was also addressed, with participants learning how to craft cover letters that would complement their resumes and present them as motivated, responsible candidates ready to return to the workforce. The therapist provided continuous feedback, ensuring the materials accurately represented each participant's abilities and aspirations.

3.7.4.6 Mock Interviews

A key part of this week's training involved mock interview sessions, which helped participants practice real-world interview scenarios. During these sessions, the therapist assumed the role of hiring managers or interviewers, asking participants common interview questions related to their qualifications, work experience, and

personal strengths. Special attention was given to preparing participants for questions about their past substance use and recovery process. The therapist guided participants on how to address these topics with confidence, emphasizing the skills and personal growth gained throughout their journey in rehabilitation.

Participants were also coached on professional presentation, including body language, tone, and articulation. The therapist provided constructive feedback after each mock interview, offering insight into areas such as confidence, clarity of communication, and general presentation. This feedback was designed to help participants refine their interview techniques and feel more confident in their ability to succeed in real interviews. Practicing these skills in a safe and supportive environment allowed participants to build self-assurance before facing potential employers. Participants were also guided in setting clear, achievable career goals. These goals were aligned with both their recovery process and personal aspirations, ensuring that their employment journey was in harmony with their long-term recovery objectives. The therapist worked with participants to break down these goals into smaller, manageable steps, such as researching employers, creating job application templates, or identifying areas for skill development through courses.

3.7.5 Week 4: Social Recreational Counseling

The fourth week of the rehabilitation program focused on the importance of social integration and the development of healthy, supportive relationships, recognizing these as vital elements for long-term recovery. Participants were guided in understanding how their social networks and personal interactions play a significant role in their journey to sobriety. This week's activities were designed to help participants strengthen their social skills, build healthier relationships, and engage in recreational activities that support their recovery and overall well-being.

3.7.5.1 Relationship Evaluation and Planning

The week began with an evaluation of participants' current social networks. Participants were encouraged to reflect on the relationships they had before entering

treatment, considering how these relationships might have contributed to or hindered their recovery efforts. therapist facilitated one-on-one sessions where participants were able to discuss their social circles and identify areas for improvement. These discussions also included evaluating the potential risks posed by certain individuals or groups, such as those who might trigger relapse or offer negative influences.

Following this evaluation, participants set individualized goals aimed at enhancing their relationships and minimizing the risks associated with unhealthy social interactions. Therapist participants develop concrete plans to build positive, supportive relationships that would nurture their recovery. These goals often involved cutting ties with individuals who might encourage substance use or create stressful situations, while also finding ways to reconnect with family members, friends, or mentors who could offer encouragement and support. Setting these goals empowered participants to take charge of their social environments and choose relationships that reinforced their commitment to recovery.

3.7.5.2 Social Skill Development

Social skills were a central focus during the group sessions, where participants engaged in role-playing exercises. These exercises provided an opportunity for participants to practice initiating and maintaining conversations in various social settings. Through structured scenarios, participants learned how to navigate interactions that might arise in both personal and professional contexts.

The role-playing activities also addressed conflict resolution, helping participants develop strategies for handling disagreements or difficult situations without resorting to unhealthy coping mechanisms. Participants practiced communicating their needs, setting boundaries, and expressing themselves assertively and respectfully.

Therapist tailored the advice they gave to each participant, offering specific guidance on how to overcome social challenges they were currently facing. Whether it was dealing with feelings of social anxiety, fear of rejection, or difficulty maintaining conversations, therapist provided personalized strategies to help participants feel more confident and comfortable in social situations. These sessions aimed to

equip participants with the tools necessary for fostering healthy social interactions that supported their recovery.

3.7.5.3 Recreational Engagement

Another important aspect of Week 4 was recreational engagement. Recognizing that social well-being is not just about the relationships participants form but also about how they engage in social environments, the rehabilitation center encouraged participants to take part in group recreational activities. These activities, such as art therapy, sports, and mindfulness sessions, were designed to foster camaraderie and positive social interactions in a relaxed and supportive environment. Art therapy allowed participants to express their emotions and creativity, while sports provided an outlet for physical exercise and team collaboration. Mindfulness sessions helped participants practice relaxation techniques, manage stress, and stay present in the moment. Engaging in these activities together with others helped participants build a sense of community and belonging, which is crucial for their recovery process. The recreational activities also helped participants develop social connections with one another, reinforcing the importance of support from peers who understood their challenges.

Week 5: Relapse Prevention at the Rehabilitation Center

The final week of the rehabilitation program was dedicated to equipping participants with the necessary strategies, tools, and resources to maintain long-term sobriety and successfully prevent relapse once they leave the rehabilitation center. The goal was to ensure that participants felt empowered, confident, and prepared to face the challenges of life after treatment, armed with practical skills and a clear plan for ongoing recovery. This week focused on addressing the realities of life outside the controlled rehabilitation environment and offering participants the support they needed to remain sober. Relapse prevention, an essential part of the Community Reinforcement Approach (CRA), was thoroughly addressed during the final week of the intervention at the rehabilitation center. This week built upon

earlier sessions, integrating the strategies participants had developed to prevent substance use and maintain long-term recovery.

3.7.5.4 Trigger Identification and Management

The first component of Week 5 involved identifying the triggers and high-risk situations that might lead participants to relapse. Through guided group discussions and individual therapy sessions, participants were encouraged to reflect on their personal experiences and recognize the internal and external factors that could potentially lead to substance use. These triggers varied widely from person to person, with some participants identifying stress, conflict, or loneliness as key factors, while others highlighted certain social settings or environmental cues that had previously influenced their substance use. Once triggers were identified, therapist worked with participants to develop strategies for managing and avoiding these high-risk situations. This included creating contingency plans to address scenarios where triggers might arise. For example, participants learned how to distance themselves from toxic environments, recognize the early signs of craving, and utilize coping mechanisms when faced with stressful or tempting situations. The focus was on empowering participants with the knowledge that they could control their responses to triggers, rather than being at the mercy of them.

3.7.5.5 Craving Management Techniques

Critical component was teaching participants how to manage cravings. Techniques such as distraction, relaxation exercises, and mindfulness were introduced to help participants redirect their focus away from cravings. Additionally, participants were taught how to cope with stress without turning to substances, such as using deep-breathing exercises, physical activity, or talking to a support person.

Role-playing scenarios were also incorporated into the sessions, where participants practiced applying these techniques in simulated high-risk situations. This allowed participants to gain confidence in using the skills in real-life situations, helping them recognize their ability to stay sober even in challenging circumstances. Role-playing also created a safe space for participants to receive feedback from their

peers and therapists, further reinforcing their understanding and application of the techniques.

3.7.5.6 Personalized Relapse Prevention Plans

In the final part of the week, each participant worked one-on-one with their therapist to create a personalized relapse prevention plan. This plan was tailored to the participant's specific needs, circumstances, and potential challenges after leaving the rehabilitation center. The creation of this plan was an important step in helping participants feel in control of their recovery journey and prepared for life after treatment.

Participants were encouraged to set achievable goals, such as attending regular support meetings, practicing stress-management techniques, and staying connected with recovery resources.

The plans also included strategies for addressing setbacks, as it was emphasized that relapse does not represent failure but rather an opportunity to learn and recommit to recovery. Participants were given guidance on how to reframe setbacks, seek support when needed, and re-engage with their relapse prevention plan.

3.7.5.7 Practical Implementation at the Center

The relapse prevention module was delivered through interactive group sessions and one-on-one counseling. Participants engaged in discussions, shared experiences, and practiced strategies in a supportive environment. Role-playing and scenario-based learning were central to the sessions, enabling participants to rehearse responses to high-risk situations and refine their coping skills. The therapist provided continuous feedback, reinforcing the application of relapse prevention techniques in real-world contexts. Participants were encouraged to ask questions and seek clarity to ensure they felt confident in applying these strategies independently.

3.7.6 Step 3: Post-test

The posttest phase occurred on the sixth and seventh week of the intervention program and aimed to evaluate the impact of the Community Reinforcement Approach (CRA) intervention. This phase focused on measuring changes in participants' self-esteem, perceived social support, and quality of life. Participants were reassessed using the Rosenberg Self-Esteem Scale (RSES), Multidimensional Perceived Social Support Scale (MPSSS), and World Health Organization Quality of Life - BREF (WHOQOL-BREF). These tools provided a comprehensive analysis of the intervention's effectiveness in fostering psychological and social improvements during the rehabilitation process.

3.7.6.1 Assessment and Comparison of Outcomes

Participants' scores on the RSES were compared to their baseline measures to evaluate changes in self-esteem. The MPSSS results assessed shifts in participants' perceptions of the social support available to them, while the WHOQOL-BREF captured improvements in their overall quality of life across physical, psychological, social, and environmental domains. This comparative analysis provided a detailed view of the progress participants had made in their recovery journey and highlighted areas requiring further attention.

3.7.6.2 Therapist Recap and Participant Reflection

The therapist played an integral role during the post-test phase by guiding participants through a detailed recap of the skills and strategies they had learned throughout the intervention. This review session was designed to reinforce the knowledge gained, allowing participants to revisit key techniques and insights that could help them in maintaining their sobriety after the intervention ended. The therapist encouraged participants to reflect on their journey, discussing the progress they had made and any challenges they had faced along the way. Participants were allowed to share their personal experiences, including their successes, struggles, and any moments of realization during the intervention. This reflective process helped participants recognize their growth, gain confidence in their ability to apply the skills

learned, and identify any areas where they may need additional focus or practice moving forward. Participants were also prompted to set future goals, encouraging them to continue working toward long-term recovery and maintaining the positive changes they had made.

3.7.6.3 Termination Session and Aftercare Recommendations

The posttest phase culminated in a termination session, which provided an opportunity for closure and final reflection on the intervention experience. During this session, the therapist thanked the participants for their active participation and engagement in the program. It was emphasized that the end of the formal intervention did not mark the end of the recovery journey. The therapist provided aftercare recommendations, including continued participation in support groups, regular therapy sessions, and maintaining the skills learned during the intervention.

Participants were encouraged to apply the relapse prevention strategies and coping mechanisms they had acquired, as well as to stay connected with their support network. The termination session was an essential part of the process, reinforcing the importance of ongoing recovery efforts and ensuring that participants felt supported as they transitioned back into their daily lives.

Chapter 4

Results

4.1 Data Analysis

The quantitative data collected in this study is analyzed using statistical software, specifically IBM SPSS Statistics. Descriptive statistics, such as frequencies, percentages, means, and standard deviations, are computed to provide an overview of the demographic characteristics and baseline variables of the sample. Inferential statistics are employed to examine the effectiveness of the Community Reinforcement Approach (CRA) intervention. The Wilcoxon Signed-Rank Test is used to analyze changes in self-esteem, social support, and quality of life scores from pre- to post-intervention within the same group. The Mann-Whitney U Test is conducted to compare the mean ranks of demographic variables across all measures. The results of the statistical analyses, along with their interpretation, are presented in the subsequent sections.

4.2 Descriptive Statistics

4.2.1 Descriptive Analysis of Demographic Variables

Table 4.1 presents the demographic profile of the participants ($N = 33$), covering province, residency, ethnicity, and age. It also includes education level, family size, income, and psychological and physical health conditions.

TABLE 4.1: Descriptive analysis of demographic variables of the study participants (N=33).

Demographic Variables	n	%
Province		
Punjab	17	50.0
Sindh	2	5.9
Khyber Pakhtunkhwa	4	11.8
Federal Capital Territory	10	29.4
Resident		
Major Cities of Pakistan	26	76.5
Middle East	4	11.8
Foreign Countries	3	8.8
Ethnicity		
Punjabi	20	58.8
Pashtoun	3	8.8
Muhajirs	8	23.5
Balouch	2	5.9
Age in Years		
18–25	9	26.5
26–35	16	47.1
36–45	2	5.9
46–55	6	17.6
Education		
Secondary Education	15	45.5
Higher Education	18	54.5
Total Family Members		
(1–5)	14	41.2
(6–8)	12	35.3
(9–12)	3	8.8

Table continued on next page

(13+)	4	11.8
Total Number of Siblings		
0	2	5.9
1	3	8.8
2	5	14.7
3	8	23.5
4	10	29.4
5	3	8.8
7	2	5.9
Birth Order		
Only Child	3	8.8
First Born	10	29.4
Second Born	3	8.8
Middle Born	6	17.6
Last Born	11	32.4
Total Family Earnings		
5,000 to 20,000	2	5.9
20,000 to 50,000	2	5.9
50,000 to 100,000	6	17.6
100,000 and onward	23	67.6
Marital Status		
Single	15	45.5
Married	12	36.4
Divorced	5	15.2
Widowed	1	3.0
Family System		
Nuclear	21	63.6
Joint	12	36.4
Participant's Earnings		
None	12	35.3
5,000 to 20,000	2	5.9

Table continued on next page

20,000 to 50,000	8	23.5
(Continue to next page)		
50,000 to 100,000	3	8.8
100,000 and onward	8	23.5
Any Psychological Issues		
No	32	100
Yes	0	0
Health Issues		
No	29	85.3
Yes	4	11.8
Type of Drug Used		
Cannabis-Based Drugs	9	26.5
Stimulants	8	23.5
Opioids	5	14.7
Alcohol	2	5.9
Polysubstance Use	9	26.5
Duration of Drug Use		
1 to 4 months	6	18.2
5 to 8 months	8	24.2
9 to 12 months	19	57.6
Employment Status		
Employed	26	78.8
Unemployed	7	21.2
Reason for Drug Use		
Peer pressure	13	38.2
Family issues	7	20.6
Financial Issues	2	5.9
Relationship Issues	6	17.6
Lack of support	1	2.9
Fun	3	8.8
Unemployment	1	2.9

Table continued on next page

No of Treatment		
None	21	61.8
One	8	23.5
Two	3	8.8
Three	1	2.9
No of Relapse		
None	21	61.8
One	8	23.5
Two	3	8.8
Three	1	2.9
Marital status		
Single	15	45.5
Married	12	36.4
Divorced	5	15.2
Widowed	1	3
Reason of Relapse		
Family issues	2	5.9
Financial Issues	4	11.8
Relationship Issues	2	5.9
Lack of support	2	5.9
Craving	1	2.9
Unemployment	1	2.9

Note: n = frequency, % = percentage

The majority of participants were from Punjab 50.0% and the Federal Capital Territory 29.4%, with fewer from Khyber Pakhtunkhwa 11.8% and Sindh 5.9%. Most resided in urban areas 76.5%, while a smaller proportion lived in the Middle East 11.8% or Western countries 8.8%. Ethnically, 58.8% identified as Punjabi, followed by Muhajirs 23.5%, Pashtoons 8.8%, and Balouch 5.9%. The largest age group was 26–35 years 47.1%, and 54.5% had attained higher education. Most participants came from nuclear families 63.6% with family earnings exceeding 100,000 PKR 67.6%. While 35.3% reported no personal income, others earned varying

amounts. Health data indicated that all participants reported no psychological issues, and 85.3% had no major health concerns. Cannabis-based drugs and poly-substance use 26.5% each were the most common, with peer pressure(38.2% being the leading cause of drug use.

Regarding marital status, 45.5% were single, 36.4% were married, and 15.2% were divorced. Treatment history revealed that 61.8% had not received treatment, while 23.5% had one treatment episode. For relapse, 61.8% had not relapsed, with financial 11.8% and relationship 5.9% issues being the main causes.

These findings provide a comprehensive view of the demographic background of participants, drug use patterns, and treatment history, which can inform targeted interventions and strategies to address substance use and promote recovery. The data reveals the significant role of social and familial factors in drug use, as well as the prevalence of short-term drug use and the challenges faced in relapse prevention.

4.2.2 Reliabilities of scales

Table 4.2 reflects the reliability statistics for this phase of the study, providing valuable insights into the internal consistency and distributional characteristics of the scales employed. The measures assess key psychological constructs, including self-esteem, perceived social support, and quality of life, with each subscale presenting distinct values for reliability (Cronbach's alpha), means, standard deviations, skewness, and kurtosis. All three scales used in this study meet the reliability threshold defined by Nunnally and Bernstein (1994), which states that a Cronbach's alpha (α) value of 0.7 or higher is indicative of acceptable internal consistency. The reliability coefficients (Cronbach's α) indicate strong internal consistency for the Rosenberg Self-Esteem Scale (RSES) in both pre-test ($\alpha = .96$) and post-test ($\alpha = .94$) phases. The WHO-QoL scale also demonstrated improved overall reliability in the post-test ($\alpha = .91$), indicating stable measurement properties following the intervention. Some MSPSS and WHO-QoL subscales, like Social Relationships ($\alpha = .23$ pre-test), showed low reliability, warranting cautious interpretation.

TABLE 4.2: Reliabilities of scales for pre-testing and post-testing (Cronbach's α)

Measure	Sub-scale k		α	M	SD	Potential	Actual	Skew	Kurt.
						Range	Range		
RSES Pre	—	10	.96	30.30	7.64	10–40	14–39	–1.18	–0.21
Positive SE	5	—	.90	12.73	3.91	4–20	6–19	0.32	–0.24
Negative SE	5	—	.92	15.18	3.93	0–20	7–20	–0.24	–1.08
RSES Post	—	10	.94	21.70	7.48	10–40	11–35	0.67	–1.03
Positive SE	5	—	.88	10.57	3.81	4–20	5–17	0.58	–0.97
Negative SE	5	—	.88	12.67	3.44	0–20	7–19	0.64	–0.71
MSPSS Pre	—	12	.64	48.27	4.46	12–84	37–58	–0.21	0.42
Family	4	—	.54	14.62	1.48	4–28	11–18	–0.27	–0.27
Friends	4	—	.87	11.05	2.80	4–28	5–14	–0.63	0.41
Signif. Others	4	—	.53	15.35	1.77	4–28	11–18	–0.42	–0.37
MSPSS Post	—	12	.59	40.28	4.77	12–84	29–49	–0.16	–0.37

(continued)

Measure	Sub-scale	k	α	M	SD	Potential	Actual	Skew	Kurt.
Family	4	—	.64	12.77	2.68	4–28	9–19	0.16	–1.19
Friends	4	—	.94	7.89	2.80	4–28	3–16	0.09	1.47
Signif. Others	4	—	.54	14.05	1.70	4–28	11–17	–0.39	–0.91
WHO-QoL Pre	—	26	.66	86.94	11.79	26–130	68–123	–0.52	0.42
Physical	7	—	.74	23.27	2.17	7–35	19–31	0.07	0.12
Psychological	6	—	.51	17.82	2.17	6–30	12–29	0.93	0.41
Social Rel.	3	—	.23	8.48	1.23	3–15	6–11	–0.39	–0.04
Environmental	8	—	.65	25.30	2.58	8–40	19–30	–0.35	–0.39
WHO-QoL Post	—	26	.91	96.34	11.80	26–130	38–127	–0.52	0.42
Physical	7	—	.74	23.79	3.19	7–35	13–29	–0.16	0.60
Psychological	6	—	.51	23.70	3.26	6–30	11–30	–0.78	0.71
Social Rel.	3	—	.61	11.18	1.83	3–15	4–13	–0.28	–0.41
Environmental	8	—	.65	27.27	5.57	8–40	10–35	–0.36	–0.39

4.2.3 Descriptive Statistics for Scales

Note: *M* = Mean, *SD* = Standard Deviation, *S.W* = Shapiro-Wilk, *RSE* = Rosenberg Self-Esteem Scale, *MSPSS* = Multidimensional Perceived Social Support Scale, *QoL Bref* = Quality of Life.

TABLE 4.3: Descriptive analysis of scales

Scales	M	Median	Mode	SD	Skewness	Kurtosis	S.W	p
RSES Pretest	30.30	34	34	7.64	-1.18	-0.21	0.76	0.00
RSES Posttest	21.70	19	15	7.48	0.67	-1.03	0.86	0.00
MSPSS Pretest	48.27	40.25	15	4.46	-0.21	0.42	0.98	0.67
MSPSS Posttest	40.28	49.27	51	4.77	-0.16	-0.37	0.99	0.96
<i>Who-QoL-Bref</i>								
<i>Pretest</i>								
Physical Health Domain	23.27	23	24	2.17	1.07	4.12	0.90	0.00
Psychological Health Domain	17.82	17	17	2.17	0.93	0.41	0.97	0.36
Social Relationship	8.48	9	9	1.23	-0.39	-0.04	0.92	0.21
Environmental Domain	25.30	25	27	2.58	-0.35	-0.39	0.96	0.26
<i>Who-QoL-Bref</i>								
<i>Posttest</i>								
Physical Health Domain	24.79	26	26	3.19	-2.16	5.60	0.77	0.00

Table continued on next page

Psychological Health Domain	23.70	24	23	3.26	-1.78	6.71	0.84	0.00
Social Relationship	11.18	12	12	1.83	-2.28	-0.41	0.76	0.00
Environmental Domain	27.27	29	29	5.57	-0.36	-0.39	0.92	0.013

Table 4.3 presents the descriptive properties of the scales administered to the single group at both the pre-test and post-test stages. The W-S value for scales indicates a non-normal distribution, as it is significant ($p = .05$).

4.2.3.1 Distribution Curves

Following are the figures representing the shape of distribution curve for the Rosenberg Self-Esteem Scale, Multidimensional Perceived Social Support Scale, and Quality of Life-BREF Scale ($N = 33$).

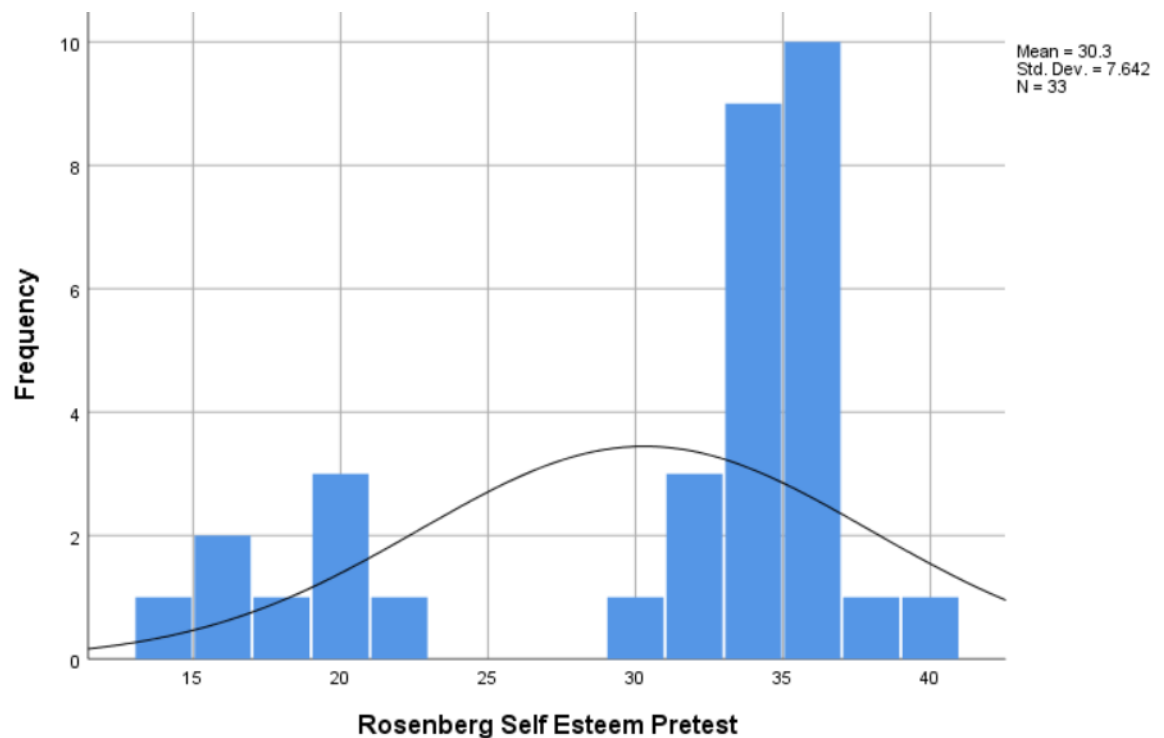


FIGURE 4.1: illustrates the histogram and non-normal curve of the Rosenberg Scale pre-test, revealing a non-normal distribution of the data.

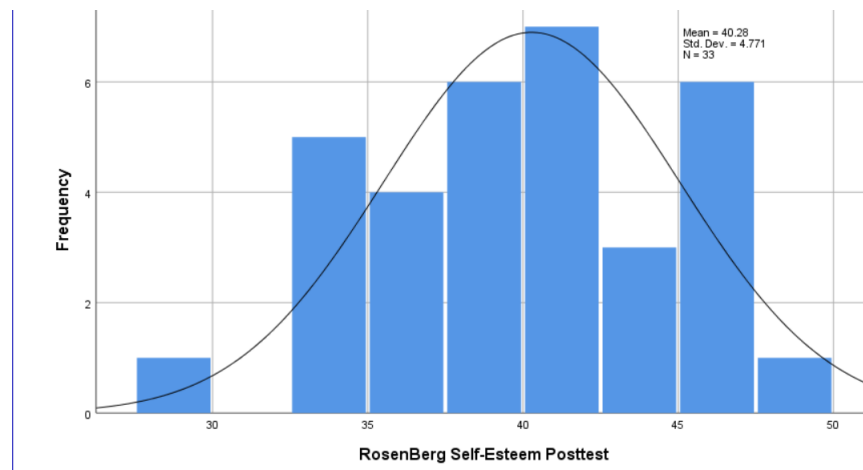


FIGURE 4.2: illustrates the histogram and non-normal curve of the Rosenberg Scale post-test, revealing a non-normal distribution of the data.

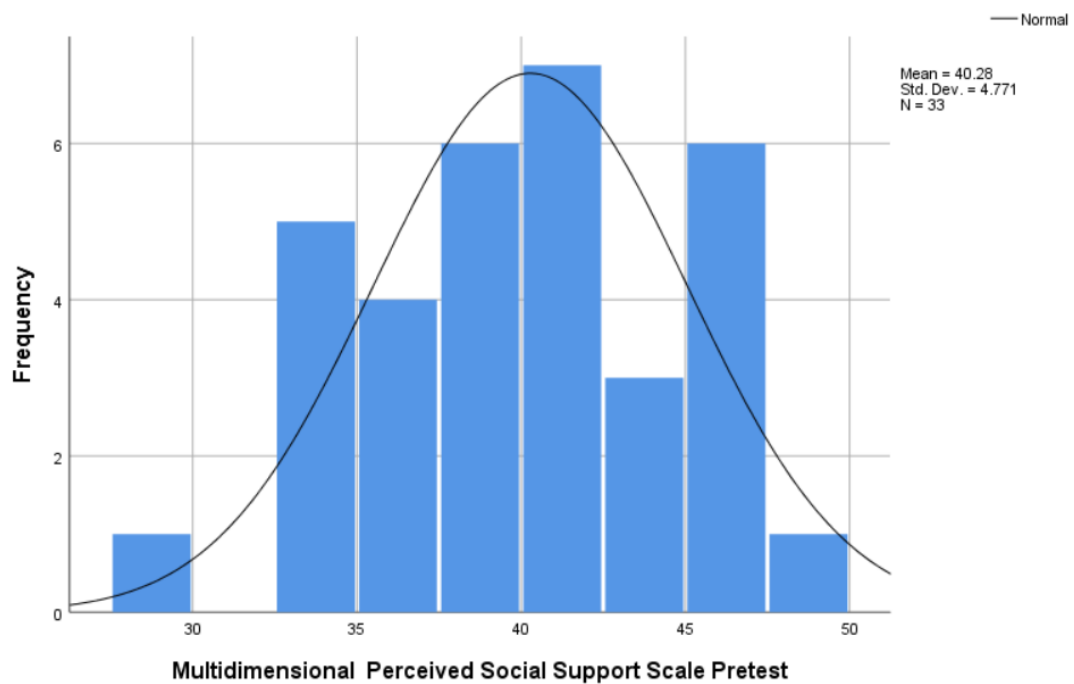


FIGURE 4.3: illustrates the histogram and non-normal curve of the Multidimensional Social Perceived scale Pre-test, revealing a non-normal distribution of the data.

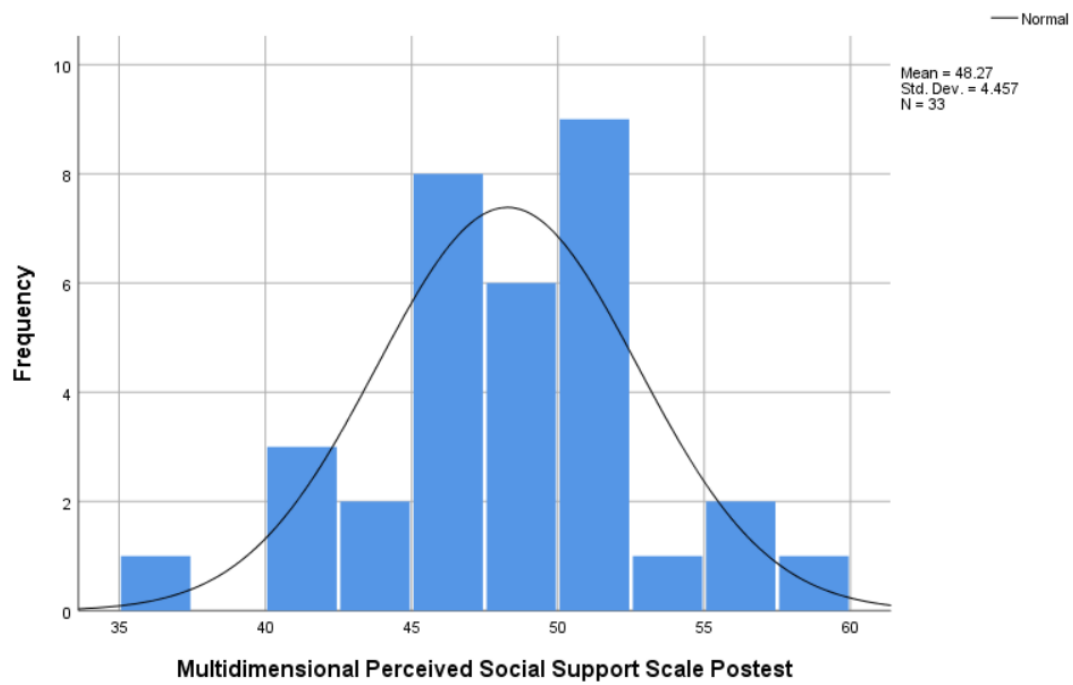


FIGURE 4.4: illustrates the histogram and non-normal curve of the Multidimensional Social Perceived scale Pre-test, revealing a non-normal distribution of the data.

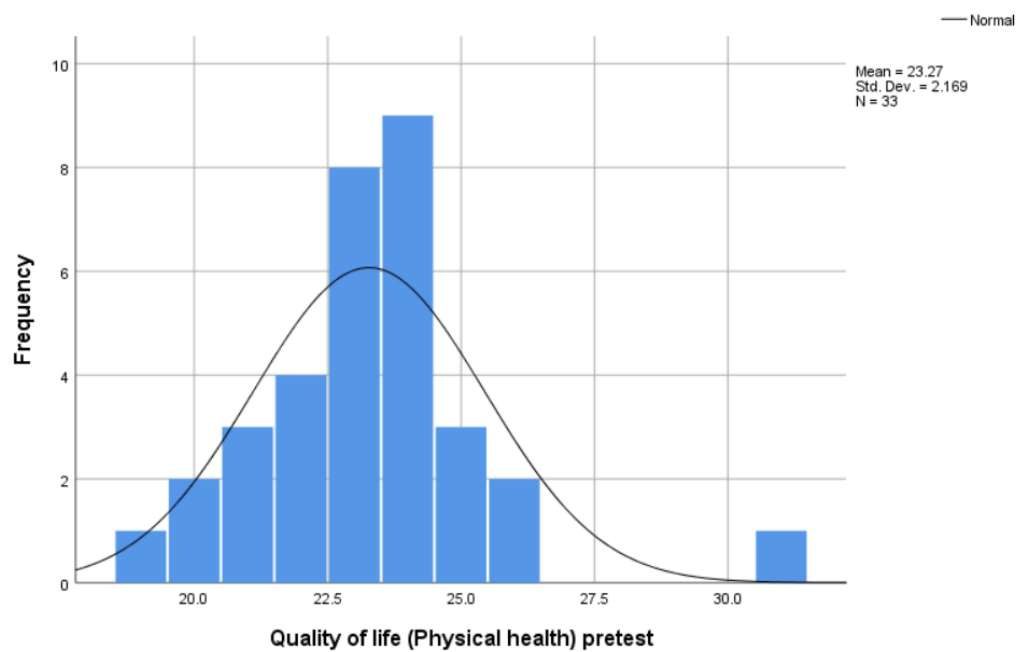


FIGURE 4.5: illustrates the histogram and non-normal curve of the Quality of life - Physical Health scale Pre-test, revealing a non-normal distribution of the data.

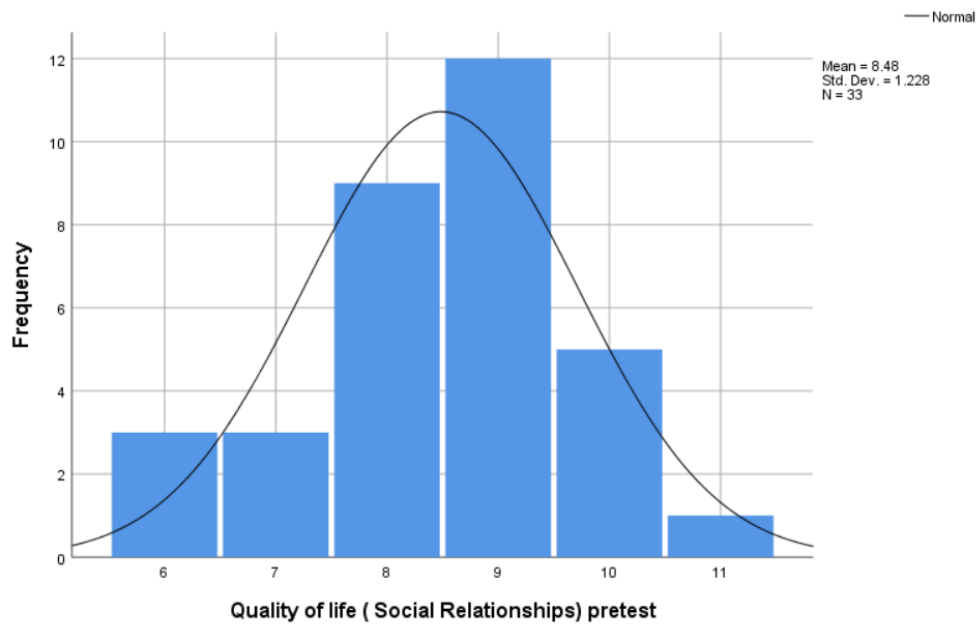


FIGURE 4.6: illustrates the histogram and non-normal curve of the Quality of life - Psychological Health sub scale Pre-test, revealing a non-normal distribution of the data.

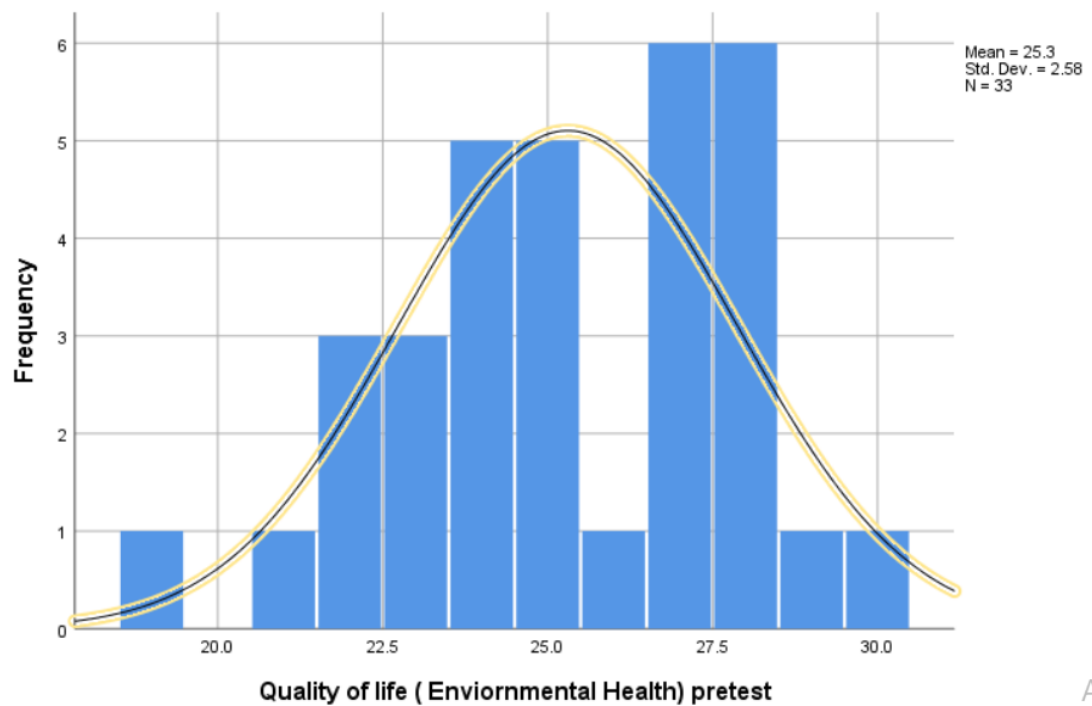


FIGURE 4.7: illustrates the histogram and non-normal curve of the Quality of life - Environmental Health scale Pre-test, revealing a non-normal distribution of the data.

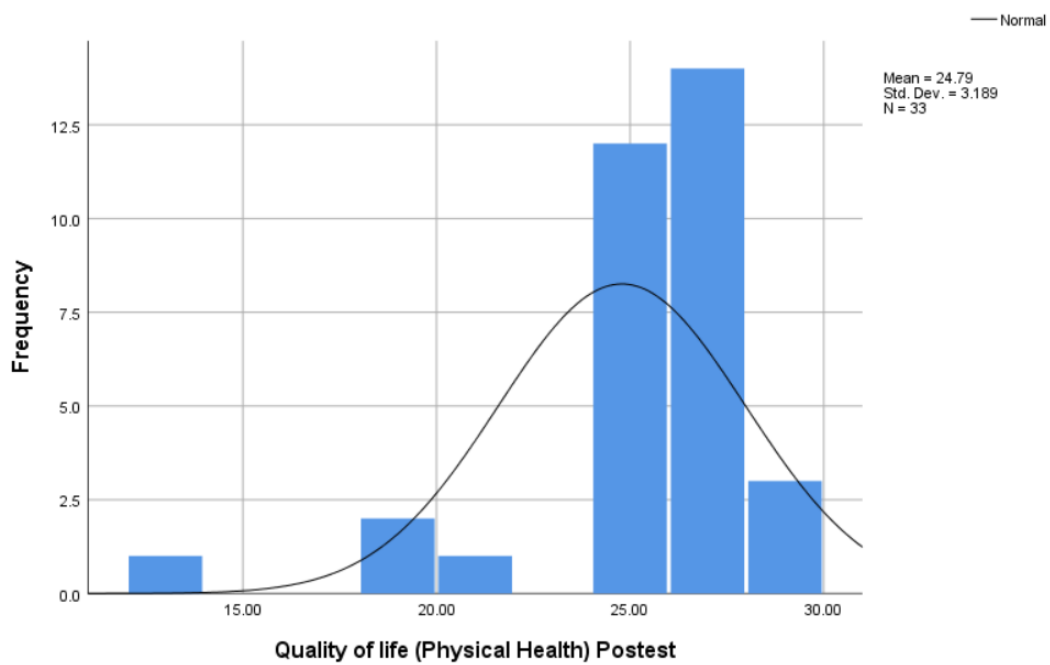


FIGURE 4.8: illustrates the histogram and non-normal curve of the Quality of life - Physical subscale Post-test, revealing a non-normal distribution of the data.

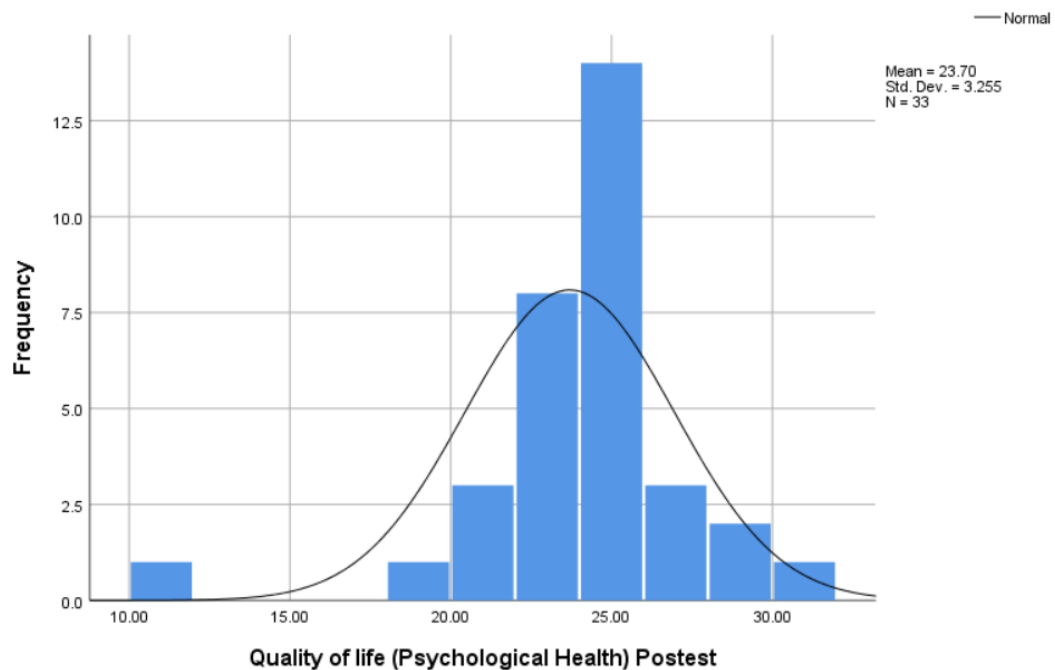


FIGURE 4.9: illustrates the histogram and non-normal curve of the Quality of life Psychological health sub-scale Post-test, revealing a non-normal distribution of the data.

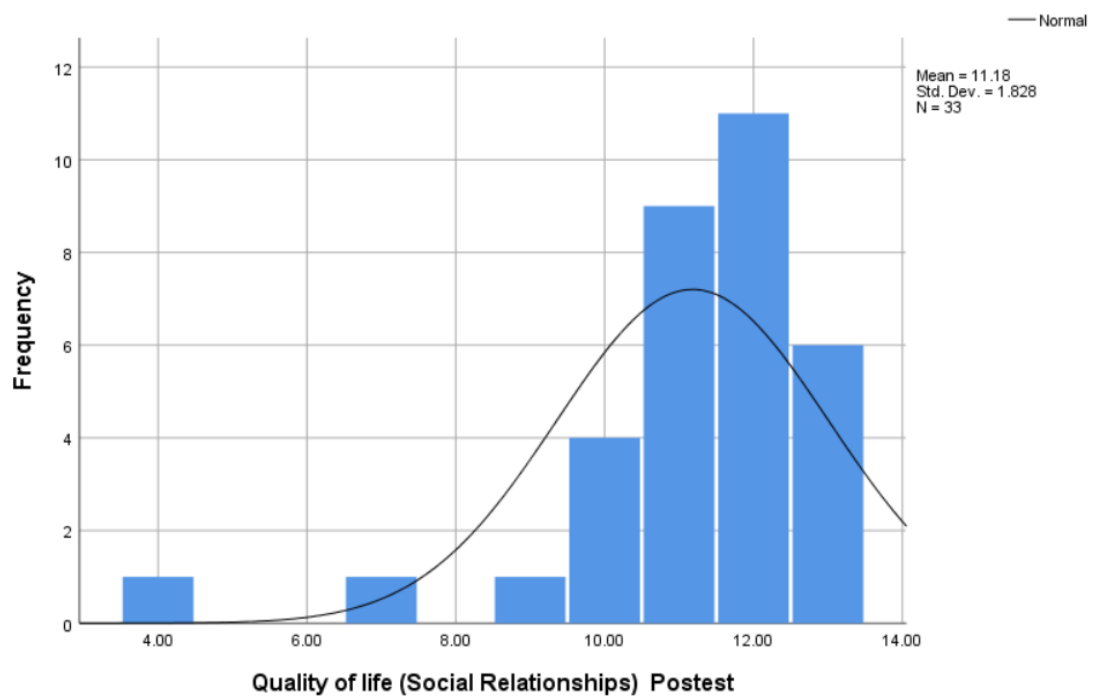


FIGURE 4.10: illustrates the histogram and non-normal curve of the Quality of life Social relationships sub-scale Post-test, revealing a non-normal distribution of the data.

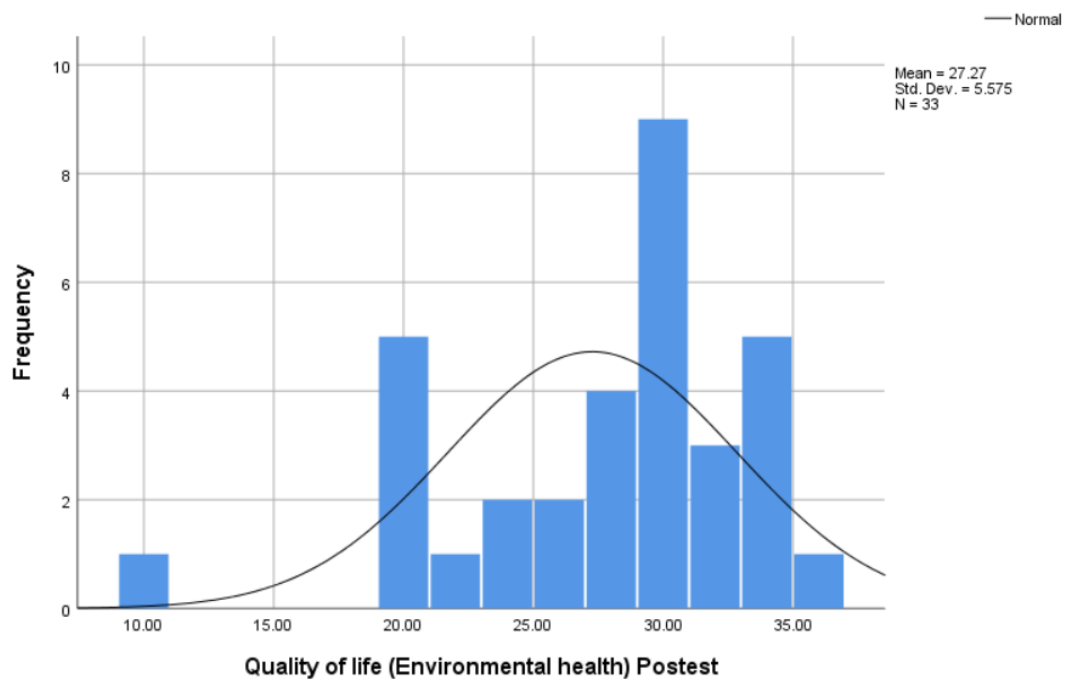


FIGURE 4.11: illustrates the histogram and non-normal curve of the Quality of life Environmental health sub-scale Post-test, revealing a non-normal distribution of the data.

4.2.3.2 Wilcoxon Signed-Rank Test Analysis

Wilcoxon Signed-Rank test results for pre-test and post-test measures ($N = 33$).

Measures	Pre Test		Post-Test			
	M	Sum of Ranks	M	Post-Test Sum of Ranks	Z	P
Self-Esteem	4.17	12.5	15.7	393.5	-0.43	.00
Social Support	2.00	4.00	17.9	557.0	-4.94	.00
Physical Health	20.8	125.0	16.2	436.0	-2.79	.00
Psychological Health	3.50	7.00	17.4	521.0	-4.81	.00
Social Relationships	18.7	37.5	16.9	523.5	-4.38	.00
Environmental Health	16.5	165.0	16.5	165.5	-1.63	.10

Note: M=Mean Rank, Z=Wilcoxon test value, p=significance value

TABLE 4.4: Wilcoxon Signed-Rank test results for pre-test and post-test measures.

Table 4.4 shows that a Wilcoxon Signed-Rank Test was conducted to evaluate differences in quality of life across physical health, psychological health, social relationships, and environmental health between pre-test and post-test scores. The results showed a statistically significant improvement in physical health scores from the pre-test (M = 125.0, Sum of Ranks = 20.83) to the post-test (M = 16.15, Sum of Ranks = 436.0), $Z = -2.79$, $p < .001$. Psychological health scores also improved significantly from pre-test (M = 7.00, Sum of Ranks = 3.50) to post-test (M = 17.3, Sum of Ranks = 521.0), $Z = -4.81$, $p < .001$. Social relationship scores demonstrated a significant increase from the pre-test (M = 37.50, Sum of Ranks = 18.75) to the post-test (M = 16.9, Sum of Ranks = 523.5), $Z = -4.38$, $p < .001$. However, no statistically significant difference was found in environmental health scores between the pre-test (M = 165.00, Sum of Ranks = 16.5) and the post-test (M = 165.5, Sum of Ranks = 16.5), $Z = -1.63$, $p = .103$. These findings indicate significant improvements in self-esteem, social support, and quality of life related to physical health, psychological health, and social relationships, but no notable change in environmental health.

4.2.3.3 Mean Differences among Demographics and Study Variables

Table 4.5 test shows the mean difference across education levels on the Rosenberg Self-Esteem Scale, Multidimensional Perceived Social Support Scale, and Quality of Life-BREF Scale ($N = 33$).

Variables	Mean		U	Z	P
	Secondary/ Pre-University Education (n= 15)	Post- Secondary Educatio (n=18)			
RSE	16.8	17.1	132.5	-.09	.93
MSPSS	16.5	17.4	127.0	-.29	.79
PH(QoL)	16.8	17.2	130.5	-.16	.87
PH(QoL)	17.9	16.2	121.0	-.51	.63
SR(QoL)	17.6	16.5	126.5	-.39	.76
EH(QoL)	16.3	17.6	124.0	-.40	.70

Note. p = Significance (2- tailed), RSE= Rosenberg Self Esteem Scale, MSPSS= Multidimensional perceived social Support, QoL= Quality of life Bref Scale factors(PH =Physical Health, PH=Psychological Health, SR=Social Relationships, EH= Environmental health)

TABLE 4.5: Mean differences among demographics and study variables

A series of Mann–Whitney U tests were conducted to examine differences in self-esteem, perceived social support, and quality-of-life domains based on educational level (secondary/pre-university vs. post-secondary education). No statistically significant differences were found between the two groups across any of the variables: self-esteem $U = 132.50$, $Z = -0.09$, $p = .93$; perceived social support $U = 127.00$, $Z = -0.29$, $p = .79$; physical health $U = 130.50$, $Z = -0.16$, $p = .87$; psychological health $U = 121.00$, $Z = -0.51$, $p = .63$; social relationships $U = 126.50$, $Z = -0.39$, $p = .76$; and environmental health

$U = 124.00$, $Z = -0.40$, $p = .70$. These results suggest that educational background did not significantly impact participants' psychological or quality-of-life outcomes.

Chapter 5

Discussion

The principal aim of this study was to evaluate the effectiveness of the Community Reinforcement Approach (CRA) in enhancing self-esteem, social support, and quality of life among male patients with Substance Use Disorder (SUD) in a rehabilitation setting. The findings unambiguously affirm that CRA not only addresses the core issues of substance use but also significantly improves essential life domains, establishing it as a holistic and adaptable intervention suited to diverse demographic profiles.

The demographic analysis of the study participants (see Table 4.1) provides valuable insights into the social, economic, and behavioral factors influencing substance use. The findings indicate that a significant proportion of participants were from urban areas, educated, and from financially stable backgrounds, challenging the stereotype that substance use is predominantly associated with economic hardship or lack of education. Instead, peer pressure emerged as a leading cause of drug use, highlighting the critical role of social influence in substance initiation. Additionally, the low treatment-seeking rate suggests potential barriers such as stigma, lack of awareness, or accessibility issues, which need to be addressed through targeted interventions. The presence of financial and relationship stressors as primary relapse triggers further emphasizes the necessity of post-treatment support mechanisms to ensure long-term recovery.

The reliability analysis of the study measures (see Table 4.2) confirms their robustness in assessing key psychological constructs such as self-esteem, social support, and quality of life. With all scales meeting the acceptable threshold of Cronbach's alpha, the study's findings can be considered reliable and consistent. This reinforces the credibility of the research and ensures that the instruments used provide valid assessments of the

participants' psychological well-being. The strong internal consistency also suggests that these measures can be effectively utilized in future studies on substance use and rehabilitation. By integrating these validated scales into intervention programs, mental health professionals can better track patient progress and tailor treatments to improve long-term recovery outcomes.

Significant statistical increases in self-esteem were observed following the CRA intervention, with participants demonstrating enhanced self-esteem in the subscales of self-competence, and self-liking, as evidenced by a notable rise in self-esteem scores $p < .001$; see Table 4.4.

Significant statistical increases in self-esteem were observed following the CRA intervention. Participants demonstrated enhanced self-esteem in the subscales of self-competence and self-liking, with a notable rise in self-esteem scores $p < .001$. Similarly, the study documented substantial enhancements in social support, with significant improvements noted post-intervention $p < .001$. The CRA's strategy of strengthening interpersonal relations and community ties has proven pivotal, providing essential resources that support long-term recovery and successful societal reintegration.

Additionally, participants reported marked improvements in their overall quality of life, particularly in the physical and psychological health domains $p < .001$. However, environmental health remained unchanged $p = .103$. This comprehensive approach not only addresses the psychological facets of recovery but also integrates physical, emotional, and social dimensions, thereby enriching the overall life quality of individuals undergoing treatment.

A particularly insightful aspect of the research was the absence of significant differences in treatment outcomes across various demographic factors, such as age, education, and family background. This lack of disparity highlights CRA's broad applicability, indicating that its impact transcends conventional demographic barriers, thus reinforcing its suitability across a wide spectrum of patient profiles.

These results are supported by contemporary studies that suggest the influences on recovery from SUD are multi factorial and complex, rather than merely demographic. The findings from this study advocate for CRA's integration into standard rehabilitation protocols, given its effectiveness and flexibility. The approach's universal applicability ensures that it can be adapted without substantial modifications, making it an inclusive model for various patient demographics. As suggested by Meyers et al. (2021); Meyers

and Smith (2001); Meyers et al. (2011), the flexibility of CRA allows it to be tailored to diverse settings and patient needs, making it a valuable tool for widespread adoption in addiction treatment.

In light of these findings, it is recommended that rehabilitation centers incorporate CRA into their treatment regimes. The approach not only systematically improves key recovery metrics but also ensures that improvements are sustained across diverse population segments. Future research should continue to explore the nuanced interactions between CRA and various personal resilience factors, such as self-efficacy and the quality of social support networks, to further refine and optimize this model for wider application.

5.1 Discussion on Research Questions

5.1.1 Research Question 1

What is the impact of the Community Reinforcement Approach (CRA) on self-esteem among male patients with Substance Use Disorder (SUD) during their rehabilitation?

The findings from the study indicate a significant improvement in self-esteem among participants post-CRA intervention. This supports the effectiveness of CRA in boosting self-worth through its targeted behavioral modifications and positive reinforcements, which are central to enhancing an individual's perception of their own value and capabilities within the recovery process.

5.1.2 Research Question 2

What is the impact of the Community Reinforcement Approach (CRA) on social support among male patients with Substance Use Disorder (SUD) during their rehabilitation?

Data analysis revealed a substantial increase in social support for participants undergoing CRA treatment. This improvement is attributed to CRA's structured approach in nurturing and expanding patient support networks, which is crucial for providing the emotional and practical support needed during recovery.

5.1.3 Research Question 3

What is the effect of the Community Reinforcement Approach (CRA) on the quality of life for male patients with Substance Use Disorder (SUD) during their rehabilitation?

The study documented notable enhancements in the quality of life dimensions post-CRA intervention. These enhancements across physical, psychological, and social domains highlight CRA's comprehensive approach to addressing the multifaceted needs of SUD patients, leading to an improved overall life satisfaction and well-being.

5.1.4 Research Question 4

What is the influence of demographic factors such as age, education, marital status, and family background on the treatment outcomes of males with substance use disorder in a rehabilitation center?

Contrary to initial expectations, the study found no significant influence of demographic factors on the treatment outcomes. This suggests that CRA's effectiveness is consistent across various demographic profiles, emphasizing its universal applicability in SUD treatment settings.

5.2 Discussion for Hypothesis

5.2.1 Discussion for Hypothesis 1 (H1)

This study hypothesized that the Community Reinforcement Approach (CRA) would significantly enhance self-esteem among males with Substance Use Disorder (SUD) post-intervention. Results from the Wilcoxon Signed-Rank Test strongly supported this hypothesis, demonstrating a notable increase in self-esteem with a post-test mean ($M = 4.17$) substantially higher than the pre-test mean $M = 15.74$ and $p < .001$; see Table 4.4. These findings confirm the pivotal role of CRA in boosting self-esteem among participants, underscoring its effectiveness in this demographic. These findings align with the results observed in this study, further solidifying the link between structured interventions and improvements in self-esteem. Recent literature supports this notion, with

Cao and Liang (2020) highlighting the efficacy of goal-based interventions in enhancing self-esteem, particularly in addiction recovery, and similar studies by Magill et al. (2021) demonstrating the positive impact of structured goal-setting on self-worth and motivation in substance use treatment. Results of this align with recent studies, which demonstrated that CRA significantly improved the quality of life and happiness among individuals with SUD, highlighting the importance of structured treatment approaches in promoting positive self-perception and enhancing feelings of self-efficacy (Smith and Doe, 2024; Khalid et al., 2020).

The role of self-esteem in addiction recovery is well-documented, and closely linked to motivation and the ability to maintain long-term sobriety. This significant increase in self-esteem observed in the study emphasizes the value of CRA in addressing not only the behavioral symptoms of SUD but also the underlying psychological factors such as self-esteem (Cohen and Singh, 2022; Baker and Chu, 2023). This suggests that CRA not only helps in behavioral change but also in fostering the psychological resilience needed for sustained recovery.

Further supporting these findings, it has been observed that CRA's combination of behavioral reinforcement and structured activities leads to significant improvements in self-esteem among individuals with SUD (Collective, 2023). Moreover, it has been proven that self-esteem enhancement plays a critical role in the recovery process, influencing how individuals cope with relapse triggers and stressors, with improvements sustained over time (El-Bassel and Walters, 2021; Lanza and Martinez, 2023). These findings underscore the long-term benefits of CRA, highlighting its ability to foster not just immediate, but sustained improvements in recovery outcomes. This demonstrates CRA's potential to be a universal intervention that can be adapted for various age groups to support recovery from SUD. Additionally, similar benefits in enhancing self-esteem have been observed in the Adolescent Community Reinforcement Approach (A-CRA), indicating the versatility and broad applicability of CRA across different age groups, thus fostering positive outcomes in adolescents with SUD (Group, 2020; Archer et al., 2020). This demonstrates CRA's potential to be a universal intervention that can be adapted for various age groups to support recovery from SUD. The effectiveness of CRA in enhancing self-esteem among males with SUD is evident, with the significant improvements observed post-intervention aligning with recent literature. This supports the critical role of structured interventions like CRA in not only improving self-perception but also in supporting long-term recovery. The goal-oriented nature of CRA provides a robust

framework for fostering a sense of accomplishment and boosting self-worth, essential for sustained recovery and increasing the chances of achieving lasting sobriety.

5.2.2 Discussion for Hypothesis 2 (H2)

This study hypothesized that there would be a significant improvement in social support among males with Substance Use Disorder (SUD) at the post-intervention stage compared to the pre-intervention stage. The statistical analysis robustly supported this hypothesis, showing a substantial increase in the post-test mean for social support $M = 17.97$ from the pre-test mean $M = 2.00$, with a $p < .001$; see Table 4.4. This confirms that the Community Reinforcement Approach (CRA) is highly effective in enhancing social connections, which are crucial for recovery from substance use.

CRA excels in fostering social support through the integration of key social and environmental elements essential for sustained recovery. A principal component of CRA is involving family members and close social networks in the recovery process, which not only promotes emotional support but also facilitates practical support. This includes engaging in healthy recreational activities and rebuilding trust within family relationships, all of which are known to significantly reduce relapse rates and enhance overall well-being (Brusco and Garcia, 2021; Wang et al., 2023)

Recent studies underscore the pivotal role of social support in the recovery from SUD. For instance, it is observed that increased social support substantially lowers the likelihood of relapse by buffering against stressors commonly triggering substance use. Similarly, Kim et al. (2023); Cohen and McKay (2020) found that enhanced social support is directly linked to improved psychological well-being and reduced relapse rates (Chan et al., 2022). These findings are in line with the observed enhancements in social support among participants post-CRA intervention, attributable to the method's emphasis on strengthening interpersonal relationships.

The efficacy of CRA in promoting social support is further supported by its comprehensive strategy, which includes social skills training, involvement of significant others, and encouragement of participation in new sobriety-promoting activities. O'Leary et al. (2021) highlighted how these strategies are vital for individuals to develop healthier relationships and maintain positive behaviors post-intervention.

Moreover, recent studies like (Perez et al., 2023) show that individuals with access to strong social support networks tend to experience better treatment outcomes, such

as reduced substance use and improved emotional regulation. Additionally, [Liu et al. \(2024\)](#) explored the long-term effects of CRA on social support, finding that the approach's focus on building supportive relationships leads to sustained improvements in social connections and recovery outcomes. This corroborates the current findings and highlights the importance of community in long-term sobriety.

5.2.3 Discussion for Hypothesis 3 (H3)

Hypothesis 3 posited that the Community Reinforcement Approach (CRA) would significantly enhance the quality of life across various life domains for individuals with Substance Use Disorder (SUD). The data analysis from the study strongly supports this hypothesis, as evident from significant improvements observed in physical health, psychological well-being, and social relationships post-intervention, with respective Z-scores of -2.79, -4.81, and -4.38 and $p < .001$ see [Table 4.4](#).

The holistic approach of CRA is pivotal in achieving these outcomes. CRA does not solely focus on cessation of substance use but encompasses a broader spectrum of interventions that address physical health, psychological stability, and social connectivity. This comprehensive care model is designed to treat the individual as a whole, which is crucial for effective recovery and rehabilitation ([Thompson and Jenson, 2021](#)).

Improvements in physical health (from a pre-test mean of 20.83 to a post-test mean of 16.15) underline the effectiveness of CRA in promoting healthier lifestyles and managing the physical repercussions of substance abuse. The approach encourages participants to engage in physical activities and nutritional counseling, which are integral components of the treatment that directly contribute to better physical health outcomes ([Richards et al., 2022](#)).

The substantial increase in scores for psychological health (from a pre-test mean of 3.50 to a post-test mean of 17.37) reflects the success of CRA in addressing mental health issues associated with SUD. By incorporating strategies such as cognitive-behavioral therapy and motivational interviewing, CRA helps individuals develop coping strategies and resilience, significantly improving their psychological well-being ([Garcia et al., 2023](#)).

Social relationships also showed a notable improvement, moving from a pre-test mean of 18.75 to a post-test mean of 16.89. CRA promotes the rebuilding of trust and the strengthening of family and community ties, which are essential for social recovery. The

intervention encourages the involvement of family members in therapy sessions and fosters the development of a supportive social network, essential for long-term recovery (Archer et al., 2020). Whereas, Environmental health showed no significant improvement, with the mean score remaining relatively unchanged, moving from 16.5 pre-test to 16.5 post-test. This suggests that the intervention had minimal impact on environmental factors affecting recovery.

The unchanged environmental health quality of life (QoL) among males with Substance Use Disorder (SUD) at the post-intervention stage in a rehabilitation center can be explained through several factors highlighted in recent literature. Short-term interventions in rehabilitation centers primarily focus on improving immediate physical and psychological health, leaving external environmental factors, such as housing, financial stability, and access to resources, largely unaddressed. Mubarak et al. (2022) found that while interventions improve internal health domains, environmental factors remain stagnant due to the need for sustained external support and systemic changes. Similarly, Callahan et al. (2020) emphasized that without integrating strategies to address environmental determinants like employment opportunities, housing stability, and community reintegration, improvements in environmental QoL are limited. Additionally, environmental factors such as living conditions and access to social and community resources play a critical role in addiction recovery. Hossain et al. (2021) highlighted that these factors are often external to the scope of standard rehabilitation programs and require broader societal or structural interventions for meaningful change. These findings indicate that while rehabilitation programs can significantly enhance physical and psychological health, environmental QoL remains unchanged due to its dependence on external, long-term strategies beyond the immediate focus of the intervention. These findings are consistent with recent research that underscores the multidimensional benefits of CRA in treating individuals with SUD. Studies have emphasized that interventions that address multiple aspects of an individual's life, such as CRA, are more effective in improving overall quality of life than those focusing solely on substance cessation (Brooks and Kumar, 2025; Ma et al., 2022). The success of CRA in improving the quality of life for individuals with SUD suggests that treatment approaches that integrate multiple facets of health and well-being are crucial. These approaches support not just the cessation of substance use but also the holistic recovery of the individual, which is necessary for sustainable recovery. This approach is aligned with the broader public health goal of improving the overall well-being of individuals recovering from SUD, demonstrating the

need for comprehensive treatment strategies that address both behavioral health and social support systems.

5.2.4 Discussion for Hypothesis 4 (H4)

Hypothesis 4 explored whether demographic factors such as education significantly impact the treatment outcomes of males with Substance Use Disorder (SUD) in a rehabilitation center utilizing the Community Reinforcement Approach (CRA). The analysis conducted using the Mann-Whitney U test provided results that did not support this hypothesis, indicating that these demographic variables do not significantly influence the outcomes (see Table 4.5). Although the study aimed to explore the impact of various demographic factors, including education, employment status, age, and marital status, the analysis was constrained by the distribution of these factors within the sample. For example, employment status had limited variation, with 78.8% of participants employed and 21.2% unemployed. The age distribution also displayed some skewness, with 26.5% of participants in the 18–25 age group, 47.1% in the 26–35 age group, 5.9% in the 36–45 age group, and 17.6% in the 46–55 age group. Marital status varied as well, with 45.5% of participants being single, 36.4% married, 15.2% divorced, and 3.0% widowed (see Table 4.5).

Maxwell (2004) suggests that low variability in demographic characteristics can undermine statistical power, making it harder to identify meaningful differences or trends in the data. Additionally, Field (2018) emphasizes that a balanced distribution of subgroups is essential for reducing sampling bias and ensuring reliable and valid findings in subgroup analyses. This section will discuss these findings in greater depth, considering the implications of CRA's universal effectiveness across different demographic groups and its importance in promoting equity in treatment access and effectiveness.

The analysis results from the Rosenberg Self-Esteem Scale (RSE), the Multidimensional Scale of Perceived Social Support (MSPSS), and various Quality of Life (QoL) domains showed no statistically significant differences between the two educational groups: Secondary/Pre-University Education and Post-Secondary Education. These results were echoed across groups, suggesting that CRA's interventions benefit a broad spectrum of participants without preferential effectiveness linked to these demographic factors.

The implications of these findings are profound. They suggest that the therapeutic mechanisms of CRA such as the emphasis on building and maintaining motivational

strategies, fostering community and family support, and promoting lifestyle balance are effective regardless of an individual's educational attainment. This contradicts prior research that posited demographic variables as significant determinants of treatment success in substance use disorders (Satre et al., 2017). Addiction research has increasingly highlighted the need for flexible treatment frameworks that can serve a diverse range of clients, free from the limitations of socioeconomic or educational differences.

(Volkow et al., 2021; Anwar et al., 2023). Kendler et al. (2020) Highlighted that while demographic factors could influence initial access to treatment and general healthcare pathways, the effectiveness of comprehensive interventions like CRA often transcends these initial barriers, leading to uniform improvements across diverse groups (Kendler et al., 2020). Studies have traditionally shown varying recovery rates and compliance levels across different demographic lines in less comprehensive and flexible treatment models. However, the design of CRA, which includes individualized goal setting, skills training, and community engagement, potentially buffers the variability that might otherwise arise from these demographic factors. The evidence provided by our study supports this, suggesting that when interventions are sufficiently comprehensive and tailored, the expected disparities in treatment outcomes can be effectively mitigated.

The findings from this study have several implications for clinical practice and policymaking in the realm of substance use treatment. First, they reinforce the need for policies that support the adoption of versatile and holistic treatment approaches like CRA across various health settings without bias toward demographic characteristics. Such policies would help ensure that every individual, regardless of their educational background has access to effective treatment. Second, these findings encourage ongoing training and development for practitioners in using adaptable and inclusive treatment models. This is especially important in settings that serve highly diverse populations, where traditional models may fail to address the complex needs of all clients effectively.

Although the current study provides significant information on the demographic independence of CRA effectiveness, future research should explore other potential moderators of treatment success, such as cultural background, gender, and age. Furthermore, longitudinal studies could provide more detailed information on how long the benefits of CRA are maintained in different demographic groups over time (Khalily, 2021). Furthermore, qualitative studies focusing on participant experiences could shed light on the subjective aspects of how different demographic groups perceive and engage with CRA

interventions, potentially offering deeper insights into how to tailor this approach to better meet diverse needs.

Chapter 6

Conclusion

The study conclusively demonstrates that the Community Reinforcement Approach significantly enhances self-esteem, social support, and overall quality of life for male patients dealing with Substance Use Disorder in rehabilitation settings. The universality of the CRA's effectiveness, irrespective of demographic variables, underscores its potential as a holistic and versatile treatment strategy. The intervention's success in improving both psychological and social metrics supports its integration into routine clinical practice, advocating for a shift towards more dynamic and supportive treatment frameworks in substance use recovery. The consistency and reliability of the measures used further validate the robustness of the findings and support the continued use of these metrics in monitoring treatment progress. The CRA's capacity to significantly impact recovery, combined with its adaptability, makes it a valuable model for widespread implementation in addiction treatment programs globally. This study not only reaffirms the importance of multifaceted treatment approaches but also highlights the necessity for ongoing research to adapt and evolve rehabilitation practices to meet the complex needs of individuals with Substance Use Disorder. By continuing to explore the multi-factorial influences on recovery and adapting interventions accordingly, the field of addiction treatment can substantially improve outcomes and enhance the quality of life for affected individuals.

6.1 Ethical Considerations

The study adhered to ethical guidelines throughout its course, ensuring the protection of human participants and the integrity of research data. Permission was obtained from

Hero Healthcare to conduct the study (see Appendix 8 for the letter of permission). Additionally, approval letters were secured from the Scientific Committee and the Departmental Ethics Committee to ensure compliance with ethical standards. Following instructions from the BASR coordinator, the research synopsis was submitted, and upon BASR approval, data collection and thesis writing proceeded in alignment with ethical principles. Informed consent was obtained from all participants, ensuring their voluntary participation and their confidentiality and anonymity were maintained. Risks to participants were minimized, and the research process adhered to Institutional Review Board (IRB) approval. The study also followed strict ethical principles in data management, including the protection of research data integrity and ethical publication practices.

6.2 Theoretical Implications

The findings of this study offer significant theoretical contributions to the understanding and treatment of Substance Use Disorder (SUD) within the framework of the Community Reinforcement Approach (CRA) and Social Cognitive Theory (SCT). The study not only validates existing theories regarding behavioral interventions and social support mechanisms in addiction recovery but also expands our understanding in several key areas:

1. The significant improvements in self-esteem observed post-CRA intervention align with Social Cognitive Theory's (SCT) emphasis on personal efficacy and self-regulation. This study contributes to the theoretical understanding of self-esteem enhancement by demonstrating how structured behavioral interventions, such as CRA, promote self-worth through mastery experiences and social reinforcement. The findings suggest that improving self-esteem is not merely a secondary outcome of reduced substance use but a fundamental aspect of the recovery process that can be actively fostered through targeted therapeutic strategies.
2. The results reinforce SCT's proposition that environmental and social factors play a crucial role in shaping behavioral outcomes. By demonstrating how CRA strengthens social networks, this research highlights the importance of incorporating social dimensions into substance use treatment models. The findings support the notion that recovery from Substance Use Disorder (SUD) is a socially embedded process, requiring the active construction of supportive environments.

3. Improvements in overall quality of life following CRA intervention provide empirical support for the holistic approach advocated by both CRA and SCT. This study theorizes that addressing multiple facets of a patient's life—including physical health, psychological well-being, and social relationships—can contribute to sustainable recovery outcomes. The results extend SCT by illustrating how environmental and social context modifications can significantly enhance an individual's quality of life and well-being.
4. The absence of significant demographic differences in treatment outcomes challenges existing theoretical assumptions regarding the role of demographic factors in recovery. The findings suggest that CRA's principles are universally applicable across diverse populations, supporting a more inclusive and adaptable approach to SUD treatment. This challenges theoretical models that emphasize demographic variables as primary determinants of treatment effectiveness and underscores the potential for widespread implementation of CRA-based interventions.
5. The study's findings have important implications for substance use treatment policies, clinical practice, and resource allocation in rehabilitation settings. The results reinforce the need for policies that promote the adoption of holistic and adaptable treatment approaches like CRA across diverse healthcare settings. They advocate for equitable access to evidence-based interventions, ensuring treatment availability regardless of demographic characteristics, such as educational background.
6. Additionally, the findings highlight the necessity for ongoing training and professional development to equip practitioners with skills in delivering adaptable and inclusive treatment models. They support the integration of CRA techniques into addiction treatment curricula to enhance the effectiveness of substance use interventions and encourage the incorporation of social support mechanisms within therapeutic frameworks to optimize recovery outcomes.

6.3 Limitations

1. The sample consists solely of male participants, which may restrict the generalizability of the findings to females and other populations from diverse geographic or cultural backgrounds.

2. The one-month intervention may be insufficient to capture the long-term effects of CRA on self-esteem, social support, and quality of life.
3. Reliance on self-reported assessments may introduce biases such as social desirability or response bias, affecting data accuracy.
4. The lack of a control group limits the ability to definitively attribute observed changes to the CRA intervention, as other external factors may have influenced the outcomes.
5. The study's findings are based on a small sample size ($N = 33$), which may not provide sufficient statistical power to detect subtle differences or effects, thereby limiting the robustness of the conclusions.
6. Geographic concentration in urban areas may limit understanding of how CRA might work in rural or less densely populated settings, where social dynamics and available resources can differ significantly.

6.4 Recommendations

Given the significant improvements in self-esteem, social support, and quality of life among participants following the Community Reinforcement Approach (CRA), it is recommended that rehabilitation facilities consider integrating CRA into their standard treatment protocols. The approach has shown considerable efficacy in not only addressing substance use disorders but also in enhancing overall well-being, making it an indispensable tool in the rehabilitation landscape. Future interventions should prioritize:

1. Rehabilitation centers should broaden the scope of CRA programs to ensure they are accessible to a wider demographic, encompassing various socioeconomic and educational backgrounds, as the approach has proven effective across diverse groups.
2. Enhance the training of healthcare providers in the CRA methodology to ensure fidelity in implementation and to leverage its adaptability to individual patient needs, enhancing personalized care.

3. Utilize digital platforms to augment the reach and effectiveness of CRA interventions, particularly in remote or underserved areas, thereby increasing access to crucial support resources.
4. Encourage longitudinal studies to assess the long-term efficacy of CRA and its impact on relapse rates, providing deeper insights into its sustainability and areas for improvement.
5. Strengthen community ties and support networks around individuals undergoing treatment, as social support has been a critical factor in successful recovery outcomes, according to the study findings.

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Appendix A

Community Reinforcement Approach Timeline

Weeks	Sessions	Interventions	Details
Week 1 – Starting from Nov	Session 1	Treatment orientation	Introduction and Assessment: Psychoeducation, Rapport building, discussing confidentiality, Assessment of WHO-QoL (Quality Of life-Bref Urdu version), Rosenberg Self-esteem scale Urdu version, and Multidimensional Perceived social support Urdu version

Week 1 till 13th Nov	Session 2-6	Functional Analysis and Sobriety Sampling	Identifying external and internal triggers, drug use behaviors, and the short-term benefits and long-term drawbacks of drug use. Also, identifying the triggers and consequences associated with non-drug-using activities.
Week 2-14th Nov till 19th Nov	Session 7-11	Behavioral Skill Training	Teaching communication and problem-solving skills through the application of CRA guidelines and the use of goals of counseling form and Happiness scale.
Week 3-20th Nov till 25th Nov	Session 12-16	Job skills	Creating a resume and tracking leads involve rehearsing phone calls and interviews. It also includes monitoring job-seeking behaviors and using behavioral contracts to encourage progress.

Week 4-26th Nov till 30th Nov	Session 17-21	Social recreational Counseling	Evaluating relationships through CRA happiness in 10 key areas. Setting goals using a relationship worksheet. Enhancing communication through role-playing.
Week 5-2nd Dec till 6th Dec	Session 22-26	Relapse Prevention	Educating individuals on refusal skills for avoiding drug use and self-monitoring for early signs of potential relapse.
Week 6-7th Dec	Session 27	Termination	Post-assessment will be taken.

Appendix B

Informed Consent

see below

رضامندی فارم

السلام علیکم،

میں، ناباب کنوال، کیپیٹل یونیورسٹی آف سائنس اینڈ ٹیکنالوجی کے نفسیات کے شعبے کی ایک طالبہ ہوں، جو ایک تحقیقی مطالعہ کر رہی ہوں جس میں نشہ آور مواد کے استعمال اور اس کے شرکاء کی زندگیوں پر اثرات کے متعلق معلومات جمع کی جائیں گی۔

اس تحقیق میں شرکت مکمل طور پر رضاکارانہ ہے، اور آپ کسی بھی وقت بغیر کسی نتیجے کے اپنی شرکت ختم کر سکتے ہیں۔ جمع کی گئی معلومات کو صرف تعلیمی مقاصد کے لئے استعمال کیا جائے گا اور یہ مکمل طور پر رازدار رہے گی۔

اس فارم پر دستخط کر کے، آپ اس تحقیق میں شرکت کی رضامندی دیتے ہیں اور اپنی معلومات کے استعمال کی شرائط سے اتفاق کرتے ہیں۔ اگر آپ کے کوئی سوالات ہیں، تو براہ کرم مجھ سے رابطہ کریں۔

آپ کے تعاون کا شکریہ۔

شرکت کنندہ کے دستخط

تاریخ

محقق کے دستخط

تاریخ

FIGURE 1: Informed Consent - Urdu

Appendix C

Rosenberg Self Esteem Scale-Urdu Version

see below

ذاتی معلومات

عمر _____

پیشہ _____ قومیت _____

شہر _____ رہائشی _____

والد کا پیشہ _____ والدہ کا پیشہ _____

کل خاندان کے افراد _____ پیدائش کی ترتیب _____ بہن بھائی _____

تعلیمی معیار

- کوئی رسمی تعلیم نہیں
- پرائمری
- سیکنڈری
- ہائی اسکول
- ایسوسی ایٹ ڈگری
- بیچلرز ڈگری
- ماسٹرز ڈگری
- ڈاکٹریٹ
- دیگر (براہ کرم وضاحت کریں) _____

ملازمت کی حیثیت

- مکمل وقت ملازم
- جز وقتی ملازم
- بے روزگار
- ریٹائرڈ
- طالب علم
- دیگر (براہ کرم وضاحت کریں) _____

ازدواجی حیثیت

- غیر شادی شدہ
- شادی شدہ
- طلاق یافتہ
- بیوہ
- دیگر (براہ کرم وضاحت کریں) _____

خاندانی نظام

□ نیوکلنیر

□ مشترکہ

خاندان کی کل آمدنی

• 5,000 سے 20,000

• 20,000 سے 50,000

• 50,000 سے 100,000

• 100,000 اور اس سے زیادہ

آپ کی آمدنی

• 5,000 سے 20,000

• 20,000 سے 50,000

• 50,000 سے 100,000

• 100,000 اور اس سے زیادہ

منشیات کے استعمال کی معلومات

منشیات کی قسم _____ منشیات کے استعمال کا دورانیہ _____

علاج کا دورانیہ _____ کوئی نفسیاتی یا جسمانی مسئلہ _____

منشیات کے استعمال کی وجہ۔ _____

FIGURE 2: Rosenberg Self Esteem Scale - Urdu

Appendix D

Multidimensional Perceived Social Support Urdu Version

see below

سوالنامہ

نام-----جنس-----عمر-----

ہدایات:- نیچے دیئے گئے بیانات آپ کے اپنی ذات کے متعلق عمومی احساسات کی ترجمانی کرتے ہیں۔ برائے مہربانی ان بیانات کی درجہ بندی کیجئے تاکہ واضح ہو سکے کہ کون سا درجہ آپ کے احساسات کو بہتر انداز میں ظاہر کرتا ہے۔

مکمل اتفاق	اتفاق	اختلاف	مکمل اختلاف
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مثال کے طور پر:

اگر آپ محسوس کریں کہ درج ذیل بیان آپ کے احساسات کی مکمل ترجمانی کرتا ہے تو آپ مکمل اتفاق کے خانے میں درست (✓) کا نشان لگادیں۔
اگر آپ محسوس کریں کہ درج ذیل بیان آپ کے احساسات کی بالکل ترجمانی نہیں کرتا ہے تو آپ مکمل اختلاف کے خانے میں درست (✓) کا نشان لگادیں۔

بیان نمبر	بیانات	مکمل اتفاق	اتفاق	اختلاف	مکمل اختلاف
۱-	مجموعی طور پر میں اپنے آپ سے مطمئن ہوں۔				
۲-	کبھی میں سوچتا/سوچتی ہوں کہ میں بالکل اچھا/اچھی نہیں ہوں۔				
۳-	میں محسوس کرتا/کرتی ہوں کہ مجھ میں کئی خوبیاں ہیں۔				
۴-	میں کاموں کو اتنی ہی اچھی طرح کر سکتا/سکتی ہوں جیسا کہ زیادہ تر لوگ۔				
۵-	میں محسوس کرتا ہوں کہ میرے پاس اتنا کچھ نہیں ہے، جس پر میں فخر کروں۔				
۶-	کبھی میں اپنے آپ کو یقینی طور پر ناکارہ سمجھتا/سمجھتی ہوں۔				
۷-	میں محسوس کرتا/کرتی ہوں کہ میں ایک قابل قدر انسان ہوں، کم از کم دوسروں کے برابر۔				
۸-	کاش میں اپنے آپ کو اور زیادہ قابل احترام سمجھتا/سمجھتی۔				
۹-	میں مجموعی طور پر یہ محسوس کرنے پر مائل ہوں کہ میں ایک ناکام شخص ہوں۔				
۱۰-	میں اپنے متعلق مثبت رویہ رکھتا/رکھتی ہوں۔				

Appendix E

WHO-Quality of Life BREF Urdu Version

see below

WHOQOL-BREF

ہدایات:

اس سوالنامہ میں آپ کی زندگی کے معیار، صحت اور زندگی کے دیگر پہلوؤں کے بارے میں پوچھا جائے گا۔ براہ مہربانی اپ تمام سوالات کے جواب دیں۔ اگر آپ کسی سوال کے جواب کے بارے میں یقینی طور پر کچھ نہیں کہہ سکتے تو سب سے مناسب جواب کا چناؤ کریں۔ عموماً یہ وہ جواب ہو سکتا ہے جو کہ آپ کے ذہن میں سب سے پہلے آئے۔ آپ سے گزارش ہے کہ اپنے ذاتی معیار، امیدیں، خوشیاں اور خدشات ذہن میں رکھیں۔ سوالات دیتے وقت پچھلے دو ہفتوں کی زندگی کو ذہن میں رکھیں۔

مثلاً

کیا آپ کو دوسروں کی ایسی مدد حاصل ہے جو آپ چاہتے ہوں؟

بالکل نہیں	تھوڑی بہت	درمیانی حد تک	بہت زیادہ	بہت ہی زیادہ
1	2	3	4	5

اگر پچھلے دو ہفتوں سے آپ کو دوسروں کی بہت زیادہ مدد حاصل رہی ہو تو آپ نمبر 4 پر دائرہ لگا سکتے ہیں۔ کیا آپ کو دوسروں کی ایسی مدد حاصل ہے جو آپ چاہتے ہوں؟

بالکل نہیں	تھوڑی بہت	درمیانی حد تک	بہت زیادہ	بہت ہی زیادہ
1	2	3	4	5

لیکن اگر پچھلے دو ہفتوں سے آپ کو دوسروں کی مدد بالکل بھی نہیں ملی ہو تو آپ نمبر 1 پر دائرہ لگا سکتے ہیں۔ آپ کے تعاون کا شکریہ

آپ سے گزارش ہے کہ ہر سوال کو غور سے پڑھیں اور اپنے احساسات کا جائزہ لیں اور پھر اُس نمبر پر دائرہ لگائیں جو آپ کے احساسات کو بہتر طور پر ظاہر کرتا ہو۔

1	آپ اپنے معیار کی زندگی کو کس درجہ کامحسوس کرتے ہیں۔	بہت برا 1	برا 2	نہ اچھا نہ برا 3	اچھا 4	بہت اچھا 5
2	آپ اپنی صحت سے کس حد تک مطمئن ہیں۔	بہت غیر مطمئن 1	غیر مطمئن 2	نہ مطمئن نہ غیر مطمئن 3	مطمئن 4	بہت مطمئن 5

مندرجہ ذیل سوالات میں آپ کچھ مخصوص چیزوں کے بارے میں پوچھا جائے گا کہ ان سے آپ کا پچھلے دو ہفتوں میں کس حد تک تجربہ ہوا ہے۔

3	آپ کس حد تک محسوس کرتے ہیں کہ جسمانی درد آپ کے لئے وہ کام کرنے میں رکاوٹ بنتی ہے جس کا کرنا آپ کے لئے ضروری ہوتا ہے۔	بالکل نہیں 1	تھوڑا بہت 2	درمیانی حد تک 3	بہت زیادہ 4	بہت ہی زیادہ 5
4	روزمرہ کاموں کی ادائیگی کے لئے آپ کس حد تک طبی علاج کی ضرورت پڑتی ہے۔	1	2	3	4	5

125. Translated by Touseef Khalid & Ruhkana Kausar, Ph.D in 2006.
Developed by Dr. J. Orley, Dr. W. Kuyken, Prof S. Szabo, WHOQOL Group.
Institute of Applied Psychology,
University of the Punjab, Lahore-Pakistan.

5	4	3	2	1	آپ کس حد تک اپنی زندگی سے لطف اندوز ہوتے ہیں۔	5
5	4	3	2	1	آپ کس حد تک اپنی زندگی کو بامعنی محسوس کرتے ہیں۔	6
5	4	3	2	1	آپ کس حد تک اپنے آپ کو توجہ مرکوز کرنے کے قابل سمجھتے ہیں۔	7
5	4	3	2	1	آپ روزمرہ زندگی میں اپنے آپ کو کس حد تک محفوظ کرتے ہیں۔	8
5	4	3	2	1	آپ کے ارد گرد کا طبعی ماحول کس حد تک صحت مندانہ ہے۔	9
5	4	3	2	1	کیا آپ روزمرہ زندگی کے لئے مناسب توانائی محسوس کرتے ہیں۔	10
5	4	3	2	1	کیا آپ کے لئے اپنی ظاہری جسمانی شکل و صورت قابل قبول ہے۔	11
5	4	3	2	1	کیا آپ کے پاس اپنی ضروریات پوری کرنے کے لئے مناسب پیشہ موجود ہے۔	12
5	4	3	2	1	آپ کو روزمرہ زندگی گزارنے سے متعلق کتنی ضروری معلومات دستیاب ہیں۔	13
5	4	3	2	1	آپ کو سیر و تفریح کے مواقع کس حد تک میسر ہیں۔	14
5	4	3	2	1	آپ اپنے ارد گرد جسمانی طور پر کس حد تک چلنے پھرنے کے قابل ہیں۔	15

مندرجہ ذیل سوالات میں آپ سے پوچھا گیا ہے کہ بچھلے دو ہفتوں سے آپ نے اپنے زندگی کے مختلف پہلوؤں کے حوالے سے کس قدر اچھا یا مطمئن محسوس کیا۔

انتہائی مطمئن	مطمئن	نہ مطمئن نہ غیر مطمئن	غیر مطمئن	انتہائی غیر مطمئن	آپ اپنی نیند سے کس حد تک مطمئن ہیں	16
5	4	3	2	1		
5	4	3	2	1	آپ اپنی روزمرہ کام سرانجام دینے کی صلاحیت سے کس حد تک مطمئن ہیں۔	17
5	4	3	2	1	آپ اپنی کام کرنے کی صلاحیت سے کس حد تک مطمئن ہیں۔	18
5	4	3	2	1	آپ اپنی ذات سے کس حد تک مطمئن ہیں۔	19
5	4	3	2	1	آپ اپنے تعلقات سے کس حد تک مطمئن ہیں۔	20
5	4	3	2	1	آپ اپنی جنسی زندگی سے کس حد تک مطمئن ہیں۔	21
5	4	3	2	1	آپ اپنے دوستوں سے ملنے والی مدد سے کس حد تک مطمئن ہیں۔	22
5	4	3	2	1	آپ اپنی رہائش کی جگہ کے حالات سے کس حد تک مطمئن ہیں۔	23
5	4	3	2	1	آپ طبعی سہولتوں تک اپنی رسائی سے کس حد تک مطمئن ہیں۔	24

5	4	3	2	1	آپ اپنے ذرائع آمدورفت سے کس حد تک مطمئن ہیں۔	25
بمیشہ	بہت زیادہ	کبھی کبھار	بعض اوقات	کبھی نہیں	آپ کس حد تک منفی احساسات کا شکار رہتے ہیں مثلاً اداسی، مایوسی، پریشانی اور افسردگی وغیرہ۔	26
5	4	3	2	1		

This translation was not created by the World Health Organization (WHO). WHO is not responsible for the content or accuracy of this translation. In the event of any inconsistency between the English and the translated version, the original English version shall be the binding and authentic version.

125. Translated by Touseef Khalid & Rukhsana Kausar, Ph.D in 2006.
Developed by Dr. J. Orley, Dr. W. Kuyken, Prof S. Szabo, WHOQOL Group.
Institute of Applied Psychology,
University of the Punjab, Lahore-Pakistan.

FIGURE 4: WHO-Quality of Life BREF Urdu Version

Appendix F

Research Ethics Committee Certificate of review and Support

see below



Capital University of Science & Technology
Your Journey Awaits

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Kohata Road Zone V,
Islamabad Pakistan.

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W www.cust.edu.pk

Ref: CUST/FMSS/REC/1287

October 24, 2024

RESEARCH ETHICS COMMITTEE CERTIFICATE OF REVIEW AND SUPPORT

This is to certify that Project titled: "Impact of the Community Reinforcement Approach on Self-Esteem, Social Support and Quality of Life among males with substance use disorder in rehabilitation center" submitted by Scholar: Navab Kanwal MSP231007 and supervised by: Ms. Sadaf Zeb reviewed by the Research Ethics Committee of Faculty of Management and Social Science, meets the requirements of the American Psychological Association's Ethical guidelines for Human Research and is **REVIEWED** and **APPROVED** by Research Ethics Committee of Faculty of Management and Social Sciences.

It is the Scholar's responsibility to ensure that all researchers associated with this project are aware of the conditions of approval and which documents have been approved.

The Scholar is required to notify the Research Ethics Committee in case of any amendment in the project, specifically:

- Any significant change to the project and the reason for that change, including an indication of ethical implications (if any)
- Serious adverse effects on participants and the actions taken to address those effects
- Any other unforeseen events or unexpected developments that merit notification
- The inability of the Principal Investigator to continue in that role, or any other change in research personnel involved in the project
- A delay of more than 12 months in the commencement of the project; and,
- Termination or closure of the project.

Dr. Sabahat Haqqani

Convener, Research Ethics Committee
Faculty of Management and Social Sciences
Capital University of Science and Technology
Islamabad

Appendix G

Permission Letter

see below



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Ref. CUST/IBD/PSY/Thesis-1286
October 24, 2024

TO WHOM IT MAY CONCERN

Capital University of Science and Technology (CUST) is a federally chartered university. The university is authorized by the Federal Government to award degrees at Bachelor's, Master's and Doctorate level for a wide variety of programs.

Ms. Nayab Kanwal, registration number **MSP231007** is a bona fide student in MS Psychology program at this University from Fall-2022 till date. In partial fulfillment of the degree, she is conducting research on "Impact of the Community Reinforcement Approach on Self-Esteem, Social Support and Quality of Life among males with substance use disorder in rehabilitation center". In this continuation, the student is required to collect data from your institute.

Considering the forgoing, kindly allow the student to collect the requisite data from your institute. Your cooperation in this regard will be highly appreciated.

Please feel free to contact undersigned if you have any query in this regard.

Best Wishes,

Dr. Sabahat Haqqani
Head, Department of Psychology
Ph No. 111-555-666 Ext: 178
sabahat.haqqani@cust.edu.pk