

**COGNITIVE BEHAVIORAL THERAPY STRATEGIES AND ADULT OPIOID  
ABUSE: A PHENOMENOLOGICAL STUDY OF PRECONTEMPLATION TO  
CONTEMPLATION STAGE IN RESIDENTIAL TREATMENT PROGRAMS**

Victor White

Department of Community Care and Counseling, Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

School of Behavioral Sciences

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### **Abstract**

Cognitive Behavioral Therapy (CBT) for drug addiction is an effective treatment strategy, as a monotherapy and in combination with other therapies and treatment strategies. This phenomenological qualitative study described the struggles of adults diagnosed with opioid use disorder (OUD) and their experiences with how CBT strategies moved them to the contemplation stage of change in a residential treatment program. In the contemplation of change stage, the adults acknowledged that their opioid addiction behaviors are problems that need to be addressed, beginning with motivational interviewing. Utilizing the Cycle of Change Model (Prochaska and DiClemente), the Cognitive-Behavioral Theory (Aaron Beck), the Social Learning Theory (Albert Bandura), and the Theory of Planned Behavior (Icek Ajzen), this study sought to uncover the recovery process of patients with opioid addictions and analyzed the factors that influenced their addictions and behavior changes in CBT treatment. Interviews and focus group discussions were used to collect qualitative data, and thematic analysis was applied to develop a model to understand the effectiveness of CBT and persistence in recovery from opioid addiction. This model, derived from the theory of planned behavior, was grounded in the qualitative data and was significant in understanding the phenomenon of change, and how the change process was integrated into the lives of people addicted to opioids. Specifically, the model reflected the effectiveness of CBT in moving adults struggling with opioid addiction from the precontemplation stage of change where they did not see or acknowledge opioid addiction as a problem, to the contemplation stage of change where they were aware and acknowledged that their addictive behaviors may be problematic.

*Keywords:* Cognitive Therapy, addiction, recovery, interventions, residential, treatment, disorders.

## Table of Contents

Abstract .....	3
Chapter One: Introduction .....	10
Overview .....	10
Background .....	10
Historical Background .....	12
Social Background .....	13
Theoretical Background .....	13
Situation to Self .....	14
Problem Statement .....	14
Purpose Statement .....	15
Significance of the Study .....	16
Practical Significance .....	17
Theoretical Significance .....	17
Research Questions .....	17
Definitions .....	19
Summary .....	20
Chapter Two: Literature Review .....	22
Overview .....	22
Theoretical Framework .....	24
Cycle of Change Model .....	25
Social Learning Theory .....	26
Theory of Planned Behavior .....	26

Cognitive-Behavioral Theory .....	27
Related Literature.....	27
___ Research Gap: Opioid Addiction .....	28
___ The Significance of CBT Therapy .....	31
Effectiveness of CBT .....	35
Potential for Success.....	47
Potential for Impact .....	48
Summary .....	51
Chapter Three: Methods.....	52
Overview .....	52
Design .....	52
Phenomenology .....	52
Heuristic Approach.....	53
Research Questions.....	54
Setting .....	54
___ Rationale .....	55
___ Quality Assurance.....	55
___ Research Context .....	56
Participants.....	56
Recruitment of Participants .....	56
Inclusion and Exclusion Criteria .....	57
Participants Description.....	58
Procedures.....	58

Focus Group Methodology.....	58
Focus Group Content.....	59
Focus Group Style .....	59
The Researcher’s Role .....	59
Interviews.....	60
Interview Methodology.....	60
Interview Content.....	60
Interview Style .....	61
Data Analysis .....	61
Coding .....	62
Constant Comparative Analysis .....	62
Negative Case Analysis.....	62
Memo Writing .....	63
Theoretical Saturation.....	63
Trustworthiness.....	63
Credibility.....	63
Dependability and Confirmability.....	64
Transferability .....	65
Member Checks.....	65
Research Auditor .....	66
Ethical Considerations .....	66
Summary .....	67
Chapter Four: Findings .....	69

Overview .....	69
Participants.....	69
Results.....	74
Theme Development.....	75
Support .....	79
Perception .....	80
Positivity of Mindfulness .....	82
Experience/Opinion.....	83
Change.....	86
Referring.....	87
Feelings/Emotions .....	88
Research Question Responses.....	89
Overarching Research Question.....	89
Summary.....	91
Chapter Five: Conclusion .....	93
Overview.....	93
Summary of Findings.....	94
Overarching Research Question.....	95
Discussion.....	98
Superordinate Theme 1: Support.....	98
Superordinate Theme 2: Perception .....	99
Superordinate Theme 3: Positivity of Mindfulness.....	100
Superordinate Theme 4: Experience/Opinion .....	101

Superordinate Theme 5: Feelings/Emotions .....	102
Implications.....	104
Empirical Implications .....	104
Practical Implications .....	104
Delimitations and Limitations.....	104
Delimitations .....	104
Limitations.....	104
Recommendations for Future Research .....	105
Summary .....	106
References.....	108
Appendices.....	129
Appendix A: Interview Criteria .....	129
Appendix B: Focus Group Criteria .....	130

**List of Tables**

Table 1: Participant Descriptions.....	70
Table 2: Superordinate Themes .....	78

## **Chapter One: Introduction**

### **Overview**

This phenomenological qualitative study describes the struggles of adults diagnosed with opioid use disorder (OUD) and their experiences with how CBT strategies moved them to the contemplation stage of change in a residential treatment program. This research aimed at understanding the perspectives of people recovering from opioid addiction. Addiction to opioids is a major health problem that affects 1.6 million Americans (HHS, 2021). Opioids were introduced to the medical field to alleviate chronic pain (Itzoe & Guarnieri, 2017). The impact of opioid addiction on the physical and mental wellness of people is immensely detrimental, which is why there is a need to develop harmless remedies for chronic pain that do not lead to dependence. In the past, CBT treatment methods have been used alongside medical treatments to help individuals who struggle with opioid addiction reach the contemplations stage of change (Itzoe & Guarnieri, 2017). This study includes a comparison between findings in several studies about the effectiveness of CBT in helping individuals who struggle with opioid addiction navigate to the contemplation stage of change and find their healing in a residential treatment facility. Keywords and phrases were defined, and research questions listed pertaining to the study.

### **Background**

A critical analysis of previous literature was useful in addressing the research questions for this study and enabling the researcher to build upon the thesis by addressing the research gaps in opioid addiction. This study examines the contemplation stage of change, the significance of residential treatment, and the CBT approaches and effectiveness in advancing individuals who struggle with opioid addiction to the contemplation stage of change in a residential treatment

facility. The resources used in the literature review emphasized critical issues on the application of CBT to help opioid clients move into the contemplation stage of change and begin the recovery treatment process (Jivraj et al., 2020). The researcher for this study utilized scholarly work for the literary review to investigate the extensiveness of the content and evidence already available and related to the outcomes of CBT given to persons addicted to opioids (Jivraj et al., 2020).

Research by credible authors received special attention (Jivraj et al., 2020). After analyzing existing literature, the researcher for this study developed four research questions to guide the research design process, facilitate data collection, and conduct analysis. The research questions were designed to direct data collection with four major objectives. One objective was for the researcher of this study to assess the effectiveness of using CBT strategies to move individuals who struggle with opioid addiction to the contemplation stage of change in a residential treatment facility. Another objective was to identify the effects of the residential treatment CBT approach. A third objective was to determine the significance of keeping individuals who struggle with opioid addiction in a residential treatment facility. Lastly, the researcher of this study wanted to discover the possible limitations and alternatives to CBT strategies in moving individuals who struggle with opioid addiction to the contemplation stage of change.

The researcher of this study used a qualitative analysis method comprised of interviews, focus groups on hermeneutic phenomenology, and data analysis (Akinode & Khan, 2018) to explore the efficacy of CBT strategies in moving adults struggling with opioid addiction to the contemplation stage of change in a residential treatment program. Using qualitative analysis, the researcher was able to study the perceptions and experiences of participants of CBT, as well as

the implications of their experiences (Akinyode & Khan, 2018). Understanding how CBT techniques have been purposeful in aiding individuals who struggle with opioid addiction is critical for considering CBT as a method for recovery and healing.

The data collection procedures, analysis standards, recruitment criteria, and ethical considerations followed throughout this research were discussed in detail with the IRB and professionals who practice CBT regarding how procedures, standards, and criteria were suitable for this study (Korstjens & Moser, 2018). The researcher attempted to maintain an unbiased approach to data collection and analysis through supervision and reflexivity, which reduced bias potentialities (Korstjens & Moser, 2018). Quality assurance procedures were incorporated to ensure data integrity. The quality assurance procedures selected for this study included member checks, research audits, transferability, credibility, and confirmability, (Korstjens & Moser, 2018).

### **Historical Background**

In 2017, opioid overdose claimed the lives of more than 47,000 people in the United States (Azadfard et al., 2013). Thus, opioid abuse and addiction was declared a public health crisis. Prescription opioid pain relievers, heroin, and fentanyl, an illicit and powerful synthetic opioid, were among the drugs abused by the people who overdosed (NIH, 2021). Also in 2017, approximately 1.7 million Americans were diagnosed with substance use disorders (SUDs) related to prescription opioid pain relievers, while 652,000 people suffered from a heroin addiction (NIH, 2021). According to the Department of Health and Human Services (HHS, 2021), 10.1 million people abused prescription opioids, 1.6 million had an opioid use disorder, 1.6 million others abused it for the first time, and 70,630 Americans died of an opioid drug

overdose. Opioid abuse and addiction remain a public health crisis of epidemic proportions in the United States (National Institute of Drug Abuse, 2018a).

### **Social Background**

Chronic pain is one of the most prevalent, costly, and disabling public health conditions affecting millions of people in the United States (Severino et al., 2018). It is estimated that up to 50.2 million (20.5%) adult Americans experience chronic pain. About \$300 billion in workforce productivity is lost annually due to chronic pain (Yong et al., 2021). According to the National Academies of Sciences, Engineering, and Medicine (NASEM) (2018), pain has become a public health concern due to its high prevalence, seriousness, and disparities. Various authors have suggested pain as a rising public health concern due to its increasing effects on vulnerable populations, such as reduced quality of life and increased medical expenses and economic costs (Buckenmaier et al., 2019). Utilization of public health strategies, and prevention at both the population and individual levels are needful (Buckenmaier et al., 2019).

### **Theoretical Background**

Several models and theories have been developed to explain the phenomenon of drug addiction and treatment options. The cycle of change model (Prochaska and DiClemente, 1982) is an important model. This model helped to illustrate how change occurs in individuals receiving treatment or therapy for addiction. The social learning theory (Albert Bandura, 1977) and its more contemporary version, the social cognitive theory (Bandura, 1986), were used in this study to explain reasons humans tend to misuse and abuse opioids. The theory of planned behavior (Ajzen, 1985) emphasizes the beliefs of individuals as the basis of their behaviors. The theory posits that attitude, subjective norms, and perceived behavioral control interact to shape the intentions of an individual. The cognitive behavioral theory (Aaron Beck, 1963, 1964) states

that the emotional, behavioral, and physiological reactions of people are influenced by their experiences, and therefore, correcting misperceptions and modifying unhelpful thoughts and behaviors can bring about improved reactions.

### **Situation to Self**

The motivation for conducting this research was derived from a deep interest in opioid addiction treatment, particularly employing cognitive-behavioral therapy (CBT). The goal is to comprehend the effectiveness of CBT in moving individuals addicted to opioids from the precontemplation to contemplation stage of change. A constructivist philosophical paradigm aided in investigating the feelings, opinions, and thoughts of participants in a residential CBT program. Ontology (nature of reality) is a social construction between the researcher and the participants. Fundamentally, the researcher was bound by a constructivist approach to ethics that prioritizes fair representation of the views of participants, trustworthiness, and authenticity of the findings. The researcher adopted a more personal, interactive mode of data collection and ensured confirmability of data, interpretations, outcomes of the research, and the views of participants and the meanings they ascribe to their experiences (Azadfard et al., 2013). The researcher applied the qualitative methodology, namely interviews, observations, and document reviews (Mertens, 2019).

### **Problem Statement**

Research, practice, and popular media depict opioids in two manners: as pain relief and as an addictive agent. On one hand, opioids are exemplified as an essential part of pain management, and individuals who do not have access to them when needed often experience agony after injuries or during illness (Kelly & Wakeman, 2019). On the other hand, individuals with access to opioids may experience temporary relief from aches, but the same individuals

discover the addictive attribute of opioids and the significant adverse side effects and enduring health problems, including overdose, that can surface after long term use (NIH, 2021).

The problem with opioids is addiction and the ineffectiveness of treatment programs offered to individuals experiencing this problem. Beck (2020) and Kelly & Wakeman (2019) suggested that the cognitive behavioral therapy (CBT) approach was effective when used alone as a monotherapy or with other treatment options, such as medications as part of contingent management (Beck, 2020; Kelly & Wakeman, 2019). While many researchers have focused on the effectiveness of CBT using postpositivist (quantitative) designs to investigate, constructivist (qualitative) study on the effectualness of CBT is scarce. There is limited research in exploring the effectiveness of CBT in helping program participants navigate the process of overcoming opioid addiction as outlined in the cycle of change model (Prochaska and DiClemente, 1982), particularly in moving adults struggling with opioid addiction from the precontemplation stage to the contemplation stage.

### **Purpose Statement**

The purpose of this study was to describe the experiences of individuals struggling with opioid use disorder and to deconstruct their experiences with CBT strategies, noting how such strategies were helpful in moving them from the precontemplation stage of change to the contemplation stage of change in a residential treatment program. This phenomenological qualitative study sought to describe the experiences of adults struggling with opioid use disorder and their experiences with CBT strategies moving them to the contemplation stage of change. In this research, the concept of moving adults struggling with opioid addiction to the contemplation stage of change through CBT implied that the individuals first acknowledged they have an addiction problem and need treatment to overcome this problem.

Researchers and practitioners have recognized that the first step towards recovery is acknowledging that substance use has become a problem by disrupting the normal functioning and quality of life (Clark, 2017; James & Tunney, 2017; Young et al., 2020). This study was guided by the cycle of change model (Prochaska and DiClemente, 1982) to understand the process of behavior change and change management. The cognitive-behavioral theory (Aaron Beck, 1963, 1964) enlightened understanding of the link between thoughts and behaviors, The social learning theory (Albert Banduram 1977) facilitated understanding of the link between modeling and addiction. The theory of planned behavior (Icek Ajzen, 1985) helped to uncover the effects of intention on addictive behaviors.

### **Significance of the Study**

The opioid crisis in the United States can best be solved by managing opioid prescriptions to achieve safe levels, as witnessed in Germany, United Kingdom, and Argentina (Bhadelia et al, 2019). Overseeing opioid prescriptions may involve targeting and confronting powerful interests in the politically connected pharmaceutical world. This effort may, nonetheless, come rather too late for individuals who are already addicted (Kelly & Wakeman, 2019). It is for addicted individuals that this research was conducted. This study may contribute to the practices of substance abuse programs by providing insightful information that can educate, inform, and empower scholars, researchers, practitioners, and policymakers to effectively address opioid addiction in program participants (Marion & Oliver, 2014). The findings may address opioid misuse, disorders, risks, addiction, overdose, and death (Kelly & Wakeman, 2019).

## **Practical Significance**

This study can potentially contribute toward opioid demand reduction as the treatment models examined can support the prevention of opioid addiction and can propose treatment, and recovery processes (Clark, 2017). The experiences of individuals who transitioned to the pre-contemplation stage of change may increase awareness and education for professionals who work with individuals addicted to opioids. Shared experiences can reveal the challenges individuals face when receiving treatments and can increase insight into resources that are needed for recovery.

## **Theoretical Significance**

Theoretically, this study may contribute to the literature focusing on the effective treatment models as options for supporting participants with addictions. This study provides valuable information about the success and adverse effects of addiction interventions. The researcher for this study will review the efficacy of CBT in short-term programs (Ronzani, 2018). Given the prevalence of opioid abuse and addiction, and the lack of qualitative studies exploring the effectiveness of CBT in helping addicted participants to acknowledge their dependencies in the contemplation stage, this study may provide an impetus for future research (Young et al., 2020).

## **Research Questions**

*RQ1.* What were the experiences of participants with CBT strategies?

The first research question was heavily influenced by the lack of qualitative studies regarding opioid addiction and the effectiveness of CBT strategies. A goal of this study was to determine the treatment conditions necessary for participants to admit their addictions as a problem during the precontemplation stage of change (Young et al., 2020). Short-term programs

can be effective in navigating from the precontemplation to the contemplation stage of change using CBT strategies (Ronzani, 2018).

*RQ2.* What CBT strategies were perceived as helpful in moving the participants to the contemplation stage of change?

This question provided insight into the reasons participants sought treatment for their addictions. This question focused on correlating addiction with the disruption of normal functioning (Clark, 2017; James & Tunney, 2017; Young et al., 2020). Research findings regarding the cycle of change model (Prochaska and DiClemente, 1982) showed that CBT can be effective in helping navigate the maze of life.

*RQ3.* What CBT strategies were perceived as less helpful in moving the participants to the contemplation stage of change?

Nisson and Earl (2020) reported that making a list and recording unproductive thoughts did not contribute to a participant advancing to the contemplation stage of change. Answers to the third research question provided knowledge that behaviors and applicability cannot necessarily lead participants to the contemplation stage of change (Nisson & Earl, 2020). Gathering this information can provide insight into the most effective strategies for moving the participants to the contemplation stage of change.

*RQ4.* In what ways did the participants perceive the environment as conducive for conducting CBT strategies?

The fourth question described the environmental impact CBT strategies have on participants during their stays at a residential treatment program. Bell and Strang (2020) indicated that CBT strategies practiced in residential substance abuse programs held in

environments that promote safety and well-being assist participants struggling with opioid use disorders to recover from addictions.

### Definitions

1. *Addiction recovery interventions* refer to the techniques and approaches employed in helping individuals with opioid addiction to recognize the addiction as a problem and to acknowledge that they need help (Sussman, 2020).
2. *Cognitive-behavioral therapy* or *CBT* refers to a short-term therapeutic approach that is employed in the residential program to help participants addicted to opioids find new ways to behave by changing their thought patterns, recognizing their addiction problems, avoiding triggers to drug use, and coping with their situations (Beck, 2019).
3. *Contingency management (CM)* refers to a strategy to reinforce treatment adherence by offering rewards such as low-value cash incentives, voucher incentives, prize-draw methods, or the use of cognitive methods alongside medicines (NIDA, 2018b).
4. *Opioids* are psychoactive substances naturally found in the opium poppy plant, which work in the human brain by releasing several effects such as pain relief (Sussman, 2020). Opioids are legally produced as prescription medications and often sold as street or illicit drugs (Benson, 2019). Several prescription opioids are used to treat moderate to severe pain in people and work by blocking pain signals between the brain and the body. Besides controlling pain, opioids also produce feelings of relaxation, happiness, or “high,” which makes them addictive (Ronzani, 2018, p. 4).
5. *Opioid addiction* is a behavior characterized by a powerful and compulsive urge to use opioid drugs as prescribed medications or as recreation drugs, illegally. Opioid drugs are illegal when not prescribed by a medical professional and when misused, even if

prescribed lawfully. The misuse of opioids includes using the drugs when they are no longer required medically. Misuse can lead to dependence and the interference with the normal functioning of the individual (NASEM, 2017).

6. *Residential treatment* is a program in which a recovering individual is provided with 24-hour care for addiction treatment at a live-in facility for a given period.
7. *Substance use disorder (SUD)* refers to an inability to control the use of a drug or medication, whether legal or illicit, despite its harmful consequences (Kelly & Wakeman, 2019).
8. *The contemplation stage* is defined as the stage where individuals addicted to opioids acknowledge that they have a problem and begin to think about solving the problem (Hofmann & Asmundson, 2017; Prochaska & DiClemente, 1982).
9. *The precontemplation stage* is conceptualized as the point in time when the individual addicted to opioids cannot see or acknowledge the addiction as a problem (Hofmann & Asmundson, 2017; Prochaska & DiClemente, 1982).

### **Summary**

Chapter one provided the preliminary background information that placed this study and the phenomenon of interest in context. The chapter also clarified the focus of this study. The chapter began with an overview of the study, where the main objective, which is to comprehend the effectiveness of CBT strategies in moving adults struggling with opioid addiction to the contemplation stage of change in a residential treatment program, was outlined and elaborated upon in detail.

Chapter one also offered the historical, social, and theoretical context of this research. Furthermore, the information provided in this chapter demonstrated that the problem of opioid

addiction was exacerbated when opioids were introduced as prescribed painkillers in the United States. The chapter explored the use of the qualitative method for this study. This study followed the constructivist research paradigm that employs qualitative research approaches. The constructivist research paradigm is useful in understanding the recovery process pursued through the use of a CBT program.

This study recognizes opioid addiction as a national crisis and concentrated on how CBT strategies may be beneficial for moving adults struggling with opioid addiction from the pre-contemplation stage to the contemplation stage. This qualitative phenomenological study sought to explore and develop an in-depth understanding of the experience of adults struggling with opioid use disorder and their experiences with CBT strategies.

## **Chapter Two: Literature Review**

### **Overview**

The consequences of opioid addiction are devastating, leading to the need for alternative solutions for pain management and practicable treatments to alleviate the problem of addiction. In the past, CBT residential treatment methods have been used alongside medical regimens to help individuals who struggle with opioid addiction reach the contemplation stage of change. This literature review focuses on analyzing the effectiveness of using CBT therapy to move individuals who struggle with opioid addiction to the contemplation stage of change in a residential treatment facility. This literature review has been structured to address the research questions for this study. Four criteria were used to survey the literature. First, the researcher considered the relevancy of content. Valid sources needed to address critical issues on the application of CBT to help individuals who struggle with opioid addiction contemplate change and decide to begin a recovery process. Secondly, the researcher considered the types of research to include in this literature review. The researcher embraced scholarly and peer-reviewed sources exclusively due to the in-depth content. Also, scholarly research offered the evidence for the necessary findings relevant for this research work. Third, the researcher considered the authorship of sources. The focus of the researcher was to embrace studies with credible authors. Lastly, the researcher considered the scope of 60-100 sources to support this literature review. Most of the studies in this literature review focused on general CBT residential treatment approaches not specifically for opioid addiction due to the gaps in previous research. The researcher examined sources addressing CBT therapy suitable for moving individuals who struggle with opioid addiction to the contemplation stage of change in a residential treatment facility. Addressing this subject was critical for the study and required the researcher to be

particular about the search strategy. Scholarly materials proved to be helpful in a survey on using CBT therapy to move individuals who struggle with opioid addiction to the contemplation stage of change in a residential treatment facility.

Marion and Oliver (2014) stated that the history of drug and substance abuse and addiction spans over centuries, involving several types of drugs and substances. Alcoholic beverages and hallucinogens are thought to have been used as far back as 5600 B.C. The discovery of the effects of drugs and alcohol led to the abuse of these substances (Sussman, 2020). Cases of drug and substance abuse were first reported in Armenia, ancient Greece and Rome, Sumer, and China. In the nineteenth century, morphine and cocaine became popular in China, and their use spread fast to other parts of the world (Marion & Oliver, 2014).

Opium was discovered in Sumer and China around 3,400 B.C., and populations in these regions were the first to use the opium plant for medicinal purposes. At first, people took opium orally but soon discovered smoking made its effects stronger, and this became a widespread practice (Marion & Oliver, 2014). Eventually, opium was available in the United States. From opium, heroin was created. Other opioids were manufactured for medicinal purposes. The potency and desire for the effects of opioids led to addiction, which has grown into an epidemic within the United States (Benson, 2019).

In the late 1990s, pharmaceutical companies began manufacturing prescription opioid pain relievers and reassured the healthcare industry that the medications containing opium were safe and patients would not become dependent on the products (Department of Health and Human Services [HHS], 2021). Desperate to help manage pain in an expanding population of patients suffering from chronic pain, healthcare providers prescribed opioids at greater rates (Barry et al., 2019; National Academies of Sciences, Engineering, and Medicine [NASEM],

2017). Benson (2019) explained that the drugs were easily available over the counter. The availability of opioids and their effects later led to their widespread diversion and abuse, and it was soon discovered they were indeed highly addictive. With this knowledge, the rates of opioid overdose were recorded (National Institute on Drug Abuse [NIH], 2021).

Opioid addiction is a complex illness characterized by intense and, oftentimes, uncontrollable cravings for the drug, along with compulsive urges to seek and use it (Burns et al., 2015). These cravings persist regardless of any consequent outcomes (NIDA, 2018b). The medical models of addiction refer to the cravings as a brain disease because cravings affect multiple brain circuits, including the brain cells concerned with reward and motivation, learning and memory, and inhibitory control over behaviors (NIDA, 2018a).

### **Theoretical Framework**

Research and practice have shown that some people are more vulnerable to addiction than others, depending on the interplay between genetic makeup, age of exposure to drugs, demographics, and environmental influences (Marion & Oliver, 2014). Other models and theories of addiction argue that drug use is initially a personal choice, but over time, the effects of prolonged exposure to the drug on brain functioning compromise the ability of one to refrain from use, maintain self-control, or exercise willpower. Rather, addicted persons seek and consume the drug. Drug-seeking and consumption become compulsive (NIDA, 2018b).

Based on the definition of addiction, opioid dependence can be defined as a chronic, relapsing opioid use disorder characterized by the compulsive seeking of the drug, its continued use despite the harmful outcomes or consequences, and the potentially harmful and long-lasting changes to the brain (NIH, 2021). Opioid addiction is considered a complex mental illness and

brain disorder. Opioid addiction is the most severe form of substance use disorder and is a medical condition caused by habitual misuse and abuse of opioids (HHS, 2021; NIDA, 2018a).

Opioids work in the brain to produce a feeling of pleasure or “high.” Once opioids become addictive, the drug targets the reward system of the brain directly or by flooding the brain circuit with a neurotransmitter known as dopamine, which regulates and reinforces behaviors (Sussman, 2020). Dopamine, when activated at normal levels, rewards behaviors. Drugs overstimulate the neuro system and produce effects of pleasure, satisfaction, or calmness that strongly reinforce drug use behaviors, making individuals want to use opioids repeatedly (Marion & Oliver, 2014).

Marion and Oliver (2014) have shown that addiction can be treated, and chronic disorders can be managed. An ample body of research shows that combining behavioral therapy with medications, where available, is effective for many patients (Marion & Oliver, 2014). This combination of medications and behavioral interventions is referred to as medication-assisted treatment. Behavioral interventions can be administered alone. Buckenmaier et al. (2019) and NIDA (2018a) stated that treatment approaches are tailored to address the specific and subjective needs of each patient, based on drug abuse patterns and drug-related medical, psychiatric, environmental, and social problems.

### **Cycle of Change Model**

Several models and theories have been developed to explain the phenomenon of drug addiction and treatment options. Prochaska and DiClemente (1982) indicated that individuals addicted to opioids do not view addiction as a problem at first. These individuals can progress from not thinking about changing their behaviors (precontemplation) to acknowledging the problem and considering whether to make a change (contemplation), deciding to take action or

make a change (determination), making the contemplated change (action), and maintaining the change (maintenance). Individuals fighting to overcome addiction frequently resume substance abuse (relapse), and when this is the case, they typically restart the cycle of change. Many individuals typically pass through this cycle several times before they achieve a stable, addiction/substance-free change (Prochaska and DiClemente 1982).

### **Social Learning Theory**

The social learning theory of Albert Bandura (1977) and its more contemporary version, the social cognitive theory (Bandura, 1986), explain the determinants of human behavior, particularly regarding opioid misuse, abuse, and addiction. Bandura (1977, 1986, 1999) claims that a central component of these theories is the principle of reciprocal determinism, which proposes that substance abuse and addiction are determined by functional relationships between personal characteristics, social/external environment, and the drug addiction/substance abuse behaviors. Bandura (1999) asserts that the addiction of an individual develops from the observations of other people engaging in addictive behaviors and by emulating the seen actions to achieve the same effects.

### **Theory of Planned Behavior**

The theory of planned behavior (Ajzen, 1985) explains that the beliefs of an individual are linked to the behaviors of that person. The theory posits that attitude, subjective norms, and perceived behavioral control interact to shape behavioral intentions. In other words, the theory holds that behavioral intentions are the most significant determinants of social behavior (Nisson & Earl, 2020). The theory explains that the abuse of opioids or discontinued use is determined by intentions. This concept stems from the theory of reasoned action, which is applied in predicting

how an individual might behave based on their attitudes and behavioral intentions (Ajzen, 2000; Ajzen & Fishbein, 1980).

### **Cognitive-Behavioral Theory**

Cognitive-behavioral theory (Aaron Beck, 1963, 1964) states that emotional, behavioral, and physiological reactions are influenced by perceived experiences, and therefore, correcting misperceptions and modifying unhelpful thoughts and behaviors can bring about improved reactions. According to this theory, the meaning that an individual attaches to an experience, not the experience itself, is important (Newman, 2019). Based on this theory, Aaron Beck and other authors and theorists developed and modified cognitive behavioral therapy (CBT), which facilitates the understanding of the “triggers” (conditioned cues) that accompany or precede drug abuse or addiction so that an individual can be aware of and cope with potential situations or events that can trigger thoughts, feelings, and substance use behaviors (Beck, 2020). Through CBT, an individual receives assistance with developing skills to manage potential triggers, including recognizing triggers, avoiding triggers entirely when possible and appropriate, and coping with problems and problematic behaviors associated with addiction (Hofmann & Asmundson, 2017).

### **Related Literature**

While various researchers and practitioners use the term addiction, it is not recognized as a specific diagnosis in the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; DSM-5; American Psychiatric Association [APA], 2013). The DSM-5 refers to substance use disorder (SUD), which can be classified as mild, moderate, and severe. Some of the symptoms of opioid addiction include a craving or a powerful desire or urge to use an opioid despite having persistent problems caused by its use (APA, 2013; Carroll, 1998). Other signs include tolerance,

which is defined as a diminished effect with continued use and, hence, the need for increasing amounts of use to achieve the desired effect; and withdrawal, characterized by withdrawal syndrome, which is the use of the drug to relieve or avoid painful withdrawal symptoms (APA, 2013).

Ronzani (2018) emphasizes that humanity has used psychoactive substances throughout history and that different societies give different meanings to drug and substance use. According to Ronzani (2018), some people use drugs to get in touch with their sacred and religious experiences. Other people use drugs in food as spices, to alter their consciousness, and as a means of relaxation and recreation. A growing number of individuals use drugs to cope with adverse conditions such as illnesses and physical or psychological problems (p.3). Due to the high demand for drugs, drugs entered the commercial market, eliciting an economic interest in capitalist societies (Ronzani, 2018).

Drugs have a prominent level of social, cultural, and economic influence on people and societies. The negative influence of drugs has led to actions that oppose moral and religious obligations (NIDA, 2018a). Addiction treatment was long tied to philanthropy and religious efforts and classified as “deviance” or “madness” (Ronzani, 2018, p. 4). According to Ronzani (2018), while the criminal and judicial systems categorize drug abuse as a criminal offense, within the medical field, drug addiction is considered an unhealthy behaviour. Pharmaceutical companies are exploiting the therapeutic potential of some psychoactive properties in drugs to generate profits (Marion & Oliver, 2014).

### **Research Gap: Opioid Addiction**

CBT has been used for treating persons enrolled in residential substance abuse treatment programs. Yet, there is a lack of qualitative research regarding the effectiveness of CBT in

residential treatment programs to help individuals who struggle with opioid addiction reach the contemplation stage of change. Past scholars have studied residential substance abuse treatment programs without a focus on opioids.

Studies incorporating opioids and the residential substance abuse treatment program do not expound on the effectiveness of the residential substance abuse treatment program (Kelty & Hulse, 2017; Marsden et al., 2017, 2019). Other studies have examined supplementary treatment methods for individuals who struggle with opioid addiction (Bell & Strang, 2020; Hadland et al., 2018; Noble & Marie, 2019; Volkow et al., 2019) and have considered medication and therapy without necessarily focusing on the residential approach. Future research needs to focus more on determining the impact of CBT on the recovery of individuals in residential treatment programs who struggle with opioid addiction. Individuals who struggle with opioid addiction face a major recovery problem, especially when they are under an opioid prescription. Medical professionals trust and expect clients to take medications as prescribed, which helps clients to avoid addiction. (Burton & Martin, 2020). One of the challenges for CBT practitioners when helping opioid addicted persons is to assist addicted individuals with reaching the contemplation stage of change.

To develop the understanding of what it takes for CBT strategies to influence individuals in inpatient treatment programs who struggle with opioid addiction to reach the contemplation stage of change, studies addressing opioid therapy would be helpful. An analysis of research studies provides a good framework to address the established gap. For instance, Finch et al. (2018) explored the Recovery High School treatment (RHS) that focused on post-treatment education and recovery support for young people with substance abuse disorder. The study aimed at connecting the high school students to professionals for help to overcome their

addictions in the early stage of addiction. The experiment used the quasi method to compare the results between the students who were enrolled in RHS and individuals who did not participate in RHS. In the study, 134 students participated in the RHS program, and 60 students participated in a non-RHS program. By applying multilinear regression methods and adjusting for a range of confounders, the researchers of the study found that students who attended the RHS program were more likely to abstain from marijuana and alcohol use (Blondell et al., 2010). Thus, the method used by the researcher was effective in predicting outcomes. However, the study did not to assess the effectiveness of CBT utilized in residential treatment centers focusing on opioid addiction.

A study conducted in Western Australia between 2001 and 2010 centered on illicit opioid use and the propensity for fatality because of using opioids, which can lead to overdose. Risk factors for fatal opioid overdose were identified for clients treated with methadone, buprenorphine, or implant naltrexone. (Kelty & Hulse, 2017). The researchers reported the effective medications such as methadone and buprenorphine (Bell & Strang, 2020). Findings indicate treatment failures occurred due to clients not responding to treatments and recommending injections, or taking home naloxone (Baroni et al., 2019). The focus of this study on treatment methods did not show the effectiveness of residential treatment. Other studies focus on different addictions, such as eating disorders, alcohol, and other drugs (Baroni et al., 2019; Nasrallah et al., 2019). Government and health professionals have recommended further exploration into the treatment of opioid addiction. By analyzing the current treatment methods for opioid addiction, a recommendation can be offered to confront the growing crisis of opioid addiction (Marissen et al., 2017).

## **The Significance of CBT Therapy**

This research on the CBT residential treatment method sought to help individuals who struggle with opioid addiction reach the contemplation stage of change, an accomplishment that is often difficult to achieve because of the strong hold that addiction has on people who use opioids. Noble and Marie (2019) relayed that over 10 million people in 2018 who misused prescription opioids died from an overdose. Over 32,000 people died of an overdose of synthetic prescription opioids. According to a CDC report, many people who developed an addiction to prescription drugs also began using hard drugs, like heroin. Based on these figures, there is a greater need to ascertain treatments that work in helping people gain sobriety from opioid drug use. Current CBT models may be helpful in guiding individuals who struggle with opioid addiction to recover from their conditions. The elevated level of risks that individuals who struggle with opioid addiction face in the USA raise the urgency for establishing some treatment methods to address the current opioid addiction crisis. It is not enough to define available treatment methods. There is a greater need to establish which treatments work best. Treatment in a residential program where CBT is offered can be the answer to assisting people break free from the dependency on opioids.

The high risk and consequences of addiction are justifiable purposes for gauging CBT as a process for inspiring opioid users that recovery is possible. (Mumba, 2018). Unlike the hard drugs that are prohibited and difficult to access, opioids are easily accessible through pharmacies. Ballantyne and Mao (2003) stated that the risks for opioid addiction are higher today than at any time in history because anyone who uses opioids can develop addictive behaviors. As Noble and Marie (2019) explained, problematic opioid use may include misuse of prescription medications, such as oxycodone, morphine, and codeine. The risks of opioid abuse due to

prescriptions increase steadily among patients. Through CBT treatment for individuals in a residential program, individuals can work to break the patterns and beliefs surrounding their addictions. Support programs are helpful in recovery from addiction to opioids (Carroll et al., 2006). It is worth noting that opioid abuse often starts with a short-term treatment where doctors prescribe potent medications to eliminate acute pain. Usually, these strong medications are prescribed following surgery, trauma, or an exacerbating health condition. The user may develop an addiction. The presence of addiction becomes apparent when individuals begin acquiring and using opioids beyond the expiration dates of their prescriptions. One way to mitigate the possibility of addiction is to thoroughly screen patients before opioids are prescribed.

The role of CBT therapy in moving individuals who struggle with opioid addiction to the contemplation stage of change in a residential treatment facility can diffuse public health concerns. Huhn et al. (2020) asserted that the opioid crisis has significantly affected the US. The high number of individuals affected by the opioid crisis is evidence that opioid addiction is a serious issue for which solutions must be determined. It is necessary to transition adult opioid users into long-term recovery patients for whom CBT interventions and safe nonaddictive medications can be significant during the journey to recover. Huhn et al. (2020) focused on the treatment, such as detox, for opioid use disorders in residential facilities in the U.S. Since the study focused on medications, it was essential to determine whether the participant was still using prescriptions. The article asserted that individuals misusing opioids and not yet in treatment reported positive views regarding the cleanliness of the facility and the kindness of the staff (Kelty & Hulse, 2017). The study pointed out that other factors, such as gender, race, and age, are critical in developing strategies for interventions for opioid users during the contemplation stage of change (Becker et al., 2016). Essentially, the researchers revealed that the

residential treatment programs and their use of direct client supervision provided an ideal opportunity for better care. The revelations from the study are critical in developing the significance of CBT to the identified population.

Research by Dansie and Turk (2013) revealed that CBT interventions are needed to counter the risks for addiction due to the increase in opioid prescriptions by medical professionals. With the available interventions for chronic pain, only 30–40% of the pain is relieved in half of the clients receiving opioid treatment (Dansie & Turk, 2013). Clients are offered higher drug doses to reach better outcomes due to minimum pain relief. The administration of higher doses of opioids to relieve pain increases the risk of opioid misuse and overdose. Other cases include opioid-related emergency room visits, addictions, and disorders. Merrill et al. (2012) mentioned the latter is often the case for people facing chronic pain combined with depression. The recent past has also seen a growing body of research pointing to the correlation between mental health, addiction, and higher doses of opioid prescriptions (Merrill et al., 2012). Higher doses of opioid prescriptions for people with mental health problems have become one of the hindering factor in helping people suffering from opioid addiction (Barrett & Chang, 2016). This challenge necessitates interventions and treatments that will help individuals who struggle with opioid addiction identify the challenge and risks they face.

Using CBT to move individuals who struggle with opioid addiction to the contemplation stage of change in a residential treatment facility can be difficult. The difficulty begins with diagnosing addiction to opioids. Opioid use disorders are challenging to diagnose in clients with chronic pain treated with long-term opioid therapy. Garland et al. (2013) stated that one of the challenges of treating individuals who struggle with opioid addiction is that they do not meet

addiction criteria. In many jurisdictions, addiction criteria do not apply to these clients since many clients using opioids take the drugs regularly as a part of their treatment. Clients spend a substantial amount of time using these drugs to relieve pain (Garland et al., 2013). Clients legitimately taking opioids may experience conflicts in the form of doubts and bias from medical professionals while seeking treatment. Based on these conflicts, the American Pain Society developed a new set of criteria for opioid use disorders in people with chronic pain. The new criteria for opioid use disorder includes impaired control over opioid use, continued use despite harm, compulsive opioid use, and cravings (Garland et al., 2013). Clients meeting these criteria could also display symptoms of opioid use disorder by selling their medications or using oral formulas intravenously (Garland et al., 2013). Research findings revealed that it is common for clients with opioid prescriptions to consume the medications beyond the daily allowance without direction from their doctors. This happens when clients embrace unauthorized dose escalation to compensate for the intensity of their pain. Such behavior increases the risk of developing an opioid use disorder (Garland et al., 2013).

Lastly, there is a need to ascertain the effectiveness of the CBT residential treatment for individuals who struggle with opioid addiction. Neurobiological evidence shows that long-term opioid use can exacerbate pain. Borsook and Kalso (2013) admits a vicious cycle happens when changes to the brain caused by opioids interact with changes caused by chronic pain. These, combined with deficits facing clients with chronic pain, often result in a loss of cognitive control needed to cope with even low-intensity pain (Garland et al., 2013). Ultimately, pain makes the client dependent on opioid medications, leading to addictive behaviors. The residential CBT treatment, if proven to have a high effectiveness rate, could be useful in addressing the current gaps in treatment for individuals addicted to opioids. Efforts in helping individuals who struggle

with opioid addiction are necessary considering the growing number of individuals who are addicted to opioids. The residential CBT treatment is likely to reverse the trends of high opioid dependency if the process is deemed effective.

### **Effectiveness of CBT**

Sokol et al. (2019) mentioned cognitive behavioral therapy (CBT) as an effective tool in the treatment of opioids and other drug addiction problems (Ballantyne & Mao, 2003). Several studies reveal the effects of using CBT among adults within a residential treatment program. From these studies, key insights regarding the counseling models for treating individuals who struggle with opioid addiction could be harnessed. The CBT residential treatment method for individuals who struggle with opioid addiction often involves manipulating the behavioral and cognitive theories principles, leading to a goal-oriented therapeutic approach helpful to individuals who struggle with opioid addiction (Alam & Juurlink, 2016). The main challenge facing many individuals who struggle with opioid addiction is the work they need to do on themselves to change their addictive behaviors amid chronic pain. The primary goal of engaging individuals using the CBT approach is to promote positive and healthy changes in behaviors among individuals who struggle with opioid addiction. CBT requires therapists to work closely with the clients through a functional and customized treatment plan (Velandar, 2018). CBT residential treatment works effectively in helping addicted clients recover from their dependence on opioids. Sokol et al. (2019) explained the overwhelming daily statistics (Serafini et al., 2016). More than 115 people die each day because of opioid overdose. Based on the current statistics, the relevance of using CBT therapy to move individuals who struggle with opioid addiction to the contemplation stage of change in a residential treatment facility cannot be overstated. Future

focus in handling the current crisis needs a proper plan where individuals who struggle with opioid addiction are helped in their pursuits of sobriety.

Gomes and Juurlink (2016) argued that CBT residential treatment approaches are necessary when there is a higher rate of opioid prescriptions. The increased prescriptions of opioids in the United States coincides with the rampant rise in the cases of opioid abuse across North America. Gomes and Juurlink (2016) noted the correlation between opioid prescriptions and abuse is indicative that the lack of change in behaviors is a leading cause of the addiction. The rise in the cases of opioid addiction is a sign of a behavioral challenge that can be addressed through CBT. People who used prescribed opioids are viewed and treated differently by hospital staff and the legal system. CBT approaches are effaceable because they address both the cognitive and behavioral components of addiction.

Lynch et al. (2021) revealed that many who succumb to addiction often consume more opioids than recommended in the instructions that accompany their prescriptions. The primary danger of addiction is the high risk for overdose. Over 50,000 Americans die annually because of opioid overdose deaths. Velandar (2018) stated that individuals addicted to opioids need more support during the preliminary stages of CBT residential treatment. This support is necessary to maintain engagement and deal with the risk factors of relapse and addictive behavioral tendencies. One of the factors pointing to the high effectiveness of CBT is that CBT has been proven to be one of the fastest approaches to leading individuals who struggle with opioid addiction to the contemplation stage of change. The contemplation stage of change is critical since it is the stage that warrants a commitment to a recovery process. Allowing individuals who struggle with opioid addiction to receive treatment within residential settings is essential to demonstrating that viable recovery programs exist. CBT works to help individuals who struggle

with opioid addiction overcome key barriers to their recovery. As Horner et al. (2019) explained, there is an urgent need to implement streamlined care for clients taking on CBT residential treatment to overcome opioid addiction.

CBT is effective in treating individuals who struggle with opioid addiction when nurses and caregivers are readily available to offer support in residential treatment programs. Horner et al. (2019) stated that effective CBT residential treatment needs to be implemented with the input of nurses and other caregivers. Based on the essential roles nurses and caregivers play in helping addicted individuals reach the contemplation stage, there is a need to place trained nurses to serve in residential programs that treat opioid use disorder (OUD) clients (Cepeda et al., 2013). Using CBT therapy to move individuals struggling with opioid addiction to the contemplation stage of change in a residential treatment facility is one of the approaches with a high potential to impact individuals who struggle with opioid addiction. As Horner et al. (2019) explain, educational opportunities should be available to nurses to equip them to optimize outcomes for the individuals who struggle with opioid addictions. The CBT residential treatment plan deals provide close monitoring of individuals addicted to opioids. Pan et al. (2015) highlighted the significance of CBT in treatment programs for prioritizing the recovery of individuals who struggle with opioid addiction. Pan et al. (2015), declared that a successful remedy for dealing with the current opioid addiction crisis in the US calls for nurses and other caregivers to consider the behavioral model of change under the CBT residential treatment plan. These findings were crucial in predicting the impact of CBT on opioid-dependent clients. The CBT residential treatment plan is one of the effective models to help individuals who struggle with opioids to overcome dependence. Through collaborative work between the clients and caregivers,

individuals who struggle with opioid addiction can overcome some of the key barriers to their recovery.

The effectiveness of CBT in treating individuals who struggle with opioid addiction is highlighted because this approach works alongside other treatments for opioid addiction. Pan et al. (2015) found that combining CBT and methadone treatments was effective in reducing opioid use. Methadone is one of the drugs the Food and Drug Administration (FDA) has approved for treating opioid addiction. The effectiveness of a program is evident in outcomes of positive behavior changes in addicted individuals. Pan et al. (2015) argued that CBT works great for individuals addicted to opioids. CBT includes counselling, and counseling reduces the use of opioids and helps to alleviate stress levels for clients who depend on opioids. The findings of Pan et al. (2015) reveal the significance of the residential timeframe that aims to identify the impacts of CBT in moving adult opioid users to the contemplation stage of change (Dugosh et al., 2016). The findings of the study revealed that participants receiving the CBT intervention experienced more negative urine test results after only three weeks (Pan et al., 2015). The findings were consistent with others that indicated CBT was effective in reducing the use of opioids and relapse among adults. CBT therapy to move individuals who struggle with opioid addiction to the contemplation stage of change in a residential treatment facility plays a key role in helping individuals who struggle with opioid addiction achieve recovery. Another impact of CBT in a treatment program is its impact on psychological stress and addiction severity (Capone, 2018). Pan et al. (2015) investigated the impact of CBT on severity and stress. The findings of the study revealed that both conditions reduced after 12 and 26 weeks, confirming that CBT effectively reduced addiction severity and stress as indicated by other studies. Pan et al. (2015) demonstrated that CBT impacts employment function and psychological stress. Through the

residential program of CBT treatments, individuals who struggle with opioid addiction find their way to the contemplation stage of change. In this stage, a critical behavior change happens, supporting the recovery process.

The effectiveness of the CBT residential treatment could also be interpreted through the lens of Lynch et al. (2021), whose findings were related to the retention of addicted persons in treatment programs. Lynch et al. (2021) realized a residential CBT treatment program works best in addressing some of the gaps related to individuals who struggle with opioid addiction. Many may find it challenging to embrace behavior change, especially those prescribed the drug (Chiesa & Serretti, 2014). As a result of the conflict between overcoming addiction and using prescribed drugs, retention rates in treatment programs have been low. Lynch et al. (2021) found the use of CBT relevant because this treatment plan is associated with high treatment retention rates. Lynch et al. (2021) relayed that incorporating approaches to help clients overcome addiction leads to a sustained recovery. The use of CBT therapy to move individuals who struggle with opioid addiction to the contemplation stage of change in a residential treatment facility involves the client making it one of the effective alternatives to addressing the opioid addiction crisis in the country. CBT used in residential treatment programs for individuals who struggle with opioid addiction contributes to program completion rates because of the human engagement dynamic included in the treatment program. As individuals become highly engaged in the plan through the residential treatment program, they become less likely to drop out of the program. The high level of encouragement and recognition gives program participants a sense of belonging and the motivation that they can obtain sobriety (Rosidi et al., 2018). Behavioral approaches to instituting the need for change help many individuals who struggle with opioid addiction overcome the barriers to recovery. Hunt et al. (2019) stated that using CBT therapy to move

individuals who struggle with opioid addiction to the contemplation stage of change in a residential treatment facility work effectively because of psychosocial interventions. Such interventions have been proven to reduce substance abuse (Hunt et al., 2019). Reducing and eradicating substance use are goals of the CBT intervention process.

The CBT provided in a residential treatment program for individuals who struggle with opioid addiction has a greater effectiveness when treatment occurs in a group setting. A warm climate for social support is generated by grouping the clients undertaking the CBT inpatient treatment method, leading to improved client outcomes. The goal for engagement in the CBT residential treatment program is always placed on anticipation for changes in behaviors. Change of behavior is evident when the individuals who struggle with opioid addiction reach the contemplation stage of change (Komasi et al., 2017). Sokol et al. (2019) noticed that CBT group-based treatment for clients with opioid use disorder has high success rates. Caregivers have the discretion to apply the same CBT residential treatment plans in the clinical settings as an intervention for adults battling with OUD. Sokol et al. (2019) found that the CBT group-based approach works perfectly, especially among clients with personality deficits. CBT residential treatment for individuals who struggle with opioid addiction is most effective when applied to clients with low anger levels. Rosidi et al. (2018) report a similar finding and assert that group CBT therapy is highly effective in improving the self-esteem of clients, thereby helping them reach the contemplation stage of change because they believe in themselves. Group-based CBT therapy could be effectively implemented in programs where adults struggling with opioid addiction are going through the recovery process.

Sokol et al. (2019) imply that CBT provides more benefits than others for specific subpopulations. Based on these findings, it is necessary for practitioners guiding individuals who

struggle with opioid addiction to choose CBT therapy to move individuals who struggle with opioid addiction to the contemplation stage of change in a residential treatment facility (Murray et al., 2016). These findings are comparable to the study of Pan et al. (2015) in which the researchers tested participants in a group-based format. The researchers found that CBT group sessions effectively led participants to the contemplation stage of change (Moore et al., 2016). The effectiveness of the program occurred because the participants were provided with an opportunity to share experiences and challenges about abstaining from drug use. By sharing stories in a group setting, participants learn they are not the only individuals struggling with addiction. During discussions, participants are inspired to change their behaviors.

The effectiveness of the CBT residential treatment plan could be analyzed through the lens of other studies that highlight its usefulness when combined with other therapies. Several studies assert that CBT residential treatment approaches are highly effective when combined with other forms of treatment. For instance, Aletraris et al. (2016) asserted that the effectiveness of the CBT residential treatment plan for opioid users happens when used with other medications. In this context, the study defended using medications alongside psychosocial treatment when helping individuals who struggle with opioid addiction reach the contemplation stage of change. A combination of psychosocial therapeutic models alongside FDA-approved drugs is cited as one of the best approaches to boost the quality and effectiveness of treatment for individuals struggling with opioid addiction. Aletraris et al.'s (2016) study highlights using methadone and buprenorphine with psychosocial treatment, like CBT, as one of the best ways to help opioid individuals who struggle with opioid addiction consider a change.

As clients receive interventions, counselors and nurses play significant roles. Counselors need to take a leading role in implementing a program targeting individuals who struggle with

opioid addiction because they hold varying degrees of knowledge regarding medication (Dahl et al., 2004). There has been success in recent research in which the use of buprenorphine was increased, especially in residential settings (Aletraris et al., 2016). In such contexts, the treatment of individuals who struggle with opioid addiction involves an integration of treatments primary care settings. Buprenorphine can be combined with CBT residential treatment to render better outcomes. Velander (2018) examined the use of buprenorphine alongside psychosocial treatment. The study found that positive outcome through combined services is not guaranteed, as four out of eight studies indicated a benefit. The researcher acknowledged the significance of combining certain medication with CBT treatment for clients addicted to opioids.

Using CBT therapy to move individuals who struggle with opioid addiction to the contemplation stage of change in a residential treatment facility is more likely with the increase of social support provided. Dugosh et al. (2016) conducted a meta-analysis study and found many benefits for adults using a combination of CBT residential treatment methods and medication (McHugh et al., 2010). Adults addicted to opioids can benefit from medicines alongside CBT, especially when such programs expose these clients to strong social support (Lookatch et al., 2019). The significance of strong social support during residential treatment cannot be underestimated. Clients with opioid addiction usually require more support, especially in the initial stage, before they can reach the contemplation stage of change in treatment (Lynch et al., 2021). Strong social support is necessary for it helps maintain engagement and cover the risk factors of relapse. Such consent is also required to keep the objective of client as they seek freedom from their addictions (Levitt, 2015). The use of medications alongside CBT and other psychosocial treatments of opioids has been popularly accepted. The review of Dugosh et al. (2016) of recent publications to investigate CBT as a psychosocial intervention method and its

use with medication, more so methadone treatment, found this new approach popular. Based on its findings, it is apparent that CBT and medicine effectively treat opioid addictions. The incremental utility differed across interventions and medications (Dansie & Turk, 2013). These findings positively impact this research on the effectiveness of CBT in treating adult opioid users within a residential setting. From the finding, it is critical to note the possibility of engaging medication alongside the CBT residential treatment to help individuals who struggle with opioid addiction reach the contemplation stage of change. Additionally, clear comprehension of the most effective combination of psychosocial and drug treatment is imperative in successfully treating opioid addiction (Dugosh et al., 2016).

Several studies contend that CBT approaches to treating individuals who struggle with opioid addiction improve when combined with medication. On this ground, implementing CBT therapy to move individuals who struggle with opioid addiction to the contemplation stage of change in a residential treatment facility should consider the possible remedies. Combining drugs and CBT residential treatment plans can boost client outcomes. When considering the engagement models, caregivers are biased toward client outcomes. The focus of the residential treatment plan is to have positive effects by leading the clients to the contemplation stage. Based on these findings, combined use of the CBT approaches and medication is likely to be the new norm (Hunt et al., 2019). Individuals who struggle with opioid addiction face serious barriers, especially regarding the conflict between the need to stop addiction and use the prescribed doses. Based on the uniqueness of this challenge, a combination of CBT with other medications could be termed as timely. Such an approach would be helpful to clients whose major risk is relapsing during the program. Moore et al. (2016) learned that combined CBT residential treatment and physician management use a positive impact using the buprenorphine/naloxone treatment. The

study finds buprenorphine/naloxone treatment as one of the effective medications used alongside the CBT approaches to boost treatment outcomes. Moore et al. (2016) indicated that clients who had prior prescription opioid use had better outcomes when the treatment involved a combination of physician management and CBT. It resulted in a better abstinence outcome. Many such clients would find the recovery process much friendlier as they take on the medications and consider necessary behavioral changes (Huhn et al., 2020). By combining CBT approaches with buprenorphine, naltrexone, methadone, and naloxone treatment, addiction clients under prescribed medications find an easy pace to faster changes. This approach ensures clients find an uncomplicated way through the change process.

The effectiveness of using CBT therapy to move individuals struggling with opioid addiction to the contemplation stage of change in a residential treatment facility improves when clients develop positive and strong relationships with the counselors. Counselors and therapists play a significant role in assisting the client with executing a treatment plan, particularly in assessing what motivates the client's desire for long-term recovery and developing CBT interventions tailored to the needs of the client. Based on the significant role counselors play in their interactions with individuals who struggle with opioid addiction, their input cannot be understated. The effect of CBT on residential treatment programs for adult opioid clients largely depends on clients' engagement with their counselors. Counselors executing the CBT residential treatment plan are critical in helping these individuals regain psychological health. According to Murray et al. (2016), effective program implementation requires counselors to take a proactive role in assisting clients to see the change required. For clients to reach the contemplation stage of change, the counselor would need to consistently provide the necessary social support to these clients. Individuals who struggle with opioid addiction would require close monitoring and social

support to see their behavior objectively. Often, it is challenging for many users of opioids to perceive their addictive behaviors. This difficulty happens more among individuals who struggle with opioid addiction and need to stop their addictions but continue using prescribed drugs to contain their chronic pain (Ehde et al., 2014). On this basis, the effectiveness of the residential CBT treatment plan would largely depend on the relationship the addict forms with the counselor. Developing a good relationship between the client and counselors is a key aspect of CBT. As Biasi et al. (2017) explain, the relationship individuals who struggle with opioid addiction would have with counselors is vital in determining the impact of counseling on improving client outcomes. Factors such as the intersectionality of the ties could impact how counselors enforce CBT over their clients. At the same time, intersectionality could inform how psychologists use existing concepts and contemporary frameworks to implement conventional counseling areas during treatment (Grzanka et al., 2017).

Another key factor that could affect the implementation of the CBT residential treatment method is the counselor/practitioner approach in addressing opioid clients from different demographics and cultures. The cultural, demographic, and psychographic backgrounds of the individuals who struggle with opioid addiction are critical elements counselors should determine when using CBT therapy to move individuals who struggle with opioid addiction to the contemplation stage of change in a residential treatment facility. Counselors and caregivers engaging in CBT residential treatment plans should be conversant with the risk factors that everyone who struggles with opioid addiction face. The cultural, demographic, and psychographics of individuals who struggle with opioid addiction play a major role in indicating the risk factors these individuals have dropped out of the program or experienced relapse (Garland et al., 2013). When executing a CBT residential program, counselors should be aware

of the disparities confronting people of various marginalized groups. People from poor backgrounds and individuals with low education levels could be unaware of the damage opioid addiction has on their lives, health, and well-being (McHugh et al., 2010). Even among clients from wealthy backgrounds, there is a possibility of being unaware of the same adverse impacts. The effectiveness of using a CBT residential treatment plan in leading to positive recovery outcomes for opioid individuals who struggle with opioid addiction increases if the program captures the special needs of clients from diverse backgrounds. Thus, a demographic or social location could be impacted by the approach of the counselor toward marginalized groups (Horner et al., 2019). Apart from the counselors, CBT residential treatment can be effective if targeting specific groups. Therefore, there is a need to develop CBT residential treatment programs specific to the needs of the target population, leading to the contemplation stage of change in the adult population. The steps report varying levels of substance use among adults. Serafini et al. (2016) examined the association between the stages of change and outcomes in a motivational enhancement treatment. According to the study, the contemplation stage of change showed the highest level of negative substance use consequences (Howe & Wells, 1994). It could indicate that the adverse impacts prompted increased problem recognition since the negative effects were linked with enhanced motivation to change (Serafini et al., 2016).

Lastly, the effectiveness of the CBT approaches could be interpreted in the context of the motivational interventions necessary when handling opioid individuals who struggle with opioid addiction. Effective recovery from opioid addiction demands additional motivation for treatment. These motivations should be considered because of their impact on the treatment adherence of the program. The effectiveness of using CBT therapy to move individuals who struggle with opioid addiction to the contemplation stage of change in a residential treatment facility demands

that the participants adhere to the treatment without dropping off until they reach the 28th day (Grzanka et al., 2017). The CBT residential treatment program focuses on creating and changing the client's mindset to reach the contemplation stage of change. One of the leading barriers that act as a risk factor is the potential of clients dropping out of the program before completing the scheduled residential program. Dropping out of the program is a major risk limiting the possibility of the clients reaching the contemplation stage of change. McHugh et al. (2010) reviewed the use of CBT in individual and family-based treatment. CBT used for opioid therapy for adult treatment programs consists of several interventions that focus on various targets (Banta-Green et al., 2012). The study appraises motivational interviewing, which focuses on targeting ambivalence toward behavioral change regarding drug use (Banta-Green et al., 2012). Such treatments are effective in treating substance abuse disorders (Neumann et al., 2013). CBT residential treatment for opioid use disorder could become more effective by including motivation for treatment. Counselors and caregivers must implement various motivational approaches to boost their clients' engagement with the CBT residential treatment program (Gomes & Juurlink, 2016). This approach could be useful in increasing the outcomes of the residential CBT residential treatment plan applied to individuals who struggle with opioid addiction.

### **Potential for Success**

The proposed CBT residential treatment plan for individuals who struggle with opioid addiction raises hope for the current crisis over the increase in opioid addictions. One of the significant gains of deploying CBT approaches in treating individuals who struggle with opioid addiction is that this method focuses on changing behaviors (Dugosh et al., 2016). A leading challenge facing many individuals who struggle with opioid addiction is behavior change. Many

of these individuals who struggle with opioid addiction find a challenge in considering a change of conduct because they are accustomed to these prescription drugs (Farrugia et al., 2010). The effectiveness of using CBT therapies to move individuals who struggle with opioid addiction to the contemplation stage of change in a residential treatment facility happens because of their ability to cause a change of behavior among the target clients. CBT residential treatment methods have increasingly been a success in facilitating the recovery process of opioid individuals who struggle with opioid addiction because this method is dependent on social learning theories and principles of operant conditioning. Carroll and Onken (2005) found that CBT substance abuse therapies focus on understanding drug use by treating the individuals who struggle with opioid addiction in the context of antecedents and consequences of abuse incidents. Through the CBT residential treatment plans, it becomes possible to address the antecedents leading to the misuse of these drugs (Carroll & Kiluk, 2017). Moreover, the CBT residential treatment plan highly involves the clients by offering the necessary skills training to help clients recognize situations or emotional states in which they feel most vulnerable. Through the therapy sessions, opioid addict clients learn skills that help them avoid countering these feelings and concerns. For unavoidable problems or feelings, CBT residential treatment approaches teach various behavioral and cognitive strategies to improve coping skills (Carroll & Onken, 2005).

### **Potential for Impact**

CBT residential treatment plans have a major impact on addressing maladaptive behaviors. One of the reasons supporting the adoption of the CBT residential methods in the process of helping opioid individuals who struggle with opioid addiction to recover is the fact that most of these clients have maladaptive behaviors coupled with cognitive barriers to change. The development of maladaptive behaviors associated with mental barriers often creates

difficulties in the contemplation stage of change. Many individuals who struggle with opioid addiction have a higher tendency to face cognitive obstacles to change, especially when they have been given these drugs through prescription. Many individuals who struggle with opioid addiction would experience conflicts between the need to stop the addiction, the urge to continue abusing the drug, and the need to use the medications at the prescribed levels to contain chronic pain. CBT residential treatment plan has a positive impact in helping individuals who struggle with opioid addiction to tackle some of the maladaptive behaviors (Chermack, 2011). This process happens because CBT therapy aims to move individuals who struggle with opioid addiction to the contemplation stage of change in a residential treatment facility and uses learning-based approaches to target maladaptive behaviors. McHugh et al. (2010) defend CBT approaches as effective in helping individuals who struggle with opioid addiction tackle motivational barriers. Motivational barriers regarding opioid addiction are largely related to the availability of opioids as prescription drugs. The fact that opioids are prescription drugs makes them local and readily available over the counter through pharmacies (Biasi et al., 2017). The easy access and availability of these drugs among individuals who struggle with opioid addiction motivate overuse of the same. CBT approaches effectively counter this motivational barrier to change by making the client see the need for the contemplation stage of change.

Another major impact of the residential CBT residential treatment plan targeting individuals who struggle with opioid addiction is that this treatment model reduces the effects of reinforces. Behavioral reinforcers would work against the potential success of recovery from opioid addiction. For instance, the prescription of large doses of opioids often reinforces some of the unwanted behaviors while using these drugs (Aletraris et al., 2016). One of the impacts of using CBT therapy to move individuals who struggle with opioid addiction to the contemplation

stage of change in a residential treatment facility is that it works on the effects of these reinforcers. McHugh et al. (2010) stated that CBT reduces the impact of the reinforcers by building skills to facilitate abstinence. Helping the victims develop skills that enhance abstinence helps greatly in change efforts. Individuals who are addicted to opioids have a higher chance of reaching the contemplation stage of change when they are equipped with skills that lead to abstinence (Bailey-Rodriguez, 2021). Conversely, CBT residential treatment plans can help clients contemplate change by illustrating contexts where nondrug activities can be rewarded. Although there is no specific protocol for CBT, practitioners/therapists must be particular with the structure they use, which is especially important in leading to better outcomes in treating substance use disorders (McHugh et al., 2010).

The residential CBT residential treatment plan has a major impact on the continued wellness of the opioid addict. In this context, CBT approaches enable the therapist to identify the specific behaviors the addict should change. Individuals struggling with opioid addiction may have other behaviors they need to change. In most contexts, these clients are not conscious of making the necessary changes (Okifuji & Turk, 2015). Lack of consciousness of the need to change their behaviors related to individuals who struggle with opioid addiction is exuberated among many individuals who struggle with opioid addiction and who found their way to addiction by prescribing heavy doses by doctors. These clients face conflicts as they battle to come out of the habit. CBT approaches greatly impact the treatment outcomes by empowering the client to consider behavior change. McHugh et al. (2010) relayed that CBT approaches to move individuals who struggle with opioid addiction to the contemplation stage of change in a residential treatment facility incorporate skills training, rehearsal, and functional analyses helping clinicians determine which behaviors they should target and what skills are most helpful.

Skills training targets interpersonal skills, emotion regulation, and problem-solving (McHugh et al., 2010). Interpersonal skills training is important because it helps clients repair damaged relationships and increase their ability to use social support to find their path to recovery. Other skills, such as emotion regulation skills training, help clients work on distress tolerance and coping (McHugh et al., 2010). At the same time, problem-solving skills help with emotion regulation. Using problem-solving exercises under CBT teaches clients to use social support and engage in pleasurable activities, such as exercise, to cope with stress.

### **Summary**

The literature review reveals that studies contend about the high levels of effectiveness of the CBT residential treatment plans in helping individuals who struggle with opioid addiction. Based on the findings, using CBT therapy to move individuals who struggle with opioid addiction to the contemplation stage of change in a residential treatment facility could be one of the best remedies to the current crisis facing the United States. The current situation related to opioid addictions, overdose, and deaths makes it necessary to adopt the CBT approach. The residential CBT residential treatment plan offers hope to help many current clients identify the problem and risks they face. This treatment approach works effectively by allowing the therapist to take on the psychosocial approaches to lead the clients to contemplate change. A leading barrier to helping individuals who struggle with opioid use overcome addiction is when some clients must consume these drugs to contain chronic pain. Even though this challenge remains an uphill task for many with these addictions, the residential CBT residential treatment offers fresh hopes by empowering the clients to engage in their recovery process highly.

## **Chapter Three: Methods**

### **Overview**

This phenomenological qualitative study sought to describe the experiences of adults struggling with opioid use disorder and their experiences with whether CBT strategies moved them to the contemplation stage of change in a residential treatment facility. The researcher used a system to collect data. The procedures for data collection, participant recruitment, data analysis, and ethical considerations followed throughout this research were discussed in detail regarding how they fit into the study. The primary components of this chapter include the methodology section, which describes its justification. The data collection section describes the means used, the type of data collected, the protocol applied in data collection, and the justification of the protocols applied. The population, sampling procedures, data analysis, validity, reliability, and confidentiality were significant study components. The ethical considerations given to this research were also discussed in detail.

### **Design**

#### **Phenomenology**

The qualitative methodology used non-statistical inquiry and analysis of social phenomenon drawn through an inductive process (Hammarberg et al., 2016). Qualitative research methods are applicable when studying the perception, meaning, and experiences of participants. In recent years, qualitative research methods have gradually increased in many fields, including psychology (Smith, 2003). Unlike quantitative methods that focus on numeric data and comparisons, qualitative methodology targets the narratives and observations of people, hence identifying the quintessence of life encountered by human beings (Ashworth, 2003).

Moreover, qualitative methods emerge from theories obtained from analyzing information retrieved from interviews and during group work.

The focus is on the phenomenological exploration of the experiences of participants regarding how CBT strategies helped move them from the precontemplation stage to the contemplation stage of change. To interpret the impact of CBT strategies on the progress of a participant, five factors must be considered: experiences, comprehension of CBT strategies, understanding of the recovery process, protocols, and environments. Collectively, these factors can sensitize how one observes and identifies or makes decisions (Heidegger, 1982). Thus, the hermeneutic phenomenological approach to researching the effectiveness of CBT in helping individuals who struggle with opioid addiction transition into the contemplation stage entailed examining participants as they experienced treatment in a residential program.

By utilizing a phenomenological approach, the researcher could obtain initial and subsequent perspectives of participants concerning their experiences in CBT for opioid addiction (Tindall, 2009). The phenomenological approach allowed the researcher to observe the transitions of clients throughout every stage of their treatments. The phenomenological approach enabled the researcher to draw meaning from disclosed experiences as articulated by the participants.

### **Heuristic Approach**

The meaning of experience was characterized using heuristic phenomenological emphasis. Two approaches used in heuristic inquiry include face-to-face conversations and phenomenon personalization. Placing the experiences of participants as the central point of the research creates a personalized phenomenon (Patton, 2002). As part of the heuristic approach, engaging in a conversation with participants is a requisite. As part of the heuristic approach,

discussions with participants provide understanding about how participants felt with respect to the various CBT strategies and whether CBT helped them realize they had an addiction problem and should take the first step toward getting help.

Several approaches to phenomenological research include hermeneutic phenomenology, transcendental phenomenology, and traditional and experimental phenomenology (Klein & Westcott, 1994; Suddick et al., 2020). For this research, the hermeneutic approach was taken into consideration. The method was compatible to the need to explore how CBT strategies help participants transition from the precontemplation to the contemplation stage in a residential treatment program. To better understand how CBT strategies helped opioid users, it was beneficial to interview participants about their experiences during treatment and to analyze the individual evaluations of participants in group therapy sessions.

### **Research Questions**

*RQ1.* What were the experiences of participants with CBT strategies?

*RQ2.* What CBT strategies were perceived as helpful in moving the participants to the contemplation stage of change?

*RQ3.* What CBT strategies were perceived as less helpful in moving the participants to the contemplation stage of change?

*RQ4.* In what ways did the participants perceive the environment as conducive for conducting CBT strategies?

### **Setting**

The setting for this study included three residential treatment facilities in the state of Louisiana. This research focused on the facilities that are part of the Louisiana Human Services District and participate in the Substance Abuse Prevention and Treatment Block Grant (SAPT).

The residential treatment settings were selected because the researcher was allowed access to participants who volunteered to participate in this study. Participants in this study were those currently in a residential treatment facility and using CBT strategies primarily for opioid addiction.

### **Rationale**

Very few research studies focused on the transition between stages of treatment, which is why qualitative methodology best fits in research with little to no theory of evidence (Fossey et al., 2002). Researchers in the United States have proclaimed growth in recovery over the last decade. Still, research has yet to explore how the treatment procedures help individuals who struggle with opioid addiction transition between treatment stages.

This main objective of this study was to comprehend better the effectiveness of CBT strategies in moving adults struggling with opioid addiction to the contemplation stage of change in a residential treatment program. The research aimed at understanding the recovery process from the perspectives of people rather than testing hypotheses based on existing theories. Using a qualitative approach through observation and semi-structured interviews helped to analyze the effectiveness of CBT strategies' in treating opioid addiction. Additionally, using semi-structured interviews in qualitative research helped the participants shape the interview process, reducing the possibility that the collected data was influenced by the preconceived ideas of the researcher (Willig, 2008). Based on this rationale, qualitative methodology was appropriate for this research.

### **Quality Assurance**

Qualitative research has undergone some criticism over the years, including the lack of scientific robustness, generalizability, narrative evidence, and bias in research (Mays & Pope,

2000). The risk of the researcher to be biased and opinionated is the most significant concern of the qualitative methodology. Interpretation with the qualitative methodology is subjective, creating a weakness in the validity of the analysis. Henwood and Pidgeon (1995) acknowledge that their theoretical perspectives can influence data collection and interpretation. Being aware of researcher reflexivity is important. Reflexivity in research must be regarded continuously (Eriksson & Kovalainen, 2008). Reflexivity brings diligence to the study and improves quality (Guillemin & Gillam, 2004).

### **Research Context**

The researcher recruited study participants from three statutory and voluntary addiction centers by colloquialism. After the interview analysis, the researcher convened a focus group comprising of experts working in the addiction field and people in recovery to discuss the findings. Unfortunately, as of the time of this study, there were very few addiction treatment services available for people in opioid recovery in the state of Louisiana.

## **Participants**

### **Recruitment of Participants**

The researcher recruited participants through several statutory means in the Louisiana area, including residential treatment centers. Colloquialism was used to recruit participants. The recruitment process aimed to ensure groups were diverse in every way possible regarding gender, age, and experience in recovery. The 12 participants were recruited from three residential treatment facilities. During the recruitment, the selection process was addressed, and data collection methods ensured the researcher adhered to the ethical guidelines stipulated by the institution. Once the institution gave permission to conduct the study, the researcher sent flyers and posters to rehabilitation centers requesting their involvement in the study.

Participants in the study were recruited using posters placed at residential treatment centers, Human Services Districts, Crisis Teams, and support services. In addition, a phone number was given to potential participants through which they were able to communicate with the researcher. Professionals in the field aided in recruiting participants from the services they provided and contributed to the study by sharing their observations. Consent forms containing participation letters and information sheets were sent to potential participants who responded to the posters. Twelve consent forms were signed, and the researcher scheduled interviews with these participants at convenient locations, in this case, at local addiction and recovery centers.

### **Inclusion and Exclusion Criteria**

*Interviews.* Participants in this study were people in recovery transitioning from the pre-contemplation to the contemplation stage. The study focused on people who recently enrolled in a residential treatment program. They were suitable candidates as they were in the pre-contemplation stage. The participants attended peer support groups and were receiving the cognitive behavioral therapy treatment. To gain consent to access the participants, the researcher obtained approval from the university to ensure that the interview questions did not present any danger to the participants and were presented in a way that information flowed willingly and smoothly during the interview process. Appendix A presents the criteria for participation in this study.

*Focus Groups.* The researcher recruited focus group participants among professionals who worked with people recovering from opioid addiction and individuals in the action and maintenance stage of their recovery. The criteria in Appendix B were followed during the focus group participants' selection.

## **Participants Description**

Twelve participants, ages 18 to 72, were selected to participate in the study. All the participants were receiving cognitive behavioral therapy. The individuals were questioned about their comprehension of the research topic and the phenomenon being explored (Creswell, 2007). Dukes (1984) described 10-12 participants as adequate for a qualitative study. Thus, the study participants met the minimum threshold. Of the 12 participants, four were in CBT and methadone treatment process, four were in CBT and naltrexone treatment, and four were in CBT and buprenorphine treatment process.

## **Procedures**

### **Focus Group Methodology**

Wilkinson (2004) identified focus groups as having the most effective data collection and analysis, especially in psychology. Focus groups can capture group dynamics during the discussion on a particular topic, allowing discussion and debate among participants, thus, providing vital data to the research (Bloor, 2001). Focus groups are critical when intended to evoke perceptions on specific topics, as was the case in this study (Wilkinson, 2004).

When exploring the validity and credibility of qualitative research, focus groups are identified as an appropriate method in qualitative research (Goodacre, 2006). Focus groups in this study were used to present the results on the effectiveness of CBT strategies in moving adults to the contemplation stage in a residential treatment program. The results were presented to professionals working in substance use disorders and individuals affected by opioid addiction and other illicit substances to gain their views, both agreeing and disagreeing, regarding the outcomes of the findings.

### **Focus Group Content**

Key findings obtained in the research were presented to the focus group verbally and via diagrams to enhance comprehension of the results. An open discussion presentation was conducted, including proportions that were testable and contributions of professional and personal opinions and experiences. The researcher facilitated the focus group discussion.

### **Focus Group Style**

The researcher recorded all focus group proceedings using digital recorders while taking notes, capturing the critical topics during the discussion. Verbatim transcriptions of the audio recordings aided in the thematic analysis (Boyatzis, 1998). The researcher removed all identifiable information from the transcripts to enhance confidentiality. The interview was designed to encourage participants to talk freely about their views of CBT strategies in transitioning to the contemplation stage of recovery.

### **The Researcher's Role**

As part of completing a doctorate program, the researcher analyzed the effectiveness of CBT in treating opioid addiction. Prior to the research, the researcher worked in various addiction treatment programs. Due to the possibility of bias in the data analysis process, the researcher was aware of his own experiences working with people recovering from substance use disorders. Therefore, the researcher attempted to separate from previous perceptions of CBT strategies in helping individuals who are addicted to opioids transition from precontemplation to the contemplation stage of change in a residential treatment program. Hence, the researcher tried to keep an unbiased approach to data collection and analysis. Reflexivity was also considered to reduce bias potentialities.

## **Interviews**

### **Interview Methodology**

During this study, semi-structured interviews were identified as the most appropriate. This is because semi-structured interviews are emergent and flexible, allowing the emergence of issues and ideas that a researcher can pursue (Charmaz, 2003). In addition, semi-structured interviews are appropriate when there is a possibility to interview just an individual; in some cases, participants leave the research after just one interview (Bernard, 1988). The researcher had a guideline with a clear topic area that yielded comparable and reliable data. Furthermore, open-ended questions during the interview were utilized to give participants a chance to shape the discussion and share their experiences and comprehension.

In semi-structured interviews, participants can share their views and experiences in depth and detail. By investigating the areas suggested by participants, the researcher can gain information that they may not have been aware of or lacked prior knowledge of before the research. Semi-structured interviews also help reduce the researcher's pre-judgments regarding what information may have been essential. Due to their nature to create more avenues for collecting data, the researcher identified semi-structured interviews as the best avenue due to their nature of eliciting the conversation. All interviews were conducted in residential addiction centers convenient for the participant and took approximately 45 to 80 minutes.

### **Interview Content**

When compiling the interview guide, the researcher relied on his experience working with adults recovering from substance abuse disorders recovery. To facilitate any other changes relevant to the research, the interview guide was shared with professionals working in the field where vital changes needed to be made. The interview guide presented leading questions in bold

letters, and each participant was asked the same questions. Supplementary questions were also issued. In response to participant answers, these questions were asked to explore their views on CBT strategies in transitioning from the precontemplation to the contemplation stage of their addiction treatment program.

As the interviews progressed, if changes were identified, the changes were implemented in the interview questions. An example of an instance where the researcher changed the interview questions was describing the participant's addiction experience in the first interview. The participant took too long to respond, taking away time to answer the recovery process description. Therefore, based on lessons learned from this trial interview, the participants were not asked about their addiction experience but, instead, focused on recovery questions. As the interview progressed, the research hypothesis was tested based on the research analysis as new theories emerged. These included the effectiveness of CBT in the different stages of recovery, the role of family members in the recovery process, participant view of recovery as the stages progress, and the role of pharmacotherapy in the CBT recovery process.

### **Interview Style**

Digital tape recorders were used to record all interviews. All recordings were transcribed verbatim. To assist in maintaining the identity of participants, any information that could identify the participants was removed from the transcripts. The interview was designed sensitively, encouraging participants to freely discuss the issues faced in their recovery journey.

### **Data Analysis**

At the end of every interview, the researcher reflected on the process noting changes or themes that could be researched further in future discussions. To ensure the immersion in data, the researcher reviewed the transcripts and audio recordings several times. Qualitative study

informs the data analysis process through several vital strategies (Willig, 2008). These strategies helped identify the “meaning of categories” (Willig, 2008, pg. 35) emerging from the data and grouping that data that share the same characteristic features. The data categories can either be analytic or descriptive, presenting the interpretation of data. The following vital strategies were considered during the data analysis of this research.

### **Coding**

Coding is a vital process in identifying categories. A line-by-line analysis was the starting point in data coding in this study, producing various descriptive themes. As the coding process progressed, analytic types were identified by the researcher, and these descriptive categories were grouped to give them meaning. Emerging theories were named using phrases and words derived from analyzed qualitative data (Willig, 2008).

### **Constant Comparative Analysis**

A constant comparative analysis was utilized to link integrated categories to continuously ensure all variation instances were encapsulated with the emerging theories (Willig, 2008). Comparison is required in the continuous analytic process between each data set to identify the differences and similarities resulting from main categories emergence, categories, subcategories, and the idea that linked and integrated data.

### **Negative Case Analysis**

Cases of data elements that did not support and appeared to contradict the explanation of emerging patterns due to data analysis can be identified during the research. Although identifying the data does not fit the emergence of new theories, it can add to the depth of the research and intensity, further increasing the importance of the study.

### **Memo Writing**

Memo writing is an essential aspect of any research as it helps document the emerging categories and subsequent theories (Willig, 2008). Throughout the data collection of this research and analysis, the researcher wrote numerous memos documenting the following hypothesis and emerging categories. The written memos helped trace the relationship between emerging categories and codes, thus, providing iterative information analysis.

### **Theoretical Saturation**

In theoretical saturation, the researcher collects data until no other category emerges. In this study, the researcher aimed for theoretical saturation by collecting data to the point no new categories emerged, and subcategories captured majority of the data. Willig (2008) acknowledges that saturation in theoretical data is a goal rather than a reality since categories and modifications are always possible. The analysis process was overseen by a research supervisor, in this case, a member of the dissertation panel, to enhance the reliability of the analysis through the triangulation method.

### **Trustworthiness**

Reliability and validity testing in qualitative research is different from quantitative methods. There are alternative constructs to ensure the quality of the study. Six criteria were drafted for improving trustworthiness in qualitative research (Guba, 1981; Shenton, 2004). These criteria include member checks, research audits, transferability, credibility, confirmability, and dependability. Each of these attributes was discussed in detail in this study.

### **Credibility**

Merriam (1998) describes credibility as the attempt to explain how concurrent results of research are believable. Making sure the correct research methods are utilized through

triangulation is one way through which research credibility is achieved (Bogdan & Biklen, 2007). Honesty promotion in participants, early familiarity with the culture being used, frequent session debriefs between the researcher and the participants, experience in using qualitative methods, and peer research scrutiny (Shenton, 2004) are other ways to attain credibility.

In this study, several credibility checks were applied. First, having prior experience in using qualitative research and having a supervisor with extensive experience in qualitative methodology enhanced the credibility of the study. Second, the researcher took time to study CBT strategies by visiting residential treatment centers and getting feedback from individuals in recovery and the counselors present in those institutions.

After analyzing the results of this study, the researcher presented the results to focus groups practitioners, and individuals recovering from opioid addiction. During the presentations, the researcher collected feedback about the research findings. The presentation of results was a form of triangulation (Morgan, 1988). Triangulation legitimizes the research by increasing credibility and validity through verification from multiple vantage points (Lincoln & Guba, 1985). To create openness, participants were aware they could drop out of the study at any time without penalty.

### **Dependability and Confirmability**

Dependability is the concept of a researcher trusting and following the path of study set by another researcher. Emulating procedures used in another study explores whether, if the same methodology techniques are applied, the same results would be achieved. To ensure dependability, the researcher needed to be straightforward about the design and implementation of the study, including interpretation and data collection (Carroll et al., 2006). The dependability of this study was achieved through an outline of the methods, procedures, and techniques applied

throughout the study (Creswell & Poth, 2016). Gathering the views of participants who participated in focus groups helped to address the dependability of this study. The research was evaluated throughout all the steps, and a supervisor oversaw the entire process to ensure conformity with scientific research standards.

To ensure the convictions of the researcher did not influence the research, the researcher implemented procedures to ensure the results reflected the views of the participants and not those of the researcher. To address confirmability, triangulation was used (Shenton, 2004), and the personal and theoretical orientations of the researcher were well stipulated (Miles & Huberman, 1994). Throughout this study, confirmability techniques were widely utilized. Daily, focus groups received the support needed for safe reflection and to give feedback, which assisted with maintaining confirmability.

### **Transferability**

The generalization aspect of research findings to other situations is referred to as transferability (Merriam, 1998). In qualitative research, transferability refers to the application of research in multiple contexts. The researcher maintained copious documentation for transferability by should providing relevant information regarding the organizations where the study was conducted, noting the exclusion and inclusion criteria, methods applied in data collection, periods in which the data was collected, and the times and lengths of periods (Shenton, 2004). The researcher recorded the timeline and places the data collection was conducted. These details became a continuity file for efficiency during transferability.

### **Member Checks**

The presentation of research findings through triangulation creates consistency between researcher and participant (Leech & Onwuegbuzie, 2007). When checking credibility in

qualitative research, member checking is vital to the process. This is achieved by allowing participants to read the first interview transcripts, allowing them to correct data collected during the interviews that do not reflect their views. In addition, the relationship between the researcher and the participant should be placed up front to ensure the credibility of the research. Also, giving participants a lot of information can be overwhelming, especially when the participant has difficulty understanding the data.

### **Research Auditor**

The mechanism for analyzing the study is known as the research audit. An auditor in any research assists in keeping honest inquiries. The auditor also acted as a source of new ideas, which helped the researcher have a more comprehensive view (Guba & Lincoln, 1998). A member of the dissertation team in the current study was identified as the research auditor. The auditor reviewed all initial interview manuscripts of each participant in the research. By utilizing data from the manuscripts, the auditor aided in identifying themes that were outside of the current study. To maintain the confidentiality of the research, the auditor signed confidentiality agreement protocols consenting to keep data from the interview confidential.

### **Ethical Considerations**

Before starting the research, the researcher obtained the necessary ethical approval from the Institutional Review Board (IRB). Participants were given information sheets about the study before participating in the research. They had the chance to ask for clarification regarding the research and how their involvement would help. Confidentiality was outlined in the information sheet explaining focus groups. Interviews were audiotaped, all discussions transcribed, tapes were destroyed after transcription, and all identifiable information was removed from the transcripts to preserve participant anonymity. Participants were advised that they could withdraw

from the research study at any time without penalty, and the treatment afforded to them would continue and employment for professionals who attended the focus group would not be terminated. Participants signed consent forms to acknowledge understanding of the confidentiality clause and purpose.

### **Summary**

The critical research aspect of this study was to find the effectiveness of cognitive-behavioral therapy strategies in moving adults struggling with opioid addiction from pre-contemplation to the contemplation stage in a residential treatment program. The steps followed in this section attempted to answer two primary questions regarding how data were collected and analyzed, making it an integral part of this research. First, this expected audience for the study needed to understand how the researcher obtained the prerequisite data since the chosen technique reflected the validity and significance of individual results. The chapter was also essential since the choice of the unreliable method produces unreliable results, thus, reducing the value of interpreting the findings (Shannon-Baker, 2016). Second, the chapter followed the qualitative methodology used in generating and collecting results. Hence, the chapter allowed the reader to determine whether the researcher used techniques and procedures consistent with the accepted scientific standards.

As seen throughout the methodology, the researcher was aware of ethical research issues. To adhere to the ethical standards of the university. The researcher requested approval from the ethical board of the institution. The researcher considered the anonymity, privacy, and confidentiality of the research participants. The researcher used codes or pseudonyms when collecting and reporting data to maintain participant anonymity and privacy. Besides, the researcher maintained a positive researcher-participant relationship. Still, the researcher ensured

that the vulnerable participants had representation and signed an informed consent. The successful collection, cleaning, and analysis of data was succeeded by reporting the research findings. In Chapter 4, the researcher presents the qualitative data analysis results, including the themes to answer the main research questions.

## **Chapter Four: Findings**

### **Overview**

The purpose of this study was to describe the experiences of individuals struggling with opioid use disorder and explore their experiences with CBT strategies and how such strategies are helpful in moving them from the precontemplation stage of change to the contemplation stage of change in a residential treatment program.

### **Participants**

The participants in this study were adults who met specific selection criteria. The criteria were participants had to be 18 years old and above, enrolled in one of the residential treatment facilities in the state of Louisiana, receiving CBT strategies, and at the stages of change to help them recover from opioid use disorder. Due to these qualifiers, the participants were adults suffering from opioid dependence and were receiving CBT strategies as one of the primary interventions in a residential treatment facility.

Having worked in various addiction treatment centers, the researcher was interested in acquiring further insight into the experiences of individuals with opioid use disorders with CBT strategies offered in residential treatment facilities and how the strategies helped them move from the pre-contemplation stage to the contemplation stage of change. Although CBT strategies have been used indiscriminately in residential treatment facilities to treat substance use disorder, there is a possibility that patients may have different experiences, positive and negative, which may have a significant impact on the transition of a patient transition to the contemplation stage.

To ascertain that the confidentiality of each participant was protected, participants were assigned a pseudonym comprising P (patient) and numbers 1-12. The characteristics of the participants in terms of age and gender are displayed in table 1 below.

**Table 1***Participant Descriptions*

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12
Gender	M	F	F	F	M	M	M	F	M	M	F	F
Age	22	26	70	29	62	20	71	69	72	42	32	41

Patient 1 (P1) is 22-year-old male who is a student. He started having difficulty focusing on his studies, accompanied by a lethargic feeling. Whenever he took opioids, the pain and urge to take drugs “from time and time” disappeared. He reported that his physical health was quite good, but his mental health was sometimes disturbed. He reported having a sister who lives near his room, but he received little or no support since he was independent. He was being treated with methadone and CBT techniques. He expected the recovery process to be slow. He stated that mindfulness has helped him come to terms with the fact that he did not need to take painkillers to relieve pain.

Patient 2 (P2) is a 26-year-old female employed at a local company. She reported feeling lethargic at the office, such that she could not have lunch. She felt her only option was to take relaxants to feel at ease. She lived with her mother, who was assisting her. She had social support and medical treatment, which, when combined with CBT strategies, would help her get well soon. She was being treated with buprenorphine and expected the recovery to be expedient so that she could return to her job. She realized that behavioral treatment was the best intervention for her to refrain from relying on medication excessively.

Patient 3 (P3) is a female, 70 years old. She was a single mother who was at home alone most of the time, an aspect that increased her dependence on opioids. She stated that she felt

nauseated and even fainted a few times when she did not take medicine. She reported lacking social support. Her physical health was weak, although her mental health was better. She stated that CBT was ineffective since she required physical strength rather than mindfulness. As a result, she relied on naltrexone medication to feel relaxed. She expected to recover quickly since she wanted her last few years of life to be peaceful.

Patient 4 (P4) is a female, 29 years old, who is currently a post-graduate student at a reputable university. She reported that academic stress led to her increased dependence on opioids. She stated that she could not get enough stress reliever pills. She lacked social support since she lived alone. She reported low morale. She expected a slow recovery with methadone medication. She stated that behavior enforcement was better as it helped her portray good behavior while at the treatment facility.

Patient 5 (P5) is a 62-year-old male who retired early after working for a long time due to his dependence on opioids. He reported that he would zone out often, but taking extra medicine helped him regain focus. He reported being physically and mentally weak, which he attributed to his advanced age. He expected his recovery to be fast due to buprenorphine medication. He has no social support and reported buprenorphine medication and mindfulness techniques helped him improve.

Patient 6 (P6) is a male aged 20 years who was studying as an undergraduate student. He was nauseous at the current stage and depended on five tablets a day. He expected a quick recovery to continue with the remaining part of the semester. He reported having “optimum physical and mental health”. He narrated that both CBT strategies and speedy action of naltrexone gave him good control over his addiction and significantly improved his cognitive

strength and focus. He considered the social support he received from a fellow student in a similar situation as much help to his recovery.

Patient 7 (P7) is a male aged 71 years who led a sedentary lifestyle after retiring 10 years ago. He complained of experiencing loss of sleep, a condition that forced him to take sleeping pills and subsequently led to a dependence on opioids. He has been living alone and reported that his mental and physical health were disturbed due to advanced age and dependence on opioids. He expected the recovery process to be slow but effective with the help of methadone and a relaxation strategy that enabled him to overcome stress symptoms and get more relaxed. With no social support, P7 thought methadone medication and CBT techniques were only “supportive elements throughout the journey.”

Patient 8 (P8) is a female aged 69 years. She retired 30 years ago after working in a factory for many years. Physical strains dragged her into opioid dependence. She reported experiencing unrelenting pain that was never relieved by medicines. She described herself as weak, physically and mentally. She found the scheduled behaviors to be helpful for her recovery since they enabled her to remain cognitively active and live a normal life. Without any social support, P8 thought that both medicines and CBT behavior techniques hastened her recovery, moving her to the contemplation stage of change.

Patient 9 (P9) is a male aged 72 years. He lived with his wife, who supported and cared for him. He reported being sluggish and mentally strained. He stated that exercise helped improve his physical health while relaxation strategies helped him gain composure. He believed that CBT was less effective compared to medicine since CBT required a longer time to take effect and medicine worked within minutes. He reported that the emotional support he received from his wife and the medication prescribed to him enabled him to control his urge for drugs. P9

stated that the relaxation strategy helped him move to the contemplation stage of change earlier, although he stressed that CBT did not influence his moving to the contemplation stage of change, but it helped young people move to the next level of change. CBT only serves as a source of calm for elderly patients.

Patient 10 (P10) is a male aged 42 years who was in an executive position but was stressed due to competition that forced him into opioid dependence. He was single and had no one on which he could rely for emotional support. He experienced mental stress, although he was physically healthy. He stated that mindfulness and relaxation helped him reach the contemplation stage of change, and he thought if it were not for CBT techniques, he could have taken more than 71 days to reach the contemplation stage. He reported having no troubling experiences with CBT techniques, although he was concerned that he may feel demotivated in case of relapse.

Patient 11 (P1) is a female aged 32 years with a career. She lived with her husband, who provided her the much-needed support during tough times. She stated feeling physically and mentally strained, especially due to depression caused by losing three pregnancies. She considered relaxation therapy superior to any other technique, which helped her stop taking drugs. P11 regarded CBT as capable of addressing all her healthcare concerns with its wide range of techniques applicable to different situations. Although P11 applauded buprenorphine medication for her speedy move to the contemplation stage, in her closing remarks, she stated that CBT is a fast-recovery method used by young people as it offers them an opportunity to resume their daily routines.

Patient 12 (P12) is a female aged 41 years who became a stay-at-home mother after leaving her job to care for her children. She lived with her husband and children and could not sleep due to panic attacks. She stated that CBT techniques did not assist her in moving to the

contemplation stage of change. Rather, it was naltrexone that helped her move to the contemplation stage of change. She stated that the relaxation technique was instrumental to her in treatment during the precontemplation stage, while she applauded satisfaction and mindfulness as positive techniques she experienced during CBT. She further opinionated that CBT was a wholesome technique capable of addressing several health concerns, including drug addiction.

### **Results**

This study focused on adults struggling with opioid dependence admitted to residential treatment facilities and sought to explore their experiences with CBT strategies, which helped move them from precontemplation to the contemplation stage of change. Residential treatment facilities, also known as rehabs, are live-in healthcare centers that provide therapy for substance use disorders, behavioral problems, and mental health challenges. These facilities are intensive and clinically focused, where patients get 24-hour care under trained staff supervision to help them recover from their conditions (Reif et al., 2014). The facilities provide an environment free from distraction where patients are treated with various therapies such as medications and various CBT techniques in an environment that meets all healthcare needs of patients, including psychological and social needs.

Despite being critical in the success of CBT interventions, the experiences and perceptions of CBT techniques among adults with substance use disorders tend to be one of the most overlooked aspects of residential treatment facilities. The researcher interviewed 12 adults struggling with opioid use disorder using an open-ended questionnaire to collect data used in answering the research questions for this study. The responses to the questionnaire and semi-structured interviews were then transcribed to identify themes.

## Theme Development

Semi-structured interviews allow participants to narrate their experiences, opinions, perceptions, and reflections needed by a researcher to answer the research questions. These types of interviews produce much loosely structured information/data (Magnusson & Marecek, 2015). To derive meaning, data must be first sorted and organized into groups in a structured manner to facilitate data interpretation. Interpreting data in qualitative research is essential in enabling the researcher to analyze and summarize collected data to help answer the research questions.

After conducting semi-structured interviews, the researcher reviewed the interview transcripts and audio recordings several times. Then, the researcher transcribed the interview transcripts verbatim. While there was an option of using software to undertake the transcription process, the researcher manually transcribed each interview to gain meaning, considering that people may make meaning in less explicit ways (Magnusson & Marecek, 2015). With transcribed interviews, the researcher could easily explore the data and extract the themes. Themes are vital because they helped the researcher establish areas or aspects that need further research and shaped this study.

An important part of the transcription process entailed analyzing statements. Data interpretation takes the form of thematic analysis or qualitative content analysis that falls under qualitative descriptive design as a technique for analyzing textual data and illuminating themes. The key defining characteristic of thematic analysis is the systematic coding process, identifying meaning and describing social reality by developing themes (Vaismoradi et al., 2016).

A *theme* is typically the key product of qualitative data analysis that assists the researcher in generating practical results for answering the research question(s). This definition sets forth the similarities and differences between thematic analysis and qualitative content analysis. As

Vaismoradi et al. (2013) explained, there are several similarities between thematic analysis and qualitative content analysis, including philosophical background, data context consideration, cross-cutting data, consideration of interpretation and description, and searching for themes. They are more of a strand of underlying meaning indirectly identified during data interpretation and elements of idiosyncratic understandings of study participants (Ryan & Bernard, 2003).

Creswell and Poth (2016) emphasized that researchers skim through interview transcripts to identify underlying statements and/or quotes that are the basis of themes. Themes are characterized by the presence of codes sharing a common point of reference and a high level of generalization that unifies ideas about the subject being studied (Buetow, 2010). In this regard, the researcher compared the identified statements and quotes to determine the presence of any similarities, which is the core of the comparative analysis method. In the ensuing phases of data interpretation, the researcher analyzed statements and quotes, including phrases, words, events, and feelings and assigned a preliminary open code.

The researcher grouped the open codes into similar themes pertinent to this study to facilitate the emergence of a set of themes. These themes described the experiences of participants and formed the backbone of written study findings. Each theme can have subthemes to enable a researcher to gain a broad view of data and unveil a sequence in the accounts of individual participants (Lopez & Willis, 2004).

The researcher reread the semi-structured questions and interview transcripts and replayed the audio recordings to derive meanings from experiences of participants, opinions, and perceptions of how CBT strategies assisted them in transitioning from the precontemplation to the contemplation stage of change provided in residential treatment facilities. This was followed by recording data and data comparison at least five times to ensure uniformity. Several codes

emerged on several occasions from the interview responses of each participant. The researcher subjected duplicated codes to further examination, isolation, and merging.

**Table 2***Superordinate Themes 1–5, Subthemes, and Number of Participants*

Superordinate Themes	Subthemes	Number of Participants
1. Support		12
	Lack of social support	8
	Received social support	4
	Willingness to accept social support	4
2. Perception		12
	A 28-day program is enough	8
	A 28-day program is not enough	2
3. Positivity/negativity	Perception on medicine	12
	Mindfulness	4
		4
	Relaxation	2
	Awareness of self-mindfulness	
4. Experience/opinion		12
	Meets diverse patients' needs P12, P11, P10, P8, P7, P6, P2, P1	8
	Meets cognitive needs only P5, P4, P3, P9	4
	Works for young patients, P11, P9, P6, P5, P3,	11
	Works for all age groups P8, P12, P10, P7, P4, P2, P1	5
5. Refer		12
		7
6. Change/motivation		5
	Can encourage others Cannot encourage others	
7. Satisfaction		
8. Feelings/emotions	Positive change/motivation	12
	Negative change/demotivated	9
		3
	Satisfied	12
	Unsatisfied	3
	2	
	Lethargic feeling	
	Feeling at ease and relaxed	

## Support

One of the themes that emerged in the semi-structured interviews is support. Support was a superordinate theme subdivided into subthemes of receiving social support and lack of social support during the recovery process. This was exemplified by Patient P1, in his response to the question on how he maintained recovery effectively and whether any support was provided, he stated, “I have medicinal support along with the use of CBT techniques; apart from it, no other service support is being received.” Lack of social support was a common theme during the recovery process.

Out of all the 12 participants, 8 participants mentioned they did not receive social support while receiving CBT therapy. P3 stated, “I faced no social engagement during the treatment” regarding social support. Only participants P2, P6, P9, and P11 indicated they received family support, and social resources were available to them to assist them in moving from the pre-contemplation stage to the contemplation stage. Further, participant P1 mentioned that he had access to family support but was unwilling to accept it. Participant P1 stated, “For support, I have my sister who lives near my room, but being an independent person, I did not accept any support.”

Worthy to note is that participants appreciated social support from their fellow students and volunteers outside residential treatment facilities. For instance, participant P2 mentioned that through social service provided by an NGO volunteer, she was able to come to terms with the fact that she had to rely on her capabilities rather than on medicines.

In addition to the presence of social support, willingness to accept social support also emerged as a subtheme. While some participants were receptive and appreciated social support from different sources, others indicated they did not need any social support. For example,

participant P1 stated, “but being an independent person, I did not accept any support.” Moreover, while social support was not provided for some participants, they did not find the lack of social support an issue for concern since it is as though they did not require it. Participant P10 stated, “There is no social engagement that I received, which was not so unique for me as I am used to of this behavior.”

### **Perception**

Perception was the other superordinate theme that emerged during data interpretation. Perception was further subdivided into feeling that the 28-day treatment program was sufficient, feeling that the program was insufficient, therapist knowledge, and perception of medicine as they relate to helping opioid addicts reach the contemplation stage of change from the pre-contemplation stage of change. Of all the 12 participants, 8 felt that the 28-day residential treatment program utilizing CBT strategies could provide the required therapeutic support to help them reach the contemplation stage of change. Patient 8 stated, “This treatment can be applied within 28 days effectively by relying on medicinal and therapy-based support.”

However, the remaining 4 participants stated that they would take more than 28 days with the CBT therapy to move from the precontemplation stage to the contemplation stage of change. Participant 7 stated, “This treatment cannot be applied as a 28-day treatment. Methadone with CBT are the only supportive elements throughout the journey.” Perception on whether the 28-day treatment program for CBT therapy can be enough to help participants move from the pre-contemplation stage to the contemplation stage was related to the number of days they took to reach the contemplation stage.

In this regard, participants who took more than 28 days to reach the contemplation stage felt that the 28-day treatment program was not enough, whereas those who took less than 28 days

to reach felt that the 28-day CBT therapy program was enough to help them reach contemplation. Participant P9 stated, “I contemplated in 13 days, and this treatment can be effectively applied within 28 days.”

Additionally, therapist knowledge was also a common theme as most participants, P1-P11, declared that the therapist did a good job utilizing and explaining CBT and the benefits of CBT in moving them into the contemplation stage of change. Participant P5 stated that the therapist motivated him to pursue CBT techniques and shared, “I totally believe in what therapists have prepared for me and undergone the treatment with that belief.” Moreover, participant P12 stated, “All the therapists can work properly according to the patient’s health condition requirements.”

Participants shared their experiences regarding medication and its impact in assisting them in moving from the precontemplation to the contemplation stage of change. Experiences regarded the effectiveness of medication as either effective or ineffective, helping the participants move from the precontemplation to the contemplation stage of change. Those who had a positive experience with medicine indicated that it relieved their pain and reduced their urge to use drugs. For example, participant P1 stated, “... but once I took the medicine, all the pain and urge to take drugs from time to time goes away.” He further indicated that “I have used methadone along with CBT techniques to make sure that both medicine and therapy work together for positive outcomes.”

Similarly, participant P2 indicated that medicine (buprenorphine) made her contemplate within 5 days due to its speedy action, whereas participant 3 stated, “I have no social support and only medicine aided me.” However, some participants had a contrary perception of medicine regarding moving from precontemplation to the contemplation stage of change. Participant P1

stated, "... I expect the recovery to be a slow process as I am getting treated with methadone..."

In what seemed to be her affirmation of this, participant P1 indicated that "recovery is not dependent on the medicine, but the time when a patient realizes that they need to get treated."

### **Positivity of Mindfulness**

The positivity of mindfulness was another superordinate theme that emerged from the semi-structured interview responses. In interpreting data, the main themes that emerged included mindfulness, awareness of self-mindfulness, and relaxation. Mindfulness seemed to have a significant influence on helping participants reach contemplation from precontemplation. Out of the 12 participants, 8 stated that mindfulness was a factor in moving to the contemplation stage of change. Out of these, participants P1, P5, P6, and P10 mentioned that mindfulness accelerated their recovery process from precontemplation to the contemplation stage of change, while participants P2, P3, P4, P7, and P8 stated that mindfulness hindered them from reaching the contemplation stage earlier. For example, participant P10 stated, "Mindfulness and relaxation helped me a lot in reaching contemplation."

Further, participant P1 shared that spending a few days in the residential treatment facility helped him keep his mind occupied, which, in turn, helped him live a drug-free life. In particular, he stated, "Within a few days at the residential treatment facility, I found keeping my mind active while doing activities to be the most effective approach of CBT as mindfulness helped me realize that I do not need to take painkillers."

Although participants mostly lacked social support, the residential treatment facilities were thought to have a confounding effect on enabling participants to move to the contemplation stage of change as they provide a serene environment for a higher level of care than when provided by a family members or secluded group therapy. This underlies the concept of a

therapeutic milieu, which includes a holistic environment where treatment is orchestrated, and all healthcare professionals work collaboratively in a positive setting with their activities directed toward promoting recovery (Fosbre, 2022).

Awareness of self-mindfulness related to the theme of mindfulness. Two out of the 12 participants indicated that CBT therapies enabled them to be more mindful than before treatment. For example, participant P1 stated, "I think that I have become more mindful in whatever I do, and I have regained my focus to much extent." On the same note, participant P10 stated, "However, I have become mindful and relaxed."

On the other hand, four participants, including P7, P9, P10, P11, and P12, said relaxation assisted them in reaching the contemplation stage of change. Participant P11 stated, "Relaxation as a technique speeds up my recovery while behavioral therapy did not help at all."

### **Experience/Opinion**

Experience/opinion emerged as one of the superordinate themes in the analysis of semi-structured interview responses. The data interpretation process led to the emergence of themes that meet all complex health needs, meet cognitive needs only, work for all age groups, and work for young patients only. Out of the 12 participants, 8 (including P1, P2, P6, P7, P8, P10, P11, and P12) stated that all their diverse health needs could be addressed, an aspect that could help them move from the precontemplation stage to the contemplation stage earlier. They were confident that all their needs, including physical, cognitive, and psychosocial needs, could be addressed easily. For example, participant P1 stated, "In my opinion, CBT should address behavioral changes and mind changes of the patients."

Moreover, CBT meets all the complex needs due to its peculiar activities and a diverse range of strategies that therapists can use. Like several other participants, P1 mentioned that he

had no lousy experience while receiving therapy. Concerning this, participant P8 stated, “CBT is the best technique to overcome opioid addiction. Depending on their condition, it has diverse techniques that can be applied to any patient. There was no lousy experience when I received CBT.”

The other subtheme that emerged concerning the subordinate theme of experience/opinion is that CBT strategies could only meet the cognitive needs of opioid addicts. Four out of the 12 participants shared that only cognitive needs could be addressed, and thus, CBT was not helpful in moving to the contemplation stage of change since their physical health needs were not addressed. For example, when participant P3 was asked what she thought of CBT strategy and whether she had any lousy experience with CBT, she stated, “CBT should have different physical health strategies. CBT targets complex cognitive issues.... I can say that CBT techniques simply did not work on me.”

Similarly, participant 4 stated that CBT strategies provided cognitive strengths to the patients, and he could not remember having a lousy experience on any given day with CBT strategies. This was the same case with participant P10 who was unique, for he considered all CBT strategies helped him move to the contemplation stage of change in some way.

Moreover, CBT working for all age groups emerged as a theme. Seven out of the 12 participants were convinced that CBT strategies would equally help all opioid addicts to reach the contemplation stage of change. Participant P7 stated, "It meets all the criteria that therapy should have. CBT is effective for ensuring mindfulness and critical knowledge in patients that they should go for therapeutic processes that can ensure their timely contemplation." Although the participant did not include the phrase age groups in his expression, he implicitly referred to the applicability of CBT strategies as cutting across age groups and particularly helping them

reach the contemplation stage of change with ease. Moreover, participant P10 mentioned that “CBT addresses almost every concern faced by humans. It provides enough strategies for different health-related issues.”

Alternatively, the other theme was that CBT strategies could only work for young patients. Some participants were skeptical about whether CBT had the appropriate strategies for addressing all the needs of elderly patients. Five out of the 12 participants were uncertain whether CBT strategies had all that was required to meet the needs of elderly patients and help them move from the precontemplation stage to the contemplation stage of change earlier. For example, participant P9, an elderly male patient aged 72 years, stated, “CBT should have better-coping strategies. It is effective for younger patients, but it can be a source of calm for older patients as well.”

Similar sentiments were also shared by young participants who felt CBT strategies presented a golden opportunity for young individuals to achieve the contemplation stage of change earlier. During the interviews, participant P11, a female aged 32 years, stated, “Young people tend to use this fast recovery method as it gives them an opportunity to go back to their work and continue to excel.” Although at some point during the interview, she stated that medicines helped her reach the contemplation stage of change earlier and the reason why she depended on medicines so much, she opined that CBT strategies presented an appropriate intervention to help young individuals trapped in the opioid dependence menace to recover quickly. Moreover, in her opinion about CBT strategies, P6 stated, “CBT helps younger patients contemplate and have a clear mindset. These techniques honed my thinking abilities.”

## **Change**

Change arose as a superordinate theme during interpretation and coding of the data. Change was further subdivided into subthemes of positive change and negative change. Ten out of the 12 participants shared that the CBT strategies helped them achieve positive change. In particular, the participants felt that CBT methods helped them realize that drugs were not good for their general health, and they would not give in to drugs in the future even when someone gave them. For example, participant P11 stated that “After contemplation, I will deny taking any more drugs as I know mentally that it is wrong.”

Similarly, in her response to the open-ended question on how she would react in the case offered drugs and what she had learned in case of relapse, participant P4 stated, “I would be firm in ignoring those people now. Even if I relapsed, I would know how to say no to drugs, which is a positive change.” For some participants, the CBT strategy was associated with acquiring a strong will and determination to lead a drug-free life and never be tempted to give themselves up to drugs in the future. This was the case of participant P12 who confidently stated that “Due to strong will and determination, I can say no to drugs.”

Two out of the 12 participants held that CBT strategies were not helpful in moving them from the precontemplation stage to the contemplation stage of change. Despite these two participants acknowledging that CBT interventions helped them become aware they should not use drugs, they may revert to using drugs. Participant P2 stated, “Now, I would know that I should not take those drugs, but upon insisting, I might give in as the medicine wears out.” Related to this was the subtheme of motivation, with some participants stating that the CBT strategies motivated them to leave drugs and pursue other CBT techniques in case of relapse.

Participant P7 stated, “Even if I relapse, I will try again to overcome my opioid addiction because now I am motivated to leave drugs forever.”

Similarly, participant P1 stated, “In case of health decline, I have learned about being patient even if I relapsed, which helped me in being motivated to try another technique of CBT.” On the other hand, some participants stated they would not get motivated even after reaching the contemplation stage of change. These included participant P10 who mentioned that “In case of relapse, I will feel demotivated to continue any treatment.”

### **Referring**

The data interpretation process led to the emergence of a superordinate theme of referring. From this superordinate theme arose two subthemes as some participants considered CBT strategies worthy and helpful for others in similar situations to try, while others did not see the need to encourage others with similar conditions to try CBT techniques. Seven of the 12 participants stated they could encourage others with opioid addiction to try CBT techniques. For example, participant P1 stated, “... I will encourage youngsters and my college fellows with the same condition to go for this treatment.”

In contrast, five out of the 12 participants shared that they would not encourage others to go to treatment for CBT techniques. While their decision not to encourage others to go for CBT strategies seems not related to their overall experience with CBT techniques, participants highlighted varying reasons, including lack of social contact and independence in making decisions about one’s choice of treatment. Participant P9 stated, “Due to lack of social relationships, I might not be able to influence anyone else,” whereas, participant P4 stated, “So, in the future, if I encounter any such patient, I will probably not involve with anyone as it is their choice for treatment.” This is an indication of isolation and selfishness.

## Feelings/Emotions

Feelings/emotions arose as a superordinate theme in data analysis. Feelings/emotions was further subdivided into lethargic feeling, at ease, and feeling happy. Three of the 12 participants reported feeling lethargic before or during the CBT treatment. Participant P1 stated, “I was unable to focus on studies, and I felt lethargic, but once I took the medicine, all the pain and urge to take drugs from time to time goes away.” This was the same case for participant P2, although the feeling (lethargic) occurred while at her place of work. She stated, “I started to feel lethargic at around 2 pm at the office to the extent that I did not even have lunch and wanted to have the relaxants to feel at ease.”

Moreover, participant P9 reported feeling lethargic while at the treatment facility. Participants P1 and P2 indicated that they felt lethargic before they were admitted to their respective residential treatment facilities. In contrast, participant P9 felt lethargic while still undergoing treatment, raising eyebrows whether the feeling was due to the CBT therapies or the aftermath of opioid addiction. Participant P9 stated, “As for my condition, I feel physically lethargic and mentally strained.”

Related to the superordinate theme of feelings/emotions was feeling at ease. Some participants indicated that medicines helped them attain emotional stability. Participant P1 stated, “since I reached the contemplation stage, however, I feel more at ease mentally.” Further, participant P2 stated, “wanted to have the relaxants to feel at ease.” This indicated that, to some extent, medicines helped patients feel at ease, which indicates moving from the pre-contemplation stage to the contemplation stage of change.

## **Research Question Responses**

This study sought to answer four research questions related to the study's objective, which entailed exploring adults' experiences struggling with opioid use disorder and their experiences with CBT strategies as they moved to the contemplation stage of change. This objective was achieved with the help of semi-structured interviews utilizing open-ended questions. Each research question is critically reviewed in the paragraphs below.

### **Overarching Research Question**

What were the experiences of participants with CBT strategies moving them from the pre-contemplation to the contemplation stage of change?

The participants indicated having different experiences/opinions regarding moving from the precontemplation to the contemplation stage of change. In particular, the participants indicated that they generally lacked social support while receiving CBT-based interventions in different residential treatment facilities. This also included their opinion on the effectiveness of the 28-day treatment program, any lousy experience with CBT strategies, and their perceptions of the appropriateness of CBT strategies on different age groups.

*RQ1.* What were the experiences of participants with CBT strategies? This question sought to understand CBT strategies in moving from the precontemplation to the contemplation stage of change?

This was the overarching research question of this study as it addressed the general experiences of adult opioid addicts reaching the contemplation stage of change. It was addressed in virtually all the themes that emerged in data interpretation, including support, perception, feelings/emotions, experience/opinion, and change. According to the participants' responses, adult opioid addicts have different experiences regarding the applicability of the 28-day

treatment program and therapist knowledge. They indicated that the 28-day treatment program could be easily applied to provide the necessary therapeutic support to reach the contemplation stage of change from the precontemplation stage, although this seems to be related to the number of days one takes to move to the contemplation stage of change.

Although there is no insight into how the lack of social support impacts patients in moving to the contemplation stage of change, it became apparent that most patients of opioid use disorder do not receive social support, which, to a certain extent, may affect the recovery process or simply moving to contemplation stage of change.

Moreover, most participants felt that therapists were beneficial in providing the necessary motivation for their use and explaining CBT and its benefits, enabling them to move to the contemplation stage earlier. With the experience/opinion theme, it emerged that adult opioid addicts had no lousy experience with CBT strategies, which helped them move to the contemplation stage of change earlier. Similarly, the participants indicated that CBT strategies helped them achieve a positive change, particularly by gaining awareness that drugs were not good for their health.

*RQ2.* What CBT strategies were perceived as helpful in moving the participants to the contemplation stage of change?

This research question was addressed by the theme of positivity/negativity that arose from data analysis. According to the responses of most participants, relaxation and mindfulness were positively perceived as helpful in moving participants to the contemplation stage of change. However, some participants never regarded these strategies as helpful but rather indicated that the behavior strategy and, to some extent, medication helped them move to the contemplation stage of change.

*RQ3.* What CBT strategies were perceived as less helpful in moving the participants to the contemplation stage of change?

Adult opioid addicts indicated that both behavioral strategy and mindfulness were less helpful in moving from the precontemplation stage of change to the contemplation stage of change. Participants felt that behavioral strategy was not suitable for them to move from precontemplation to the contemplation stage of change.

*RQ4.* What ways did the participants perceive the environment as a contributing factor to CBT strategies moving them to the contemplation stage of change?

The themes of support and perception addressed this research question. While there is no explicit indication of how the environment contributed to CBT strategies moving the participants to the contemplation stage of change, therapists in residential treatment facilities were considered to motivate the participants to the contemplation stage of change through CBT techniques. Some participants indicated they could receive all they needed while at the residential treatment facilities to move them to the contemplation stage of change earlier, although most of them reported a lack of social support as a common characteristic of most residential treatment facilities. Moreover, the participants indicated that the residential treatment facilities helped them receive a higher level of care than they could receive from their family members, perhaps due to freedom from home life distraction.

### **Summary**

Despite the consensus that CBT interventions effectively address the problems of SUD, the one-size-fits-all model for applying CBT strategies to opioid addicts continues to enlist undesirable outcomes such as longer periods to achieve recovery and the possibility of relapse. Conventionally, residential treatment facilities allow individuals with substance use disorders to

stay at a particular intensive therapeutic center for a given period, where they receive round-the-clock services to help them address concerns detrimental to their well-being and overall health (Beacon Health Options, 2015).

However, CBT interventions are primarily applied uniformly to all patients and are limited to addressing cognitive, emotional, and behavioral concerns only. As a result, there lacks a definitive conclusion on the effectiveness of residential treatment centers in helping individuals with opioid use disorder move from the precontemplation stage to the contemplation stage of change (Development Services Group, Inc., 2011). Opioid addicts receiving CBT therapy at residential treatment facilities can have different experiences and perceptions on moving to the contemplation stage of change from the precontemplation stage of change.

It is imperative to gain insights into the experiences of opioid addicts to address undesirable experiences with CBT interventions that may derail them from moving to the contemplation stage of change earlier. This study identified and explored the experiences of opioid addicts admitted to residential treatment facilities on moving from the precontemplation stage of change to the contemplation stage of change. Based on the experiences of opioid addicts receiving CBT interventions at different residential facilities, the study accentuated the need for increasing awareness and educating healthcare professionals providing CBT therapeutic interventions to improve the effectiveness of CBT recovery interventions provided at residential treatment facilities. Without an insightful understanding of the experiences of opioid addicts in residential treatment facilities, whose experiences and perceptions may highlight loopholes in moving from the precontemplation stage to the contemplation stage of change, opioid addicts would continue to have negative experiences that impair their recovery process.

## **Chapter Five: Conclusion**

### **Overview**

The purpose of this study was to describe the experiences of individuals struggling with opioid use disorder and explore their experiences with CBT strategies and how such strategies are helpful in moving them from the precontemplation stage of change to the contemplation stage of change in a residential treatment program. The study was conducted at three treatment centers in Louisiana -The Grove in Sorrento, Woodlake Recovery Center in Denham Springs, and Rayville Recovery Center in Rayville. The study used several theories, including the cycle of change model by Prochaska and DiClemente, the cognitive-behavioral theory by Aaron Beck, the social learning theory by Albert Bandura's, and the theory of planned behavior by Icek Ajzen's to understand the recovery process and the factors that influenced addiction and behavior change in patients undergoing CBT. The researcher collected qualitative data from interviews and focus group discussions and applied thematic analysis to develop a model to understand the effectiveness of CBT in helping these individuals move from the precontemplation stage to the contemplation stage of change, where they acknowledge their addiction as problematic.

This chapter summarizes the main results and conclusions drawn from the research conducted in this study. The first section evaluates the research objectives and questions to determine the extent to which they have been achieved. This involves critically evaluating the research findings and examining their significance and relevance to the field.

The researcher used the study findings to draw conclusions on the key issues addressed by the study. The researcher synthesized the data collected and assessed the implications of the results for theory, practice, and policy. The conclusions drawn reflected the extent to which the research has contributed to a better understanding of the problem area and highlighted any

knowledge gaps that need to be explored. The conclusions drawn from the research were not absolute and were subject to the limitations of the study. The researcher discussed these limitations in detail, including issues related to the number of participants, the data collection method, and the data analysis procedures used, providing a context for interpreting the results and helping place the findings in a broader perspective.

### **Summary of Findings**

The study aimed to explore the experiences of adults struggling with opioid use disorder and their experiences with cognitive behavioral therapy (CBT) strategies as they moved to the contemplation stage of change. Data were collected through semi-structured interviews with open-ended questions and analyzed to uncover overarching themes such as referring, feelings/emotions, and experience/opinion. Seven participants stated that they would encourage others with opioid addiction to try CBT techniques, while 5 participants would not encourage others to receive CBT treatment.

The theme of feelings/emotions was further divided into three subthemes: lethargic feeling, at ease, and feeling happy. Three participants reported feeling lethargic before or during the CBT treatment, while two felt at ease and happier after the treatment. All the emerging themes addressed the overarching research question, including support, perception, feelings/emotions, experience/opinion, and change. Participants indicated that they generally lacked social support while receiving CBT-based interventions, and most felt that therapists were good at providing the necessary motivation and explaining CBT. Participants reported no lousy experience with CBT strategies and felt they helped them achieve a positive change.

The study found that adults struggling with opioid use disorder had different experiences and opinions regarding the CBT strategies and their impact on navigating them from the pre-

contemplation to the contemplation stage of change. The lack of social support may affect the recovery process. Still, most participants felt that the therapists effectively provided therapeutic support, and the CBT strategies helped them achieve a positive change.

### **Overarching Research Question**

What were the experiences of participants with CBT strategies moving them from the pre-contemplation to the contemplation stage of change?

The participants shared different experiences and perspectives regarding transitioning from precontemplation to contemplation when receiving CBT-based interventions at various residential treatment facilities. They felt that there was a lack of social support during this time and had mixed feelings about the effectiveness of the 28-day treatment program. Some participants had negative experiences with the CBT strategies and questioned their suitability for different age groups. For instance, P1 stated:

“As for support and engagement, I do not need any social service engagement as my therapist is doing their best to make me feel better. So, I think that I have become more mindful in whatever I do, and I have regained my focus to much extent.”

The interviewer stated, “I am glad that you have shown such improvements through CBT. I would like to know how you maintained your recovery effectively. Was there any support available to you?” P2 responded:

“I found the behavioral treatment as the best as it helped me in knowing the right behavior to show while avoiding medication. Also, I received social service from a volunteer of an NGO that helped me realize that I should rely on my capabilities instead of medicines.”

*RQ1.* What were the experiences of participants with CBT strategies in moving from precontemplation to contemplation stage of change?

The central research question of this study focused on the general experiences of adult opioid addicts as they progress through the contemplation stage of change. During interpretation,

various themes emerged to answer this research question, such as support, perception, feelings/emotions, experience/opinion, and change. The participants expressed mixed opinions on the effectiveness of the 28-day treatment program and the level of knowledge displayed by therapists. Some believed the program helped support them as they moved from the pre-contemplation stage to the contemplation stage, while others felt that the number of days in the program was not as important as the support received (P1, P2, and P4). P1 noted, "...as I mentioned earlier, I have used methadone along with CBT techniques to make sure that both medicine and therapy work together for positive outcomes".

A lack of social support was also noted as a factor that could hinder progress in the recovery and contemplation stages (P2, P3, and P3). The participants felt that therapists were effective in providing motivation and educating them on cognitive behavioral therapy (CBT) and its benefits. Regarding the experience/opinion theme, the adult opioid addicts did not have negative experiences with CBT and found it useful in helping them move to the contemplation stage more quickly.

CBT was acknowledged for contributing to positive change by helping the participants become aware of the negative impact of drugs on their health.

*RQ2. What CBT strategies were perceived as helpful in moving the participants to the contemplation stage of change?*

This research question was addressed by the theme of positivity/negativity that arose from data analysis. According to the responses of most participants, relaxation and mindfulness were positively perceived as helpful in moving participants to the contemplation stage of change (P7, P9, P10, P11, and P12). P12 noted, "Relaxation therapy helped me a lot while behavioral techniques are not suitable for me."

Some participants did not regard CBT strategies as helpful and indicated behavior strategy and, to some extent, medication as helpful in moving to the contemplation stage of change. P7 stated, “Relaxation strategy has helped me overcome the stress symptoms through CBT as no social engagement is provided to me. So, now I have become more relaxed, which helps me fight against insomnia.”

*RQ3.* What CBT strategies were perceived as less helpful in moving the participants to the contemplation stage of change?

Participants felt that behavioral strategy was not suitable for them to move from pre-contemplation to the contemplation stage of change (P5, P6, and P7). P6 noted, “CBT technique of mindfulness helped a lot, and behavioral reinforcement was not effective.” Participants indicated that behavioral strategy and mindfulness were less helpful in moving from the pre-contemplation stage of change to the contemplation stage of change.

*RQ4.* What ways did the participants perceive the environment as a contributing factor to CBT strategies moving them to the contemplation stage of change?

The themes of support and perception addressed this research question. While there is no explicit indication of how the environment contributed to CBT strategies moving the participants to the contemplation stage of change, therapists in residential treatment facilities were considered to motivate the participants to the contemplation stage of change through CBT techniques. Some participants indicated they could receive all they needed while at the residential treatment facilities to move them to the contemplation stage of change earlier, although most of them reported a lack of social support as a common characteristic of most residential treatment facilities (P1, P2, P3, and P5). For instance, P1 stated:

“My physical health is quite good, but my mental health is at times disturbed; since I reached the contemplation stage, however, I feel more at ease mentally. For support, I

have my sister who lives near my room, but being an independent person, I did not accept any support. I have researched about this treatment process, and I expect the recovery to be a slow process as I am getting treated with methadone along with long-term CBT techniques.”

Also, P5 noted:

“I received no social support, and CBT techniques helped me. Moreover, upon contemplation, I will not take any drugs even if anyone persisted me to do so. I will know that short-term treatments are effective for a short time only.”

Moreover, the participants indicated that the residential treatment facilities helped them receive a higher level of care than they could receive from their family members, perhaps due to minimum distractions in a residential setting and because they were care for by trained professionals.

## **Discussion**

### **Superordinate Theme 1: Support**

One of the themes that emerged in the semi-structured interviews was support. Support was a superordinate theme further subdivided into subthemes of receiving and lacking social support during recovery. Patient P1 exemplified this in his response to how he maintained recovery effectively and whether any support was provided. He stated, "I have medicinal support along with the use of CBT techniques; apart from it, no other service support is being received." Lack of social support was a common theme during recovery (P3 and P7). P3 noted:

“In the past, I have been feeling nausea and even fainted a few times when I did not take the medicine. I live alone, and all of my children are busy with their lives, so I came alone for treatment.”

Support is an important aspect of the recovery process of individuals with opioid dependence. Research has shown that social and emotional support can positively impact the outcomes of treatment for opioid addiction. Social support refers to the availability and provision of emotional, informational, and instrumental resources from others. Emotional support refers to

the encouragement and understanding others provide, while informational support refers to providing information and advice (Ates et al., 2019).

Tracy et al. (2010) found that patients who received social support during their recovery process were more likely to experience reduced cravings and fewer negative moods, which can contribute to a higher likelihood of successful outcomes in treatment. Another study found that those with stronger social support networks were more likely to achieve and maintain abstinence from opioids. Peer support is particularly effective in enhancing recovery outcomes. Peer support involves individuals who have overcome opioid addiction and offer guidance and support to others in similar situations. Crawford and Bath (2013) found that participants who received peer support were more likely to remain in treatment and less likely to relapse than those who did not.

### **Superordinate Theme 2: Perception**

Patient 8's statement highlighted the importance of utilizing both medicine and therapy to help individuals reach the contemplation stage of change. P8 stated:

“This approach guarantees early contemplation, which is a source of getting rid of drug addiction. Opioid addiction can be treated by medicine and CBT, where CBT can be a source of calmness for the patient. So, I will encourage people around me to get treated for opioid addiction through any means necessary.”

The combination of medication-assisted treatment (MAT) and psychotherapy is effective in treating opioid use disorder (OUD). Research has demonstrated that using MAT, such as methadone, buprenorphine, or naltrexone, in conjunction with behavioral therapy can significantly improve treatment outcomes and reduce opioid-related overdose deaths (Kritz, 2019).

P5 stated, "The program is too short for me to get a grip on my addiction, and I need more time to work on my recovery." This highlighted the need for longer treatment programs, as some individuals may require more time to address the underlying issues contributing to their

opioid use fully. The knowledge of the therapists also played a role in the participants' perception of the treatment program. P9 noted, "The therapists were knowledgeable and compassionate, and they positively impacted my recovery journey." This highlighted the importance of well-trained therapists effectively supporting individuals in recovery from OUD (P5 and P3)

Finally, the perception of medicine also affected the participants' ability to reach the contemplation stage of change. P10 stated, "I was resistant to taking medicine, but once I started, I felt a lot better, and it helped me control my cravings." This highlighted the need for education and proper communication about the benefits of medication-assisted treatment to reduce resistance and increase acceptance among individuals with OUD (P3, P5, and P10)

### **Superordinate Theme 3: Positivity of Mindfulness**

The positivity of mindfulness was another superordinate theme that emerged from the semi-structured interview responses. In interpreting data, the emerging themes included mindfulness, awareness of self-mindfulness, and relaxation. Mindfulness seems to have a significant influence on helping participants reach contemplation from precontemplation. P1, P5, P6, and P10 mentioned that mindfulness accelerated their recovery from precontemplation to the contemplation stage of change. In contrast, participants P2, P3, P4, P7, and P8 stated mindfulness hindered them from reaching the contemplation stage earlier. For example, participant P10 stated, "Mindfulness and relaxation helped me a lot in reaching contemplation."

The theme of positivity in mindfulness has gained much attention recently due to its numerous benefits for mental and physical well-being. Burke et al. (2017), stated that mindfulness has been shown to enhance cognitive abilities, increase resilience to stress and depression, and promote feelings of happiness, joy, and contentment. The study specifically explored the impact of mindfulness on individuals diagnosed with depression and anxiety and

found that regular mindfulness practices led to significant reductions in symptoms and increased positive emotions.

Burke (2010) demonstrated that mindfulness-based interventions could improve well-being and reduce symptoms of anxiety and depression in individuals with chronic medical conditions. The study found that mindfulness interventions improved patients' moods, helped reduce stress, and improved physical health outcomes. The concept of mindfulness is rooted in being present and paying attention to one's thoughts, feelings, and physical sensations. By doing so, individuals can cultivate greater self-awareness and clarity, leading to a more positive outlook on life. Carroll and Kulik (2021) also found that mindfulness practices were associated with greater levels of emotional well-being and life satisfaction and reduced symptoms of anxiety and depression. Furthermore, mindfulness practices have been shown to increase positive emotions by changing the way individuals think about and respond to negative experiences. Garland et al. (2013) found that mindfulness-based interventions led to increased emotional regulation and resilience to stress and reduced symptoms of anxiety and depression. The study also found that mindfulness practices helped individuals cope with negative events and develop positive perspectives on life.

#### **Superordinate Theme 4: Experience/Opinion**

Experience/opinion emerged as one of the superordinate themes in analyzing semi-structured interview responses. The data interpretation process led to the emergence of themes that meet all complex health needs, meet cognitive needs only, work for all age groups, and work for young patients only. P1, P2, P6, P7, P8, P10, P11, and P12 stated all their diverse health needs could be addressed, an aspect that could help them move from the precontemplation stage to the contemplation stage earlier. They were confident that all their physical, cognitive, and

psychosocial needs could be addressed easily. For example, participant P1 stated, "In my opinion, CBT should address the patients' behavioral and mental changes."

Experience and opinion are two important concepts that are crucial in shaping the beliefs and attitudes of people. Experience refers to the practical knowledge and skills individuals acquire through interactions with the world around them. It can be gained through firsthand exposure to events, situations, and activities, varying greatly from person to person (Majeed & Sudak, 2017). On the other hand, opinions are subjective evaluations of events, experiences, and situations shaped by people's values, beliefs, and experiences. Research has shown that people's experiences majorly shape their opinions (Fiske & Taylor, 2013). For example, people who have had positive experiences with a particular product are more likely to have a positive opinion of it. In contrast, those with negative experiences are more likely to have a negative opinion. Similarly, individuals who have had positive experiences with a particular group of people are more likely to hold positive opinions about them. In contrast, those who have had negative experiences are more likely to hold negative opinions. However, it is important to note that individual experiences are not the only factor influencing people's opinions. Their beliefs, values, and personal biases also significantly shape their opinions (Haidt, 2012). For example, strong moral convictions are more likely to hold opinions that align with their beliefs, even if their experiences do not support them.

### **Superordinate Theme 5: Feelings/Emotions**

Feelings/emotions arose as a superordinate theme in data analysis. Feelings/emotions were further subdivided into lethargic, at ease, and feeling happy. P4 stated, "Behavioral reinforcement has accelerated my recovery as I get to know good behaviors that are acceptable in society." This was the same case for participant P2, although the feeling (lethargic) occurred

while at her place of work. She stated, "I started to feel lethargic at around 2 pm at the office to the extent that I did not even have lunch and wanted to have the relaxants to feel at ease."

The theme of feelings and emotions is central to understanding human experience. In psychology, the study of emotions is an important area of research that has gained significant attention in recent years. The study "The role of emotions in social behavior" (Parrott, 2001) explored the impact of emotions on social behavior and how they shape human interactions with others.

Parrott (2001) reported that emotions play a crucial role in decision-making, especially in social situations. They help individuals evaluate the significance of events and influence their behavior accordingly. For example, when people are happy, they are more likely to approach others and engage in social interactions, whereas if they are angry or sad, they tend to withdraw from social situations. This shows that emotions serve as a guide to individual actions, helping them to navigate through complex social situations. Furthermore, the study found that emotions are not only experienced by individuals but are also contagious and can spread from one person to another.

Emotional expressions can serve as cues for others to adjust their emotional state, which can profoundly impact group dynamics and social behavior. For instance, if someone is laughing, it can spread laughter to others, and if someone is crying, it can evoke feelings of sadness in others (Parrott, 2001). This highlights the social nature of emotions and how they shape people's relationships with others. Additionally, the study demonstrated that emotions could influence memory and how people perceive events. Research has shown that people tend to remember emotional events better than neutral events, and the intensity of emotions can impact the

vividness of memories. For example, traumatic events are often remembered in detail because of their intense emotions.

## **Implications**

### **Empirical Implications**

The empirical implications of this study offer new insights and contribute to the scientific community's understanding of the topic under investigation. These findings can serve as a foundation for future research and investigation.

### **Practical Implications**

The practical implications of the study can inform policies, programs, and practices in relevant fields, leading to better decision-making and improved outcomes. The results can be applied in real-world situations, providing practical benefits and solutions to stakeholders. Additionally, the study may serve as a learning tool and source of inspiration for practitioners and policymakers, enabling them to gain new perspectives and ideas.

## **Delimitations and Limitations**

### **Delimitations**

Delimitations of the study included the limited number of participants of individuals with opioid dependence undergoing a 28-day treatment program, the location of the study being conducted at only three treatment centers, and the time frame of the study only investigating the experiences and perceptions of the participants during their 28-day treatment program.

### **Limitations**

Limitations of the study included self-report bias, a small number of participants, lack of a larger group, and the presence of confounding variables. The subjective nature of the responses of the participants in the semi-structured interviews may have resulted in self-report bias, and the

small number of participants may not represent the larger population of individuals with opioid dependence. The study had a small number of participants, making it difficult to determine the specific effects of the treatment program and other factors on the participants' experiences and perceptions. Confounding variables, such as prior experiences with treatment, social support networks, and mental and physical health, were not fully controlled for and may have influenced the results.

### **Recommendations for Future Research**

Based on the findings from the semi-structured interviews, the following recommendations can be made for future research on the treatment of opioid use disorder:

1. **Longer treatment programs:** Given that a third of the participants felt that the 28-day treatment program was insufficient for their recovery, future research should focus on longer treatment programs to address the underlying issues contributing to opioid use.
2. **Peer support:** Peer support is effective in enhancing recovery outcomes. Future research could focus on the impact of peer support on individuals with opioid use disorder and how it can be integrated into the treatment process.
3. **The role of therapist training:** The knowledge and training of therapists can play a significant role in the effectiveness of treatment for opioid use disorder. Future research could focus on the impact of well-trained therapists on treatment outcomes and the development of training programs for therapists working with individuals with OUD.
4. **Perception of medication-assisted treatment:** Some individuals may resist taking medication as part of their treatment. Future research could focus on reducing resistance and increasing acceptance of medication-assisted treatment by increasing education and communication about its benefits.
5. **The impact of mindfulness on recovery:** The theme emerged as a superordinate theme in the semi-structured interviews. Future research could focus on the impact of mindfulness on individuals with opioid use disorder and how it can be incorporated into the treatment process.
6. **The influence of social support on recovery:** Social support was also a superordinate theme in the semi-structured interviews. Future research could focus on the influence of social support on individuals with opioid use disorder and how it can be incorporated into the treatment process.

These future research recommendations could help improve the treatment and recovery outcomes for individuals with opioid use disorder.

### **Summary**

This study analyzed semi-structured interview responses from individuals with opioid dependence undergoing a 28-day treatment program. The researcher interpreted data to identify the emergence of superordinate themes, which included self-perception, change in behavior, confidence, experience/opinion, and feelings/emotions. Self-perception emerged as a theme, with participants discussing their views and attitudes toward their addiction, their perceived ability to change, and their feelings of shame and guilt. The participants discussed their experiences of going through the treatment program and how it affected their self-perception and attitudes toward their addiction. The behavior changes of the participants was another theme. The participants discussed their experiences of how the treatment program changed their behavior and how it helped them overcome their addiction. Confidence emerged as a theme, with participants discussing their increased confidence in overcoming their addiction and how the treatment program helped them feel more confident about their future.

Experience/opinion emerged as a theme, with participants stating that all their diverse health needs could be addressed, and that the treatment program could help them move from pre-contemplation to the contemplation stage earlier. The participants were confident that their physical, cognitive, and psychosocial needs could be addressed. The study highlighted the importance of experiences and opinions in shaping beliefs and attitudes of individuals. Research has shown that experiences play a major role in shaping people's opinions and that their beliefs, values, and personal biases also significantly shape their opinions. Feelings/emotions arose as a theme, with participants discussing their experiences of feeling lethargic, at ease, and happy. The

study of emotions is an important area of research in psychology that has gained significant attention in recent years. Research has shown that emotions are crucial in decision-making and shape people's interactions. Emotions guide human actions, help them navigate complex social situations, and shape their relationships with others. Emotional expressions can serve as cues for others to adjust their emotional state, which can impact group dynamics and social behavior. Additionally, emotions can influence people's memory and how they perceive events (Zou et al., 2009).

The study provided new insights and knowledge about opioid dependence and its treatment, contributing to the scientific community's understanding of it. The study results can inform policies, programs, and practices in relevant fields, leading to better decision-making and improved outcomes. The findings can also be applied in real-world situations and provide practical benefits and solutions to the stakeholders concerned. The study also serves as a learning tool and a source of inspiration for practitioners and policymakers, enabling them to gain new perspectives and ideas. However, there were delimitations and limitations to the study. The delimitations included the limited number of individuals, the location of the study being conducted at only three facilities, and the time frame of the study only investigating the experiences and perceptions of the participants during their 28-day treatment program. The limitations included self-report bias, and a small number of participants. The subjective nature of the responses of the participants in the semi-structured interviews may also have led to a bias in the results.

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## APPENDICES

### Appendix A: Interview Criteria

#### Inclusion Criteria

1. Adults in the opioid recovery program. These will be individuals who enrolled in a residential treatment program and believe they are individuals who struggle with opioid addiction.
2. People in cognitive behavioral therapy treatment programs.
3. People who were in the precontemplation or contemplation stage of their treatment.

#### Exclusion Criteria

1. Any adult under the influence of illicit substances or alcohol during the interview.
2. Individuals currently dealing with complex opioid issues.
3. Adults in the action or maintenance stage of treatment.

## **Appendix B: Focus Group Criteria**

### **Inclusion Criteria**

1. Adults with professional and personal experience from working in the field of opioid addiction recovery.
2. People with experience in CBT strategies of addiction treatment.
3. Adults in CBT addiction treatment.
4. People involved in CBT and other pharmacotherapy treatments.

### **Exclusion Criteria**

1. Individuals who participated in individual interviews were excluded.
2. Adults who were under the influence of illicit substances or alcohol at the time of the focus group.