

**EXPLORING THE PERCEIVED EFFECTIVENESS OF COGNITIVE BEHAVIOURAL
THERAPY AS A TREATMENT MODEL FOR SUBSTANCE USE DISORDERS WITH
CO-OCCURRING DISORDERS AT SUBSTANCE ABUSE REHABILITATION CENTRES
IN GAUTENG**

by

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Dissertation submitted in fulfilment of the requirements for the degree of

MASTER OF ARTS

in the subject

PSYCHOLOGY

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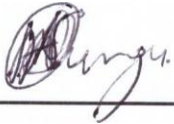
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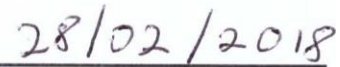
DECLARATION

I herewith declare that, “*Exploring the perceived effectiveness of cognitive behavioural therapy (CBT) as a treatment model for substance use disorders with co-occurring disorders at substance abuse rehabilitation centres in Gauteng*”, is my own work and that all the sources used or quoted have been indicated and acknowledged by means of complete references.



Signature

Mr S A Mhlungu



DATE

ABSTRACT

Against the background of high prevalence of substance abuse in the globe generally and South Africa in particular, research has shown an association between substance abuse and other mental disorders or vice-versa. With most rehabilitation centres offering separate diagnosis and treatment for the two disorders, the problem of relapse has been significant. The purpose of this study is to explore the perceived effectiveness of CBT as a treatment model for substance use disorders with co-occurring disorders. Subsequently, the research will add to the already existing research evidence. The study was conducted in five rehabilitation centres in Gauteng Province. The qualitative descriptive research approach was used to conduct the study. Both purposive and snowball sampling were used to recruit participants in this study. The sample consisted of CBT specialist participants from diverse race, gender, ethnicity, and age ranging from 30 to 65 years, with at least a minimum of five years' experience. A pilot study with two specialist participants was conducted, and this enhanced trustworthiness and authenticity of the study. The primary method of qualitative data collection employed in this study was semi-structured individual interviews for specialist participants. Grounded theory analysis was employed to analyse data.

The findings of the study emphasised a need to not separate treatment of substance use disorders and psychiatric pathologies. More importantly, the effectiveness of CBT in treating both disorders was established by the study. The study further encourages more time in therapy as the way to increase effective results accompanied by less relapse rate. Accordingly, the findings of this study encourage more research and use of CBT treatment for substance use disorders with co-occurring disorders in South Africa. This study found that the most used substances are both legal and illegal, and they are further classified as depressants, stimulants, opioids, and new psychoactive substances. A vulnerable population to abuse substances includes adolescent and young adults, individuals with co-occurring disorders, and low socio-economic status. The disorders that normally co-exist with substance use disorder ranges from depression, bipolar disorder, schizophrenia, sleeping disorder, impulsivity, antisocial behaviour, borderline disorder, paranoia, panic disorder, and suicide behaviour. The study found that genetic predisposition, depression, parental neglect and financial problems, experimentation with substances for relaxation, peer group pressure, and co-occurring disorders are high risk causes for substance abuse. The experience of participants in treating substance use disorder with co-occurring

disorders involves which disorders get treated first, and the mental state of patients for effective treatment. The various substance abuse treatment models includes person centred approach, bio-psycho-social approach, holistic approach, eclectic therapy, integrated approach, resilient approach, rational emotive behavioural therapy, family therapy, motivational interviewing, 12-step programme, and cognitive behavioural therapy. The participants' experience with CBT entails its usability in both individual and group therapy, the use of CBT skills after therapy, and CBT effectiveness in relapse prevention. Accessibility and affordability of CBT treatment is influenced by access to rehabilitation centres and cost of rehabilitation centres. Lastly, individual factors, family factors, and environmental factors are part of the contributing factors towards high relapse rates.

KEY TERMS

Cognitive Behavioural Therapy; co-occurring disorders; grounded theory; rehabilitation centres; relapse; substance use.

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- I will like to thank my ancestors for giving me strength to work on this study from commencement until the end.
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DEDICATION

I dedicate this study to all people affected by substance use disorder with co-occurring disorders. I wish them strength to recover. May they find the necessary help to fight and overcome the disorders.

ACRONYMS/ABBREVIATIONS

AA:	Alcoholics Anonymous
ADHD:	Attention-deficit/hyperactive disorder
AIDS:	Acquired Immune Deficiency Syndrome
CBT:	Cognitive Behavioural Therapy
CMR:	Christelik-Maatskaplike Raad/Christian Social Counsel
CN:	Cocaine Anonymous
DALYs:	Disability-adjusted life years
HIV:	Human Immuno-Deficiency Virus
MI:	Motivational Interviewing
NA:	Narcotic Anonymous
NPS:	New Psychoactive Substances
PTSD:	Post-Traumatic Stress Disorder
SANCA:	South African National Council on Alcoholism
SUD:	Substance Use Disorders
TiK:	Methamphetamine
UN:	United Nations
UNDCP:	United Nations Drug Control Programme
WHO:	World Health Organisation

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CHAPTER 1: ORIENTATION TO THE STUDY

1.1 INTRODUCTION

Across the globe, countries experience serious challenges of substance abuse and South Africa is not an exception (Dada, Burnhams, Erasmus, Parry, Bhana, Timol, & Fourie, 2016). The history of humanity is also the history of substance abuse and no country is immune to the devastating effects of substance abuse (United Nations Office on Drugs and Crime, 2017). Since time immemorial, herbs, roots, bark leaves, and plants were used for pain relief and to help control diseases. Therefore, proper drug administration is a medical blessing. Over the past decades, the use of illegal substances spread at an unprecedented rate and reached every part of the world (United Nations Office on Drugs and Crime, 2017). The United Nations General Assembly established the United Nations Drug Control Programme (UNDCP) in 1990 to advance rigorous global actions against illicit substance production, trafficking and abuse (Maithya, 2009). This was informed by the need for an organisation. The unit's creation is evident of determining the governments of the globe, operating through the United Nations (UN) to end these transnational phenomena (United Nations Office on Drugs and Crime, 2017).

Abused substances range from alcohol and cannabis to various other forms of substances. These include cocaine, prescription opioids, ecstasy, heroin, opium, study drugs, inhalants, and many new psychoactive substances (Dada *et al.*, 2014; United Nations Office on Drugs and Crime, 2017). In 1994, during his opening speech, the former South African President, Nelson Mandela highlighted substance abuse as a challenge among social pathologies (Ramlagan, Peltzer & Matseke, 2010). In South Africa, different parts of the country seem to be having dominant drugs prone to that specific location. Alcohol remains the dominant substance of abuse in KwaZuluNatal and the central region, while cannabis is standard in Gauteng and the Northern region. Cocaine is reported as a secondary substance of abuse by most of the rehabilitation centres in the country, while heroin remains stable as a primary substance of abuse, except in KwaZulu-Natal where its abuse is increasing (Dada *et al.*, 2014). The Western Cape continues to be prone to methamphetamine (Tik) as a predominant substance of abuse. Moreover, over the counter and prescription medicines continue to be increasing as substances of abuse (Dada *et al.*, 2014).

As much as the scourge of substance abuse is affecting all age groups, the challenge is more dominant among youngsters, being a global challenge (United Nations Office on Drugs and Crime,

2013). According to Nkosi and Ndou (2010), the 2010 national statistics released by the South African National Council for Alcoholism (SANCA) revealed that 8500 patients treated in the country are younger than age 21. According to Degenhardt and Hall (2012), an estimate of 149 to 271 million individuals globally used illicit substances during 2009.

The numbers seem to be the highest in countries with a high-income and in countries near major substance production areas. Less evidence of substance data is available for low-income countries (Degenhardt & Hall, 2012). This is owing to developed countries such as Europe, North America, and Australasia producing improved data, while the developing countries struggle with data collection. It became problematic proceeding with exact estimates of global numbers of individuals using substances (Degenhardt & Hall, 2012).

According to Degenhardt and Hall (2012), a survey by the World Health Organisation (WHO) involving 27 countries in five (WHO) regions depicted the same image of developed or highincome countries with the highest numbers for substance abuse. The variation can be attributed to cultural differences in willingness of reporting illicit substance use (Degenhardt & Hall, 2012). Despite the discrepancies in substance use reporting and statistical information available, it remains imperative to address the magnitude of substance use locally.

Previous studies reported that no country is immune to substance abuse (United Nations Office on Drugs and Crime, 2017). Substance abuse apprehends the economy because supply control and demand reduction are expensive undertakings. According to Maithya (2009), substance abuse is too expensive for users and their families, taxpayers, on the national economy, and the community. Previous studies indicate that half of the long-term substance users die prematurely and half of these are middle-aged (Maithya, 2009). In addition, it affects the youth as they become less productive and not contributing positively to the economy of the country (Pullen, Petruzzi, Lange, Pamarouskis, Dominguez, Harris, & Slopadoe, 2016). The earlier youngsters

use substances and the more they use, the more likely they are to suffer from substance use related diseases (Pullen *et al.*, 2016). The studies also echoes that substance users are four times more likely than non-substance users to suffer from a heart attack before the age of 40 (Pullen *et al.*, 2016).

Patients with mental disorders are at greater risk of substance use. For decades, several theories have been used to conceptualise substance use treatment, yet none adequately incorporated the treatment of both substance use disorders and mental disorders (International Centre for the Prevention of Crime, 2015). As a result, substance use disorder and mental disorder treatments are often offered separately (Centre for Substance Abuse Treatment, 2012). This situation results in patients treated at one location for substance use disorder and at a different location for mental disorder. As a result, this causes patients being forced to choose for which disorder to receive treatment (Centre for Substance Abuse Treatment, 2012).

Among the factors increasing prevalence of co-occurring disorders in substance use disorders are:

- Older patients.
- Low socio-economic status.
- Residence in urban areas.
- Homeless.
- Incarceration (Compton, Thomas, Stinson & Grant, 2007; Pettinati, O'Brien, & Dundon, 2013).

Various treatment models for substance abuse:

- Contingency management therapies.
- Motivational Interviewing (MI).
- Community reinforcement treatment approach.
- Twelve-step programme.
- Psychodynamic intervention.
- Family intervention.
- Cognitive Behavioural Therapy (CBT).

The lack of effectiveness in treating patients separately or the practice of forcing them, which disorder to choose encouraged more research on co-occurring disorders. More studies on substance abuse focus on treating both substance use disorders and co-occurring disorders (Centre for Substance Abuse Treatment, 2012). Recent studies indicate that treating both disorders bear improved outcomes. Considerable interest exists in CBT and its effectiveness in reducing relapse rates, forms the focus of the study. These treatment models are further discussed in Chapter 2.

1.2 STATEMENT OF THE PROBLEM

The rise in substance use disorders with co-occurring disorders is a global problem. These strains accompanied by a low socio-economic status, play a huge role in causing individuals to be vulnerable to substance abuse, therefore becoming barriers on affected patients to access treatment (Compton et al., 2007). The primary purpose of this study is to explore the perceived effectiveness of CBT as a treatment model for substance use disorder with co-occurring disorders, and methods to address this challenge. The study will further explore and analyse the relapse episodes after treatment.

From the context of this study, effectiveness means few relapse events. The gap between global empirical evidence supporting CBT as a treatment model for substance use disorders with co-occurring disorders and its related effectiveness, and underutilization by South African rehabilitation centres justifies this study (Centre for CBT, 2014).

1.3 RATIONALE FOR THE STUDY

The rationale for this study is informed by the reality that, the extent of substance abuse on patients with co-occurring disorders is increasing. However, there is a limited number of rehabilitation centres in South Africa. Moreover, the patients continue to relapse and continue to abuse substances (Chie, Tam, Bonn, Dang & Khairuddin, 2016). Among the reasons for relapse are peer group, family systems, cognition, effect, coping, self-regulatory mechanisms (Hendershot *et al.*, 2011). Few rehabilitation centres in the country use CBT as treatment model. This may be informed by the fact that there is limited number of CBT therapists in the country (Centre for Cognitive Behaviour Therapy, 2014). This situation is present even though research indicates that CBT can be comparable. It can be more effective when compared to other credible models such as 12-step programmes and motivational enhancement therapy (O'Connor & Stewart, 2010).

Numerous researchers recommend using CBT as a treatment model for substance abuse with co-occurring disorders. This study is more relevant to advance explorations on the perceived effectiveness of CBT as a treatment model for substance use disorders with co-occurring disorders. This serves to promote adoption by more rehabilitation centres. Treatment for substance use is costly, and cannot be afforded by everyone. It could benefit more patients, being one of the most cost effective treatment models (Magill & Ray, 2009).

1.4 SIGNIFICANCE OF THE STUDY

The findings will also assist in identifying the gaps in treatment of substance use disorders and co-occurring disorders. It will further promote integration of treatment for patients diagnosed with both substance abuse and co-occurring disorders. Furthermore, the findings will highlight the effectiveness of CBT as part of treatment model in rehabilitating substance abuse with co-occurring disorders.

1.5 AIMS OF THE INVESTIGATION

The aim (or goal) of this study is to explore the perceived effectiveness of CBT as a treatment model for substance use disorders with co-occurring disorders in the rehabilitation centres of Gauteng Province of South Africa.

1.6 RESEARCH STRATEGY AND RESEARCH METHODS

The qualitative descriptive research approach was used to conduct the study. Both purposive and snowball sampling techniques were used to recruit participants in this study. The sample comprises of CBT specialists' participants from different age groups, gender, race, and ethnicity, with at least a minimum of five years' experience. Before the study commenced, a pilot study was conducted with two specialist participants. This formed part of enhancing trustworthiness and authenticity of the study. Further details on pilot study are provided in Chapter 3. The research assistants were hired to assist with collecting data.

The primary methods of qualitative data collection employed in this study include face-to-face semi-structured individual interviews for specialist participants. A digital recorder was used to record interviews after obtaining permission from participants. Accordingly, the transcripts from interviews were analysed using grounded theory analysis. More importantly, the grounded theory expert was consulted in reviewing data analysis and recommendations. Further details of the research strategy and research methods are discussed in Chapter 3.

1.7 RESEARCH QUESTIONS

The main research question for the study is:

- How effective is CBT in rehabilitation of substance use disorders with co-occurring disorders?

The following are the sub-questions for the study:

- Which substances are mostly used?
- Which co-occurring disorders standardly co-exist with substance abuse?
- Who is the vulnerable population to abuse substance?
- Which treatment models are normally used to address the substance abuse challenge?
- How accessible and affordable is CBT treatment in South Africa?
- What are the contributing factors towards high relapse rates?

These guiding questions are means used in generating further questions and searching for patterns. Through interviewing CBT specialists, the study will establish what the contributing factors towards high relapse rates are. CBT evaluates the patient outcome in relapse episodes when implemented as a treatment model.

1.8 ETHICAL CONSIDERATIONS

Ethical considerations in the study include ethical clearance from the Ethical Committee of Unisa and permission from rehabilitation centres (Annexure A). Participants were informed on the procedures of the study and that participation is voluntary. They could withdraw from the study should they wish to (British Psychological Society, 2010). Participants were informed that all records pertaining to the study are confidential, and that numbers and names for rehabilitation centres will be used instead of the actual names for participants. All the participants were requested to complete informed consent forms before participating in the study (Walliman, 2006). Further details of the ethical considerations are discussed in Chapter 3.

1.9 DEMARCATION OF THE STUDY

The study was conducted in five rehabilitation centres in Gauteng. Ten participants took part in the study, limiting the scope of the study. Therefore, the results cannot be generalised to represent the situation in other rehabilitation centres in other provinces. However, the findings can assist with

the treatment of substance use disorder with co-occurring disorders (Creswell, 2013). Using CBT specialists as participants and similar findings in other parts of the world can be a foundation for more rehabilitation centres to adopt CBT as treatment model of choice.

1.10 DEFINITION OF CONCEPTS

For the purpose of this study, the following key terms were used and defined below:

1.10.1 Psychoactive substances

Psychoactive substances are referred to as substances that can change an individual's consciousness, mood or thinking process upon being taken. Substance abuse refers to using substances to an extent that the user fails to fulfil important obligations at work, school or home, has legal challenges or social or interpersonal challenges owing to substance use or uses substances in hazardous situations (World Health Organisation, 2009). For the purpose of this study, substance abuse is the hazards in using psychoactive substances. Substance abuse includes both licit and illicit substances such as alcohol, cocaine, heroin, opium, prescription opioids, ecstasy, cannabis, and new psychoactive substances.

1.10.2 Cognitive Behavioural Therapy (CBT)

CBT can be defined as a general term referring to several therapeutic approaches stressing how thoughts affect behaviour and feelings (Beck, Wright, Newman, & Liese, 2011). This treatment model draws upon both cognitive and behavioural change strategies, alleviating the client's level of personal distress, and enhancing his or her coping abilities (O'Connor & Stewart, 2010). A difference exists between CBT and positive thinking. In CBT, the therapist does not change the client's negative thinking to positive thinking. The therapist assists the client to discover strategies and skills that will empower the client to interpret events leading to negative cognition (O'Connor & Stewart, 2010). For the purpose of this study, CBT is a treatment model for substance use disorders with co-occurring disorders.

1.10.3 Relapse

Relapse can be described as both an outcome and a process. It is an outcome in a sense that the person is either ill or well. The process encompasses any transgression in the process of behavioural change. It starts with an initial setback (lapse) to wrong behaviour, followed by the actual return to previous problematic behaviour (relapse). In circumstances where relapse prevention treatment is successful, an individual gets back on track in the direction of positive change (prolapse) (Hendershot, Witkiewitz, George & Marlatt, 2011). For purposes of this study, relapse refers to the continuation of substance abuse even after treatment.

1.10.4 Substance rehabilitation

Substance rehabilitation is defined as a medical process or psychotherapeutic treatment for dependency on psychoactive substances. The intention of a rehabilitation programme is to assist patients to stop substance abuse. The treatment can include a psychological, spiritual or medical approach (Dos Santos, 2008). For purposes of this study, substance rehabilitation refers to using a treatment model to rehabilitate substance use disorder with co-occurring disorders in both government and non-governmental centres. The treatment model for this study is CBT.

1.10.5 CBT Specialist

A CBT specialist can be defined as an experienced practitioner within the field of CBT. The therapist must be a registered clinical psychologist specialising in CBT, with at least five years' experience in the field of CBT. According to Fairburn and Copper (2011), no standardised knowledge tests exist to examine the competence of a therapist (Fairburn & Copper, 2011). As part of assessing the therapist's competence, the therapist's ability to implement treatment must be evaluated based on the following methods:

- The evaluation of patient outcome.
- The evaluation of treatment sessions (usually recordings).
- The Cognitive Therapy scale or its revised version.
- The evaluation of standardised role-plays, involving the trainee being the therapist with a stimulated patient enacting a series of prepared clinical scenarios (Fairburn & Copper, 2011).

As mentioned above, for the purposes of this study, a specialist refers to a cognitive behavioural therapist specialist employed in rehabilitation centre to assist with treatment of substance use disorder with co-occurring disorders.

1.10.6 Co-occurring disorders

Co-occurring disorders can be defined as the presence of two or more disorders simultaneously. This terminology was frequently used to refer to the co-existence of a substance use disorder with another mental health disorder (Centre for Substance Abuse Treatment, 2012). Patients with substance use disorders with co-occurring disorders often display behaviours interfering with treatment. In some incidents, these symptoms indicate a mental health disorder regardless of substance use or co-occurring disorders caused by substance use. It may also indicate the presence of both independent disorders (Centre for Substance Abuse Treatment, 2012). For purposes of this study, co-occurring disorders refer to mental disorders that co-exist with substance use disorders, such as depression, attention deficit/hyperactivity disorder, and post-traumatic stress disorder.

1.10.7 Rehabilitation Centres

Rehabilitation centres can be defined as facilities that provide therapy for substance abuse addiction. For the purpose of this study, rehabilitation centres refer to the five centres that were used as research site for the study.

1.11 OUTLINE OF THE STUDY

Chapter 1: Orientation to the study

This chapter gives an orientation to the study where background, statement of the problem, rationale of the study, significance of the study, aims of the investigation, research strategy and research methods, ethical considerations, demarcation of the study, definition of concepts, and outline of the study were discussed.

Chapter 2: Literature review

This chapter comprises the literature reviewed to situate the study within previously conducted studies. Numerous data sources were searched, such as journal articles, books, researches done on the topic and an Internet search was also done. In addition, this chapter discussed topics such as

types of substances used, causes of substance abuse, types of treatment for substance use disorders, evidence for effectiveness of CBT, and the perceived effectiveness of CBT relating to fewer relapse rates.

Chapter 3: Research strategy and research methods

In this chapter, the methodology used in the study is discussed. Research paradigm, research design, sampling, data collection, research questions, researcher's role, pilot study, and data analysis strategies are discussed in detail. Issues of trustworthiness, authenticity and ethical consideration are also discussed.

Chapter 4: Findings and Discussion of the study

In this chapter, findings of the study are presented. The same findings are analysed and interpreted. The findings of the study were further discussed concerning the studies by previous researchers. The following aspects were discussed in relation to the findings and literature review:

Types of substances used include the following:

- Vulnerable population to abuse substances.
- Aetiology of substance abuse.
- Types of treatment.
- The experience of participants using CBT treatment.
- Co-occurring disorders.
- The experience of participants in treating both substance use disorder and co-occurring disorders, contributing factors towards relapse.
- CBT's effectiveness in reducing relapse rate, affordability.
- Accessibility of CBT treatment.

Chapter 5: Conclusions, recommendations and limitations

Conclusions of the study are provided. The chapter also discusses the recommendations based on the study findings and the limitations of the study. The personal reflections of the researcher are also discussed.

1.12 CHAPTER SUMMARY

This chapter provides an overview of the study, including the background to the research problem, rationale for the research, significance of the study, aims of the investigation, statement of the problem, research strategy and research methods, ethical considerations, demarcation of the study, definition of concepts, and outline of the study. Substance abuse with co-occurring disorders is one of the huge challenges faced globally and particularly, in South Africa. In addressing the challenge of substance abuse, psychotherapeutic treatment remained the most used treatment (United Nations Office on Drugs and Crime, 2014). Chapter 2 discusses the literature review.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

Literature review serves as an opportunity to study the work of other researchers who studied and researched the topic. This implies that the literature review should contain critical analysis of previous research studies and sometimes non-research based literature on the topic studied. As a result, literature review is expected to close the gaps and avoid duplication (Mzolo, 2015). In this chapter, literature relating to CBT as a treatment model for substance use disorder with co-occurring disorder is discussed.

2.2 TYPES OF SUBSTANCES ABUSED

The manufacturing and use of substances under international control remains stable compared to previous years (United Nations Office on Drugs and Crime, 2017). Increased production and misuse of new psychoactive substances are worrisome. These substances are not under international control (United Nations Office on Drugs and Crime, 2013). According to the United Nations Office on Drugs and Crime (2013), Afghanistan remains high ranking regarding the cultivation and production of opium. Africa becomes increasingly vulnerable to the illicit substance trade and organised crime; although data on illicit substance trade and organised crime from this region is rare (United Nations Office on Drugs and Crime, 2013).

Among the abused substances are alcohol, cocaine, heroin, opium, prescription opioids, ecstasy, cannabis, mandrax, methamphetamine, ketamine, study drugs, inhalants, and new psychoactive substances (United Nations Office on Drugs and Crime, 2013; United Nations Office on Drugs and Crime, 2017). In South Africa, *alcohol* is the most widespread and harmful substance of abuse at the population level (Matzopoulos, Truen, Bownan & Corrigal, 2014). According to Matzopoulos *et al.*, (2014), alcohol is the third largest contributor to death and disability, following unsafe sex or sexual transmitted infections and interpersonal violence. Both are influenced by alcohol consumption (Matzopoulos *et al.*, 2014). In figures, alcohol accounts for a total of 36 840 deaths (6.1% of total mortality), 787 749 years of life lost (7.4% of premature mortality) and 344 331 years lived with a disability (6.2% of total disability) were attributable to alcohol abuse. Overall, it accounted for more than 1.1 million disability-adjusted life years (DALYs), or 7% of the total disease burden (Matzopoulos *et al.*, 2014).

Consistent cultivation and consumption of *cocaine* are present. Indications are that cocaine consumption is shifting to those regions not associated with its strong consumption (United Nations Office on Drugs and Crime, 2013). The use of *opiates (heroin and opium)* remains stable in some parts of the world, with an increase in areas in the Middle East, specifically in Afghanistan, Iran, and Pakistan. Cocaine and opiates receive high global population consumption among the illicit substances, with approximately eight million and 13.3 million respectively (Degenhardt & Hall, 2012; United Nations Office on Drugs and Crime, 2013).

Substance abuse can be in the form of prescription substances or *opioids* when abuse continues without any medical condition and proper prescriptions. These types of substances have addictive effects and users tend to abuse them after recovery (Kyalo, 2010). Fortuitously, there was a decline in *ecstasy* consumption globally, with an exception of an increase in Europe. *Cannabis* remains the most widely used illicit substance (United Nations Office on Drug and Crime, 2013). It is difficult to provide a global picture of its cultivation and production owing to localised cultivation, feeding local markets (Degenhardt & Hall, 2012; United Nations Office on Drug and Crime, 2013).

Ketamine was originally meant to be used for dissociative anaesthetic, which later became standard for non-medical recreational purposes (Chu *et al.*, 2008). Owing to it being a tasteless or odourless substance, it was easily used to victimise unsuspecting victims through their beverages (Chu *et al.*, 2008; Bokor & Anderson, 2014).

Physicians frequently prescribe *Study drugs* such as Ritalin and Amphetamines for attention deficit disorders (Calder, 2012). The prevalence of study drugs is mostly dominant among students. The substance enhances students' ability to perform strenuous tasks and to enhance their concentration. Students use these substances to stay awake all night to study, reduce fatigue and appetite, generate excitement and induce an exaggerated sense of well-being (Calder, 2012). Abusing study drugs may lead to side effects, such as restlessness, headaches, dizziness, dry mouth, depression, high blood pressure, and respiratory failure (Tarter, Ammerman & Ott, 2013).

As early as 2002, South Africa was responsible for almost 80% consumption of the world's *mandrax* (Peltzer, Ramlagan, Johnson & Phaswana-Mafuya, 2010). According to Morojele Myers, Townsend, Lombard, Plüddemann, Carney, and Nkosi (2013), 2.1% of learners in the Western Cape reported to have used mandrax and 2% of all learners in the Western Cape used

methamphetamine. It is further reported that 4% of the learners who repeated a grade, reported lifetime methamphetamine use against 1.3% who have not used it (Morojele *et al.*, 2013).

Inhalants include petrol, model-aeroplane glue, paint thinners, nail polish remover, aerosol propellants, and a diversity of thinners, and the prevalence of inhalants is customary among youth living in poverty (Calder, 2012; Tarter *et al.*, 2013). Inhalants induce intoxication effects such as dizziness, dullness, floating sensations, and feelings of power (Calder, 2012).

Similar to other substances, poor youth easily resort to this cheap way of experiencing feelings of intoxication or 'high' (Calder, 2012). The abuse of inhalants may lead to side effects such as unconsciousness, kidney damage, nervous system damage, brain tissue damage, bone marrow damage, and death.

New psychoactive substances (NPS) increased from 2009 to 2012 with 50%. This led to the numbers of new NPS exceeding the total number of substances under international control (United Nations Office on Drugs and Crime, 2013). According to United Nations Office on Drugs and Crime (2017), as much as NPS occupies a relatively small market, the users are unaware of the content and dosage of psychoactive substances in some NPS.

2.3 AETIOLOGY OF SUBSTANCE ABUSE

According to Scheier (2009), the aetiology, or cause of substance abuse is based on a complex interplay of personality, genetic, cultural, and environmental influences on behaviour. No biological, psychosocial or behavioural variable can be attributed to substance abuse alone (Scheier, 2009). Paradoxically, both affluence and poverty were identified as customary causes of substance abuse among the youth. According to Maithya (2009), some youth from wealthy families abuse substances because they can afford them. Some youth from poor families abuse cheap substances such as cannabis and alcohol, due to frustrations. Aggravations such as lack of financial support and other basic needs may lead youngsters to abuse substances based on the false belief that using or abusing substances will make them forget their problems (Maithya, 2009).

Various scholars (Borsos, 2008; Calder, 2012; Dreyer, Jones, 2011; Lander, Howsare, & Byrne, 2013; 2012; Linton, 2008; Masombuka, 2013; Mzolo, 2015; Nkansah-Amankra & Minelli, 2016) developed theories to explain the causes of substance abuse. The theories include among others,

systems theory, anomie theory, psycho-social theory, psychological theory, the moral model of addiction, the genetic model of addiction, gateway theory, peer cluster theory, and CBT. For the purpose of this study, this researcher will only focus on these theories. In addition to the theories discussed in this section, substance users may be influenced to use substances by other theories not discussed in this study. These theories may include the media, boredom, the need to experiment, and the excitement of risk-taking (Calder, 2012).

2.3.1 Systems theory

Systems theory focuses on how the parts of the system interact with one another. Therefore, in family systems theory, the family is essentially its own system (Lander, *et al.*, 2013). The key concepts of the theory are feedback (circular way in which parts of the system communicate with each other), homeostasis (tendency of a system to seek stability and equilibrium), and boundaries (internal and external limits of a system to conserve energy by creating a protective barrier around the system) (Lander *et al.*, 2013).

According to the systems theory, the addictive behaviour is observed in family context, where behaviour is the consequence of interactions between relevant others, such as parents and siblings (Mzolo, 2015). Substance abuse is a manifestation of a dysfunctional family system. The addictive behaviour of one or more individual in the system results from the dynamic system rather than individual action or motivation. Substance use disorders negatively affect emotional and behavioural patterns from the inception of the family, resulting in poor outcomes for children and adults with substance use disorders (Lander *et al.*, 2013). A family remains the primary source of attachment and socialisation of humans in our current society. As a result, individuals are seen as symptomatic and their pathology can be viewed as an attempt to adapt to their family system to maintain homeostasis (Lander *et al.*, 2013).

In addition to the substance abuser, there is a co-dependent (partner) and other family members maintaining addictive behaviour by enabling the substance abuser (Mzolo, 2015). Children from dysfunctional families, or with bad relationships with their parents, are more likely to use substances, believing they will overcome frustrations arising from these experiences. In the systems theory, behaviour is determined and maintained by the ongoing demand for interpersonal systems where an individual interacts (Masombuka, 2013).

2.3.2 Anomie theory

According to anomie theory, failure to achieve set goals can drive individuals to substance abuse. In this case, substances are used as an escape avoiding the suffering caused by failure to achieve goals (Akins, Smith, & Mosher, 2010). It is believed that the feeling of being intoxicated or high brings the good feeling that users initially hoped to experience from successfully achieving their goals. The South African youth are accustomed to this behaviour when confronted with challenges in achieving their goals; they associate themselves with wrong peers that may expose them to substance abuse (Masombuka, 2013). They easily involve themselves with substances with the view they will forget their socio-economic circumstances or their failure to achieve their goals. Nevertheless, this theory fails to explain substance abuse by individuals appearing to achieve their goals (Masombuka, 2013). This theory further emphasises that in plummeting substance abuse, society may need to set attainable goals, and further avail opportunities for all to reasonably attain these goals (Akins *et al.*, 2010).

2.3.3 Psycho-social theory

Multiple psychosocial factors mutually influence each other in causing substance abuse. These factors can range from family history, developmental issues, motivations, substance related cognition, peers, culture, and advertising (Jones, 2011). According to this theory, personal characteristics and social environments play a role influencing addictive behaviour (Calder, 2012). Erik Erikson (1956) identified eight stages of psychosocial development that a healthy human being is expected to experience from infancy to late adulthood. Each stage has its own challenges and individuals are expected to overcome those challenges before passing to the next stage (Calder, 2012). If the challenges of the different stages are not mastered properly, it is expected that such challenges may surface in the future in the form of substance abuse (Jones, 2011). Causal factors influencing the psychosocial sphere include peers, family, school, neighbourhood, and community (Calder, 2008).

This theory seeks to unpack the relationship between social and psychological variables in producing adaptive and maladaptive behaviour (Jones, 2011). Social variables such as sexual activity and association with friends who use substances have been shown to be related to substance

abuse. Substance abuse is viewed as an individual attempt to deal with needs and conflicts, relations with others, and social environment (Jones, 2011).

2.3.4 Psychological theory

According to this theory, substances are a means of coping with depression, anxiety, family or friends, lack of support or guidance, pressure to achieve, a low self-image, negative sexual experiences or difficulty in finding a positive identity (Borsos, 2008; Walters & Rotgers, 2012). If substance use results in positive coping rewards, it will be continued as a coping mechanism. Therefore, substance use is reinforced either by enhancing positive mood states or by diminishing negative mood states (Borsos, 2008; Walters & Rotgers, 2012).

According to Wisdom (2008), a bi-directional causal impact of substance use exists with co-occurring psychiatric disorders. Substance users with particular temperamental traits, such as shyness, aggression, or high novelty seeking may have fewer childhood or adolescent experiences of success. Substance users with these childhood or adolescent experiences of poor social skills, family problems or self-regulation difficulties, may associate with a peer group supportive of substance use (Wisdom, 2008). According to Wisdom (2008), many adolescents are dysfunctional in maintaining a safe environment. This may include poor family communication, poor adult supervision, a deviant peer group, poor academic performance, and overt conflict or violence. Substance use contributes to further marginalisation of adolescents from potentially positive school or family associations and increased involvement with deviant peers (Wisdom, 2008).

2.3.5 The moral model of addiction

According to Calder (2012), addiction is viewed as a choice informed by an addict with weak morals. The lack of morals implies that an addict needs grace to help him or her to respond to the addictive disorder. The grace can be in the form of the Christian concept of God's grace or the notion of the need for the 'Higher Power' of Alcoholics Anonymous (AA). In support of moral model of addiction theory, Foddy and Savulescu (2010) buttress that patients use substances because of being morally corrupt hedonists who value instant pleasure and rely on others to handle their responsibilities. The remedy is for the patient to choose to accept their responsibility and cease to abuse substances (Foddy & Savulescu, 2010). According to Mzolo (2012), with this theory, individuals are responsible for their behavioural choices and for their own recovery. The stigma

faced by individuals with a substance problem is based on this moral notion that labels anyone with a substance misuse habit as a 'bad person'. This is where the victim-blaming approach is evident and the focus of intervention is the control of behaviour through social disapproval, spiritual guidance, moral persuasion, or imprisonment (Mzolo, 2012). The medical and scientific community does not support this approach owing to its failure to recognise biological or genetic components of addiction (Pickard, 2017). However, several individuals and groups support it (Borsos, 2008).

2.3.6 The genetic model of addiction

The genetic model of addiction considers biological and genetic factors contributing to substance abuse (Calder, 2012). According to Calder (2012), numerous studies suggest that alcohol or substance addiction is the consequence of genetic or an induced biological abnormality of physiological, structural or chemical nature. Addiction is not inherited, but the genetic predisposition for developing the addiction is inherited (Calder, 2012). A genetic component of addiction is evidence-supported to some extent in that addiction seems to run in the same families and this may be owing to nurture and nature (Borsos, 2008). According to Miller (2006), alcohol addicts have a 50% chance of having at least one member of their family becoming dependent on alcohol and a 90% chance of two or more family members dependent on alcohol. A family history of substance abuse and dependence substantially increases the risk of such challenges among family members (West & Brown, 2013). Children with extensive alcohol or substance abuse parents are vulnerable to develop substance abuse and related problems (Mzolo, 2015).

2.3.7 Gateway theory

The gateway theory proposes that substance users use licit substances such as cigarettes and alcohol and then progress on to illicit harder substances (West & Brown, 2013). Furthermore, Wisdom (2008) argues that the use of less deleterious drugs may lead to future risks of using more dangerous substances. Although gateway theory has been a subject of scholarly and political discourse, a review of literature shows less consensus (Nkansah-Amankra & Minelli, 2016). Contrary to the progression approach, using cannabis indicated an antithesis of hypothesis of gateway theory, in which substance use is thought to progress from alcohol and tobacco to cannabis to addictive substances. Instead, some patients reported cannabis use without prior experience of cigarette or alcohol use (Srikameswaran, 2006). According to Nkansah-Amankra and Minelli (2016), gateways

substances used in early adolescence were cannabis, cocaine in older adolescence, but overtime, this relationship was not consistent in adulthood.

2.3.8 Peer cluster theory

According to Greene and Banerjee (2009), unsupervised time with peers is linked indirectly with adolescent engaging in substances through the mediation of association with delinquent peers. Peer groups may consist of best friends, couples or a cluster of individuals sharing the same attitude towards substance abuse (Dreyer, 2012). Furthermore, peer groups act as subgroups, providing the individual with an opportunity to manifest behaviour not controlled by the external environment. Using substances and their availability in such groups result in new members experimenting with substances, or being initiated into using substances (Masombuka, 2013). Added to this is the existence of a strong social influence encouraging peer conformance to the cluster's norms. Substance users, just like other individuals, seek approval for their behaviour from their peers who they attempt to convince to join them in their habit in seeking acceptance. Whether peer pressure has a positive or negative impact, depends on the quality of the peer group (Dreyer, 2012).

2.3.9 Cognitive-Behavioural Model of addiction

According to the Cognitive-Behavioural Model of addiction theory, individual behaviour and emotions are influenced by the way they think (Linton, 2008). More importantly, for a person to change behaviour, he or she needs to change the way they think about that behaviour. The Cognitive Behavioural Model presumes that all behaviours are learned, and the same applies to addictive behaviour. Addictive behaviour can be unlearned (Linton, 2008). Behaviours can be learned through rewarding or not rewarding these behaviours, imitating role models, displaying the same behaviour as a peer group (Linton, 2008). Destructive and negative thinking are common among patients diagnosed with substance use disorder (McHugh, Hearon, & Otto, 2010). It is common to find that patients maintain a belief that using a particular substance will help some problematic aspect of their life, and failure to identify these negative thought patterns can be harmful for the patient (Barrowclough *et al.*, 2010).

One of the core principles of Cognitive Behavioural Model of addiction is that substances of abuse serve as powerful reinforcers of behaviour (Magill & Ray, 2009). The reinforced behaviour can

either be positive (enhancing social experience) or negative (reducing negative effect) (Magill & Ray, 2009).

The next section focuses on types of treatment for substance use disorders.

2.4 TYPES OF TREATMENT FOR SUBSTANCE USE DISORDERS

According to the United Nations Office on Drugs and Crime (2014), access to regular substance abuse counselling impacts on how the patient participates in the treatment programme and its outcomes. By international standards, all countries need to consider how best to respond to the challenge of substance abuse. The response of a country to substance abuse is best organised and guided by a public policy and strategic framework (Pienaar & Savic, 2016). The strategic framework needs to spell out the nature of the problem, the actions taken and what sort of results are expected (Pienaar & Savic, 2016). In South Africa, there is a National Drug Master Plan (2013) produced by the Department of Social Development. The nature of treatment interventions can take different forms across different countries, which can range from medical, psychosocial, traditional healing, and other rehabilitative services (Pienaar & Savic, 2016). These treatment interventions include person-centred approach, bio-psychosocial approach, holistic approach, eclectic therapy, integrated approach, resilient approach, rational emotive behavioural therapy, family therapy, motivational interviewing, 12-step programme, and cognitive behavioural therapy.

However, for the purpose of this study, I will discuss the following treatment models:

2.4.1 Contingency management therapies

The contingency management therapy is grounded in operant learning theory, and it involves the administration of a non-substance reinforcer (Hendershot, Witkiewitz, George, & Marlatt, 2011). The history of operant learning can be traced back to the research of psychologist EL Thorndike's with cats in puzzle boxes (Wong, 2012). B.F. Skinner later refined it using a chamber with a lever that could be programmed to deliver food following lever press, and other psychologists followed to contribute in decades that followed (Wong, 2012). At the centre of the theory is the law of effect, which says, "in situations where responses are followed by events that give satisfaction, those responses become associated with and are more likely to recur in that situation" (Wong, 2012).

Basically, this is an outpatient treatment programme, where abstinence based incentives are provided to patients. Incentives are normally in the context of vouchers exchangeable for retail goods on submission of substance-free urine specimens (Petry *et al.*, 2005; Walters & Rotgers, 2012). Its outcomes suggest that abstinence-oriented counselling is associated with reduction in substance use. This is based on principles of behavioural pharmacology and operant conditioning, in which behaviour followed by positive consequences is more likely to be repeated (Carrol & Onken, 2014).

Various clinical trials have supported the efficacy of Contingency Management therapy for various substances such as alcohol, cocaine and opioids (Hendershot *et al.*, 2011). However, the availability of funds for providing the reinforcers has been a challenge. As a result, the establishment of job-based reinforcements have been introduced as an alternative (Hendershot *et al.*, 2011).

2.4.2 Motivational Interviewing

According to Rubak, Sandbaek, Lauritzen, and Christensen (2005) in 1983, Miller and his colleagues embraced a brief therapeutic intervention known as Motivational Interviewing (MI), intended to facilitate a patient's internally motivated commitment to change. In this approach, the key role player is the patient. The responsibility for challenges and their consequences is left with the patient, making any form of change to be reliant on the patient's commitment to particular goals and strategies (Barrowclough *et al.*, 2014). According to the United Nations Drugs and Crime (2014), Saunders and colleagues applied MI on heroin users. With the six months follow up, the patients who received MI treatment reported less illicit substance use. They remained in treatment longer and relapsed to heroin use less frequently, compared with controls (United Nations Office on Drugs and Crime, 2014).

According to Lundahl, Kunz, Brownel, Tollefson, and Burke (2010), a therapist can assist the patient to get motivated in four ways:

- Expressing empathy, which helps the patient to feel understood and reducing the likelihood of resistance to change.
- Developing discrepancy, which allows patients to argue to themselves reasons why they should change.
- Rolling with resistance, which gives a room for resistance to be respected.

- Supporting patient's self-efficacy, which acknowledges the patient's ability to change.

As much as MI originated in substance abuse fields, its effectiveness is currently much broader to other addictive problems such as gambling as well as for enhancing general health promoting behaviours (Lundahl *et al.*, 2010). Motivational interviewing is utilised as both a standalone intervention and in combination with other treatment strategies for substance use disorders, such as CBT (Walters & Rotgers, 2012). It is also offered both in an individual format and group format (Hendershot *et al.*, 2011).

2.4.3 Community reinforcement treatment approach

In the 1970s, Azrin and colleagues developed the community reinforcement treatment approach (Roozen, De Waart & Van Der Kroft, 2010). This treatment is based on the belief that the environment plays a critical role in encouraging or discouraging substance abuse (Roozen, *et al.*, 2010). The environment involves the family, friends, work, social life, spiritual affiliations, and easy access to physical setting that substance revolves in, such as drinking places. As part of the treatment, patients must receive support through social and family networks (Roozen *et al.*, 2010). It is aimed to make a sober lifestyle more rewarding than a lifestyle including substance use (Roozen *et al.*, 2010). Altering contingencies such as non-substance related activities in the patient's daily schedule have been introduced as a way to make sober behaviour more rewarding than substance use (Hendershot *et al.*, 2011).

At first, this approach was for alcohol dependence with favourable results. At a later stage, Higgin and his colleagues extended the treatment to cocaine-dependent patients, with favourable results (United Nations Office on Drugs and Crime, 2014). In addition, Hendershot (2011) confirms that the efficacy of Community Reinforcement Approach is more in substances such as alcohol, cocaine and opioid.

2.4.4 Twelve-step programme

In 1938, Bill Wilson and Dr Bob Smit founded the 12-step programme (Donovan, Ingalsbe, Benbow, & Daley, 2013). Specifically, 12-Step programme is based on the philosophy of accepting addiction as a disease that can be arrested but never cured, enhancing individual maturity and spiritual growth, minimizing self-centredness, and providing help to other individuals who are

addicted (Donovan *et al.*, 2013). This is a set of guiding principles outlining a course of action for recovery from alcohol and other forms of substance addictions. The recovery process deals with physical, mental, emotional, and spiritual aspects (Galanter, Dermatis, Mansky, McIntyre & PerezFuentes, 2007). Alcoholics Anonymous (AA), Narcotics Anonymous (NA), Cocaine Anonymous (CA) are among the groups of 12-step programme (Donovan *et al.*, 2013). These groups are highly accessible and are available at no cost in communities throughout the world (Gossop, Stewart, & Marsden, 2008). Among the countries popular with these groups, this researcher can mention United States of America (USA), Canada, South Africa, and many more (Gossop, *et al.*, 2008). In addition, these groups are also found in the Internet, through chat rooms and online meetings (Donovan *et al.*, 2013). The requirement for membership in 12-Step groups is a desire to stop using substances (Donovan *et al.*, 2013).

There are 12 consecutive activities or steps that patients should achieve during therapy. These steps specify that patients must admit their powerlessness over substances, take a moral inventory of themselves, admit the nature of their wrongs, make a list of individuals whom they have harmed, and make amends to those people (Donovan *et al.*, 2013). In addition, the efficacy of 12-Step is based on patients stopping using substances, going to meetings, asking for help, getting a sponsor, joining a group, and getting active (Donovan *et al.*, 2013). Under this treatment approach, motivation and duration of participation are associated with positive results (Galanter *et al.*, 2007).

2.4.5 Family intervention

This treatment model views substance use disorder in the context of a family's transactional patterns. Family members or a partner is expected to play a critical role in assisting the patient in identifying and changing the problematic behaviour; in this context, substance abuse behaviour (Walters & Rotgers, 2012). With this therapy, a patient not seen as an individual is considered to be the problem in the family. As a result, the family system becomes the focus of treatment (Dos Santos, 2008). For the family intervention treatment model to work, strong family support and stability is necessary. The entire family needs to be trained regarding addictive behaviour (Dos Santos, 2008).

Certain elements of family life have been found to be major risk factors for substance abuse problem (Kumpfer, 2014). These consist of lack of bonding with parents or significant adult, chaotic home environment, ineffective parenting, other family members abusing substances, social isolation, and

inconsistent discipline or expression of values (Kumpfer, 2014). This treatment model has shown to be most effective and cost beneficial for substance abuse and other negative developmental outcomes (Walters & Rotgers, 2012). In addition to patient getting help, the entire family members learn and practice new skills to improve their interactions to have long term sustainable impact on positive developmental outcomes (Kumpfer, 2014). Different settings are conducive for family intervention, these includes family home use DVDs, computer programs, faith communities, and clinical treatment (Kumpfer, 2014).

In the study by Liddle, Dakof, Turner, Henderson, and Greenbaum (2008), family intervention was implemented using four interdependent treatment domains according to the particular risk and protection profile of the adolescent family. These domains were:

- Adolescent domain, which helps adolescents to engage in treatment, communicate effectively with parents, develop coping, emotional regulation, and problem-solving skills.
- Parent domain, which engages parents on therapy, improves parenting skills, clarifying adolescent expectations, and addressing their individual psychosocial functioning apart from their role and responsibility as parent.
- Interactional domain, which deals with family conflict; and improving emotional attachment.
- Extra familial domain, which promotes family competency in all social systems where adolescent participate, such as school and recreational space (Liddle *et al.*, 2008).

2.4.6 Psychodynamic intervention

This is the form of treatment model, focusing on revealing the unconscious content of substance abuse to ease psychic tension (Dos Santos, 2008). The difference between this model and psychoanalysis is that it is brief and less intensive with more focus on interpersonal relations between the patient and the therapist. It is customarily envisaged as an opportunity for motivated person to reflect deeply about everything she/he is feeling and thinking without censoring (Goodman, 2009). Under this approach, addiction is described as a defensive strategy to avoid feeling helplessness. Substance abuse is a futile attempt to compensate for inner emptiness without success (Goodman, 2009). The addict tries to compensate via addictive behaviour for painful subjective states of low self-esteem, doubts and anxiety (Goodman, 2009). For the success of this treatment model, a patient is expected to play her/his role through being willing to receive help

(Dos Santos, 2008). More importantly, psychodynamic therapy increases patient's ability to engage in self-reflection, and identifying alternative ways to manage difficult emotions (Shedler, 2010).

2.4.7 Cognitive Behavioural Therapy

Cognitive Behavioural Therapy (CBT) is the focus of the study. The CBT treatment model is among the most extensively evaluated treatment for illicit substances (Magill & Ray, 2009). This treatment model is founded on the model of relapse prevention. The focus of the treatment is on cognitive, affective, and situational triggers for unwanted behaviour, and provides coping skills. In therapy, the role of CBT is to mitigate the strongly reinforcing effects of substance abuse by either increasing the contingency associated with non-use or by building skills to facilitate reduction (Magill & Ray, 2009). Empirical evidence exists to support using CBT for substance use disorders with co-occurring disorders, and it is among the cost-effective interventions (Magill & Ray, 2009). CBT treatment is based on the theory that in the development of maladaptive behavioural patterns like substance abuse, learning processes play a critical role. Patients are thought to identify and correct problematic behaviours by applying a range of different skills that can be used to stop substance abuse and to address a range of other problems that often co-occur with it (McHugh, Hearon, & Otto, 2010). For example, one high-risk situation and events such as people and places are identified, CBT is directed to altering the likelihood that these events are encountered through providing alternative non-substance activities or activities with non-substance using individuals (Magill & Ray, 2009).

Some of the CBT techniques include exploring the positive and negative consequences of continued substance use, self-monitoring to recognise cravings early (McHugh, Hearon, & Otto, 2010). Empirical evidence indicates that skills learned through CBT remain after the completion of treatment (Barrowclough *et al.*, 2010). This is owing to CBT being highly focused and compared to other therapeutic modalities (Barrowclough *et al.*, 2010). The focused nature of treatment leads to shorter effective sessions. The treatment programmes are normally offered in time frames lasting 30-45 days, or 90 days (Barrowclough *et al.*, 2010). CBT can be administered in both individual and group formats. The treatment programmes include rehearsals and doing of homework (McHugh, *et al.*, 2010). Where relevant, rehearsal can be supplemented by imaginal exposure or emotional induction to increase the degree to which the rehearsal is similar to the patient's high-risk situation for substance use (McHugh, *et al.*, 2010).

2.5 EVIDENCE FOR THE EFFECTIVENESS OF COGNITIVE BEHAVIOURAL THERAPY

In dealing with the crisis of substance abuse with co-occurring disorders, research positioned CBT as the most clinically effective and cost effective treatment approach (Centre for Substance Abuse Treatment, 2012). Most studies indicated that psychotherapeutic treatment can yield short, medium and sometimes long-term reductions in substance use (Gates, Norberg, Copeland & Digiusto, 2012).

A study by Rawson *et al.*, (2013) explored implementing CBT in South Africa. This was done as a contribution to assist clinicians with an effective approach for treating the huge population of substance users (Rawson *et al.*, 2013). The participants in Rawson *et al.*'s (2013) study were 143 clinicians, and the findings of the study were effective on the basis that the frequency of use of CBT skills increased significantly among the participants. CBT is one of the models ranked high in its effectiveness, specifically in treating alcohol use disorder, extended to other illicit substance use disorders (O'Connor & Stewart, 2010).

CBT views substance abuse as behaviour learned through experience. If the substance consumption results in desired outcomes, it is likely to be consumed again. When using the cognitive behavioural approach, the intention is to alter the clients' cognitions, values, attitudes, and expectations maintaining substance abuse behaviour. More emphasis is placed on problemsolving, reasoning, self-control, and behaviour modification (Gendreau, 2012). During the diagnosis process, the substance abuse levels and substance dependence levels are evaluated. The abuse levels explain the quantity consumed while dependence levels explain the tolerance, withdrawal, loss of control of the quantity of substance taken and the time spent, and the interruption of important activities. The above difference is critical in determining how to conduct treatment (Range & Mathias, 2012).

The effectiveness of CBT was more prominent when treating patients with Substance Use Disorders (SUD) with co-occurring disorders (Barrowclough *et al.*, 2014). This was more evident when integrating CBT with Motivational Interviewing and family intervention (Barrowclough *et al.*, 2014). The presence of comorbid or co-occurring disorders in patients' with SUD had a huge negative impact on the effectiveness of the treatment; the same applied to CBT treatment (O'Connor & Stewart, 2010). This problem led CBT clinicians to develop CBT treatments treating SUD parallel with co-occurring disorders, leading to cases that are more positive.

The predominant psychopathologies can include depression, attention-deficit/hyperactive disorder (ADHD), suicide behaviour, bipolar disorder, and post-traumatic stress disorder (PTSD) (O'Connor & Stewart, 2010). In addition, evidence suggested that in most patients diagnosed with SUD with comorbid psychopathologies, the comorbid psychopathology resulted in a patient using or abusing substances, avoiding experiencing the psychopathology (O'Connor & Stewart, 2010).

2.5.1 CBT in dealing with depression as a co-occurring disorder

Evidence indicated that occurrence of major depressive disorder and alcohol abuse are higher than any other Diagnostic and Statistical Manual of Mental Disorders (5th ed; DSM-IV) Axis I disorders. Patients diagnosed with depressive disorder and SUD were treated separately either sequentially or parallel, and such past separate intervention resulted in poor outcomes for both disorders (Lydecker *et al.*, 2010). Furthermore, the emerging evidence suggested that CBT treatment catering for both depression and substance abuse improved both mood and substance use outcomes (Hunter, Witkiewitz, Watkins, Paddock & Hepner, 2012).

Literature associated the prevalence of depressed mood and substance use with each other. The reported effects of depressed mood on substance use appeared mixed (Hunter *et al.*, 2012). The contradiction through the studies is how and when depression and substance use disorder influenced each other. As a result, this unresolved relationship made it challenging to draw suppositions on the temporal relationship between the two disorders on concisely, which precedes the other (Hunter *et al.*, 2012). According to Hunter *et al.* (2012), treatment focused on strong depressive symptoms is effective in exonerating the association between depressive symptoms and substance use ultimately, suggesting mitigating the relationship between depressive mood and substance use as a viable mechanism for CBT (Hunter *et al.*, 2012).

2.5.2 CBT in dealing with Attention Deficit Hyperactivity Disorder as a co-occurring disorder

Attention Deficit Hyperactivity Disorder (ADHD) is one of the substance abuse co-occurring disorders emerging from an early age. ADHD is further associated with a high relapse rate, specifically for cocaine and alcohol (Van Emmerik-Van Oortmerssen *et al.*, 2013). Substance consumption is associated with impulsivity. The study by Van Emmerik-Van Oortmerssen *et al.*, (2013) presumes that treating ADHD could result in reduced substance use. The integrated CBT

protocol for both SUD and ADHD indicated successful results. With the absence of effective pharmacological treatment options for ADHD in patients with SUD, the CBT integrated approach is highly recommended (Van Emmerik-Van Oortmerssen *et al.*, 2013).

In the study by Weiss *et al.*, (2012), CBT was used to address ADHD through CBT modules with aspects addressing emotional dysregulation, sleep, addiction, anger outburst, and other problems common in ADHD. The CBT modules were used together with executive functioning skills, problem-solving, prioritising, learning to self-reward, delegating, setting up environment to optimise strengths, and working to identify methods of avoiding distraction and disinhibition (Weiss *et al.*, 2012).

2.5.3 CBT in dealing with Suicide Behaviour as a co-occurring disorder

Substance use disorders and suicidal behaviour usually co-exist. According to Esposito-Smythers *et al.* (2011), the rate of substance use disorders ranges from 27% to 50% among patients who died by suicide. The rate of substance use disorders among patients who attempted suicide ranged from 12% to 50%. Substance use disorders were associated with a three-to four-fold increase in the likelihood of suicide attempts (Esposito-Smythers *et al.*, 2011). Research further suggests that substance use disorder increases risk for future suicidal behaviour, particularly in the presence of other mental health problems. This relationship seems to reinforce as each problem increases in severity (Esposito-Smythers *et al.*, 2011).

The major cause for ineffectiveness treatment was linked with separate diagnosis and treatment. The shortcomings of separate treatment promoted a call for integrated treatments. Integrated treatments proved to be more cost effective and allowed ongoing attention to both challenges. Among the integrated treatments, using CBT indicated significant improvement when employed to patients with substance use co-occurring with suicide behaviour (Esposito-Smythers *et al.*, 2011).

2.5.4 CBT in dealing with Bipolar Disorder as a co-occurring disorder

Both Bipolar one and two are often complicated by co-occurring substance use disorders (Cerullo & Strakowski, 2007). The most standard co-occurring substances are alcohol, cannabis, cocaine, and opioid. Alcohol abuse is positively correlated with the duration of depression. The duration of cannabis abuse is positively correlated with the duration of mania (Cerullo & Strakowski, 2007).

Research indicates that patients with co-morbid substance use disorders are challenged complying with treatment when compared to bipolar patients without any co-morbid substance disorders. Furthermore, negative treatment outcomes were associated with co-occurring substance abuse (Cerullo & Strakowski, 2007). In addition, bipolar patients with co-occurring substance use disorders had a lower overall quality of life compared to bipolar patients without substance use disorders (Cerullo & Strakowski, 2007).

Prospective research needs to address the casual relationship between the poor outcome on bipolar rehabilitation and the presence of substance use disorders. As a form of integrated treatment, CBT indicated positive outcomes. In a study by Cerullo and Strakowski (2007), patients in the CBT therapy group reported significantly fewer days of manic or depressive symptoms.

In addressing bipolar disorder, CBT can be used in several ways. These include managing the symptoms of bipolar disorder, preventing a relapse into those symptoms, learning effective coping techniques to help control emotions and stress, and acting as an alternative treatment when medication are ineffective or not an option (Bardram, Frost, Tuxen, Faurholt-Jepsen, & Kessing, 2016). There are six CBT techniques for bipolar disorder, which are accepting one's diagnosis, monitoring one's mood, undergoing cognitive restructuring, problem solving frequently, enhancing one's social skills, and stabilising one's routine (Bardram *et al.*, 2016).

2.5.5 CBT in dealing with borderline personality disorder as a co-occurring disorder

Borderline personality disorder is a mental pathology involving multiple symptoms and maladaptive behaviours, including pervasive patterns of instability of interpersonal relationships, self-image and affects (Gregory, 2006). These pervasive patterns of instability also apply to impulsive behaviours and potentially damaging behaviours, including excessive spending, sexual promiscuity, reckless driving, binge eating, and substance abuse (Gregory, 2006). The co-existence of substance use disorder among borderline personality disorder is severe. According to Gregory (2006), 50% to 70% of patients with borderline personality disorder have substance use disorders. The same study by Gregory (2006) indicates that borderline personality disorder aggravated the outcomes of substance use rehabilitation. Research further demonstrates an association between substance use and impulsive behaviour. CBT in the form of Dialectical Behavioural Therapy and Schema Therapy was effective in rehabilitating borderline personality disorder co-occurring with substance use disorder (Gregory, 2006). The CBT intervention incorporates the range of techniques

to modify contributing factors of borderline personality disorder. These techniques include cognitive restructuring, behaviour modification, exposure, psycho-education, and skills training (Matusiewicz, Hopwood, Banducci, & Lejuez, 2010).

2.5.6 CBT in dealing with Post Traumatic Stress Disorder as a co-occurring disorder

Integrating cognitive behavioural treatment for patients with Post Traumatic Stress Disorder (PTSD) co-occurring with substance use disorder has yielded improved outcomes (Najavits, Gallop & Weiss, 2006). Behavioural approaches dealt successfully with PTSD, leading to proposals of integrating the behavioural approach to patients with co-occurring SUD. Integrated cognitive behavioural treatment is an 8-12 session protocol that includes modules such as breathing, retraining, PTSD psycho-education, and CBT coping skills such as relapse prevention and cognitive restructuring (Brenz & Coffey, 2012). Most patients suffering from PTSD co-occurring with SUD risked increasing the substance consumption or even fleeing treatment (Najavits *et al.*, 2006). As a solution to the above challenge, Najavits *et al.* (2006), developed Seeking Safety, which integrated cognitive behavioural treatment for both PTSD and SUD (Najavits *et al.*, 2006). Seeking Safety covers a variety of topics such as decreasing risky behaviours, setting boundaries, and coping with substance triggers (Brenz & Coffey, 2012). Previous studies indicated that the addition of medication such as anti-depressants to Seeking Safety yielded more effective outcomes (Hien *et al.*, 2009).

2.6 THE EFFECTIVENESS OF COGNITIVE BEHAVIOURAL THERAPY RELATING TO FEWER RELAPSE RATES

The relapse prevention approach views addictive behaviour as a learning process where environmental factors collude with psychological factors to perpetuate risk for substance use. In most instances, it is followed by abuse and dependence, where even after treatment, relapse is expected. Environmental factors can range from substance availability, peer groups, family systems, and life stressors. In line with the environmental factors mentioned above, high-risk situations consist of individuals (drug dealers), places (bars), and events (parties). It is always wise to caution clients on abstinence violation effects and to prepare them for potential lapse avoiding major relapse (Hendershot *et al.*, 2011).

Psychological factors are cognition, affect, and coping as self-regulatory mechanisms. The focus with relapse prevention is avoiding high-risk situations accompanied by other skills such as:

- Stimulus control.
- Contingency contracting.
- Behavioural substitution.
- Relaxation training.
- Coping with negative affect.
- Imagery techniques for craving control.
- Refusal skills.
- Developing social support (Hendershot *et al.*, 2011).

In a study by Gonzalez, Schmitz and Delaune (2006), using homework in relapse prevention therapy was critical in facilitating change in substance abuse. The study attributed homework compliance to a high level of motivation to change. As much as homework compliance cannot be treated as alternative measures of motivation to change, important is that non-compliance to homework may be a sign for potential dropout, and a possible lack of commitment to treatment. As much as motivation is not a direct predictor of homework completion, it can influence the quality of homework completion and proficiency with which coping skills are used (Gonzalez, *et al.*, 2006).

The availability or lack of social support has a part in preventing or attracting relapse. According to the study by Witkiewitz and Marlatt (2005), research indicated that increased substance use may be the major cause of alienation from non-substance-abusing friends and family members. More substance use leads to less support and the lesser the support the more the substance use (Witkiewitz & Marlatt, 2005).

Stanton (2005) reviewed the individual psychology of relapse and advocated a shift towards a systemic psychology of relapse accommodating the integration of interpersonal factors. This shift addresses the role by a non-substance-abusing partner or member of the family in assisting the substance abuser to prevent relapse. The practical example can be a “daily sobriety contract made by the substance-abusing person to the non-substance-abusing partner” (Stanton, 2005).

The non-substance-abusing partner can assist the substance-abusing partner avoiding high-risk situations and if necessary, accompany the substance-abusing partner to events with possible temptations (Stanton, 2005).

In the study by Litt, Kadden and Stephens (2005), it appeared that instead of coping skills learned in relapse prevention treatment, the changes in self-efficacy and state of readiness were to the decrease of substance abuse. Ironically, the same study further argued that the increase in factors such as self-efficacy might be the direct result of the learned and practised skills, encouraging further use of skills and assist in preventing relapse (Litt, Kadden & Stephens, 2005).

CBT as a treatment model was initially developed as a method to prevent relapse when treating drinking problem and later it was adapted to other substance use disorders (Hendershot *et al.*, 2011). From a CBT point of view, relapse prevention got to do with identification and prevention of high risk situations. The impact of high-risk situation is minimised by increasing awareness, building coping skills and limiting relapse proneness by promoting a healthy and balanced lifestyle (Hendershot *et al.*, 2011). There are two relapse prevention categories. The first one focuses on specific intervention techniques that are designed to help the patient anticipate and cope with high-risk situation. The second category deals with global self-control approaches; these are intended to reduce relapse risk by promoting positive lifestyle change (Hendershot *et al.*, 2011). Using high-risk situation as a starting point, the therapy works backward to identify immediate precipitants and distal lifestyle factors related to relapse and forward to evaluate coping responses (Hendershot *et al.*, 2011). As part of relapse prevention programme, creating lapse management plans can be helpful. The lapse management plan assists the patient in self-correcting soon after slip (Hendershot *et al.*, 2011).

2.7 CHAPTER SUMMARY

The literature review provided a deeper understanding of substance use disorders with co-occurring disorders. This chapter indicated that substance abuse is a global challenge. The literature review observed which substances are being abused; among them were alcohol, cocaine, heroin, opium, prescription opioids, ecstasy, cannabis, new psychoactive substances (United Nations Office on Drugs and Crime, 2013). The literature review further observed types of treatments for substance use disorders. Therapists used various treatment models, such as Contingency Management

therapies, Motivational Interviewing, community reinforcement treatment approach, 12-step programme, and CBT (United Nations Office on Drugs and Crime, 2014).

Substance use disorders coexist with other mental health disorders and separate interventions proved less effective. CBT was more effective in treating substance use disorders with co-occurring disorders, and is recommended as a cost-effective intervention (Centre for Substance Abuse Treatment, 2012). The perceived effectiveness of CBT as a treatment model, linked to less relapse episodes after treatment (Magill & Ray, 2009). The literature review supported the need for more interest in this area of research, which can improve understanding some processes involved in long-term abstinence and recovery from substance abuse. Chapter 3 deals with the research methodology and method of this research.

CHAPTER 3: RESEARCH STRATEGY AND RESEARCH METHOD

3.1 INTRODUCTION

This chapter focuses on the research strategy and methods employed in this study. According to the College of Charleston (2017) and Dinnan (2014), a research strategy and methods entail a step by-step plan of action, giving direction to thoughts and efforts, enabling one to conduct research systematically and on schedule to produce quality results and detailed reporting. For the purpose of this study, the research strategy and methods entail a discussion on the research paradigm, research approach, research design employed, setting of the study, role of the researcher, sampling and criteria for inclusion of the participants, methods of data collection and data analysis, ethical considerations, trustworthiness, and authenticity.

3.2 RESEARCH PARADIGM

Research paradigm concerns a global view of the research, dealing with a framework of beliefs, values, and methods within the research (Denzin & Lincoln, 2011). There are various qualitative research paradigms, including post-positivism, constructivism, advocacy/participatory, and pragmatism (Creswell, 2014). This study assimilated postmodernism paradigm. The latter encapsulates constructivism and interpretivism, which postulated that reality needs to be interpreted from the socially constructed reality (Denzin & Lincoln, 2011). This study constructed perceptions of CBT Specialists regarding perceived effectiveness of CBT as a treatment model in rehabilitation of substance use disorder with co-occurring disorders.

3.3 QUALITATIVE RESEARCH APPROACH

The qualitative descriptive research approach was employed. Masombuka (2013) defines qualitative research approach as a method attempting to discover the quality of something, that is, its peculiar and essential character. In addition, it is an interpretive inquiry where researchers make an interpretation based on what they saw, heard and understood. The focus is on meaning, rather than on quantifiable phenomena, and the interpretation cannot be alienated from own historical, political and cultural backgrounds. In this context, the researcher was an instrument for collecting and analysing data rather than the designer of objective instruments to measure particular variables (Masombuka, 2013). After a research report was issued, further interpretations emerged from the

readers and participants, offering more interpretations of the study (Masombuka, 2013). Furthermore, the study was based on collecting ample data on a few cases, rather than little data on many cases (Masombuka, 2013). Previous studies reported that this approach was used in understanding and responding to public health challenges among hidden populations (Dos Santos, 2008). The use of qualitative descriptive approach provided a comprehensive perspective and recognised nuances of attitude and behaviour that might be omitted by other methods (Dos Santos, 2008). In the study by Kilbride *et al.*, (2013), a qualitative approach was used to explore individuals' subjective experiences of CBT for psychosis with the aim of identifying coherent themes consistent across individual accounts and any potential barriers to CBT's effectiveness. The method used was semi-structured interviews with nine individuals with CBT experience. This type of research focuses on non-statistical methods and small samples, often drawn up through purposive selection (De Vos *et al.*, 2006). Among the limitations of this approach is that it may not provide conclusive answers to the research question; it may suggest answers and could furnish insights into research methods that might provide more answers.

In most cases, qualitative research approach studies human behaviour in their social context, with generalised results (Springer, 2010). In addition, a qualitative approach occurs in a more natural setting with less control, where the role of the researcher was to explore the reality from an insider's perspective, becoming narrated (Springer, 2010). In this study, the setting was five substance abuse rehabilitation centres in the City of Tshwane and Ekurhuleni metropolitan municipalities in Gauteng Province of South Africa. Qualitative research approach employs special data collection methods such as interviews, case studies and ethnography. In this study, the researcher used face-to-face individual interviews and details are provided later in this chapter.

Qualitative approach was preferred for this study because this is a comprehensive approach, which allowed for the modification of the research plan and methodology, period and other specifics of the study according to the study objectives (Creswell, 2014; Dos Santos, 2008). This was important for the study as participants' contributions and the manner in which they responded to questions could lead to the modification of the research questions. These modifications were informed by the outcomes of the pilot study. Further details about the pilot study are provided later in this section.

According to Yin (2011), the qualitative research approach is more concerned with understanding than explaining; it is a subjective investigation of reality. The qualitative approach is normally biased to the researcher and this may not provide conclusive answers to the research objectives

(Yin, 2011). With this study, such biasness was minimised by the involvement of the CBT specialists, of which the information they provided was to provide a high level of corroboration (Yin, 2011).

3.4 RESEARCH DESIGN

Labaree (2009) defines research design as the overall strategy that integrates various components of the study in a coherent and logical way, thereby ensuring that a research problem is addressed. In this study, research design entailed ethical considerations, research setting, role of the researcher, data collection and analysis, , and ensuring trustworthiness and credibility of the findings. Further details on these aspects are provided later in this section.

3.5 RESEARCH SETTING

This study took place at the rehabilitation centres in the two municipalities in the Gauteng Province of South Africa. Below is a map for Gauteng Province, South Africa.

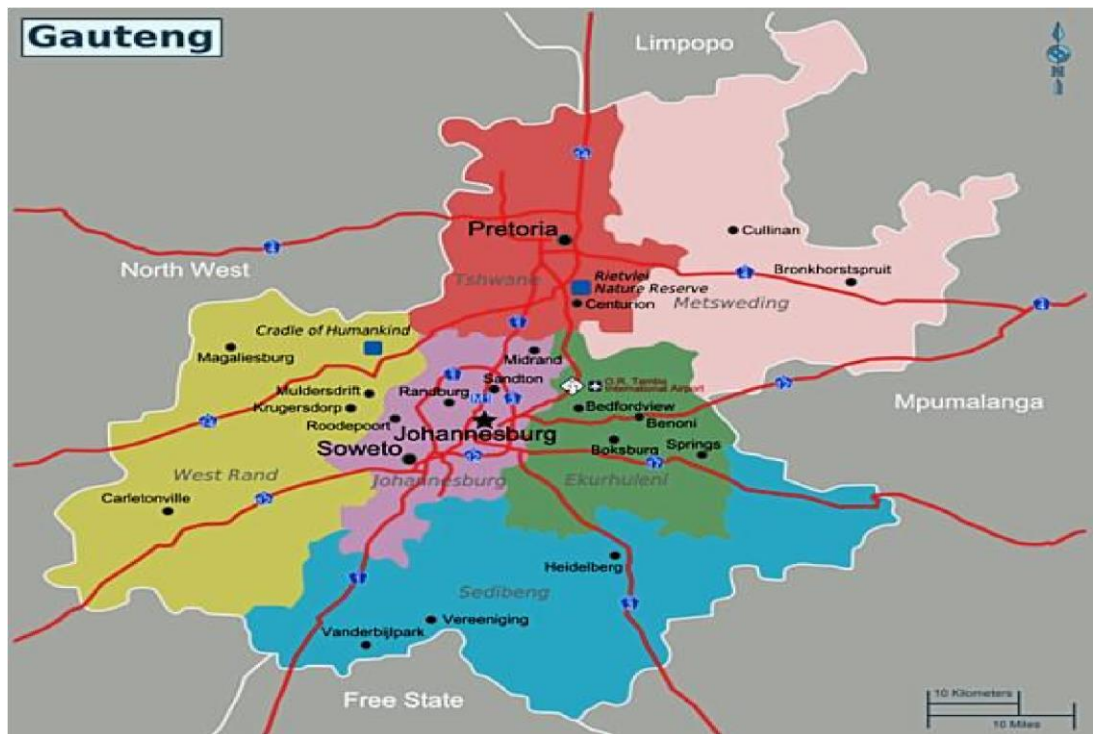


Figure 1: Map of Gauteng Province, South Africa

The next section provides a brief profile of Gauteng Province of South Africa in terms of its economy, population, unemployment, education, health, politics, and religion. Gauteng Province accounts for an estimated 35.1% of the national economy (Gauteng provincial government socioeconomic review and outlook, 2016). In terms of Gauteng Province's economic strategy, the Province has adopted the Ten Pillar Programme of Transformation, Modernisation and Re-industrialisation (TMR), in line with the National Development Plan. This is the Province's policy framework for transforming and modernising its economy (Gauteng provincial government socio-economic review and outlook, 2016). The TMR identifies various sectors that have the potential to create decent employment and bring about greater economic inclusion. These sectors include manufacturing, pharmaceuticals, Information & Communication Technology (ICT), agro processing, and the automotive industry (Gauteng provincial government socio-economic review and outlook, 2016).

According to Gauteng provincial government socio-economic review and outlook (2016), there are 55 million people living in South Africa, and 24% of them live in Gauteng, which makes Gauteng home to 13.2 million people. Majority of Gauteng's population lives in the three cities, namely, City of Johannesburg with 4.9 million people, City of Ekurhuleni with 3.4 million people, and City of Tshwane with 3.2 million people (Gauteng provincial government socio-economic review and outlook, 2016). In addition to indigenous population, Gauteng attracts the largest number of migrants, with an estimated net increase of 543,000 between 2011 and 2016 (Gauteng provincial government socio-economic review and outlook, 2016). In terms of human settlement, the proportion of households with access to basic services continues to increase. By 2014, over 90.4% of Gauteng households had access to electricity, and 78.8% were living in formal housing (Gauteng provincial government socio-economic review and outlook, 2016).

Statistics South Africa (2016) reports that unemployment rates sits at 24.5% nationally and 27.6% in Gauteng and the age cohort 15-24 years had the highest rate of unemployment, at 50.1% nationally and 44.1% in Gauteng Province. Around 52.7% of the unemployed people in Gauteng Province do not have matric, which speaks to the issue of lack of skills. Of about 1.3 million people unemployed in Gauteng Province in 2015, 41.7% were new labour force entrants, 25.9% had lost their jobs, 6.1% had left their jobs, 6.6% were re-entering the labour market and 19.7% had not been employed in the previous five years (Statistics South Africa, 2016).

Gauteng Province consists of 2606 schools, six universities, and number of public and private colleges (Gauteng provincial government socio-economic review and outlook, 2016). Educational attainment levels in the Gauteng Province have improved. Evidently, over 75% of learners who started Grade 1 in Gauteng's public schools in 2004 reached matric in 2015. This was the highest throughput rate in the country. Owing to government no fees schools programme, formal schooling is available to all of the country's young people. While access to higher education remains a challenge not only for Gauteng, the number of tertiary enrolments increased from 838,000 in 2009 to 984,000 in 2013, with about 28.8% taking courses in engineering, science & technology and 28.5% in business and commerce (Gauteng provincial government socio-economic review and outlook, 2016).

The Gauteng provincial government socio-economic review and outlook (2016) indicated that there has been an improvement in the health indicators such as life expectancy, which increased from 67.6 years in 2010 to 69 years in 2015. Moreover, it is estimated that by 2016, male life rose to 61.74 years and female to 64.3 years. In addition, the national crude death rate decreased from 10.7 deaths per 1,000 people in 2011 to 9.6 by 2015. However, the Gauteng Province's crude death rate increased from 10.9 deaths per 1,000 people in 2010 to 11.4 deaths in 2015.

Politically, Gauteng Province is a very dynamic province. The Independent Electoral Commission (IEC) of South Africa (2016) found that no political party got majority votes in both cities of the research sites, City of Ekurhuleni and City of Tshwane. As a result, both cities are governed by a coalition administration, with the City of Ekurhuleni under African National Congress, while the City of Tshwane is under Democratic Alliance coalition (Independent Electoral Commission of South Africa, 2016).

In terms of religious belief, information from Statistics South Africa (2016) indicates that 76.0% of Gauteng residents are Christian, 18.4% have no religion, 1.7% are Muslim, 0.5% are Jewish, and 0.8% are Hindu, while 2.6% have other or undetermined beliefs.

The next section provides the Maps of the Tshwane and Ekurhuleni Municipalities as well as the brief profiles of the substance abuse rehabilitation Centres.



Figure 2: Map of Tshwane Municipality



Figure 3: Map of the Ekurhuleni Municipality

The next section provides a brief profile of the substance abuse rehabilitation centres where the study took place. Rehabilitation Centre 1 is a national organisation providing addiction services

through active partnership with government and other stakeholders. The organisation is based in different provinces across the country. The research site chosen is based in Gauteng, Pretoria (South African National Council on Alcoholism, 2014). Rehabilitation Centre 2 is a centre based in Gauteng, providing treatment programmes for alcohol, medication and substance dependence (Stabilis Treatment Centre, 2014). Rehabilitation Centre 3 is a religious organisation situated in Gauteng. It is a centre comprising professional network of social workers operating under Christian ethos. The centre helps with family preservation, child protection, poverty alleviation, HIV, AIDS, and substance use disorder treatment (Christelik-Maatskaplike Raad, 2016).

Rehabilitation Centre 4 is a centre situated in the Ekurhuleni Metropolitan Municipality. The centre accommodates patients addicted to substances like alcohol, substances and medication. The centre also entertain together patients with behavioural addictions such as compulsive gambling, compulsive seeking of sex, watching pornography and compulsively using digital technology (Elim Clinic, 2016). Rehabilitation Centre 5 is a programmed psychiatric hospital situated in the western side of Tshwane. The hospital has been existing for more than 123 years (Weskoppies Hospital, 2016). All the above centres were identified based on availability of the CBT specialist as part of their therapists.

3.6 THE RESEARCHER'S ROLE AND BIAS

The researcher's role included collecting and analysing data. Data were collected through interviewing the participants with the assistance of two honours psychology students, operating as research assistants. They assisted in taking notes and audio recordings. Their participation was subject to approval by specialist participants. More importantly, the rationale for employing students to assist was to enable them to gather relevant research experience for their future studies. The researcher has biases stemming from his/her experience with peers who abused substances and are battling to get proper treatment. The researcher also heard various people complaining about challenges with accessing substance abuse treatment centres because it is costly. The researcher, then intend addressing these biases by listening with sensitivity to the views of the participants (Corbin & Strauss, 2008).

3.7 SAMPLING

Previous scholars provided various definitions for sampling. According to Springer (2010), sampling refers to the actual individuals from the wider population participating in the study. In addition, sampling refers to individuals representing most found types in characteristics, representatives or attributes of the population (De Vos *et al.*, 2006). Furthermore, Mzolo (2015) defines sampling as the procedure used for identifying participants experienced in the phenomenon of interest to the researcher, providing detail and complexity to the study. The sample of this study was drawn from the five rehabilitation centres in the City of Tshwane and Ekurhuleni Metropolitan Municipalities, Gauteng Province of South Africa. The five rehabilitation centres were identified through a list of centres received from the South African Medical Research Council (Alcohol, Tobacco and Other Drugs Research Unit, Pretoria) and through the recommendations of interviewed specialists (Alcohol, Tobacco and Other Drugs Research Unit). The non-exhaustive list was dominated by the rehabilitation centres in the Gauteng Province of South Africa, relevant to the jurisdiction of the study, with a few CBT specialists.

Creswell (2014) argues that there are various sampling methods such as cluster sampling, random sampling, purposive sampling, and snowball sampling. For the purpose of this study, purposive sampling was used to select participants. This form of sampling is normally called judgmental, theoretical or selective sampling (Creswell, 2014). In addition, Burns and Grove (2009) view judgmental, theoretical or selective sampling as conscious and deliberate selection of participants. As advised by De Vos *et al.* (2011), participant selection was later adapted to snowball sampling because it was difficult to get enough specialists in the identified sites to identify other specialists to meet the target of the minimum of 10 specialists, and strict requirements for participation was maintained. As part of the snowballing approach, the identified specialists introduced other specialists interested to be part of the research project (Terre Blanche, Durrheim & Painter, 2006). After additional specialists were identified outside the research sites identified in the research proposal, the ethical procedure of requesting permission to conduct the interviews with the additionally identified specialists from their respective rehabilitation centres was initiated and granted. Prospective participants needed to meet certain expertise, benchmarks or experience to assemble a representative sample (Gerrish & Lacey, 2006). The criteria for the selection of the rehabilitation centres and CBT specialists were as follows: the participants were purposefully identified based on their five years CBT experience.

The age restriction of participants was 30 to 65 years. This interval was informed by the expected experience from participants and the compulsory retirement age being 65 in South Africa. It was expected that a specialist who graduated on record time would have at least a minimum of five years' experience by the age of 30. To access as many specialists as possible in the identified rehabilitation centres, there was no restriction on gender, race, and ethnicity (Dos Santos, 2008). The focus was on substance abuse rehabilitation centres in Gauteng and 10 CBT specialists were interviewed. The number of specialist participants was informed by the limited time to recruit the specialist and the scarcity of CBT specialists in South Africa. According to the information from the Centre for Cognitive Behaviour Therapy (2014). Notably, South Africa has few Cognitive Behavioural therapists. Only 6% of South African clinical psychologists could be regarded as Cognitive Behavioural Therapists. Previous research (Centre for Cognitive Behaviour Therapy, 2014) further revealed no formal minimum training standards are provided for CBT therapists in South Africa and there is no formal CBT organisation or training standards committee.

3.8 DATA COLLECTION

Prior to data collection, the principle of informed consent was adhered to (Cresswell, 2014; Rani & Sharma, 2012). The informed consent was obtained from each specialist participant prior to participating in the interviews. The specialist participants were informed of the researcher's status as a master's student at University of South Africa (Unisa) doing research on "Exploring the perceived effectiveness of CBT as a treatment model for substance use disorders with co-occurring disorders at substance abuse rehabilitation centres in Gauteng. Participants were informed that inputs provided during the interviews would be treated in confidence and all transcripts, notes and audiotapes will be stored in a lockable cabinet at the researcher's residence should there be any queries. Moreover, any information recorded on the computer was protected by a password. All the information obtained from the participants was regarded as confidential and only identified by numbers instead of names of participants and rehabilitation centres. The specialist participants were informed of their right to withdraw from the study without negative effects. In addition, participants were informed that there was no form of direct benefit from participating in the study (British Psychological Society, 2010). As advised by Walliman (2006), after completion of the study, all the documents will be shredded and all recordings deleted (Walliman, 2006).

Glaser and Strauss (1967) advise that there is a need to make data collection rigorous in a qualitative study. Therefore, interviews with participant therapists in this study were conducted within a

flexible plan (Cresswell, 2014). Data were collected through face-to-face individual unstructured interviews. Mzolo (2015) and Natasha, Cynthia, Grey, and Emily (2005) define an interview as a conversation with the purpose of gaining and understanding the perspective of the person being interviewed. Semi-structured interviews were defined as those interviews organised in an area of particular interest, while still allowing considerable flexibility in scope and depth.

The face-to-face interviews were considered for data collection because of the following reasons as adapted from Cresswell (2014), DeFranzo (2014) and Feeler (2012). They provided more accurate screening on questions such as age, gender, and race; enabled the researcher to capture verbal and non-verbal cues, which indicated the level of discomfort or enthusiasm among the participants about the topic discussed. The researcher was able to keep the interview session focused and on track up to completion. However, the researcher noted the following disadvantages with the face-to-face interviews:

- Interviews were costly as they required that the researcher do individual interviews and should be there to collect data which was costly.
- The quality of the data was dependent on the researcher's ability as the interviewer.
- Data were processed manually, and that delayed the completion of data analysis in this study.

The interviews were conducted privately during working hours in the offices of the rehabilitation centres over 30 days from 16 August 2016 up to 14 September 2016. More importantly, the offices were located in quiet places with no interruptions. This was a conducive timing as the participants were easily accessible, and there was no need for participants to make special arrangements for time and transport.

Semi-structured interviews were used detailing the participants' perceptions on Cognitive Behaviour Therapy. The interviews were guided rather than dictated by the interview schedule (Mzolo, 2015). Details about the interview schedule are provided later in this chapter and in Annexure C. Semi-structured interviews assisted in obtaining details of participants' perspective regarding CBT. Dos Santos (2008) indicates that this interview method was more flexible than a conventional structured interview, questionnaire or survey. Owing to the participants' ability to give a full picture and the researcher has to follow up on fascinating issues arising from the interview. In addition, the researcher was able to explain some of the questions and ensured that

the respondents understood it (Mzolo, 2015). The interview sessions took place in respective rehabilitation centres. All the interviews were recorded and electronic notes were taken using a laptop. Permission was requested from the participants before recordings. To ensure privacy and confidentiality, both audio tapes and notes were stored in a lockable cabinet at the researcher's residence. The interview guide is attached as Annexure C.

3.9 RESEARCH QUESTIONS

The research questions are included in the interview guide in Annexure C. The formulation of an interview guide was informed by the research question and research objectives. These questions were adapted from the literature as well as the interview guide of Dos Santos (Dos Santos, 2008), which is similar to the current study as it focused on the effective treatment model for heroin use disorder through interviewing ten specialist participants. The interview guide was structured as follows: It commenced with demographic information, followed by an introductory question, main interview questions and the probes. The demographic information focused on qualifications of participants, their relevant employment history, their experience, and years of experience with Cognitive Behaviour Therapy. Specifically, the introductory questions were aimed at building a rapport with the participants and cooling them down before main questions were asked. In addition, Feeler (2012) asserts that demographic questions prepare the respondent's thoughts connection between the topic and experiences to be used in the narrative production. They included the following question:

- Tell me about yourself and what is it that you do.

The main research questions were as follows:

- Which substances are mostly used?
- Can you identify the vulnerable population to abuse substances?
- Which co-occurring disorders standardly co-exist with substance abuse?
- Which treatment models are standardly employed to address the substance abuse challenge?
- Can you please tell me on your experience with the treating substance use disorders with co-occurring disorders?
- What is your experience with CBT as a treatment model?

- How effective is CBT in rehabilitation of substance use disorders with co-occurring disorders?
- Sub-questions or probes for the study:
- Do you deem CBT to be your primary theoretical orientation?
- Do you use CBT when treating patients with substance use disorder with co-occurring disorder?
- Does using CBT with patients with substance use disorders with co-occurring disorders result fewer relapse incidents?
- What are the contributing factors towards high relapse rates?
- Does the theoretical orientation differ based on the client?
- How accessible and affordable is CBT treatment to South Africans?
- What is the feedback from patients who have completed treatment?

As advised by Feeler (2012), the researcher limited the use of closed-ended questions and used more open-ended questions in order to obtain information about their perceptions on CBT and get them to be part of the meaning-making process. The researcher respected the responses of the participants and made them aware that he/she was interested in their perceptions regarding CBT. At the end of the interview sessions, the researcher thanked the participants for sharing their views on CBT.

3.12 PILOT STUDY

Van Teijlingen and Hundley (2009) define a pilot study as a feasibility study, trial run, or vanguard trial. A pilot study was conducted with two specialists prior to the main study. More importantly, these specialists did not participate in the main study. The pilot study brought the following advantages: It assisted in identifying gaps that could lead to the failure of the main research project, where research protocols may not be followed (Van Teijlingen & Hundley, 2009). In addition, the pilot study uncovered local politics that might affect the research process (Van Teijlingen & Hundley, 2009). For this study, such politics were the reluctance of participants to participate in the study until the researcher furnished them with all the relevant documents including consent form, ethical clearance, interview questions, and the entire proposal document. That assisted during the main study because all the participants received ethical clearance, a letter confirming that the study was approved at the identified rehabilitation centres, as well as informed consent. Proactively, the pilot study assisted in assessing the length of interviews and budget challenges that could occur

during the main study, and further assessed human capital capacity and data management issues at the participating centres. Moreover, the pilot study assisted in verifying whether participants understood the information required from them. In the study by Tabane (2010), the questions were changed after the pilot study. However, in the case of this study, there were no changes based on the feedback from the pilot study.

3.13 DATA ANALYSIS

According to Cho and Lee (2014), data analysis is a process where data reduction, presentation and interpretation take place. In addition, Masombuka (2013) argues that it is a process of bringing order, structure and meaning to the mass of the collected data. For the purpose of this study, grounded theory was employed to analyse data. Furthermore, Cho and Lee (2014) maintains that grounded theory is relevant for qualitative research, especially when researching topics such as CBT, which is not established or standard in South African rehabilitation centres (Centre for CBT, 2014). This is a data analysis theory developed for studying social phenomena (social psychology and sociology) from the perspective of interpretivism (Walsh *et al.*, 2015). Interpretivism focuses on human behaviour, specifically on how individuals interpret and define reality and how they act according to their beliefs (Walsh *et al.*, 2015). Grounded theory includes a clear set of procedures and techniques that, if correctly applied, will be of immense value, not only in the practical execution of the research, but also in ensuring rigour (Alberts, 2008). In addition, grounded theory is the methodology guiding the researcher from entering the field to a final, publishable draft (Charmaz, 2014). More importantly, grounded theory holds a basic tenet that qualitative researchers do not enter testing hypothesis to add to an existing body of knowledge, but rather they “do not know what it is that they do not know” (Cho & Lee, 2014). This theory became more relevant for this study, considering the scarcity of research within CBT and Substance Abuse Disorder with co-occurring disorders in South Africa (Dos Santos, 2008).

3.11.1 Grounded theory analysis

According to Lawrence and Tar (2013), grounded theory is a methodology that discovers theory grounded in data. The theory evolves during the actual research, and it does this through a continuous interplay between data collection and analysis. In this regard, data were captured through recorded interviews of not more than one hour for each participant. The recordings were transcribed verbatim and transcripts kept as evidence of the participants’ responses. In order to

manage data from each participant, the transcripts were numbered from number one up to 10. The transcripts were then analysed using grounded theory analysis. As part of the grounded theory principle, I ensured that before proceeding to a new interview, the previous interview script was properly analysed (Alberts, 2008).

With grounded theory, the analysis occurred during the actual research, based on comparative analysis of participants' contributions (Walsh *et al.*, 2015). Both the process and products of research were shaped from the data rather than from preconceived logically deduced theoretical frameworks. Emphasis was on discovery and theory development rather than on verification of pre-existing theories, causing it to be more abstract in its approach. The above meant that grounded theory derives theory from the collected data. That was done through a constant comparison process intended to produce concepts from all the data (Charmaz, 2014). In contrast to other research methods embedded on complete data collection before analysis begins, data analysis in grounded theory commenced as soon as the first data was collected. Therefore, data analysis and data collection occurred simultaneously. Data analysis directed the next interview (Alberts, 2008; Feeler, 2012; Lawrence & Tar, 2013).

The transcribed data were also perused and categories constructed, originating from the key participants' data prior to formal coding. At a reflexive level of processing, awareness was formed on the role of the researcher and the possible influence on the analysis of the data (Bvuma, 2014). Therefore, data collection and analysis were not objective because I was bound to react to and work with the data (Charmaz, 2014). Learned data-coding experience was brought in while adhering to the constructivist grounded theory analysis approach. It was a daunting experience at first as the researcher became aware of the intensity, detail and focus required in this technique. Notes were made in every paragraph of the critical incidents from the interviews (Bvuma, 2014).

Using grounded theory, the data were analysed using three basic coding steps - open coding, axial coding and selective coding. According to Bvuma (2014), with open coding, the data are examined to distil. The latter involves sorting and depicting what each segment of the data means to comprehend it and then be able to name and categorise phenomena, providing conceptual labels. The emphasis of the data at this level is on what happens when data is coded.

Open coding process: The data from the transcribed and imported critical incident interviews was perused to gain an understanding of the participants' views and related issues. Using informants'

terms (in vivo without modifying or editing them), concepts, and meanings specific to the participants' language, statements and views were underlined and notes made in order not to lose the concepts. The transcribed data was read repeatedly, comparing to the audio tapes, ensuring that the original meaning of the data was retained. The preliminary line-by-line data analysis, which is an open-coding process, was done to generate the concepts of focus. That was followed by paragraph coding to generate categories. During the coding process, memos were created on how the categories explained the process and named it accordingly (Lawrence & Tar, 2013). The codes were analysed at an early stage, relating to substances mostly used and co-occurring disorders coexisting with substances. The category was translated into a theme owing to its persistence throughout the data. As a result, the most important codes selected during the coding process related to treatment models used to rehabilitate substance use with co-occurring disorders. That was followed by various approaches of the therapists in relation to what takes precedence between substance disorders and co-occurring disorder and which get treated first. Throughout the data, the effectiveness of CBT was linked to the level of cognitive capacity of the patient. These concepts were classified into similar dimensions formulated into specific categories. The above categories were constantly compared according to different participants' results. Eventually, the open coding reached saturation when there were no new categories derived from the data. Owing to the scarcity of CBT specialists, 10 interviews were enough to reach data saturation (Fusch & Ness, 2015). According to Fusch and Ness (2015), data saturation is reached when there is enough information to replicate the study, and failure to reach data saturation has a negative impact on the validity of the study.

Axial coding: With axial coding, the emphasis was on setting of procedures whereby data from open coding is put back together in new ways after open coding, by making connections between categories (Bvuma, 2014). During axial coding, numerous comparisons were made to gain an analytical grasp as the data took a particular form. Analytical notes called memoing on codes were formulated for analytical categories and relationships between various categories, providing a conceptual handle on the studied experiences (Bvuma, 2014). In the same vein, Urquhart, Lehmann and Myers (2010), viewed axial coding as the process of relating codes. For example, relationships between certain substances and psychological co-occurring disorders, relationship between relapse rate and contributing factors, and relationship between effectiveness of CBT and level of cognitive capacity of the patient. In the process forming the theory, causal conditions, strategies, and consequences were identified and connected to each other. The said connection was indicated through a coding paradigm. Some categories were changed to adhere to prominent terms used by

participants to retain the originality and the idea on concepts-based categories. The above process was done through repeating the analysis of all the interviews. However, with no intention of creating new codes, rather writing memos in order to develop a picture of what the data meant in a broader sense (Rodon & Paster, 2007).

Selective coding: According to Bvuma (2014), selective coding concerns integrating categories to formulate core categories that will inform the formulation of a theory or a model. In addition, selective coding entailed explicating the storyline, matching categories into core categories and validating these relationships against the raw data while filling in gaps on categories that required further refinement. Identified categories were integrated to formulate main themes that eventually generated a grounded theory model or framework of the phenomenon studied (Bvuma, 2014). Throughout the categories, a core category was constructed producing a discursive set of theoretical propositions (Bvuma, 2014). Against this background, the overall conceptualisation of the theory was made through a narrative analysing the theory explaining the core process. The core category was systematically related to other categories, and categories that needed further refinement were completed.

Theoretical sampling and comparing

Glaser and Strauss (1967 cited in Lawrence and Tar (2013) posit that two analytic processes, namely, constant comparison and theoretical sampling, contribute to raising categories to conceptual categories. Theoretical sampling is done during data collection and involves searching the transcripts for emerging categories that characterise the narrative and seem significant to the study. Constant comparison is central to data analysis in generating grounded theory. Its purpose was to build and clarify categories by examining all the data covered and variations from it. The coded data were compared with each other and assigned to clusters or categories according to obvious fit (Lawrence & Tar, 2013). As advised by Feeler (2012), the purpose of comparing data was to note similarities and differences that enable inductive coding, generating concepts, categories, and theories. In addition, I constantly returned to the beginning point of analysis, and continued the process of analysis.

For purposes of data analysis, the assistance of an expert was utilised. The assistance of an expert was necessary for the explanation codes. In analysing the data, the transcribed interviews were read, subjected to grounded theory. It was discussed with the expert to determine the usability of the material and categorisation of themes with the interviews. This increased the reliability of the

findings of this study (Cho & Lee, 2014). In addition, to validate the interpretation, the interviews were taken back to the specialists for possible enrichment and verification of the interpretation (Cho & Lee, 2014). Detailed discussion on trustworthiness and authenticity of the findings is provided later in this chapter.

Justification for using grounded theory in this study

Grounded theory was used to analyse data in this study because of the following reasons as advised by Lawrence and Tar (2013):

- It allowed me to sift and analyse data.
- Develop a theoretical account of the general features of the study topic while simultaneously grounding the account in empirical data.
- Enabled me to generate theory that can be used as a precursor for further investigation of perceptions on the effectiveness of CBT and other related issues.

Therefore, other qualitative strategies may be used in future studies to verify or extend the qualitative propositions that emerge from this study.

3.12 TRUSTWORTHINESS AND AUTHENTICITY

The knowledge with qualitative (naturalistic) paradigm is different from the knowledge in quantitative (rationalistic) paradigm. Each paradigm requires specific criteria for addressing rigour (Morse, Barrett, Mayan, Olson & Spiers, 2008). This led to a strong rejection of reliability and validity concepts among the qualitative researchers. The premise for this rejection is that qualitative studies cannot be assessed for validity, for example, truth-value, credibility, legitimation, dependability, trustworthiness, and generalisation. Validity is relative to purposes and circumstances (Onwuegbuzie & Leech, 2007). Legitimation assessment does not lead to valid or invalid outcomes, but it speaks to the degree of validity (Onwuegbuzie & Leech, 2007).

The rejection of validity and reliability by qualitative researchers led Guba and Lincoln in the 1980s to develop the parallel concept of trustworthiness. This constituted four aspects, namely, credibility, transferability, dependability, and conformability (Morse *et al.*, 2008). According to Rubin and Babbie (2012), trustworthiness is a “the degree of consistency in measurement”. In this research, trustworthiness was established by comparing responses to see whether there was agreement

between participants' views and experiences (Rubin & Babbie, 2012). They also developed authenticity criteria unique to the constructivist assumptions, evaluating the quality of research beyond the methodological dimension (Morse *et al.*, 2008).

According to Bush (2007), authenticity of the findings can be charged by procedures used to address validity, reliability and triangulation. Corroborating with Bush (2007), Creswell (2014), De Vos *et al.* (2011), Onwuegbuzie and Leech, (2007), as well as Secomb and Smith, (2011) argue that the following techniques may be employed to affirm trustworthiness and authenticity of the findings. They include a pilot study, prolonged engagement, persistent observation, triangulation, leaving an audit trail, member checking or informant feedback. They also include weighting the evidence, checking for representativeness of sources of data, checking for researcher effects or clarifying researcher bias, contrasts or comparisons. Furthermore, they entail theoretical sampling, checking the meaning of outliers, using extreme cases, ruling out spurious relations, replicating a finding, referential adequacy, following up surprises, structural relationships, peer debriefing, rich and thick description, the modus operandi approach, assessing rival explanations, negative case analysis, confirmatory data analyses, and effect size.

Techniques such as pilot study, triangulation of data, member checking/informant feedback, comparing, rich data descriptions, and peer review were considered relevant for this study. Conducting a pilot study led to more valid and trustworthy results (Secomb & Smith, 2011). During the pilot study, the study methods and data collection processes were examined prior to a subsequent study. Participants provided information on the appropriateness of the interview guide, therefore validating the research questions prior to the main study (Secomb & Smith, 2011). Triangulation of data was done through participation of specialists from different rehabilitation centres. Therefore, this increased the legitimacy of the study by comparing data obtained from specialist participants from various rehabilitation sites, (Onwuegbuzie & Leech, 2007).

Member checking or informant feedback was done through affording participants the opportunity to verify the responses provided in their transcripts. That eliminated any possible misinterpretation and misrepresentation of the data (Onwuegbuzie & Leech, 2007). Rich thick descriptions when presenting the findings of the study that were done by providing extracts from the interview transcripts of the participants. That would allow the reader to determine whether the interpretation was true to the content and intent of the data. Regarding peer reviews, my supervisor provided input throughout this study, provided doctoral and masters dissertations, research articles, and advised

me to consider sharing my work with peers who are experts in qualitative research and CBT to provide their input. I also obtained assistance of a specialist in grounded theory to assist with data analysis. In addition, I shared my work with two other doctoral and masters supervisors in our university, who served as critical peer reviewers before it was submitted for examination. That was done to obtain advice and ensure that this study met the required standards for a master's dissertation.

3.13 CHAPTER SUMMARY

This chapter provided a discussion on the research methods employed in this study. These include research paradigm, research approach and research design, research setting of the study, role of the researcher and biases, ethical considerations throughout the phases of this study, pilot study and its benefits for the main study, data collection and analysis, as well as the strategies employed to enhance trustworthiness and authenticity of the findings of this study. The next chapter provides a discussion on the findings of this study.

CHAPTER 4: FINDINGS AND DISCUSSION OF THE STUDY

4.1 INTRODUCTION

Chapter 3 outlined the research strategy and methods. In this chapter, the findings are presented and further discussed. First, a brief introduction of the each participant is provided and their experiences and meanings about CBT are “represented in ways that capture the interview data” (Sandelowski, 1988 cited in Livingston, 2014: 184). Before doing that, it is worth acknowledging the following three aspects: Firstly, for ease of reference, numbers are utilised to identify participants and to protect their real identities (Creswell, 2014; De Vos *et al.*, 2011). Secondly, this study was conducted between 16 August 2016 up to 16 September 2016; therefore, participants are presented as they were by the time the study was conducted. Thirdly, the presentation of the themes is informed by the objectives and research questions of this study (Creswell, 2014) as well as the literature review.

4.2 A BRIEF INTRODUCTION OF PARTICIPANTS

Ten participants were interviewed between 16 August and 16 September 2016 at their offices in the rehabilitation centres where they are employed. As advised by Creswell (2014) and De Vos *et al.* (2011), numbers were used to protect their identity and privacy. In addition, letters are used to identify the rehabilitation centres in order to protect their identity and for confidentiality purposes.

Participant number 1 is a 52 year White female holding a Bachelor of Arts (BA) degree in Social Work. Her relevant employment history involves working for a government department and two NGOs in Pretoria, where she holds a management position. The nature of her experience entails practising as a therapist dealing with rehabilitation of substance abuse in the above-mentioned institutions. The participant has 26 years of experience of CBT in the field of substance use disorders with co-occurring disorders.

Participant number 2 is a 35 year Black female holding a BA degree in Social Work and Honours in Social Policy and Management. Her relevant employment history involves working for an NGO in Pretoria. The nature of her experience is practising as a therapist dealing with rehabilitation of substance abuse in an NGO in Pretoria. The participant has eight years of experience in CBT in the field of substance use disorders with co-occurring disorders.

Participant number 3 is a 64 year White female holding a BA degree in Social Work. Her relevant employment history includes working for the government department and NGO in Pretoria. The nature of her experience is practising as a therapist dealing with rehabilitation of substance abuse in the above institutions. The participant has 40 years of experience in CBT in the field of substance use disorders with co-occurring disorders.

Participant number 4 is a 49 year White female holding a BA Social Science degree in Social Work. Her relevant employment history involves working for an NGO in Pretoria. The nature of her experience has been practising as a therapist dealing with rehabilitation of substance abuse in SANCA Pretoria. The participant has 19 years of experience in CBT in the field of substance use disorders with co-occurring disorders.

Participant number 5 is a 58 year White female holding a Doctor of Philosophy (PhD) in Social Work. Her relevant employment history involves working for a treatment centre in Pretoria. The nature of her experience has been practicing as a therapist in the field of addiction and trauma, involving rehabilitation of substance abuse in a treatment centre in Pretoria. The participant has 26 years of experience in CBT in the field of substance use disorders with co-occurring disorders.

Participant number 6 is a 55 year White male holding a PhD in Theology (Therapy). His relevant employment history involves working for a treatment centre in Pretoria. The nature of his experience has been practising as a Pastor Counsellor dealing with the rehabilitation of substance abuse, and currently he is the Director of a treatment centre in Pretoria. The participant has 30 years of experience in CBT in the field of substance use disorders with co-occurring disorders.

Participant number 7 is a 46 year White female holding a BA degree in Social Work. Her relevant employment history involves working for Dr Fabian and Florence Ribeiro Treatment Centre and Christelik-Maatskaplike Raad or Christian Social Counsel (CMR). The nature of her experience has been practising as a therapist focusing on group services in a form of support group for patients with substance dependency in the above institutions. The participant has 20 years of experience in CBT in the field of substance use disorders with co-occurring disorders.

Participant number 8 is 33 year Black female holding a BA Social Science Honours degree. Her relevant employment history involves working for Elim Clinic and private/personal practice. The nature of her experience has been practising as a therapist (alcohol, substance group and after care

group) dealing with rehabilitation of substance abuse, and currently she is working for Elim Clinic, while on the side practising on her private or personal practice. The participant has 10 years of experience in CBT in the field of substance use disorders with co-occurring disorders.

Participant number 9 is a 40 year White female holding a BA Honours degree in Social Work. Her relevant employment history involves working for a private clinic. The nature of her experience has been practising as a therapist in the field of addiction dealing with the rehabilitation of substance abuse. The participant has 15 years of experience in CBT in the field of substance use disorders with co-occurring disorders.

Participant number 10 is a 32 year White female holding a Master's degree in Clinical Psychology. Her relevant employment history involves working for government psychiatric hospital. The nature of her experience is senior clinical psychologist specialising co-morbid disorder with substance abuse. Her section works closely with the substance abuse section with the hospital, where patients are referred vice - versa between the two sections. She has seven years of experience in CBT in the field of substance use disorders with co-occurring disorders.

Racial Group

The participants who consented to participate in this study were from two racial groups found in the Gauteng Province, South Africa. Precisely, they include eight white participants and two black African participants. This corroborates with the Census report (Statistics South Africa, 2011) that Gauteng Province of South Africa consisted of 77.36% black African, 15.60% White, 3.45% Coloured, 2.91% Indian or Asian, and 0.69% other racial group. However, this study could not attract participants from other racial groups such as Coloured, Indians, et cetera found in the Gauteng Province of South Africa as reported in the Census Report (Statistics South Africa, 2011). The limited participation of black Africans confirms what Sodano, Watson, Rataemane, Rataemane, Ntlhe, and Rawson (2010) discovered that in terms of race, the substance abuse treatment workforce of South Africa consisted of 36.4% White and 30.8% Black, 18.9% Coloured, 21.6% Indian or Asian, and 1.4% Cape Malay. Therefore, according to the findings of this study, majority of CBT specialists are whites. Therefore, it was not surprising that majority of the participants in this study were whites. Limitations regarding racial groups participating in this study are further discussed in Chapter 5 under limitations of the study and recommendations provided.

Gender and Age

Out of 10 participants in this study, there were two black African females, one white male, and seven white females. The latter implies that majority of female than male Cognitive Behaviour Therapists consented to participate in this study. A study by Lopez and Basco (2015), which focused on the effectiveness of CBT in Public Mental Health also established that more female therapists consented to participate in their study. Of the 166 participants, 84.3% were female and 15.7% were male. Markanday, Brennan, Gould, and Pasco (2013) established low male participation in their study on sex differences in reasons for non-participation at recruitment. This was because of time constraints, inability to cope with or understand the study. Furthermore, the study by Sodano *et al.*, (2010) established that 75% of South African substance abuse treatment workforce is female, which may have been another reason to have more females than males who consented to participate in the study.

Regarding the age, the findings of this study revealed that participants were between the ages of 30 and 65. That is three participants were between 30 to 39 years of age, while the other seven participants were 40 to 64 years of age. According to Erikson (1963 cited in McLeod, 2017), ages 30-39 is regarded as young adulthood, where individuals begin to share themselves more intimately with others and explore relationships leading toward longer-term commitments with someone other than a family member. In addition, successful completion of this stage may result in happy relationships and a sense of commitment, safety, and care within a relationship. However, avoiding intimacy, fearing commitment and relationships can lead to isolation, loneliness, and sometimes depression. Success in this stage may lead to the virtue of love. The other seven participants were in the middle adulthood stage (that is ages 40 to 64 years), in which they established their careers, settled down in relationships, begin families and develop a sense of being a part of the bigger picture. In addition, according Erikson (1963) cited in McLeod (2017), this is a stage in which individuals give back to society through raising children, being productive at work, and becoming involved in community activities and organisations. Even though participants in this study have varying ages, they had established their careers as CBT therapist.

Status

All the participants were employed as CBT in their rehabilitation centres. Majority of the participants, that is five participants, had a social work degree, two participants had an honours degree in social work, one participant had a master's degree, while two participants had doctoral degrees in Social Work and Theology respectively. Out of the 10 participants, five white

participants had social work degrees, two black participants had honours degrees, one white participant had a master's degree, and two white participants had doctoral degrees. The findings suggest that all the participants completed their tertiary qualifications (Statistics South Africa, 2014). In addition, Miller (2018) established that a Bachelor's degree was the first step towards becoming a cognitive behavioural therapist. Furthermore, Miller (2018) indicated that the first degree does not necessarily have to be in a mental health-related field, but studying a field such as Psychology or Social Work could provide one with a strong foundation and basic education about the workings of mind, psychological dysfunction and mental health. In contrast to Miller (2018), the findings revealed that two participants furthered their doctoral studies in Theology, but served as Cognitive Behaviour Therapists. Therefore, all the participants in this study had relevant qualifications and experience to serve as Cognitive Behaviour Therapists in substance abuse rehabilitation centres (Sodano et al., 2010). The study by Sodano et al (2010) established that 72% of substance abuse treatment workforce had at least a bachelor's degree, 47% had master's degree, while only 7.4% had doctoral degree. The findings further lend support to the Quarterly Labour Force Survey (Statistics South Africa, 2014), that some of the individuals in the country are employed as professionals.

4.3 GROUNDED THEORY ANALYSIS

Grounded theory is the methodology guiding the researcher from entering the field to a final, publishable draft (Charmaz, 2014). It includes a clear set of procedures and techniques that, if correctly applied, will be of immense value, not only in the practical execution of the research, but also in ensuring rigour (Alberty, 2008).

Grounded theory derives theory from the collected data. This is done through a constant comparison process intended to produce concepts from all data (Charmaz, 2014). In contrast to other research methods embedded on complete data collection before analysis begins, data analysis in grounded theory commences as soon as the first data is collected. Thereafter, analysis and collection occur alternatively; each analysis directs the next interview or observation (Alberty, 2008).

The transcribed data was perused and categories constructed, originating from the key participants' data prior to formal coding. At a reflexive level of processing, awareness was formed on the role of the researcher and the possible influence on the analysis of the data (Bvuma, 2014). The interplay between data researcher during both data collection and analysis may not have been objective

owing to the researcher being bound to react to and having to work with the data (Charmaz, 2014). Learned data-coding experience was brought in while adhering to the constructivist grounded theory analysis approach. It was a daunting experience at first as this researcher became aware of the intensity, detail and focus required in this technique. Notes are made in every paragraph of the critical incidents interviews (Bvuma, 2014).

The grounded theory was utilised to identify, code, categorise, classify, and label primary patterns as they emerged from the interview data (Livingstone, 2014). Through grounded theory analysis, nine themes were identified: 1. substances mostly used; 2. vulnerable population to abuse substances; 3. co-occurring disorders co-existing with substance use disorder; 4. aetiology of substance abuse 5. the experience of participants in treating substance use disorder with co-occurring disorders; 6. treatment models standardly employed to address the substance abuse challenge; 7. the participants' experience with CBT; 8. the affordability and accessibility of CBT treatment; 9. contributing factors towards high relapse rates. The subthemes included 1.1 legal and illegal substances, 1.2 classification of substances, 2.1 adolescent and young adults, 2.2 individuals with co-occurring disorders, 2.3 socio-economic status, 3.1 depression, 3.2 bipolar disorder, 3.3 schizophrenia, 3.4 sleeping disorder, 3.5 impulsivity, 3.6 anti-social behaviour, 3.7 paranoia, 3.8 panic disorder, 4.1 genetic predisposition, 4.2 depression, 4.3 parental neglect and financial problems, 4.4 experimentation with substance for relaxation, 4.5 peer group pressure, 5.1 which disorder get treated first, 5.2 mental state, 6.1 person centred therapy, 6.2 bio-psycho-social therapy, 6.3 holistic approach, 6.4 eclectic therapy, 6.5 resilient therapy, 6.6 rational emotive behavioural therapy, 6.7 family therapy, 6.8 motivational interviewing, 6.9 12-step programme, 6.10 Cognitive Behavioural Therapy, 7.1 individual and group therapy, 7.2 the use of CBT skill after therapy, 7.3 CBT effectiveness in relapse prevention, 8.1 access to rehabilitation centres, 8.2 cost of rehabilitation centres, 9.1 individual factors, 9.2 family factors, 9.3 environmental factors (See Table 4). The discussions were substantiated and illustrated using quotations from participants. Whereas the aim was to use verbatim quotations, it was unavoidable to edit certain responses for the sake of clarity. This was restricted to a minimum and care was taken to ensure the meaning of the quotations remained intact.

<p>1. Substances mostly used</p> <p>1.1 Illegal and legal</p> <p>1.2 substances Classification of substances</p>	<p>2. Vulnerable population to abuse substances</p> <p>2.1 Adolescent and young adults</p> <p>Individuals with co-occurring disorders</p> <p>Socio-economic status</p>	<p>3. Co-occurring disorders co-existing with substance use disorder</p> <p>3.1 Depression</p> <p>3.2 Bipolar disorder</p> <p>3.3 Schizophrenia</p> <p>3.4 Sleeping disorder</p> <p>3.5 Impulsivity</p> <p>3.6 Antisocial behaviour</p> <p>3.7 Paranoia</p> <p>3.8 Panic disorder</p>	<p>4. Aetiology of substance abuse</p> <p>4.1 Genetic predisposition</p> <p>4.2 Depression</p> <p>4.3 Parental neglect and financial problems</p> <p>4.4 Experimentation with substance for relaxation</p> <p>4.5 Peer group pressure</p>	<p>5. The experience of participants in treating substance use disorder with co-occurring disorders</p> <p>5.1 Which disorder get treated first</p> <p>5.2 Mental state</p>
<p>6. Treatment models standardly employed to address the substance abuse challenge</p> <p>6.1 Person centred therapy</p> <p>6.2 Bio-psychosocial therapy</p> <p>6.3 Holistic approach</p> <p>6.4 Eclectic therapy</p> <p>6.5 Resilient therapy Rational emotive behavioural therapy</p> <p>6.6 Family therapy</p> <p>6.7 Motivational interviewing</p> <p>6.9 12-step programme Cognitive Behavioural Therapy</p>	<p>7. The participants experience with Cognitive Behavioural Therapy</p> <p>7.1 Individual and group therapy</p> <p>7.2 The use of CBT skill after therapy</p> <p>7.3 CBT effectiveness in relapse prevention,</p>	<p>8. The affordability and accessibility of CBT treatment</p> <p>8.1 Access to rehabilitation centres</p> <p>8.2 Cost of rehabilitation centres</p>	<p>9. Contributing factors towards high relapse rates</p> <p>9.1 Individual factors</p> <p>9.2 Family factors</p> <p>9.3 Environmental factors</p>	

Table 4: Themes and subthemes

4.4 SUBSTANCES MOSTLY USED

Legal and illegal substances

Participants reported that substances abused by patients admitted in their rehabilitation centres include cannabis, *nyaope*, ketamine, heroin, alcohol, cocaine, methamphetamine, and over the counter medication:

Cannabis, nyaope, Ket, and heroin (Participant 1).

Alcohol, cannabis, heroin, cocaine, crystal meth, over the counter medication (Participant 2).

Alcohol, ket, cannabis, crystal methamphetamine, cocaine, nyaope, over the counter medication (Participant 9).

These findings suggest that substances classified as legal and illegal were reported as substances abused by the patients admitted in the rehabilitation centres where the study was conducted. Out of all the substances identified by participants, alcohol and over the counter medication were the only substances that were legal. All other substances reported by the participants were illegal. In addition, use and abuse of these substances were reported in previous international and South African studies (United Nations Office on Drugs and Crime, 2013; Dada *et al.*, 2017).

Furthermore, the use of alcohol, cannabis, heroin, cocaine, and *nyaope* was prevalent in other provinces of South Africa such as KwaZulu-Natal, Limpopo, North West, and Western Cape Provinces (Dada *et al.*, 2016; Mothibi, 2014; Setlalentoa, Ryke, & Strydom, 2015). However, the use of ketamine, crystal methamphetamine, and heroin was reported to be more prevalent in the provinces such as Gauteng and Western Cape because they are expensive and mostly people in urban areas could afford them as compared to people in rural areas (Ompard, Galea, Marshall, Fuller, Weiss, Beard, & Vlahov, 2008). The report on the use of *nyaope* did not come as surprise given that its use is increasing in South African townships specifically in Gauteng because it is cheap and easily available (Dintwe, 2017). In addition, there are various names for it, such as wunga. However, participants in this study used the name *nyaope*.

Classification of substances of abuse

According to Balhara (2018), Casa Palmera (2012), and the Recovery village, the substances identified by the participants in the preceding section of this study included the following:

- Depressants, which slow the activity of the brain (*alcohol*).
- Stimulants, which accelerate the activity of the central nervous system (*cocaine, methamphetamine*).
- Opioids, which act through the opioids receptors (*heroin*).
- Cannabis/cannabinoids (*cannabis*) and new psychoactive substances (*ketamine*).

None of the participants mentioned inhalants and hallucinogen. The substances identified by the participants are further classified as Schedule 1 and 2, which have a high potential of abuse (*alcohol, cannabis, cocaine, ecstasy, heroin, methamphetamine,*), as well as Schedule 3 with moderate or low potential for abuse (*ketamine*). Even though *nyaope* was not classified by the above-mentioned previous scholars, it is classified under Schedule 1 and 2 (Department of Justice and Constitutional Development, 2014; Monyakane, 2016).

4.5 VULNERABLE POPULATION TO ABUSE SUBSTANCES

Adolescent and Young adults

The findings also resonates with a study by Maithya (2009), who established that substance abuse has no race, class or gender preference, but affects all. Furthermore, Bushak (2014) accentuates that addiction to substances is a complicated affliction, affecting people of all ages, intelligence levels, and backgrounds. In addition, Bushak (2014) maintains that it is hard to tell what causes some people to be more prone to addiction than others because it is usually a mix of many factors, from family background, genetics, environment, stress, and personality traits. Consistent with Bushak (2014), findings in this study revealed that substance abuse is more standard among adolescents and young adults and does not affect a specific race or gender as reflected in the following quotes:

Anyone can be addicted; it is more prevalence amongst youngsters between ages of 14 to 30 years (Participant 9)

Young generation from 16, 18 to 28 years (Participant 4)

Substances do not have a specific race or gender; it is difficult to specify
(Participant 1)

Furthermore, these findings corroborates with the study by Nkosi and Ndou (2010), which established that the majority of patients treated for substance abuse in the country in 2010 were younger than age 21. However, this study associated alcohol abuse with the older individuals over 21 years of age.

Individuals with co-occurring disorders

Furthermore, the findings revealed that other vulnerable individuals include those with co-occurring disorders, trauma, unemployed, and other family members using substances and stressed individuals as reported in the following quote:

Individuals with co-occurring disorders, trauma, unemployment, family background of substances, curiosity, stressed individuals (Participant 2)

This extract indicates that dysfunctional family background and presence of co-occurring disorders increases vulnerability to substance abuse. This is consistent with the study by Lander *et al.*, (2013) in which substance abuse was found to be associated with a dysfunctional family system. In terms of this study, an addictive behaviour by a family member is a result of a dynamic family system rather than individual member's action. Substance use disorders negatively affect emotional and behavioural patterns from the inception of the family, resulting in poor outcomes for children and adults with substance use disorders (Lander *et al.*, 2013).

The study by Hawkins (2009) established that psychiatric co-occurring disorders increases risk for developing substance use disorders. In many cases, the substances are used as self-medication of psychiatric co-occurring disorders or coping mechanism for stressors that occur within the family, school, or the community (Hawkins, 2009). Compared to patients with substance use disorders alone, those with co-occurring disorders are more likely to have an earlier onset of substance abuse, use more frequently and chronically, and drop out of treatment (Chan, Dennis, & Funk, 2008).

Socio-economic status

The findings further revealed that often those abusing substances are from poor social background:

Teenagers, individuals of poor background, however also found in different classes (participant 3),

Young adults between 20 to 30 years, often from poor social status (participant 10).

This is consistent with a study by Maithya (2009) which reported that substance abuse was more prevalent among young males from poor background (Maithya, 2009). However, the findings from this study did not provide gender differences among those from poor backgrounds.

These findings imply that more awareness is required to raise awareness among youngsters about substance abuse and its negative impact. In addition, the findings point to a need for socioeconomic justice to eradicate poverty, inequality, and unemployment as these aspects contribute to vulnerability of individuals to substance abuse. Furthermore, these findings suggest a need to consider factors that contribute to vulnerability of individuals to abuse substances when treating substance abuse related challenges.

4.6 CO-OCCURRING DISORDERS CO-EXISTING WITH SUBSTANCE USE DISORDER

Many patients who enter substance abuse treatment have co-occurring mental disorders such as depression, bipolar, psychotic, schizophrenia, sleeping disorder, ADHD, mood disorder, antisocial behaviour, borderline disorder, paranoia, panic attack, and suicide (Staiger, Thomas, Ricciardelli, McCabe, Cross, & Young, 2011).

Depression

Five participants mentioned depression as one of the co-occurring disorders, *Depression* (Participant 1), *major depression* (Participant 7), *Depression* (Participant 8), *Depression especially with alcohol, remember alcohol is a depressant* (Participant 9), *major depression* (Participant 10). Lending from the previous studies, co-occurrence of depression and alcohol is very high (Lydecker *et al.*, 2010). In many occasions, depressed mood is associated with substance use (Hunter *et al.*, 2012). In the study by Conneer, Pinquart and Gamble (2009), the lifetime prevalence of major depression among alcohol dependent men is 24.3% and 48.5% among alcohol dependent women. Such differences may merely reflect the higher rate of depression observed among women in

general population. Depression symptoms can spontaneously emerge in the context of heavy drinking and decrease with abstinence (Conneer, *et al.*, 2009). A potential mechanism for alcohol use disorder during depression can be an attempt to cope with negative effects of depression (Jewkes, Dunkle, Nduna, Jama, & Puren. 2010). The study by Jewkes, *et al.* (2010) has linked depression in children with physical or sexual abuse, which later develop into alcohol dependency.

Bipolar disorder

High on the list of co-occurring disorders mentioned by participants was bipolar, as reflected in the following quotes: *Bipolar* (Participant 6), *Bipolar* (Participant 7), *bipolar which is sometimes chemically induced* (Participant 8), *bipolar* (Participant 9), *Bipolar I and II* (Participant 10). Bipolar disorder has higher prevalence of substance use disorder than any other psychiatric disorder (Swann, 2010). *Bipolar I and II, major depression, schizophrenia* (Participant 10). Substance abuse with co-occurring bipolar patients has been identified as a population exhibiting the greatest level of unmet need (Kemp *et al.*, 2009). Bipolar is often complicated by substance use disorders, such as alcohol, cannabis, cocaine, and opioid (Cerullo & Strakowski, 2007). The presence of substance abuse normally complicate the treatment of bipolar disorder by contributing to lithium resistance in patients experiencing mixed states, and reducing the likelihood of lithium response in manic patients (Swann, 2010). Moreover, patients diagnosed with both disorders normally have severe course of bipolar disorder. These two disorders share common mechanisms, such as impulsivity, poor modulation of motivation, responses to rewarding stimuli, and susceptibility to behavioural sensitisation (Swann, 2010).

Schizophrenia

Three participants mentioned psychotic disorder/schizophrenia as one of the co-occurring disorders. The most common psychotic disorder that participants mentioned was schizophrenia: *psychotic, schizophrenic* (Participant 2), *schizophrenic* (Participant 7), *schizophrenia* (Participant 10). The symptoms involve delusions and hallucinations that last longer than six months (Green, Noordsy, Brunette, & O'keefe, 2008). In addition, substance use disorder with co-occurring schizophrenia worsens the outcome of schizophrenia dramatically. A study by Green *et al.* (2008) established that 50% of schizophrenia patients had a lifetime story of substance use disorders such as alcohol, cannabis, and cocaine. In addition, the presence of substance use disorder on schizophrenic patients increases the risk of lack of adherence to treatment and relapse (Green *et al.*, 2008). Several theories have been advanced to explain the relationship between substance use

disorders and schizophrenia. Some of these theories blame substance use as a trigger of schizophrenia in vulnerable individuals; others suggest that patients with schizophrenia and history of substance use disorder may have an early age onset of schizophrenia, while others suggest that patients with schizophrenia experience negative effects following the use of even small quantities of substances (Fazel, Langstrom, Hjern, Grann, & Lichtenstein, 2009). In the study by Fazel *et al.*, (2009), the presence of substance use disorder on patients with schizophrenia has been associated with acts of violence compared to patients with only schizophrenia. This study implies the necessity of further work to establish the mechanism responsible for the association of substance abuse, schizophrenia and violence (Fazel *et al.*, 2009).

Sleeping disorder

Two participants mentioned sleeping disorder as one of the co-occurring disorder, *sleeping disorder* (Participant 2), *sleeping disorder* (Participant 6). The presence of substance use disorder such as insomnia has been associated with deleterious effects on mood, attention, and behaviour (Shibley, Malcolm, & Veatch, 2008). The association of sleeping disorder and substance use disorder is bidirectional, which means substance use disorder may directly cause sleeping disorder. On the contrary, sleeping disorder may be a risk factor for relapse to substance use disorder (Roane & Taylor, 2008). However, the effects of substance use on sleep depend on which substance is being used. Substances such as cocaine may cause light, restless, and disrupted sleep, while substances such as alcohol and heroine may produce soporific effects such as increased daytime sleepiness and reduced sleep latency, and also cause sleep disruptions later in the night due to withdrawal effects (Hasler, Smith, Cousins, & Bootzin, 2012). In the study by Roane and Taylor (2008), insomnia symptoms were associated with the use of alcohol and cannabis.

Impulsivity

Two participants mentioned ADHD as one of the co-occurring disorder, *ADHD* (Participant 3), *ADHD* (Participant 9). Substance consumption is associated with impulsivity, which is one of the symptoms of ADHD (Van Emmerik- Van Oortmerssen *et al.*, 2013). According to Chang (2015), the use of tobacco and alcohol during pregnancy increases the risk for the development of ADHD in the foetus. In addition, the prevalence of substance use disorder is higher in first-degree relatives of ADHD probands (Chang, 2015). The study by Lee, Humphrey, Flory, Liu, and Glass (2011), further established that substance use disorder and ADHD may share common etiological influences such as similar genetic factors.

Anti-social Behaviour

Only one participant mentioned anti-social behaviour as one of the co-occurring disorder, *antisocial behaviour* (Participant 5). Antisocial behaviour and substance use disorder have significant levels of co-occurrence that may be owing to shared personality traits (Hicks, Vaidyaanathan, & Patrick, 2010). For example, substance abuse can induce specific behavioural problems such as irresponsibility, impulsivity and criminality, which are also considered to be reflective of anti-social behaviour. This can easily translate substance abuse as an expression of antisocial behaviour, while on the other side, anti-social behaviour can be exacerbated by a substance use disorder (Ruiz, Pincu, & Schinka, 2008). In the study by Ducci *et al.*, (2008), women's exposure to childhood sexual abuse have increased their risk to psychopathologies such as alcohol use disorder and antisocial behaviour.

Borderline disorder

Only one participant mentioned borderline disorder as one of the co-occurring disorders, *borderline disorder* (Participant 5). Among the co-occurring disorders with substance use disorder, borderline disorder is second only to mood and anti-social behaviour in comorbidity prevalence (Rizvi, Dimeff, Skutch, Carroll, & Linehan, 2011). Borderline personality disorder has been known for aggravating the outcomes of substance rehabilitation (Gregory, 2006). Almost 67% of patients receiving borderline disorder treatment have substance use disorder (Rizvi *et al.*, 2011). The study by Rizvi *et al.*, (2011) argues that the two disorders may be a consequence of one another. For instance, chronic and excessive substance consumption may result in borderline disorder. Alternatively, individuals with borderline disorder might turn to substance abuse to self-medicate or as a way of coping with feeling of abandonment.

Paranoia

Only one participant indicated that paranoia as one of the co-occurring disorder *paranoia* (Participant 7). Paranoia is one of the personality disorders. Consistent with these findings, Casadio *et al.* (2014) established that substances such as cocaine have shown to precipitate transient of paranoid state, and majority of patients seeking treatment for cocaine dependence have reported paranoia experience (Casadio *et al.*, 2014). While cannabis is also known for causing paranoia, it is suggested that the activity in basolateral amygdale is involved in cannabis-induced paranoia. In addition, it is common that during the detoxification process, patients experience intense feelings of paranoia (Casadio *et al.*, 2014). Furthermore, Casadio *et al.* (2014) maintain that it is always

critical to make an appropriate diagnosis of personality disorder when planning treatment for patients with substance use disorder because failure to do so can result in an exclusion of interventions, which could otherwise be essential for recovery of patients.

Panic disorders

Only one participant cited panic disorder as one of the co-occurring disorder, *panic attack* (Participant 9). The relationship between substance use disorder and panic disorder is reciprocal and dynamic (Swendsen *et al.*, 2010). A study by Gum, King-Kallimanis, and Kohn (2009) discovered that some patients use substances as a form of self-medication to avoid panic attack.

On the contrary, substance abuse can be a cause of panic disorder. In a study by Gum, KingKallimanis, and Kohn (2009), anxiety in the form of panic disorder preceded alcohol abuse. On the other hand, some panic attacks may be secondary to alcohol withdrawal. While in the study by Marikangas *et al.*, (2010), stimulatory substances such as cocaine may directly precipitate panic attack.

Suicidal behaviour

Only one participant mentioned suicidal behaviour as one of the co-occurring disorder, *suicide* (Participant 9). Substance use disorder increases the risk for suicidal behaviour, particularly in the presence of other mental health problems (Esposito-Smythers *et al.*, 2011). According to Nordentoft and Mortensen (2011), 5% of patients affected with alcohol use disorder die of suicide disorder. In line with the above study, a study by Nock, Hwang, Sampson, and Kessler (2010), established that 4.8% of patients affected with alcohol use disorder are prone to die of suicide disorder. Substance abuse is more involved with the planning and attempts than ideation of suicide. The study by Nock *et al.*, (2010), established that major depression maybe the strongest predictors of suicide ideation. However, suicide plans and attempts can be preceded by anxiety, impulse control and substance use disorder. Substance users with suicidal ideation have an elevated risk of first suicide attempts even in the absence of a plan. Moreover, the presence of the plan is typically used as a key indicator of suicidal risk among ideators (Nordentoft & Mortensen, 2011). Nevertheless, a study by Ford, Hartman, Hawke, and Chapman (2008) implies that more research is needed to determine whether depressants are stronger predictors of suicide attempts than are stimulants and hallucinogens. The risk of suicidal behaviour has been linked to current substance

use rather than past use (Ford *et al.*, 2008). Nordentoft and Mortensen (2011) argue that more than one substance abuse increases the risk of unplanned suicide.

4.7 AETIOLOGY OF SUBSTANCE ABUSE

There are many reasons for the use of substances. According to Scheier (2009), the use and abuse of substances are based on a complex interplay of personality, genetic, cultural, and environmental factors (Scheier, 2009). In addition, Calder (2012), Lander et al. (2013), Linton, (2008), Masombuka (2013), as well as West and Brown, 2013) alluded to theories such as systems theory, anomie theory, psychosocial theory, psychological theory, the genetic model of addiction, peer cluster theory, and cognitive behavioural model of addiction as standard causes of substance abuse. Consistent with these scholars, participants in this study provided different reasons for substance abuse as reflected in the following quotes: genetic predisposition, depression, parental neglect and financial problems, experimentation with substances and peer group pressure

Genetic predisposition

The findings of this study revealed a link between genetic predisposition and substance abuse as reflected in the following quote:

For others it's a genetic problem, their genetic predisposition combined with risk factors makes them vulnerable (Participant 2)

Similar to the findings of this study that genetic predisposition makes individuals vulnerable to substance abuse, proponents of the genetic model of addiction (Mzolo, 2015; West & Brown, 2013) contend that genetic factors contribute to substance abuse. In addition, they assert that a family history of substance abuse makes members of such families to be at risk of substance use and abuse (Mzolo, 2015; West & Brown, 2013). The findings also corroborate with Greene and Banerjee's (2009) study findings, who underscore that association with delinquent peers contributes to substance abuse. In addition, Masombuka (2013) posited that availability of substances in such peer groups might result in new members being initiated and experimenting with substances.

Depression

Two participants reported that some people use substances because of depression, while one participant indicated that they use substances to forget their problems as reflected in the following quotes:

Co-occurring disorders such as depression does lead people to abuse substances (Participant 3).

While others occurring disorders such as cannabis, alcohol, heroin, kat, nyaope, cocaine lead them to abuse substances'. (Participant 10)

For others do it as a way of forgetting difficulties of life (Participant 1)

Co-occurring disorders normally easily makes patients to abuse substances, even traumatic episodes such as loss of a loved one can drive others to abuse substances (Participant 6)

The findings of this study suggest that depression leads to substance abuse. These findings corroborate with proponents of the psychological theories such as Borsos (2008) as well as Walters and Rotgers (2012), who maintain that depression contributes to substance abuse. Furthermore, Naazia Ismael of the South African Depression and Anxiety Group (Rustenburg Herald, 2014) and Drugwise (2017) posit that individuals try to self-medicate stress with alcohol or drugs. In addition, Partnership for Drug Free Kids.org (2017) established that when individuals are unhappy and cannot find any outlet for their frustration or a trusted confidant, they might turn to substances for solace. Corroborating with South African Depression and Anxiety Group, Davis, Uezato, Newell, and Frazier (2008) estimate that up to a third of clinically depressed people engage in substance abuse or alcohol abuse. According to Davis et al. (2008), these chemical intoxicants can become a form of self-worth, hopelessness, and despair. In addition, Davis et al. (2008) argue that although substance abuse may be used to relieve depression, it could make depressive episodes more severe, increasing the frequency and intensity of negative thoughts and self-destructive behaviour.

Parental neglect and financial problems

Two participants pointed to parental neglect and financial problems as some of the factors contributing to substance abuse as reflected in the following quotes:

Environmental factors such as parental abuse, neglect (Participant 4). For others it can be financial problems (Participant 3)

Parental neglect and financial problems were not discussed in the literature reviewed in this study as factors that contribute to substance abuse. This finding on the effect of parent neglect as a risk factor for substance abuse is consistent with a study by Mohasoa (2010), aimed at exploring reasons for substance abuse among adolescents, which also established that parents who were not taking care of their children and not providing for their financial needs led those adolescents to abuse substances. In addition, Butler (2016) emphasises that parental neglect had far more lasting consequences for the neglected child, often lasting entire lifetimes, possibly generations. Some of the identified consequences Butler (2016) identified were substance abuse.

Experimentation with substances for relaxation

One of the participants identified experimentation with substances for relaxation as a risk factor for substance abuse as reflected in the following quote:

It depends with patients, others get addicted while they were just having fun for relaxation (Participant 10)

The findings suggest that others got addicted to substances for fun and relaxation. However, the literature reviewed in this study did not consider the use of substances for relaxation purpose. However, previous studies (Drugwise, 2017; Sack, 2015) report that some people experimented with substances for fun and relaxation purposes. However, Sack (2015) cautions that even though individuals use substances for fun and relaxation, it may lead to greater degrees of substance abuse. Therefore, Addictions.com (2015) advised that other ways that individuals might use for having fun and relaxation instead of using substances. They included among others reading books, listening to music, meditation, nature walks, and exercises.

Peer group pressure

One of the participants reported that peer group pressure contributed to substance abuse as reflected in the following quote:

Sometimes it is association with wrong friends, while for others, they do it as a way of forgetting difficulties of life (Participant 1)

According to Dreyer (2012), a peer groups may consist of best friends, couples or a cluster of individuals sharing the same attitude towards substance abuse. In this study, a peer group consisted of friends only. Furthermore, the findings suggested that individuals were influenced by their friends to abuse substances. That is consistent with the learning theorists (Burger, 2008; Liddle & Rowe, 2008), psychosocial theorist (Jones, 2011), and previous studies (BOCA Recovery Center, 2016; Drugwise, 2017; Partnership for Drug Free Kids.org., 2017) asserting that substance abuse is learned from the psychosocial sphere such as the peers, among others. In addition, Masombuka (2013) avers that the use of substances and their availability in such peer groups might result in new members being initiated and experimenting with substances. However, Bandura (1997) argues that even though peer influence is important in the decision that individuals make about substance abuse, those with a high sense of self-efficacy are less influenced by their peers.

Co-occurring disorders

Five of the participants reported that co-occurring disorders contribute to substance abuse as reflected in the following quotes:

Co-occurring disorders such as depression does lead people to abuse substances (Participant 3),

Co-occurring disorders (Participant 4).

Co-occurring disorders normally easily makes patients to abuse substances (Participant 6),

For others, the presence of psychological disorders such as post-traumatic stress disorder, depression lead them to use substances as a way to overcome such disorders (Participant 9),

While others occurring disorders lead them to abuse substances (Participant 10).

Psychiatric disorders are associated with compulsive substance use behaviour, its severity, and treatment resistance (Najt, Fusar-Poli, & Brambilla, 2011). In a study by Mills et al., (2012), 89% patients develop psychiatric disorder first before substance use disorders, whereas only 9% developed substance use disorder first before psychiatric disorder. The study by O'Connor &

Stewart (2010) established that most psychiatric co-occurring disorders result in patients using or abusing substances as a way of avoiding co-occurring disorders.

In relation to gender patterns, the study by Najt *et al.*, (2011), established that more men were associated with psychiatric disorders leading to substance use disorder. However, the same study established that women with bipolar disorder had a higher risk for alcoholism than men with bipolar. A history of trauma has been recognized as a factor in co-occurring substance use disorders and mental illness among women (Mills *et al.*, 2012). For women, PTSD tends to be associated with rape, physical attack, and substance such as alcohol is used for coping purposes (Mills *et al.*, 2012).

These findings on the aetiology of substance abuse indicate that substance abuse is linked to risk factors within individual, family, and environmental factors. Therefore, this points to a need for consideration of these factors when treating substance abuse. The next section provides a discussion on substance abuse treatment.

4.8 THE EXPERIENCE OF PARTICIPANTS IN TREATING SUBSTANCE USE DISORDER WITH CO-OCCURRING DISORDERS

The previous section provided a discussion on substance abuse and co-occurring disorders. In this section, the researcher will provide a discussion on the experiences of the participants in treating substance abuse and other co-occurring disorders.

Which disorder get treated first

Participants in this study reported that it always depends on which disorder is treated first between substance use disorder and psychiatric co-occurring disorder:

It is important to manage both, the first focus being psychiatric challenge, then substance challenge. For example, a teenager with ADHD can self medicate with cannabis, because cannabis can assist him or her with his/her anxiety by giving control (Participant 3).

According to A Better Today Recovery Service (2018), when treating substance use disorders co-occurring with psychiatric disorders, the therapist first check if mental health symptoms are substance induced. Hence, substances such as alcohol and cocaine can cause depression, anxiety and psychosis. The only way to determine if symptoms are substance induced is for the patient to remain clean long enough to see if the symptoms subside (A Better Today Recovery Service, 2018).

Participant 9 commented as follows:

We prefer to focus on addiction first before co-occurring disorders and then send them to psychiatric section for other disorders. The reason is simple, for example, you avoid having a depressed person drinking under medication.

The presence of co-occurring disorders in patients with substance use disorders also has a huge negative impact on the effectiveness of treatment. Therefore, if it is the substance abuse that exacerbates mental illness and interfering with medication and treatment for mental health, it is recommended to start with substance abuse treatment (The Recovery Village, 2018). However, owing to not being sure which disorder influences the other, other therapists prefer to offer equal treatment to address both disorders at once, and this form of treatment is called integrated treatment (The Recovery Village, 2018).

Mental state

Another critical aspect during treatment of substance use disorders with co-occurring disorders raised by participants is the mental state of patients. The findings highlighted that at times, it can be difficult to deal with patients with concrete thinking, hence addiction is on thought process, and therefore it is important to have maladaptive behaviour strategy. In addition, mental functionality is important in cases where the mental state is affected. Medical attention maybe needed as the first priority as mentioned by the participants in the following extracts:

It works well, but it is sometimes difficult when dealing with patients with concrete thinking, which makes me to end up focusing more on changing behaviour (Participant 4).

It depends on brain functionality. Sometimes if the brain is damaged due to too much substance abuse, it is important to start with medical treatment first (Participant 6).

But sometimes you must start by teaching them to think, due to the fact that substances have affected the brain (Participant 8).

Yes, this is why we screen our patient, before the treatment can start, you need to be at the certain state of cognitive functioning, e.g. any brain damage can affect treatment (Participant 9).

This is in line with previous studies. In Range and Mathias's (2012) study conducted to determine how to conduct treatment during the diagnosis process, the substance abuse levels and substance dependence levels are evaluated to confirm if there is any mental damage owing to too much substance abuse. The cognitive effect of chronic substance use may make it difficult for patients to engage in a positive treatment and vulnerable to relapse (Substance abuse and mental health service administration, 2016). Substance use, including withdrawal from substance use, may also induce mental disorder, which can also negatively affect cognition. If mental state is seriously affected, treatment may be delayed in order to address the impact on the mental state through cognitive rehabilitation (Substance abuse and mental health service administration, 2016).

4.9 SUBSTANCE ABUSE TREATMENT MODELS

There are various substance abuse treatment models. These include, person-centred approach, bio psychosocial approach, holistic approach, eclectic therapy, integrated approach, resilient approach, rational emotive behavioural therapy, family therapy, motivational interviewing, 12step programme, and cognitive behavioural therapy (Segal, 2014). In this study, treatment models mentioned by participants are well known and used in rehabilitation centres in South Africa as well as other countries (Segal, Morral, & Stevens, 2014). In addition, some of the treatment models are similar to the ones discussed in the literature reviewed for this study. Treatment models mentioned by the participants included person-centred therapy, bio psychosocial therapy, holistic approach, eclectic approach, resilient approach, rational behavioural therapy, integrated approach, systems theory, family therapy, 12 –Steps, Motivational Interviewing as reflected in the following discussion:

Person-centred therapy

Three participants reported person-centred therapy as one of the substance abuse treatment models, *our centre mostly use client centred approach* (Participant 1), *client-centred model* (Participant 3), *person centred therapy* (Participant 10). Person-centred therapy is also referred to as client-centred therapy; person-centred counselling, and Rogerian psychotherapy which is named after its founder Carl Rogers (Drug Addiction Center, 2018). Under this approach, the client is the main focus. The trusting relationship is built by making a client feel comfortable and understood (Drug Addiction Center, 2018). The therapist becomes non-judgmental and sympathetic towards the client as possible through avoiding asking questions, making direct observations, assigning blame, and making a diagnosis. Instead, the treatment programme is planned together with the client, and it must reflect the needs and preferences of the client, where the client is allowed to come to terms with issues and solutions on his/her own (Drug Addiction Center, 2018). This approach has proven to be effective in treating substance use disorders (Arnett, 2016). In most cases, addicts are denied of their situation, and with the non-judgmental character of person-centred therapy, patients are more likely to respond positively to therapy (Arnett, 2016). In contrast, critics have raised the risk of liability with allowing clients to make their own choices and the time it would take to plan for treatment (Arnett, 2016).

Bio-psychosocial therapy

Two participants reported bio-psychosocial therapy as one of the substance abuse treatment models, *bio-psychosocial approach* (Participant 5), *bio-psychosocial therapy* (Participant 10).

Bio-psychosocial therapy is an inclusive approach, combining three approaches, namely, biological approach, psychological approach, and social approach (Hunt, 2014). This approach is most suited for substance use disorders, as addiction does not just impact one part of a person's life. Therefore, the focus is not just on the addiction, but the patient as the whole (Hunt, 2014). In the aetiology of substance abuse, there is a cause-effect-relationship between all three elements of bio-psychosocial approach, meaning that each element influences and is reinforced by the other two elements (West & Brown, 2013). Addiction has become a multi-disciplinary construct studied in schools of social work, public health, medicine, and psychology (West & Brown, 2013). Bio-psychosocial approach accepts the fact that every person's pathway to addiction is different, what they experience is different, why they do it is different, and how they get better is different (West & Brown, 2013).

Holistic approach

Two participants reported holistic approach as one of the substance abuse treatment model, *we also use holistic approach* (Participant 1), *holistic approach* (Participant 3). Holistic approach focuses on healing the entire person's mind, body and spirit (Milosavljevic, 2016). This is an outpatient treatment programme designed to provide patients with traditional modalities of treatment such as individual therapy, group therapy, family therapy, dance or movement therapy, art therapy, leisure and recreational, yoga, herbal medicine, skills, spiritual growth and development, cultural awareness and appreciation, vocational service, psychiatric care, and physical health (Adedoyin, Burns, Jackson, & Franklin, 2014). During treatment, the aim is to deal with factors considered to contribute to addiction. These include physical symptoms of addiction and withdrawal, emotional imbalance that can lead to substance abuse, lack of spiritual grounding, unhealthy eating habits resulting in neurochemical imbalance, and environmental toxins that result in a need for substance that gets out of control (Milosavljevic, 2016). More importantly, the holistic approach considers connection with nature important, and encourages treatment to take place in natural surroundings such as mountainous areas, adjacent to lakes or the ocean (Adedoyin et al., 2014).

Eclectic therapy

Two participants reported eclectic therapy/integrated approach as one of the substance abuse treatment model, *eclectic approach* (Participant 5), *they are many, from integrated approach (spiritual, physical, social)*(Participant 7). Eclectic therapy is also referred as an integrated approach that incorporates a variety of therapeutic principles and philosophies in order to create the ideal treatment programme to meet specific needs of the patient (Blakey & Bowers, 2014).

Several participants responded as follows:

Depends with the patient, CBT, systems approach, bio-psychosocial approach, interactional analysis (Participant 5).

They are many, from integrated approach (spiritual, physical, social), CBT, system theory, actually it depends with the needs of the patient (Participant 7).

During treatment, a therapist may have a favourite theory, but they are willing to use all theories that are available to them (Blakey & Bowers, 2014). The integrated approach is among the

preferred models for addressing substance use disorder with co-occurring disorders, owing to it being able to address both disorders (Dass-Brailsford & Safilian, 2017). In addition, the integrated approach is often more successful in both short and long-term treatment, more cost effective, and more sensitive to the unique needs of patients (Dass-Brailsford & Safilian, 2017). More importantly, the therapist needs to work together with the patient to establish treatment goals and expectations, and deciding what approach works best (Dass-Brailsford & Safilian, 2017). In the study by Dass-Brailsford and Safilian (2017), the integrated approach was effective in patients with substance use disorder co-occurring with PTSD.

Resilient approach

Only one participant reported resilient approach as one of the substance abuse treatment models (Participant 9). The phenomenon of successful development under high-risk conditions is known as resilience (Fadardi, Azad, & Nemati, 2010). The concept of risk and protection are cornerstones of resilient theory (Fadardi, *et al.*, 2010). The risk factors are environmental stressors that increase the likelihood that a child will experience poor overall adjustment in areas such as physical health, mental health, academic achievement, or social adjustment. Conversely, the protective factors reduce the potential negative effect of risk factor (Sakunpong, Choochom, & Taephant, 2016).

Resilient approach views substance use in the overall success in adapting to challenges of adolescence. The adolescence substance use disorder can be prevented by increasing their protective factors and reducing their risk factors (Sakunpong, *et al.*, 2016). Family members of adolescent can provide both risk and protection factors for the use of substances. As a way of enhancing resilience, adolescent needs to have relevant problem-solving skills (Sakunpong, *et al.*, 2016).

Rational Emotive Behavioural Therapy

Two participants reported Rational Emotive Behavioural Therapy as one of the substance abuse treatment models. They said the following:

- *Rational emotive behavioural therapy model is not on the situation, but how one thinks on the situation* (Participant 6).
- *Rational emotive behaviour therapy* (Participant 9).

According to Rational Emotive Behavioural Therapy (REBT), substance use disorder is caused by the interplay of cognition, behaviour, and images, and often substance use disorder is driven by irrational beliefs about the world (Ellis & Ellis, 2013). REBT deals with symptoms of irrational thinking; self-defeating acts, and visualizes dysfunctionality through teaching patients to challenge and contradict these unrealistic assumptions and concludes more reasonably (Ellis & Ellis, 2013). Patients are being encouraged to reward themselves for managing to resist, and they are further encouraged to picture or imagine either successfully resisting the impulse of substance use or comfortably navigating the day without use (Ellis & Ellis, 2013).

REBT was originally conceptualised and developed by Psychologist, Albert Ellis (Dryden, 2014). He borrowed the ABC acronym from behavioural psychology and made it the cornerstone of his therapeutic paradigm. According to ABC, acronym A stands for activating event, which can be either an external condition or an internal condition (expectations, emotional states, attitude) that helps to prime behaviour (Dryden, 2014). B stands for beliefs about the activating event. Patients who have flexible belief system have rational beliefs (Dryden, 2014). C stands for consequences of the particular beliefs about the activating event, the consequences can be internal or external (Dryden, 2014). On the later stage, Ellis further added DE on the acronym, D stands for disruption, when a patient has dysfunctional beliefs about activating events that are rigid, the therapist can disrupt these irrational beliefs and help the patient to correct them (Dryden, 2014). In addition, E stands for effects of the intervention. The therapist assists the patient to identify rigid irrational beliefs, disrupt the process, and organize the beliefs so that the patient could perform new and realistic actions (Dryden, 2014).

Family therapy

Three participants reported family therapy as one of the substance abuse treatment models as follows:

Family therapy – addiction is a family disease (Participant 3).

Systems approach (Participant 5).

System theory (Participant 7).

Family therapy is a branch of systems theory, which is a study of the complex systems present in nature, science, society, and its framework investigates and describes any group of objects that

work together to produce results (Gil, 2014). According to this approach, substance abuse is seen in the context of a family's transactional patterns, therefore, the family instead of the individual becomes the focus of treatment (Kumpfer, 2014). *CBT – the change start in the mind, holistic approach, client centred model, family therapy – addiction is a family disease* (participant 3). *Depends with the patient, CBT, eclectic approach, systems approach, bio-psycho-social approach, interactional analysis* (participant 5). During treatment, the therapist work with families and those who are in close relationship to foster change (Gil, 2014). This change is viewed in terms of interaction between each person in the family or relationship (Bertrand, Richer, Brunelle, Beaudoin, Lemieux, & Menard, 2014). The above simply means, to achieve successful treatment outcomes, a strong family support and stability is necessary. Therefore, the entire family needs to be trained on substance use disorder (Do Santos, 2008). In the study by Liddle *et al.*, (2008), family therapy was effective in rehabilitating substance use disorder.

Motivational Interviewing

Only one participant reported motivational interviewing as one of the substance abuse treatment model, *motivational interviewing* (Participant 2). Motivational Interviewing is identified as a brief therapeutic intervention intended to facilitate patient's internally motivated commitment to change. This approach views the patient as a key role player, whom any change is reliant upon (Barrowclough *et al.*, 2014). Motivational Interviewing is offered both in an individual treatment and group treatment, either as a standalone intervention or in combination with other treatment models such as CBT (Hendershot *et al.*, 2011; Walters & Rotgers, 2012).

Twelve-step programme

Only one participant reported 12-step programme as one of the substance abuse treatment models, *12-step programme* (Participant 2). Twelve-step programme is an approach based on the philosophy of accepting addiction as a disease that can be arrested but never cured (Donovan *et al.*, 2013). The recovery process deals with physical, mental, emotional, and spiritual aspects (Galanter *et al.*, 2007). Among the popular groups of 12-step programme, there is Alcoholics Anonymous (AA), Narcotics Anonymous (NA), and Cocaine Anonymous (CA) (Donovan *et al.*, 2013). There are 12 consecutive activities or steps that patients should achieve during therapy. These steps specify that patients must admit their powerlessness over substances, take a moral inventory of themselves, admit the nature of their wrongs, make a list of individuals whom they have harmed, and make amends to those people (Donovan *et al.*, 2013).

Cognitive Behavioural Therapy

All the participants reported using CBT as their primary theoretical orientation or in combination with other treatment models.

- *Combination of treatment model (Participant 1).*
- *CBT, we use it in collaboration with other treatment models (Participant 2).*
- *CBT – the change start in the mind, Not alone, but together with all other models, try everything that works (Participant 3).*
- *CBT, it specializes on behaviour modification (Participant 4).*
- *CBT (Participant 5).*
- *Depends on the value system (Participant 6).*
- *CBT, I also use other theories, but I love CBT (Participant 7).*
- *CBT is our primary (Participant 9).*
- *CBT (Participant 10).*

This is not surprising given that all participants in this study were deliberately recruited to suit the criteria of specialist in CBT. The participants also emphasized the relevance of CBT in rehabilitation of substance use disorders with co-occurring disorders:

- *It can help because it can cure both (Participant 2).*
- *It is one of the main approaches, and it results to positive outcomes (Participant 5).*

Previous studies established that, depending on the patient, therapists do use a combination of approaches. One approach that is normally used in combination with CBT is Motivational Interviewing (Walters & Rogers, 2012). In a study by Barrowclough *et al.*, (2014), CBT was integrated or combined with Motivational Interviewing and family intervention when treating patients with substance use disorders with co-occurring disorders.

In addition, the participants emphasized the relevance of CBT in rehabilitating substance use disorder, due to both cognitive and behavioural change brought by substance abuse and co-occurring disorders.

It is practical, it addresses the issue of cognitive functioning (Participant 2); It is important when you deal with addicts; the patient needs to go through cognitive change and behavioural change. Mind change needs information, what is the challenge? Then take responsibility (Participant 3). It is helpful with the cognitive understanding of their substance use (Participant 10).

These findings are in line with previous studies where it was highlighted that CBT treatment is based on the theory that in the development of maladaptive behavioural patterns like substance abuse and co-occurring disorders, cognitive and behavioural processes are linked to each other (McHugh, Hearon & Otto, 2010).

4.10 THE PARTICIPANTS' EXPERIENCE WITH COGNITIVE BEHAVIOURAL THERAPY

All the participants were familiar with CBT. Some used it as their primary orientation, while others used it in combination with other treatment models.

Individual and group therapy

According to the participants in this study, this treatment model is perfect for both individual and group treatment:

I use it in group therapy, and sometimes with individual therapy (Participant 7).

It is relevant whether on individual, group, or after care treatment (Participant 8).

McHugh, *et al.* (2010) report that CBT works well for both individual and group treatment. There is no significant difference between CBT individual format and group format, in fact group adaptation is comparable to the original individual treatment (Rossello, Bernal, & Rivera-Medina, 2012). The difference is that that group approach is less expensive than individual approach. Furthermore, group treatment may provide opportunity for peer support and shared experiences (Rossello, *et al.*, 2012). However, it is always critical to check first whether the group setting

reduces the effectiveness of treatment before recommending it. For example, it may not be suitable for elderly alcoholic patients who may present difficulties in forming and managing bonds (Ricca *et al.*, 2010). In addition, some patients may be reluctant to enter the group format due to issues of confidentiality (Ricca *et al.*, 2010).

The use of CBT skills after therapy

The findings revealed that the skills learned during treatment become relevant in life after treatment to prevent relapse:

Using the after care group, which we having once a week. During those sessions, I've noticed the change of language from the patients (Participant 9).

What is learned through CBT remains after the completion of treatment (Barrowclough *et al.*, 2010). CBT explores the role of thoughts and behaviours in the development, maintenance, and treatment of substance use disorders (Muse, McManus, Rakovshik, & Thwaites, 2017).

Some patients acknowledge CBT's value and how they can implement it in life in general (Participant 10).

Patients are able to make shifts from negative cognitions through implementing skills learned in therapy. For example, repeatedly examining the evidence for negative automatic thought can eventually reduce the frequency of having that thought (Hundt, Mignogna, Underhill, & Cully, 2013). During therapy, patients are encouraged to increase frequency of using the skills learned, the skill use increases from pre-to post-treatment and the amount of change in skills use correlated with treatment outcome (Hundt *et al.*, 2013).

CBT effectiveness in relapse prevention

These findings further confirmed CBT's effectiveness in relapse prevention.

More work is needed after therapy to avoid relapse, and CBT skills assist (Participant 3).

It is important, most patients got distorted thoughts, and restructuring of the mind is important when it comes to relapse (Participant 5).

It helps patients to think different solutions confronted with relapse
(Participant 6).

It is relevant in relapse prevention (Participant 7).

According to Magill and Ray (2009), CBT is founded on the model of relapse prevention, which makes relapse prevention to be at the centre of CBT treatment and study. The skills learned in CBT treatment reduce the risk of relapse. Relapse prevention was initially conceived as an outgrowth and augmentation of traditional behavioural approaches to studying and treating substance abuse (Hendershot, Witkiewitz, Georg & Marlatt, 2011). Central to relapse prevention is the role of cognitive factors in determining relapse liability. Beliefs about the cause and meaning of lapse may influence whether full relapse ensues or not (Hendershot *et al.*, 2011).

4.11 ACCESSIBILITY AND AFFORDABILITY OF CBT TREATMENT

Access to rehabilitation centres

Despite availability of treatment models to address substance abuse problems, participants in the study reported that access to rehabilitation centres is still a challenge as reflected in the following quotes:

Not easily accessible, most therapists not trained on CBT (Participant 2)

However, it is difficult to even access the state rehab centres, because of the red tape and long procedure before referral. It normally takes weeks before the patient get recommended to a state rehab centres (Participant 7)

The findings suggest that access to rehabilitation centres is not easy and in some instances, it takes long because of protocols prior to admission. Therefore, these findings corroborate with the work of Isobell (2013) who identified protocols and waiting lists as barriers for access to treatment. Corroborating with Isobell (2013), Andrews, Shin, Marsh, and Cao (2012) also established that some substance abuse treatment seekers waited longer than one month to access treatment. Acknowledging challenges related to accessing substance abuse rehabilitation centres, Mogotsi Kalaeamodimo, Chairperson of the Central Drug Authority cited in Gonzales, Maseko, and Mvilisi (2013) indicates that there were plans to implement the country's Prevention of and Treatment for Substance Abuse Act (2008), which mandated for the establishment of substance abuse

rehabilitation centres as well as the establishment of public halfway houses. In addition, he indicates that public substance abuse treatment facilities were available in Gauteng, KwaZulu-Natal, Mpumalanga, and Western Cape (Gonzales et al., 2013). These findings contradict the provisions of the Prevention of and Treatment for Substance Abuse Act (2008) that mandates government to establish community-based services, public treatment centres, public halfway houses, and aftercare and reintegration services across the country to address the challenge of access to substance abuse treatment.

Cost of rehabilitation centres

In addition to inability to access rehabilitation centres, some of the participants indicated that rehabilitation centres are expensive as reflected in the following quotes:

Private rehabs are expensive (Participant 7)

It depends with the resources in the community; there are places with more cost effective treatment like here at Maatskaplike Raad or Christian Social Counsel (CMR) (Participant 7).

The findings suggest that individuals are unable to access substance abuse treatment centres because private ones are expensive. Even though participants reported that admission to the rehabilitation centre was expensive, they did not provide their costs. According to the SA Medical Aids (2018), the cost of admission to a rehabilitation centre can be from R10 000,00 to R150,000,00. Pluddermann et al. (2007) and Leong (2014) acknowledged the high costs of substance abuse treatment. These researchers report that admission to rehabilitation centres is expensive. Leong (2014) further indicates that the cost of substance abuse treatment inflicts financial damage on families. Rob Ford, the Mayor of Toronto cited in Leong (2014) and the SA Medical Aids (2018) underscores that substance abuse treatment centres range in prices depending on the location and the length of stay.

However, one of the participants reported that:

Substance abuse rehabilitation centres are accessible if you have resources to pay professional therapists. It can be expensive, at least if having medical aid (Participant 4)

The findings suggest that individuals with medical aids are able to access substance abuse treatment facilities. SA Medical Aids (2018) confirmed that the medical aid's in hospital psychiatry (mental health) benefit is restricted to smaller limits, often around R20,000 to R50, 000 per family per year. That implies that the medical aid might not be able to cover for all the costs. SA Medical Aids (2018) asserts that individuals who still require treatment after medical aid allocations are exhausted may consider out of hospital setting with a reputable substance abuse treatment facility.

The findings on limited access to rehabilitation centres owing to costs point to a need for the funding to be invested on substance abuse prevention programmes as well as the training of more CBT therapist, which might result in more centres using CBT as part of their treatment model. That may increase access to the rehabilitation centres for substance use disorders with co-occurring disorders. Myers, Louw, and Pasche, (2010) emphasized that there is a need to ensure that individuals are able to access substance abuse treatment. That is consistent with the provisions of the Prevention of and Treatment for Substance Abuse Act (2008) that substance abuse treatment should be availed to all the individuals who require treatment.

4.12 FACTORS CONTRIBUTING TOWARDS HIGH RELAPSE RATES

Even though some of the individuals may access substance abuse treatment facilities to address their substance abuse challenges, one of the obstacles identified during treatment is relapse. Hendershot et al. (2011), Henkel (2011), Ramo and Brown (2008), Swanepoel, Geyer, and Crafford (2016) identified various factors that contribute to relapse after substance abuse treatment. They include individual, family, and societal factors that those abusing substances may not be able to handle (da Silva, Guimaraes, & Salles, 2014).

Individual factors

Some of the participants reported on various individual factors that contribute to relapse as reflected in the following quotes:

Lack of motivation, Positive or negative emotions, thoughts, interpersonal reasons, lack of skills on how to handle the situation (Participant 7).

Not being motivated, undermining the addiction (Participant 2).

Discontinuing medication for either of the disorders before completion of treatment, being too confident of not having a relapse (Participant 3). Poor insight on substance abuse by the patient, co-occurring disorders (Participant 10).

Lack of change in life style (Participant 2).

Consistent with Hendershot et al., (2011), these findings suggest that interpersonal factors such as positive or negative emotions contribute to relapse. In addition, Silva et al., (2015) caution that if negative emotions as well as co-occurring disorders such as anger, frustration, and anxiety are not properly managed, they might be risk factors for relapse. In addition, inability to make decisions when confronted with difficult situations poses a risk for substance abuse (Silva et al., 2015).

According to O'Connell and Bevvino, (2009) cited in Swanepoel et al. (2016), individuals tend to use substances to change troublesome emotions and supplement them with temporary feelings of pleasure. As a result, they might lack motivation to maintain sobriety. The findings of this study pointed to limited knowledge on substance abuse by those abusing substances as a risk factor for relapse. That is in contrast with Hendershot et al. (2011) who indicate that part of substance abuse treatment entail raising awareness about risk factors for substance abuse. Corroborating with Hendershot et al. (2011), Williams (2018) found that part of patient education in a substance abuse treatment centre includes among others, teaching patients about the dangers of substances, its effects, as well as treatment options. The findings on the limited knowledge about substances by the patient point to a need to continue raising awareness about substance abuse among those admitted in rehabilitation centres to avert relapse. The findings of this study also revealed that if medication or treatment is discontinued, it poses a risk for relapse. The National Institute on Drug Abuse (2012) affirms that treatment enables people to counteract addiction's powerful disruptive effects on the brain and behaviour. In addition, it enables them to regain control over their lives.

Family factors

There are factors within the family, which may contribute to relapse. One participant in this study also identified family factors that contribute to relapse as reflected in the following quotes:

Family support, labelling (Participant 1)

Lack of support (Participant 8)

These extract point to the extract on family support is consistent with Witkiewitz and Marlatt (2005) who established that increased substance use alienates those abusing substances from their family members and that led them to receive less support from their families. In addition, Swanepoel et al. (2016) emphasize that lack of support from families may be owing to changing political, social, cultural, and moral climates. In contrast to the above-mentioned studies reporting that families are a risk factor for relapse, Silva *et al.* (2014) mention that families might serve as a protective factor for stimulating healthy behaviours, serving as a source of support, by demonstrating positive and protective feelings. Therefore, the findings point to a need to identify risk factors within the family and enhance protective factors within the family to avert relapse for family members undergoing treatment.

Environmental factors

Three participants in this study identified varying environmental factors that contribute to substance abuse as reflected in the following quotes:

Availability of substances, life style, unemployment (Participant 1).

High-risk environment (Participant 7).

Lack of aftercare (Participant 2).

These findings suggest environmental factors that contribute to substance abuse lending support to Hendershot *et al.* (2011) who also identified these factors as risk factors for relapse in exception of unemployment. Consistent with the views of one of the participants regarding availability of substances, Silva *et al.* (2015) also acknowledge it as a contributing factor to relapse. In addition, social pressure by peers was established as a contributing factor to relapse in a study by Ramo and Brown (2008) as well as the study by Silva *et al.* (2015). However, Campos (2009) cited in Swanepoel *et al.* (2016) argues that relapse is probable if one returns to the same drug using peers. Swanepoel et al. (2016) report a high percentage of peer pressure among female adolescents than male adolescent contributing to relapse. However, in this study, participants did not provide gender and developmental differences regarding the influence of peers on relapse. Even though one of the participants identified unemployment as a factor that contributes to substance abuse, that was not considered in the literature reviewed in this study. However, previous scholars such as Henkel (2011) who focuses on the prevalence of substance use among the unemployed and employed reports that unemployment increases the risk of relapse. Corroborating with Henkel (2011),

Swanepoel *et al.* (2016) argue that not being able to find employment might lead to a lack of motivation and reduced commitment to abstinence.

These findings on the factors contributing to relapse are consistent with those of Hendershot *et al.* (2011). However, the participants in this study established that environmental factors such as availability of substances and peer group pressure contributed towards high relapse rates. In addition, as advised by Ramo and Brown (2008), these findings suggest a need to target all the factors that contribute to relapse during substance abuse treatment. Furthermore, these findings imply a need to consider cognitive behaviour therapy for helping individuals develop healthy coping skills (Hendershot *et al.*, 2011; Melemis, 2015).

4.13 CHAPTER SUMMARY

This chapter adopted the data analysis approach and presented the main findings of the study. The profiles of participants were also presented. The findings of the empirical study were analysed and discussed according to various themes emerged from the data. The themes were discussed combined with the sub-themes and categories attempting to respond to the main research question.

At the same time, the findings of this study were discussed in detail, relating to previous studies. Various substances are abused, and youngsters from poor backgrounds are the most affected by the scourge of substance abuse. The co-existence of substance use disorders with co-occurring disorders is a standard phenomenon. As a treatment model, CBT is more relevant in prevention of relapse, specifically if it is for both substance use disorders with co-occurring disorders. Accessibility and affordability of treatment remains a challenge in the country. Chapter 5 outlines and discusses the conclusion, limitations, recommendations, and reflections of this study

CHAPTER 5: CONCLUSION

5.1 INTRODUCTION

The previous chapter presented the findings and discussion of this study. In this chapter, the summary of the findings are provided, indicating that the objectives of this study as presented in Chapter 1 were addressed. In addition, this study acknowledges limitations identified and outlines the recommendations with regard to training and development as well as future studies are presented. Furthermore, the researcher's personal reflections on this study are also alluded to in this section.

5.2 SUMMARY OF THE FINDINGS

The objective of this study was to explore the perceived effectiveness of CBT as a treatment model for substance use disorders with co-occurring disorders in the rehabilitation centres of Gauteng Province of South Africa. This study found that the most used substances are cannabis, *nyaope*, ketamine, heroin, alcohol, cocaine, methamphetamine, and over the counter medication. Out of all the substances identified by participants, alcohol and over the counter medication were the only substances that were legal. All the other substances reported by the participants were illegal. Furthermore, the co-occurring disorders that were found to be high on the list were mood disorders such as depression and bipolar; psychotic disorders such as schizophrenia; behavioural disorder such as ADHD; personality disorders such as borderline, anti-social behaviour, and paranoia; anxiety disorder such as panic attack; sleeping disorder, and suicide. According to the findings of the study, substance use disorder has no racial lines, and the most affected age group is young adults between 20-30 years. On the contrary, poor socio-economic background and dysfunctional family background increases vulnerability.

Among the several therapeutic interventions such as person-centred therapy, bio-psychosocial therapy, resilient approach, rational behavioural therapy, family therapy, 12 step approach, and motivational interviewing, that participants were exposed to in one therapy session or the other, CBT was the most preferred model of treatment. This is because CBT is effective when treating substance use disorders with co-occurring disorders, group therapy can be cost effective, the skills

learned during therapy remains after completion of treatment, and its effective in relapse prevention.

The accessibility and affordability of CBT treatment remains a challenge in general.

However, the study found that not all participants committed to the CBT treatment and therefore there were few cases of relapse. It was found in this study that the main contributing factors towards high relapse rates were lack of implementing skills learned during treatment, peer pressure, co-occurring disorders, poor insight of substance problem by patients, risk environmental factors, stress management, lack of support, lack of motivation, interpersonal reasons, and lack of proper after care programme. According to the findings of the study, intrinsic factors such as promote relaxation, peer pressure, genetic reasons, and extrinsic factors such as to forget normal life, co-occurring disorders, environmental factors, relationship problems, financial worries, and loss of a loved one were high on the list of causes or reasons for using or abusing substances.

The study further revealed that most rehabilitation centres separate between alcohol patients and patients with other substance use disorders. The co-existence of substance use disorders with other co-occurring disorders was identified as a standard phenomenon. The question of which disorder influences the other or which disorder are treated first depends on the type of substance use disorder and co-occurring disorder. The most vulnerable population to abuse substances is youngsters of all races in the majority from poor background. The findings of this study confirmed CBT as a more relevant treatment model in prevention of relapse, specifically for both disorders. Implementing skills learned during treatment can influence reducing relapse rates. Therefore, affordability and accessibility of treatment remains a challenge in a fight against substance abuse with co-occurring disorders.

5.3 LIMITATIONS OF THIS STUDY

The following limitations are acknowledged: The study was conducted in one province with only 10 CBT specialist participants, making it difficult to generalize the findings of this study. As much as there is scarcity of CBT therapists in the country, a larger sample from more provinces might have improved generalizability of the findings. The majority of participants were females, with only one male participant, therefore limiting the gender perspective. In some of the responses, the

participants did not give detailed responses. Among the reasons for this lack of details was the questions themselves not directly instructing participants to give detailed responses.

This study was interested in the CBT therapist's view on their choice of therapy model. This effectively and purposively excluded stakeholders such as patients and family members to participate. However, their participation and feedback might have contributed in confirming or disconfirming the effectiveness of CBT as a treatment model for substance use disorders with co-occurring disorders. Despite the limitations, the study managed to achieve its goal of investigating the perceived effectiveness of CBT as a treatment model for substance use disorders with co-occurring disorders.

5.4 RECOMMENDATIONS

The findings of this study will assist the rehabilitation centres, academic institutions, and research institutions in developing effective evidence based treatment. Recommendations concerning future research as well as training and development are provided in this section.

Future research

In addition to qualitative methodology, it is also recommended that a mixture of qualitative and quantitative methodology be used in future investigations. Therefore, future research is required into the entirety of CBT effectiveness as a treatment model for substance use disorders with co-occurring disorders. It is recommended that a larger sample, inclusive of other provinces and stakeholders be used in future investigations, to improve the generalizability of the findings. It is that future investigations be more gender sensitive to balance the gender perspective. The majority of participants reported *nyaope* as high on the list of substance abuse. The devastating effects of *nyaope* are worrisome; more investigation is needed on *nyaope* as a new substance.

This study recommended that, more research be done on time span of treatment. Majority of participants alluded to the short period they spend with patients, in some centres patients spend as little as three weeks in treatment. Among the reasons for the short period is the cost of treatment, making longer stay in treatment not affordable even for patients with medical aids. Government intervention is needed to fund the health system, programmes such as National Health Insurance

(NHI) need to be accelerated, and further ensure that it covers treating substances and mental health.

It is further recommended that further research be done on adaptation and translation of treatment models into various languages, cultural and social groups in South Africa. Language can be a barrier if the therapist is not familiar with the patient's language. Both the cultural and social background influence how the therapist relates with the patient.

Training and Development

A need exists to formalise the CBT treatment in South Africa. The study revealed that there is no formal training standard and formal CBT organisation in South Africa (Centre for CBT, 2014). It is recommended that a formal CBT organisation responsible for setting training standards should be established. This can train substance use disorder therapist. According to the findings of this study, it is not clear who qualifies to be a substance use disorder therapist. In the majority of centres, most participants were qualified in social work qualification, with an exception of one participant qualified as a clinical psychologist. During a conversation, she was surprised that one can be a therapist without a psychology qualification. In her understanding, social workers are supposed to play a different role in the rehabilitation outside of being therapists. Such work involves providing support to a patient, and sometimes to the family. It involves assisting patients to find stable housing and ensure proper treatment, assist patients in adhering to treatment protocols.

There is a need for additional community rehabilitation centres or public rehabilitation centres. This will assist with the accessibility and affordability of treatment for poor communities, being the most affected by the scourge of substance abuse with co-occurring disorders. It is further recommended that other stakeholders such as family members, parents, partners, and communities need to be trained or attend workshops on substance use disorders with co-occurring disorders. This will ensure that after treatment, they are the first individuals to interact with the patients. More importantly, these training workshops must be tailored to suit the cultural and educational backgrounds of the stakeholders. With the challenge substance abuse starting early as at school level, this could be extended to empower Life Orientation curriculum in schools. It is recommended that the Department of Social Development, Department of Education and the Department of Health, should collaborate with organisations offering services to individuals addicted to substances with co-occurring disorders to offer awareness and educational campaigns at schools and in communities to prevent the scourge of substance use disorders with co-occurring disorders.

It is recommended that rehabilitations centres approach or be linked to comprehensive aftercare programmes, which will not only focus on checking whether patients are remaining clean or not, but on aftercare programme focusing on empowering patients through providing them job or entrepreneurial skills, which they can use when they go back to their communities. This is informed by the reality that most of the patients found themselves abusing substances owing to their poor background dominated by poverty and unemployment. Solving a substance abuse challenge alone without dealing with the cause, which led to them to abuse substances, may not be helpful. A comprehensive aftercare programme that will keep them busy by acquiring skills is recommended. Therefore, it may keep them busy for good through the possibility for employment or starting a business.

5.5 PERSONAL REFLECTIONS

The motivation behind the study was that as a young individual who grew up in a township, this researcher observed and at times participated in substance abuse. As a young person at an early high school level together with peers, this researcher was time and again exposed to substance abuse. The substances that the researcher and his peers abused include alcohol, cannabis and cocaine. Most youngsters see using substances as cool and fashionable. This was the same attitude when this researcher started abusing substances. Together with his peers, they saw themselves as most clever ones within their age group, without realising the danger into which they were putting themselves into. The experience from this study inspired this researcher to fulfil his dreams.

Interacting with the specialists was indeed fulfilling.

This researcher considers himself lucky that this exposure did not affect his academic performance; hence, he was able to do this study. Different situations existed on the majority of peers of who were exposed to the use of substances. Some of them never finished school, others ended up in prison, and others were in and out of rehabilitation centres. Without further education, criminal records, and continuation of substance abuse, some of the lives were already destroyed with less chances of recovery. The most distressing factor was the level of poverty and unemployment to which these youngsters were subjected. That further contributed to less chances of recovery. Most of them dashed any hope of seeing themselves being better individuals. This was evident in their

view on life, indicating signs of accepting their current lives, and having no plans of how they can change them.

As a psychology student, this researcher became interested in investigating a possible treatment model that can reduce relapse rates. This interest developed after observing numerous individuals who were in and out of rehabilitation centres but at no time returning to substances. Interest at these observations was a change of character of the said individuals. This became clear that the problem is no longer just substances, rather psychiatric pathologies that were accompanying substance abuse. All of these inspired this researcher to strive to work in a rehabilitation centre as a therapist in treating substance use disorders with co-occurring disorders, and eventually owning a rehabilitation centre.

The communities need more affordable rehabilitation centres. This is dominated by the private sector, with few public centres. More awareness on the side effects of substance abuse is needed in South African communities. Academically, undertaking this research was an inestimable learning experience. This researcher had to cope with feedback from his supervisor, which at times was personally challenging but character building. The undertaking of this master's degree provided some skills that will go a long way in bolstering this researcher's future practice.

5.6 CHAPTER SUMMARY

In this chapter, the conclusion, limitations of this study, recommendations and researchers' personal reflections were highlighted. This chapter further highlighted that treating substance use disorders and psychiatric pathologies should not be separated. The effectiveness of CBT in treating both disorders was confirmed. Besides the therapists, more stakeholders are critical in assisting the patient to avoid relapse. For more effective treatment results, centres may need to increase the period patients spend in rehabilitation centres. Further research is needed in formalising CBT treatment in South Africa. Government has a critical role to play in ensuring accessibility and affordability of treatment, with the relevant government department playing a role in awareness campaigns as part of prevention measures. This is because prevention is always better than cure.

REFERENCES

- A Better Today Recovery Services. (2018). Retrieved 6 January 2018 from <https://abtrs.com/cooccurring-and-dual-diagnosis>
- Addictions.com. (2015). 25 ways to relax without drugs or alcohol. Retrieved 13 January 2017 from <https://www.addiction.com/3276/25-ways-relax-without-using-drugs-alcohol/>
- Adedoyin, C., Burns, N., Jackson, H. M., & Franklin, S. (2014). Revisiting holistic interventions in substance abuse treatment. *Journal of Human Behavior in the Social Environment*, 24(5), 538-546.
- Alberts, N.W. (2008). *Engaging with charcot-marie-tooth disease: A grounded theory approach*. Published Doctoral thesis. University of South Africa. Pretoria.
- Andrews, C.M., Shin, H., Marsh, J.C. & Cao, D. (2012). Client and program characteristics associated with wait time to substance abuse treatment entry. *American Journal of Drug and Alcohol Abuse*, 1-8
- Arnett, K. D. (2016). User-involvement/oriented models of care and residential substance use disorder care.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. 84(2), 191-215.
- Bardram, J.E., Frost, M., Tuxen, N., Faurholt-Jepsen, M., & Kessing, L.V. (2016). Designing context aware cognitive behavioural therapy for unipolar and bipolar disorders. *In Proceedings of the 2016 ACM international Joint Conference on Pervasive and Ubiquitous Computing: Adjunct* (pp.1162-1170) ACM.
- Barrowclough, C., Haddock, G., Terrier, N., Lewis, S.W., Moring, J., O'Brien, R. & McGovern, J. (2014). Randomized controlled trial of Motivational interviewing, cognitive behaviour therapy, and family intervention for patients with comorbid schizophrenia and substance use disorders. *The American Journal of Psychiatry*, 158(10), 1706-1713.
- Barrowclough, C., Haddock, G., Wykes, T., Beardmore, R., Conrod, T., & Moring, J. (2010). Integrated motivational interviewing and cognitive behavioural therapy for people with psychosis and comorbid substances misuse: randomized controlled trial. *BMJ*, 341.
- Beck, A. T., Wright, F. D., Newman, C. F. & Liese, B. S. (2011). *Cognitive therapy of substance abuse*. New York: The Guilford Press.
- Berenz, E.C., & Coffey, S.F. (2012). Treatment of co-occurring posttraumatic stress disorder and substance use disorders. *Current Psychiatry Reports*, 14(5), 469- 477.

- Bertrand, K., Richer, I., Brunelle, N., Beaudoin, I., Lemieux, A., & Ménard, J. M. (2013). Substance abuse treatment for adolescents: how are family factors related to substance use change?. *Journal of Psychoactive Drugs*, 45(1), 28-38.
- Blakey, J. M., & Bowers, P. H. (2014). Barriers to integrated treatment of substance abuse and trauma among women. *Journal of Social Work Practice in the Addictions*, 14(3), 250-272.
- Boka Recover Center. (2016). Why young people experiment with substances. Retrieved 13 January 2017 from <http://bocarecoverycenter.com/why-young-people-experiment-withsubstances/>
- Borsos, D. (2008). Addiction, Models of. *Encyclopedia of Substance Abuse Prevention, Treatment & Recovery*. Retrieved June 17, 2016, from http://www.sageereference.com.oasis.unisa.ac.za/substance/Article_n6.html.
- British Psychological Society (2010). Code of human research ethics. UK.
- Burns, N. & Grove, S.K. (2009). *The practice of nursing research*. 6th edition. St Louis, MO: Saunders Elsevier.
- Bush, T. (2007). Authenticity in research – reliability, validity and triangulation. *Research Methods in Educational Leadership and Management*, 91.
- Bushak, L. (2014). Drug Addiction, Unmasked : The Types Of People Most Likely To Get Addicted And Why. Retrieved 10 January 2017 from <http://www.medicaldaily.com/drug-addiction-unmasked-types-people-most-likely-getaddicted-and-why-302676>
- Butler, L. (2016). Abuse and neglect increase a child’s risk for alcohol or drug addiction. Retrieved 13 January 2017 from <https://twinlakesrecoverycenter.com/abuse-neglectincrease-childs-risk-alcohol-drug-addiction/>
- Bvuma, S.V. (2014). *A model of shared leadership in local government*. Published Doctoral thesis. University of South Africa. Pretoria.
- Calder, B. D. (2012). *A psycho-educational programme using audio-visual media to prevent adolescent substance abuse*. Published Doctoral thesis. University of South Africa. Pretoria.
- Carrol, K. M. & Onken, L. S. (2014). Behavioural therapies for drug abuse. *The American Journal of Psychiatry*, 162(8), 1452-1460.

- Casadio, P., Olivoni, D., Ferrari, B., Pintori, C., Speranza, E., Bosi, M., ... & Rivola, F. (2014). Personality disorders in addiction outpatients: prevalence and effects on psychosocial functioning. *Substance Abuse: Research and Treatment*, 8, 17.
- Centre for Cognitive Behaviour Therapy. (2014, December 15). Retrieved from The Centre for Cognitive Behaviour Therapy website: <http://www.cognitive-behaviour-therapy.co.za/>.
- Centre for the Prevention of Crime (2015). Preventing radicalization: A systematic review. Retrieved October 28, 2017, from [www.crime-preventionintl.org/.../ICPC Systematic Review -Preventing-radicaliza...](http://www.crime-preventionintl.org/.../ICPC_Systematic_Review_Preventing-radicaliza...)
- Centre for Substance Abuse Treatment (2012). Medication assisted treatment for opioid addiction in opioid treatment programmes. Retrieved August 5, 2015, from 1stchsnewsite.businesscatalyst.com/my%20files/TOC.pdf.
- Cerullo, M. A. & Strakowski, S. M. (2007). The prevalence and significance of substance use disorders in bipolar type I and II disorder. *Substance Abuse Treatment, Prevention, and Policy*, 2(1),1.
- Chan, Y.F., Dennis, M.L., Funk, R.R. (2008). Prevalence and comorbidity of major internalizing and externalizing problems among adolescents and adults presenting to substance abuse treatment. *Journal of Substance Abuse Treatment*, 34(1), 14–24.
- Chang, S. (2015). ADHD and Substance Abuse. *Textbook of Addiction Treatment: International Perspectives*, 2307-2332.
- Charmaz, K. (2014). *Constructing grounded theory*. London: Sage.
- Chie, Q.T., Tam, C.L., Bonn, G., Dang, H.M., & Khairuddin, R. (2016). Substance abuse, relapse, and Treatment Program evaluation in Malaysia: Perspective of rehab Patients and staff Using the Mixed Method approach. *Frontiers in Psychiatry*, 7.
- Cho, J.Y. & Lee, E.H. (2014). Reducing confusion about grounded theory and qualitative content analysis: Similarities and differences. *The Qualitative Report*, 19(64),1-20.
- Christelike-Maatskaplike Raad. (2016, August 08). Retrieved from Christelike-Maatskaplike Raad website: <http://www.cmroos.co.za/about>.
- Chu, P.S.K., Ma, W.K., Wong, S.C.W., Chu, R.W.H., Cheng, C.H., Wong, S. & Man, C. W. (2008). The destruction of the lower urinary tract by ketamine abuse: a new syndrome?. *BJU international*, 102(11), 1616-1622.
- College of Charleston. (2017). ENGL 110: Research strategy. Retrieved 26 December 2017 from <http://libguides.library.cofc.edu/english110>

- Compton, W.M., Thomas, Y.F., Stinson, F.S., Grant, B.F. (2007). Prevalence, correlates, disability and comorbidity of DSM-IV Drug abuse and dependence in United States: Results from the epidemiologic survey on alcohol and related conditions *Archives of General Psychiatry*, 64, 566-576.
- Conner, K. R., Piquart, M., & Gamble, S. A. (2009). Meta-analysis of depression and substance use among individuals with alcohol use disorders. *Journal of Substance Abuse Treatment*, 37(2), 127-137.
- Creswell, J.W. (2013). *Research design: Qualitative, quantitative, and mix approaches*. London: SAGE Publications, Inc.
- Dada, S., Burnhams, N.H., Johnson, K., Parry, C., Bhana, A., Timol, F. & Fourie, D. (2014). South African community epidemiology network on drug use.
- Dada, S. Burnhams, N.H., Erasmus, J., Parry, C., Bhana, A., Timol, F., & Fourie, D. (2016). South African Community Epidemiology Network on Drug Use, January-June 2015. Retrieved from <http://www.mrc.ac.za/adarg/sacendu/SACENDUupdateDEC2015.pdf>.
- Dass-Brailsford, P., & Safilian, C. M. (2017). Integrated Approaches to Treating Psychological Trauma and Substance Abuse in Women: An Update. *Trauma & Acute Care*, 2(2).
- Davis, L., Uezato, A., Newell, J.M., Frazier, E. (2008). Major depression and comorbid substance use disorder. *Current Opinion Psychiatry*, 21(10), 14-18).
- DeFranzo, S.E. (2014). Advantages and disadvantages of face-to-face data collection. Retrieved 6 January 2018 from <https://www.snapsurveys.com/blog/advantages-disadvantagesfacetoface-data-collection/>
- Degenhardt, L., Hall, W. (2012). Extent of illicit drug use and dependence, and their contribution to the global burden of disease. *National Drug and Alcohol Research Centre*, 379, 55-70.
- Denzin, N. K. & Lincoln, Y. S. (2011). *The Sage handbook of qualitative research*. London: Sage.
- De Vos, A. S., Strydom, H., Fouche, C. B. and Delport, C. S. L. (2006). *Research at grass roots for the social sciences*. 3rd Edition. Pretoria: Van Schaik.
- Dinaan, J. (2014). Phase 2: Clearly define your research strategy. Retrieved 26 December 2017 from <http://www.mackenziecorp.com/phase-2-clearly-define-research-strategy/>
- Donovan, D.M., Ingalsbe, M.H., Benbow, J., & Daley, D.C. (2013). 12-step interventions and mutual support programs for substance use disorders: An overview. *Social work in public health*, 28(3-4), 313-332.

- Dos Santos, M. M. L. F. (2008). *Healing the Dragon: Heroin use disorder intervention*. Published Doctoral thesis. University of South Africa. Pretoria.
- Dreyer, S. E. (2012). *The relevance and effectiveness of support structures available to high school learners with substance abuse problem in the Eersterust area*. Published Masters dissertation. University of South Africa. Pretoria.
- Drugwise. (2017). Why do young people take drugs? Retrieved January 2017 from <http://www.drugwise.org.uk/why-do-young-people-take-drugs/>
- Dryden, W. (2014). *Rational emotive behaviour therapy: Distinctive features*. Routledge.
- Ducci, F., Enoch, M. A., Hodgkinson, C., Xu, K., Catena, M., Robin, R. W., & Goldman, D. (2008). Interaction between a functional MAOA locus and childhood sexual abuse predicts alcoholism and antisocial personality disorder in adult women. *Molecular psychiatry*, 13(3), 334-347.
- Erikson, E. H. (1956). The problem of ego identity. *Journal of the American Psychoanalytic Association*, 4(1), 56-121.
- Elim Clinic. (2016, September 21). Retrieved from Elim Clinic website: <http://www.elimclin.co.za/contact-us.html>.
- Ellis, A., & Ellis, D. (2013). Rational Emotive Behaviour Therapy. *Current Psychotherapies*, 151.
- Esposito-Smythers, C., Spirito, A., Kahler, C. W., Hunt, J. & Monti, P. (2011). Treating cooccurring substance abuse and suicidality amongst adolescents: A randomized trial. *Journal of Consulting and Clinical Psychology*, 79(6), 728.
- Fadardi, J. S., Azad, H., & Nemati, A. (2010). The relationship between resilience, motivational structure, and substance use. *Procedia-Social and Behavioral Sciences*, 5, 1956-1960.
- Fairburn, C. G. & Copper, Z. (2011). Therapist competence, therapy quality, and therapist training. *Behaviour Research and Therapy*, 49(6), 373-378.
- Fazel, S., Långström, N., Hjern, A., Grann, M., & Lichtenstein, P. (2009). Schizophrenia, substance abuse, and violent crime. *Jama*, 301(19), 2016-2023.
- Feeler, W.G. (2012). *Being there: A grounded theory study of student perceptions of instructor presence in online classes*. Unpublished doctoral dissertation: University of Nebraska, Lincoln, Nebraska.
- Galanter, M., Dermatis, H., Mansky, P., McIntyre, J. & Perez-Fuentes, G. (2007). Substanceabusing physicians: Monitoring and twelve-step-based treatment. *The American Journal on Addictions*, 16(2), 117-123.

- Gates, P. J., Norberg, M. M., Copeland, J. & Digiusto, E. (2012). Randomized controlled trial of a novel cannabis use intervention delivered by telephone. *Addiction*, 107(12), 2149-2158.
- Gendreau, P. & Ross, R. R. (2012). *Principles of effective correctional intervention*. Toronto: Butterworth.
- Gerrish, K. & Lacey, A. (2006). *The research process in nursing*. (5th edition). Cornwall: Blackwell.
- Gil, E. (2014). *Play in family therapy*. Guilford Publications.
- Glaser, B.G. & Strauss, A.L. (1967). *The discovery of grounded theory: strategies or qualitative research*. New Brunswick: Aldine Transaction.
- Gonzales, L.L., Maseko, C., Mvlisi, M. (Eds). (2013). Government switches strategy on drugs. Retrieved 13 January 2018 from <https://www.health-e.org.za/2013/10/16/governmentswitches-strategy-drugs/>
- Gonzalez, V.M., Schmitz, J.M. & Delaune, K.A. (2006). The role of homework in Cognitive Behavioural Therapy for cocaine dependence. *Journal of Consulting and Clinical Psychology*, 74(3), 633-637.
- Goodman, S. (2009). Psychodynamic Approach to Addiction Treatment.
- Gregory, R. J. (2006). Clinical challenges in co-occurring borderline personality and substance use disorders. *Psychiatric Times*, 23(13), 16-16.
- Green, A. I., Noordsy, D. L., Brunette, M. F., & O'Keefe, C. (2008). Substance abuse and schizophrenia: pharmacotherapeutic intervention. *Journal of Substance Abuse Treatment*, 34(1), 61-71.
- Gum, A. M., King-Kallimanis, B., & Kohn, R. (2009). Prevalence of mood, anxiety, and substance-abuse disorders for older Americans in the national comorbidity survey replication. *The American Journal of Geriatric Psychiatry*, 17(9), 769-781.
- Hasler, B. P., Smith, L. J., Cousins, J. C., & Bootzin, R. R. (2012). Circadian rhythms, sleep, and substance abuse. *Sleep Medicine Reviews*, 16(1), 67-81.
- Hawkins, E. H. (2009). A tale of two systems: Co-occurring mental health and substance abuse disorders treatment for adolescents. *Annual Review of Psychology*, 60, 197-227.
- Hendershot, C.S., Witkiewitz, K., George, W. H. & Marlatt, G.A. (2011). Relapse prevention for addictive behaviours. *Substance Abuse Treatment, Prevention and Policy*, 2011 6:17.
- Henkel, D. (2011). Unemployment and substance use: a review of the literature (1910-2010). *Current Drug Abuse Reviews*, 4(1), 4-27

- Hicks, B. M., Vaidyanathan, U., & Patrick, C. J. (2010). Validating female psychopathy subtypes: Differences in personality, antisocial and violent behavior, substance abuse, trauma, and mental health. *Personality Disorders: Theory, Research, and Treatment*, 1(1), 38.
- Hien, D.A., Wells, E.A., Jiang, H., Suarez-Morales, L., Campbell, A. N. C., Cohen, L.R. & Nune, E. V. (2009). Multisite randomized trial of behavioural interventions for women with cooccurring PTSD and Substance Use Disorders. *Journal of Consulting and Clinical Psychology*, 77(4), 607-619.
- Hundt, N. E., Mignogna, J., Underhill, C., & Cully, J. A. (2013). The relationship between use of CBT skills and depression treatment outcome: A theoretical and methodological review of the literature. *Behavior Therapy*, 44(1), 12-26.
- Hunt, A. (2014). Expanding the Biopsychosocial Model: The Active Reinforcement Model of Addiction.
- Hunter, S.B., Witkiewitz, K., Watkins, K. E., Paddock, S. M. & Hepner, K.A. (2012).The moderating effects of group Cognitive–Behavioural Therapy for depression amongst substance users. *Psychology of Addictive Behaviours*, 26(4), 906-916.
- Isobell, D.L. (2013). *Referring agents' perceptions of access barriers to inpatient substance abuse treatment centres in the Western Cape*. Unpublished Master's Dissertation. University of Western Cape. Western Cape.
- Jewkes, R. K., Dunkle, K., Nduna, M., Jama, P. N., & Puren, A. (2010). Associations between childhood adversity and depression, substance abuse and HIV and HSV2 incident infections in rural South African youth. *Child Abuse & Neglect*, 34(11), 833-841.
- Jones, R.M. (2011). Psychosocial development and first substance use in third and fourth grade students: A short term longitudinal study. *Child Development Research*, 2011.
- Kemp, D. E., Gao, K., Ganocy, S. J., Rapport, D. J., Elhaj, O., Bilali, S., ... & Calabrese, J. R. (2009). A 6-month, double-blind, maintenance trial of lithium monotherapy versus the combination of lithium and divalproex for rapid-cycling bipolar disorder and cooccurring substance abuse or dependence. *The Journal of Clinical Psychiatry*, 70(1), 113.
- Kumpfer, K.L. (2014). Family base interventions for prevention of substance abuse and other impulse control disorders in girls. *ISRN Addiction*, 2014.
- Kyalo, P.M. (2010). *Issues related to drug and substance abuse and how they affect secondary school students*. A paper presented to Kenya association of professional counselors at Safari Park Hotel. Egerton University: Njoro.

- Labaree, R.V. (2009). *Research Guide: Organizing Your Social Sciences Research Paper. Types of Research Designs.*
- Lander, L., Howsare, J., & Byrne, M. (2013). The impact of substance use disorder on families and children: From theory to practice. *Social Work in Public Health, 28*(3-4), 194-205.
- Lawrence, J., & Tar, U. (2013). The use of grounded theory technique as a practical tool for qualitative data collection and analysis. *Electronic Journal of Business Research Methods, 11*(1), 29-40
- Lee, S. S., Humphreys, K. L., Flory, K., Liu, R., & Glass, K. (2011). Prospective association of childhood attention-deficit/hyperactivity disorder (ADHD) and substance use and abuse/dependence: a meta-analytic review. *Clinical Psychology Review, 31*(3), 328-341.
- Leong, M. (2014). A price tag on life? Rehab for drug and alcohol addiction can be financially damaging. Retrieved 13 January 2017 from <http://business.financialpost.com/personalfinance/a-price-tag-on-life-rehab-for-drug-and-alcohol-addiction-can-be-financiallydamaging>
- Linton, J. M. (2008). *Overcoming problematic alcohol and drug use: a guide for beginning the change process.* Routledge.
- Litt, M.D., Kadden, R. M. & Stephens, R.S. (2005). Coping and self-efficacy in marijuana treatment: Results from the marijuana treatment project. *Journal of Consulting and Clinical Psychology, 73*(6), 1015-1025.
- Lopez, M.A., & Basco, M.A. (2015). Effectiveness of Cognitive Behavioral Therapy in Public Mental Health: Comparison to Treatment as Usual for Treatment-Resistant Depression. *Administration and Policy in Mental Health and Mental Health Services Research, 42* (1), 87-98.
- Lydecker, K. P., Tate, S. R, Cummins, K.M., McQuaid, J., Granholm, E. & Brown, S. A. (2010). Clinical Outcomes of an Integrated Treatment for Depression and Substance Use Disorders. *Psychology of Addictive Behaviours, 24*(3), 453-465.
- Mack, N., Woodsong, C., MacQueen, K. M., Guest, G. & Namey, E. (2005). *Qualitative research methods: a data collector's field guide.* Retrieved from: <https://www.ponline.org/node/263032>[Date accessed: 26.02.2018]
- Magill, M. & Ray, L. (2009). Cognitive Behavioural Treatment with adult alcohol and illicit drug users. A meta-analysis of randomized controlled trials. *Journal of Studies on Alcohol and Drugs, 70*(4), 516-527.

- Maithya R. W. (2009). *Drug abuse in secondary schools in Kenya: Developing a programme for prevention and intervention*. Published Doctoral thesis. University of South Africa: Pretoria.
- Markanday, S., Brennan, S.L., Gould, H., & Pasco, J.A. (2013). Sex differences in reasons for non-participation at recruitment: Geelong osteoporosis. Retrieved 9 January 2018 from <https://link.springer.com/article/10.1186/1756-0500-6-104>
- Masombuka, J. (2013). *Children's addiction to drug "nyaope" in Soshanguvetownship: Parents' experience and supports needs*. Published Masters dissertation. University of South Africa. Pretoria.
- Matusiewicz, A.K., Hopwood, C.J., Banducci, A.N., & Lejuez, C.W. (2010). The effectiveness of cognitive behavioural therapy for personality disorders. *Psychiatric Clinics of North America*, 33(3), 657-685.
- Matzopoulos, R.G., Truen, S., Bownan, B. & Corrigan, J. (2014). The cost of harmful alcohol use in South Africa. *South African Medical Journal*, 104(2), 127-132.
- McHugh, R.K., Hearon, B.A., & Otto, M.W. (2010). Cognitive behavioural therapy for substance use disorder. *Psychiatric Clinics of North America*, 33(3), 511-525.
- McLeod, S. (2017). Simply psychology. Retrieved 9 January 2017 from <https://www.simplypsychology.org/Erik-Erikson.html>
- Melemis, S.M. (2015). Relapse prevention and the five rules of recovery. *Yale Journal of Biology and Medicine*, 88(3), 325-332.
- Merikangas, K. R., He, J. P., Burstein, M., Swanson, S. A., Avenevoli, S., Cui, L., ... & Swendsen, J. (2010). Lifetime prevalence of mental disorders in US adolescents: results from the National Comorbidity Survey Replication–Adolescent Supplement (NCS-A). *Journal of the American Academy of Child & Adolescent Psychiatry*, 49(10), 980-989.
- Miller, A. (2018). How to become a cognitive behavioral therapist. Retrieved 10 January 2018 from <http://work.chron.com/become-cognitive-behavioral-therapist-19652.html>
- Miller, W. R. (2006). Rethinking substance abuse. *Motivational Factors in Addictive Behaviours*, 134-152.
- Mills, K. L., Teesson, M., Back, S. E., Brady, K. T., Baker, A. L., Hopwood, S., ... & Ewer, P. L. (2012). Integrated exposure-based therapy for co-occurring posttraumatic stress disorder and substance dependence: a randomized controlled trial. *Jama*, 308(7), 690-699.
- Milosavljevic, N. (2016). *Holistic Health for Adolescents*. WW Norton & Company.

- Mohasoa, I.P. (2010). *Substance abuse among male adolescents*. Published Masters dissertation. University of South Africa. Pretoria.
- Morojele, N., Myers, B., Townsend, L., Lombard, C., Plüddemann, A., Carney, T. & Nkosi, S. (2013). *Survey on Substance Use, Risk Behaviour and Mental Health amongst Grade 8/10 Learners in Western Cape Provincial Schools, 2011*. Cape Town: South African Medical Research Council.
- Morse, J.M., Barrett, M., Mayan, M., Olson, K. & Spiers, J. (2008). Verification strategies for establishing reliability and validity in qualitative research. *International Journal of Qualitative Methods*, 1(2), 13-22.
- Mothibi, K. (2014). Substance abuse amongst high school learners in rural communities. *Universal Journal of Psychology*, 2(6), 181-191.
- Muse, K., McManus, F., Rakovshik, S., & Thwaites, R. (2017). Development and psychometric evaluation of the Assessment of Core CBT Skills (ACCS): An observation-based tool for assessing cognitive behavioral therapy competence. *Psychological Assessment*, 29(5), 542
- Myers, B. J., Louw, J., & Pasche, S. C. (2010). Inequitable access to substance abuse treatment services in Cape Town, South Africa. *Substance Abuse Treatment, Prevention, and Policy*, 5(1), 28.
- Mzolo M.P. (2015). *Exploring family support for adolescents after rehabilitation for drug abuse*. Publish Master's dissertation. University of South Africa. Pretoria.
- Najavits, L.M., Gallop, R.J. & Weiss, R.D. (2006). Seeking Safety Therapy for adolescent girls with PTSD and substance abuse. A randomized control trial. *Journal of Behavioural Health Services and Research*, 33, 453-463.
- Najt, P., Fusar-Poli, P., & Brambilla, P. (2011). Co-occurring mental and substance abuse disorders: a review on the potential predictors and clinical outcomes. *Psychiatry research*, 186(2), 159-164.
- Natasha, M., Cynthia, W., Greg, G. & Emily, N. (2005). Qualitative research methods: A data collector's field guide. *Family Health International*, 1-8.
- Nkansah-Amankra, S., & Minelli, M. (2016). Gateway hypothesis and early drug use: Additional findings from tracking a population base sample of adolescents to adulthood. *Preventive medicine reports*, 4, 134-141.
- Nkosi V. & Ndou S. (2010). *Challenges of substance abuse*. Retrieved August 19, 2016, from <https://www.mamelodi-ymcs.org>.

- Nock, M. K., Hwang, I., Sampson, N. A., & Kessler, R. C. (2010). Mental disorders, comorbidity and suicidal behavior: Results from the National Comorbidity Survey Replication. *Molecular Psychiatry*, 15(8), 868-876.
- Nordentoft, M., & Mortensen, P. B. (2011). Absolute risk of suicide after first hospital contact in mental disorder. *Archives of General Psychiatry*, 68(10), 1058-1064.
- O'Connor, R.M. & Stewart, S.H. (2010). Substance use disorder. In McKay, D., Abramowitz, J.S., Taylor, S. (Eds.). *CBT for Refractory Cases: Turning failure into success* (pp. 211-229). Washington DC, US: American Psychological Association.
- Onwuegbuzie, A.J. & Leech, N.L. (2007). Validity and qualitative research: An oxymoron? *Quality and Quantity*, 41(2), 233-249.
- Partnership for Drug Free Kids.org. (2017). Top 8 reasons why teens try alcohol and drugs. Retrieved 13 January 2017 from <https://drugfree.org/parent-blog/top-8-reasons-teenstry-alcohol-drugs/>
- Petry, N., Peirce, J. M., Stitzer, M. L., Blaine, J., Roll, J. M., Cohen, A. & Li, R. (2005). Effect of prize-based incentives on outcomes in stimulant abusers in outpatient psychosocial treatment programmes: a national drug abuse treatment clinical trials network study. *Archives of General Psychiatry*, 62(10), 1148-1156.
- Pettinati, H.M., O'Brien, C.P., & Dundon, W.D. (2013). Current status of co-occurring mood and substance use disorders: A new therapeutic target. *The American Journal of Psychiatry*, 170 (1). 23-30.
- Pienaar, K., & Savic, M. (2016). Producing alcohol and other drugs as a policy problem. A critical analysis of South Africa's National Drug Master Plan (2013-2017). *International Journal of Drug Policy*, 30, 35-42.
- Plüddermann, A., Parry, C. & Bhana, A. (2007). South African Community Epidemiology Network on Drug Use (SACENDU). Alcohol and Drug Abuse Trends: January-June 2007. Retrieved November 10, 2016, from <http://www.sahealthinfo.org/admodule/sacendu.htm>
- Prevention of and Treatment for Substance Abuse Act no 70 of 2008.
- Pullen, S.J., Petruzzi, L., Lange, B.C., Pamarouskis, L., Dominguez, S., Harris, B., & Slopadoe, S.P. (2016). A qualitative analysis of substance use among Liberian Youth: Understanding behaviours, consequences, and protective factors involving school youth and school Milieu. *International Journal of Mental Health & Psychiatry*, 2(1).
- Ramlagan, S., Peltzer, K. & Matseke, G. (2010). Epidemiology of drug abuse treatment in South Africa. *South African Journal of Psychiatry* 16 (2).

- Ramo, D.E., & Brown, S.A. (2008). Classes of substance abuse relapse situations: A comparison of adolescents and adults. *Journal of the Society of Psychologists in Addictive Behaviors*, 22(3), 372-379.
- Range, B.P. & Mathias, A.C.R. (2012). *Cognitive behaviour therapy for substance abuse*. Psychiatric Institute, Federal University at Rio de Janeiro, Brazil.
- Rani, R. & Sharma, R.K. (2012). Ethical consideration in Research. *International Journal of Nursing Education*, 4 (1), 45-48.
- Rawson, R.A., Rataemane, S., Rataemane, L., Ntlhe, N., Fox, R.S., McCuller, J. & Brecht, M. (2013). Dissemination and implementing Cognitive Behavioural Therapy for stimulant dependence: A randomized trial comparison of three approaches. *Substance Abuse*, 34(2), 108-117.
- Reardon, C.L., & Creado, S. (2014). Drug abuse in athletes. *Substance Abuse and Rehabilitation*, 5, 95.
- Ricca, V., Castellini, G., Mannucci, E., Sauro, C. L., Ravaldi, C., Rotella, C. M., & Faravelli, C. (2010). Comparison of individual and group cognitive behavioral therapy for binge eating disorder: A randomized, three-year follow-up study. *Appetite*, 55(3), 656-665.
- Rizvi, S. L., Dimeff, L. A., Skutch, J., Carroll, D., & Linehan, M. M. (2011). A pilot study of the DBT coach: an interactive mobile phone application for individuals with borderline personality disorder and substance use disorder. *Behavior Therapy*, 42(4), 589-600.
- Roane, B. M., & Taylor, D. J. (2008). Adolescent insomnia as a risk factor for early adult depression and substance abuse. *Sleep*, 31(10), 1351-1356.
- Rodon, J. & Paster, A. (2007). Applying Grounded Theory to study the implementation of an inter-organizational information system. *Electronic Journal of Business Research Methods*, 5(2).
- Roozen, H. G., De Waart, R. & Van Der Kroft, P. (2010). Community reinforcement and Family training: an effective option to engage treatment-resistant substance-abusing individuals. *Addiction*, 105(10), 1729-1738.
- Rosselló, J., Bernal, G., & Rivera-Medina, C. (2012). Individual and group CBT and IPT for Puerto Rican adolescents with depressive symptoms.
- Rubak, S., Sandbaek, A., Lauritzen, T. & Christensen, B. (2005). Motivational interviewing: a systematic review and meta-analysis. *British Journal of General Practice*, 55(513), 305-312.

- Rubin, A. & Babbie, E. R. (2012). *Books/ Cole Empowerment Series: Essential research methods for social work*. Cengage Learning.
- Ruiz, M. A., Pincus, A. L., & Schinka, J. A. (2008). Externalizing pathology and the five-factor model: A meta-analysis of personality traits associated with antisocial personality disorder, substance use disorder, and their co-occurrence. *Journal of Personality Disorders*, 22(4), 365-388.
- Rustenburg Herald. (2014). Substance abuse in North West under spotlight. Retrieved 12 January 2017 from <http://www.sadag.org/images/pdf/Substance%20abuse%20in%20North%20West%20Under%20spotlight.pdf>
- Sack, D. (2015). The 4 degrees of drug use. Retrieved 13 January 2018 from <https://blogs.psychcentral.com/addiction-recovery/2014/04/the-4-degrees-of-drug-use/>
- Sakunpong, N., Choochom, O., & Taephant, N. (2016). Development of a resilience scale for Thai substance-dependent women: A mixed methods approach. *Asian Journal of Psychiatry*, 22, 177-181.
- Scheier, L. M. (Ed.). (2009). *Handbook of drug use etiology: Theory, methods, and empirical findings*. American Psychological Association.
- Secomb, J. M. & Smith, C. (2011). A mixed method pilot study: The researchers experiences. *Contemporary nurse: a Journal for the Australian Nursing Profession*, 39(1), 31-35.
- Segal, B., Morral, A. R., & Stevens, S. J. (2014). *Adolescent substance abuse treatment in the United States: Exemplary models from a national evaluation study*. London: Routledge.
- Setlalentoa, M., Ryke, E., & Strydom, H. (2015). Intervention strategies used to address alcohol abuse in the North West Province, South Africa. Retrieved 17 May 2016 from http://www.scielo.org.za/scielo.php?script=sci_arttext&pid=S003780542015000100006&Ing=en&nrm=iso
- Shibley, H. L., Malcolm, R. J., & Veatch, L. M. (2008). Adolescents with insomnia and substance abuse: consequences and comorbidities. *Journal of Psychiatric Practice*®, 14(3), 146-153.
- Silva, M. L. D., Guimarães, C. F., & Salles, D. B. (2015). Risk and protective factors to prevent relapses of psychoactive substances users. *Northeast Network Nursing Journal*, 15(6).
- South African Medical Aids. (2018). Alcohol and drug rehabilitation benefit on medical aid. Retrieved 13 January 2018 from <http://www.samedicalaids.com/alcohol-and-drugrehabilitation-benefit-on-medical-aid/>

- South African National Council on Alcoholism.(2014, August 4). Retrieved from SANCA website:
<http://sanca national.org/>
- Springer, K. (2010).*Educational research: a contextual approach*. Hoboken, NJ: John Wiley.
- Srikameswaran, A. (2006). *Researchers say smoking pot not always path to harddrug use*. Retrieved June 10, 2016, from <http://www.post-gazette.com/pg/06339/743649-114.stm>
- Stabillis Treatment Centre.(2014, August 4). Retrieved from Stabillis website:
<http://www.stabillis.org.za/>
- Staiger, P. K., Thomas, A. C., Ricciardelli, L. A., McCabe, M. P., Cross, W., & Young, G. (2011). Improving services for individuals with a dual diagnosis: A qualitative study reporting on the views of service users. *Addiction Research & Theory*, 19(1), 47-55.
- Stanton, M. (2005). Relapse prevention needs more emphasis on interpersonal factors. *American Psychology Association*, 60(4), 340-349.
- Swanepoel, I, Geyer, S., & Crafford, G. (2016). Risk factors for relapse among young African adults following in-patient treatment for drug abuse in the Gauteng Province. Retrieved 16 January 2018 from
http://www.scielo.org.za/scielo.php?script=sci_arttext&pid=S003780542016000300006
- Swann, A. C. (2010). The strong relationship between bipolar and substance_use disorder. *Annals of the New York Academy of Sciences*, 1187(1), 276-293.
- Swendsen, J., Conway, K. P., Degenhardt, L., Glantz, M., Jin, R., Merikangas, K. R., & Kessler, R. C. (2010). Mental disorders as risk factors for substance use, abuse and dependence: results from the 10_year follow_up of the National Comorbidity Survey. *Addiction*, 105(6), 1117-1128.
- Terre Blanche, M., Durrheim, K. & Painter, D. (2006).*Research in practice : Applied methods for the social sciences*. Cape Town: University of Cape Town Press.
- Thabane, L., Ma, J., Chu, R., Cheng, J., Ismaila, A., Rios, L.P.& Goldsmith, C.H. (2010).A tutorial on pilot studies: the what, why, and how. *BMC Medical Research Methodology*, 10(1),1.
- The recovery Village Columbus. (2018). Retrieved 10 January 2018 from
<https://www.columbusrecoverycenter.com/treatment-programs/co-occurring-disorders/>
- United Nations Office on Drugs and Crime, (2017). World Drug Report. Retrieved September 16, 2017, from <https://www.unodc.org/unodc/en/world-drug-report-2017.html>
- United Nations Office on Drugs and Crime, (2013).World Drug Report. Retrieved May 30, 2014, from https://www.unodc.org/unodc/secured/.../wdr2013/World_Drug_Report_2013.pdf

- United Nations Office on Drugs and Crime, (2014). World Drug Report. Retrieved July 25, 2014, from https://www.unodc.org/.../wdr2014/World_Drug_Report_2014_web.pdf
- Van Emmerik-Van Oortmerssen, K., Vedel, E., Koeter, M.W., de Bruijn, K., Dekker, J.J.M., Van Den Brink, W. & Schoevers, R.A. (2013). Investigating the efficacy of integrated cognitive behavioural therapy for adult treatment seeking substance use disorder patients with comorbid ADHD: study protocol of a randomized controlled trial. *BMC Psychiatry*, 13, 1-11.
- Van Teijlingen, E. & Hundley, V. (2009). The importance of pilot studies. *Social Research Update* (35) 1-4.
- Walliman, N. (2006). *Your research project*. (2nd ed.). London: Sage Publications Inc. http://en.wikipedia.org/wiki/Gateway_drug_theory.
- Walsh, I., Holton, J.A., Bailyn, L., Fernandez, W., Levina, N. & Glaser, B. (2015). What Grounded Theory Is. A critically reflective conversation amongst scholars. *Organisational Research Methods*, 18(4), 581-599.
- Weskoppies Hospital. (2016, September 30). Retrieved from Department of Health website: <http://www.health.gpg.gov.za/hospitals/Pages/Weskoppies-Hospital.aspx>
- West, R., & Brown, J. (2013). *Theory of addiction*. John Wiley & Sons.
- Williams, E. (2018). The role of a nurse in a drug rehabilitation. Retrieved 16 January 2018 from <http://work.chron.com/role-nurse-drug-rehabilitation-15460.html>
- Wisdom, J.P. (2008). *Adolescents, Substance Abuse and Treatment. Encyclopedia of Substance Abuse Prevention, Treatment & Recovery*. Retrieved May 20, 2016, from http://0www.sage-reference.com.oasis.unisa.ac.za/substances/Article_n9
- Witkiewitz, K. & Marlatt, A. (2005). Emphasis on interpersonal factors in a dynamic model of relapse. *American Psychological Association*, 60(4), 341-342.
- World Health Organisation (2009). Guidelines for the Psychosocially Assisted Pharmacological Treating Opioid Dependence. Geneva.
- Yin, R.K. (2011). *Qualitative research from start to finish*. New York: Guilford Press.

The proposed research may now commence with the proviso that:

- 1) *The researcher/s will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.*
- 2) *Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study, as well as changes in the methodology, should be communicated in writing to the Psychology Department Ethics Review Committee.*
- 3) *An amended application should be submitted if there are substantial changes from the existing proposal, especially if those changes affect any of the study-related risks for the research participants.*
- 4) *The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study.*

Please note that research where participants are drawn from Unisa staff, students or data bases requires permission from the Senate Research and Innovation Committee (SENRIC) before the research commences.

ANNEXURE B: LETTER OF PERMISSION TO CONDUCT THE STUDY

Department of Psychology
College of Human Sciences
P.O. Box 392
Pretoria
0003

Sabelo Mhlungu
502 Melivanda
173 Bourke Street
Sunnyside
0002

LETTER OF PERMISSION TO CONDUCT THE STUDY

For attention: Head of the rehabilitation centre

My name is Mr. S.A. Mhlungu, Masters Student in Psychology, University of South Africa, with a special interest in the field of substance use disorders with co-occurring disorders' rehabilitation.

I'm currently doing a research entitled "Exploring the perceived effectiveness of CBT as a treatment model for substance use disorder with co-occurring disorders at substance abuse rehabilitation centres in Gauteng", under the guidance of University of South Africa, being supervised by Mrs. I. P. Mohasoa.

You are hereby requested to participate as a research site. The purpose of the research is to investigate the perceived effectiveness of CBT as a treatment model for Substance Use Disorder with co-occurring disorders. The procedure in the study will include using semi-structured individual interviews. The information gathered will be treated as strictly confidential. Interviews will take approximately an hour.

The reason why your rehabilitation centre was chosen to be part of the research site is the fact that amongst your clinicians there are CBT specialists who are relevant for my study. I request to get

access to at least five specialists within your centre. I request that if possible their race, gender, and age be balanced.

I intend to provide you with the information you will need to understand what this project will be on during an introduction interview with you. Participation is voluntary and participants will be requested to complete the consent form. They have the right to withdraw from the project.

If you are unclear on anything in this letter, you are welcome to contact me.

Thank you

Sabelo Mhlungu Tel: 0826594679 e-mail: 43777902@mylife.unisa.ac.za **ANNEXURE C:**

Letter of informed consent

Department of Psychology
College of Human Sciences
P.O. Box 392
Pretoria
0003

SabeloMhlungu
502 Melivanda
173 Bourke Street
Sunnyside
0002

ANNEXURE C: LETTER OF INFORMED CONSENT

I.....,the undersigned, consent to participate in the Masters study to be conducted by Mr. S.A. Mhlungu, Masters student in Psychology, University of South Africa, under the supervision of Mrs I.P. Mohasoa . The title of the study is “Exploring the perceived effectiveness of CBT as a treatment model for substance use disorders with co-occurring disorders at substance abuse rehabilitation centres in Gauteng”.

The purpose of the research is to investigate the perceived effectiveness of CBT as a treatment model for Substance Use Disorders with co-occurring disorders. The procedure in the study will include using semi-structured individual interviews. The information gathered will be treated as strictly confidential. Interviews will take approximately an hour.

There are no known medical risks or other discomforts associated with the research. I understand that there are no personal benefits for me participating in the study, but the results of the study may help researchers and health practitioners to gain an improved understanding of the perceived effectiveness of CBT as a treatment model for Substance Use Disorder. It was made clear to me that I may withdraw from participating in the study. I agree to it that there is no financial compensation for participating in this study.

I agree that the results of this study may be published in professional journals and conferences but the records will not be revealed and the participants will remain anonymous.

I understand my rights as a participant in this study and I voluntarily consent to participate in this study. I understand what the study is on, how and why it is being done.

I will receive a copy of this consent form.

..... (Participant’s signature)..... (Date)

..... (Signature of Researcher)

Date..... (Place).....

ANNEXURE D: INTERVIEW GUIDE WITH SAMPLE QUESTIONS

A. Demographic information

Qualification/s

Age.....

Relevant Employment history.....

Nature of Experience.....

Years of Experience.....

Introductory Question

Which substances are mostly used?

Who is the vulnerable population to abuse substances?

What do you think are the reasons for using or abusing substances?

Which co-occurring disorders standardly co-exist with substance abuse?

Which treatment models are standardly employed to address the substance abuse problem? Can you please tell me on your experience with the treating substance use disorders with cooccurring disorders?

What is your experience with CBT as a treatment model?

Interview Question

How effective is CBT in rehabilitation of substance use disorder with co-occurring disorders?

Probes

1. Do you deem CBT to be your primary theoretical orientation?
2. Do you use CBT when treating patients with substance use disorder with co-occurring disorder?
3. Does using CBT with patients with substance use disorders with co-occurring disorders result in fewer relapse incidents?
4. What are the contributing factors towards high relapse rates?
5. Does the theoretical orientation differ based on the client?
6. How accessible and affordable is CBT treatment to South Africans?
7. What is the feedback from patients who have completed treatment?

ANNEXURE E: INTERVIEW TRANSCRIPTS

Participant number 1

Qualification/s – BA degree in Social Work

Age – 52 years old

Relevant Employment history – Department of Correctional Services, Dr Fabian and Florence Ribeiro treatment centre, and currently working for SANCA Pretoria

Nature of Experience – therapist dealing with rehabilitation of substance abuse

Years of Experience – twenty six years

Introductory Question

Sabelo: Which substances are mostly used?

Specialist: Cannabis, nyaope, ket, and heroin

Sabelo: Who is the vulnerable population to abuse substances?

Specialist: Substances do not have a specific race or gender, difficult to specify.

Sabelo: What do you think are the reasons for using or abusing substances?

Specialist: sometimes its association with wrong friends, while for others do it as a way of forgetting difficulties of live.

Sabelo: Which co-occurring disorders standardly co-exist with substance abuse?

Specialist: Depression, Bipolar

Sabelo: Which treatment models are standardly employed to address the substance abuse challenge?

Specialist: Combination of treatment model, our centre mostly use client centred approach, we also use holistic approach

Sabelo: Can you please tell me on your experience with the treating substance use disorders with co-occurring disorders?

Specialist: It is more difficult to treat clients with co-occurring disorders, it is possible to treat them but it is difficult than treating patients with only substance use disorders.

Sabelo: What is your experience with CBT as a treatment model?

Specialist: I have received training on CBT more than eight years ago through an international programme, and it is a good and helpful model. My experience is that most therapists do not use it anymore but they just take some of its elements to use it in their programmes.

Interview Question

Sabelo: How effective is CBT in rehabilitation of substance use disorder with co-occurring disorders?

Specialist: I cannot really tell, as I've said one does not use CBT as standalone treatment model, rather as a collective treatment model. It is difficult to tell how effective it is

Probes

Sabelo: Do you deem CBT to be your primary theoretical orientation?

Specialist: No, even at university we did not get any information on CBT, it was only through the training one has mentioned

Sabelo: Do you use CBT when treating patients with substance use disorder with co-occurring disorder?

Specialist: After the training yes, but after that we never use it as a standalone treatment model

Sabelo: Does using CBT with patients with substance use disorders with co-occurring disorders result in fewer relapse incidents?

Specialist: difficult to say, even when one used it as the sole treatment model after training, not enough clients were treated, as much as most of them manage to be clean, but due to loss of contact we are not sure of relapse after that.

Sabelo: What are the contributing factors towards high relapse rates?

Specialist: availability of substances, life style, unemployment, family support, labelling

Sabelo: Does the theoretical orientation differ based on the client?

Specialist: Yes, client centred is the good approach as it takes in to consideration what is applicable to a client.

Sabelo: How accessible and affordable is CBT treatment to South Africans? *Specialist: I do not think is access as it is expensive, even the training was expensive*

Sabelo: What is the feedback from patients who have completed treatment? *Specialist: The feedback has been positive*

Participant number 2

Qualification/s – BA degree in Social Work plus Honors in Social policy and Management

Age – 35 years old

Relevant Employment history – SANCA Pretoria

Nature of Experience – therapist dealing with rehabilitation of substance abuse

Years of Experience – eight years

Introductory Question

Sabelo: Which substances are mostly used?

Specialist: Alcohol, cannabis, heroin, cocaine, crystal methyl, over the counter medication Sabelo:

Who is the vulnerable population to abuse substances?

Specialist: Individuals with co-occurring disorders, trauma, unemployment, family background of substances, curiosity, stressed individuals

Sabelo: What do you think are the reasons for using or abusing substances?

Specialist: For others it's a genetic problem, their genetic predisposition combine with risk factors makes them vulnerable

Sabelo: Which co-occurring disorders standardly co-exist with substance abuse?

Specialist: Bipolar, psychotic, schizophrenic, sleeping disorders

Sabelo: Which treatment models are standardly employed to address the substance abuse challenge?

Specialist: CBT, life skills programme, 12 step, Motivational Interviewing

Sabelo: Can you please tell me on your experience with the treating substance use disorders with co-occurring disorders?

Specialist: Lots of patients are experiencing substance abuse with other co-occurring disorders

Sabelo: What is your experience with CBT as a treatment model?

Specialist: I love CBT; I got training on it many years ago through an international programme. It is practical, its addresses the issue of cognitive functioning

Interview Question

Sabelo: How effective is CBT in rehabilitation of substance use disorder with co-occurring disorders?

Specialist: I do not think the effectiveness must be influenced by other co-occurring disorders. The other disorders must be managed or treated. The patient must function well cognitively, otherwise CBT will not work. It can help because it can cue both.

Probes

Sabelo: Do you deem CBT to be your primary theoretical orientation?

Specialist: No, we use it in collaboration with other treatment models

Sabelo: Do you use CBT when treating patients with substance use disorders with co-occurring disorder?

Specialist: Yes, but with combination of other treatment models

Sabelo: Does using CBT with patients with substance use disorders with co-occurring disorders result in fewer relapse incidents?

Specialist: Not sure because we do not use it alone

Sabelo: What are the contributing factors towards high relapse rates?

Specialist: Not being motivated, undermining the addiction, lack of after care, lack of change in the life style

Sabelo: Does the theoretical orientation differ based on the client?

Specialist: Yes, it depends on the individual development plan; this is done every week, because the status of the patient can anytime depending at the level of treatment

Sabelo: How accessible and affordable is CBT treatment to South Africans?

Specialist: Not easily accessible, most therapists not trained on CBT

Sabelo: What is the feedback from patients who have completed treatment?

Specialist: They find the treatment effective, they found it relevant, even family members appreciate, but this does not mean they will stay clean

Participant number 3

Qualification/s – BA degree in Social Work

Age – 64 years old

Relevant Employment history – Department of Correctional Services, and SANCA Pretoria

Nature of Experience – therapist dealing with rehabilitation of substance abuse
Years of Experience – forty years

Introductory Question

Sabelo: Which substances are mostly used?

Specialist: Alcohol, cannabis, kate, nyaope, and methamphetamine.

Sabelo: Who is the vulnerable population to abuse substances?

Specialist: Teenagers, individuals of poor background, however also found in different classes.

Over the years age has change a lot, with younger individuals compared to the past.

Sabelo: What do you think are the reasons for using or abusing substances?

Specialist: Co-occurring disorders such as depression does lead people to abuse substances, others it can be financial problems

Sabelo: Which co-occurring disorders standardly co-exist with substance abuse?

Specialist: Bipolar, ADHD

Sabelo: Which treatment models are standardly employed to address the substance abuse challenge?

Specialist: CBT – the change start in the mind, holistic approach, client centred model, family therapy – addiction is a family disease

Sabelo: Can you please tell me on your experience with the treating substance use disorders with co-occurring disorders?

Specialist: Lot of substance addicts has other diseases, and most of the substance abuse is influenced by other disorders. It is important to manage both, the first focus being psychiatric challenge, then substance challenge. For example a teenager with ADHD can self medicate with cannabis, because cannabis can assist him or her with his/her anxiety by giving control.

Sabelo: What is your experience with CBT as a treatment model?

Specialist: It is important when you deal with addicts, the patient needs to go through cognitive change and behavioural change. Mind change needs information, what is the challenge? Then take responsibility. More work is needed after therapy to avoid relapse, and CBT skills assist.

Interview Question

Sabelo: How effective is CBT in rehabilitation of substance use disorder with co-occurring disorders?

Specialist: Individuals are different, what works with one person may not work with another. CBT is relevant where there must be a change of behaviour. It depends with the seriousness of the cooccurring disorder.

Probes

Sabelo: Do you deem CBT to be your primary theoretical orientation?

Specialist: Not alone, but together will all other models, try everything that works.

Sabelo: Do you use CBT when treating patients with substance use disorders with co-occurring disorder? *Specialist: Yes*

Sabelo: Does using CBT with patients with substance use disorders with co-occurring disorders result in fewer relapse incidents?

Specialist: It should, if you used it for both problems

Sabelo: What are the contributing factors towards high relapse rates?

Specialist: Lack of motivation, lack of support systems, not applying what they learn during the treatment, too confident of not having a relapse, stopping medication for both substance disorder and co-occurring disorders

Sabelo: Does the theoretical orientation differ based on the client?

Specialist: Yes, it always depends what you see, but CBT is always part of it in different ways.

Sabelo: How accessible and affordable is CBT treatment to South Africans?

Specialist: It is not easily accessible, only few rehabs got it. Most individuals who use it are professionals and they are expensive.

Sabelo: What is the feedback from patients who have completed treatment?

Specialist: Addiction is relapse prone disease, relapse is part of the disease, therefore we must be careful not to see relapse as a failure, and rather it is the part of the recovery process. Most patients appreciate the treatment and they are thankful.

Participant number 4

Qualification/s – BA Social Science degree in Social Work

Age – 49 years old

Relevant Employment history – SANCA Pretoria

Nature of Experience – therapist dealing with rehabilitation of substance abuse
Years of Experience – nineteen years

Introductory Question

Sabelo: Which substances are mostly used?

Specialist: Alcohol and cannabis

Sabelo: Who is the vulnerable population to abuse substances?

Specialist: Younger generation from 16, 18 to 28 years

Sabelo: What do you think are the reasons for using or abusing substances?

Specialist: Environmental factors such as parental abuse and neglect, co-occurring disorders

Sabelo: Which co-occurring disorders standardly co-exist with substance abuse?

Specialist: Bipolar, mood disorder

Sabelo: Which treatment models are standardly employed to address the substance abuse challenge?

Specialist: CBT, it specialize on behaviour modification

Sabelo: Can you please tell me on your experience with the treating substance use disorders with co-occurring disorders?

Specialist: It is standard, and it is important that they get treated collectively
Sabelo: What is your experience with CBT as a treatment model?

Specialist: I rely mostly on what I've learned from the university, and further used it in practice. It works well, but it sometimes difficult when dealing with patients with concrete thinking, which makes me to end up focusing more on changing behaviour

Interview Question

Sabelo: How effective is CBT in rehabilitation of substance use disorders with co-occurring disorders?

Specialist: CBT works the best; addiction is on thought process, it is important to have maladaptive behaviour strategy. When co-occurring disorder is identified relevant medical treatment is important.

Probes

Sabelo: Do you deem CBT to be your primary theoretical orientation?

Specialist: Yes, it is all on modification of behaviour. It is on being aware of thoughts because they lead to feeling, aware of feelings because they become your actions, be aware of your actions because they become your habit, be aware of your habits because they become your destiny.

Sabelo: Do you use CBT when treating patients with substance use disorders with co-occurring disorder?

Specialist: Yes, together with correct medication and proper psychiatric treatment.

Sabelo: Does using CBT with patients with substance use disorders with co-occurring disorders result in fewer relapse incidents?

Specialist: That is a difficult question; addiction is a disease prone to relapse. It is difficult to say, I've never counted how many of my patients who came back, where I was using CBT as the only treatment model.

Sabelo: What are the contributing factors towards high relapse rates?

Specialist: Lack of internalizing the skills, and if patients do not do what they learned.

Sabelo: Does the theoretical orientation differ based on the client?

Specialist: It differs, sometimes depending with the patient. First assess the patient e.g. if the is mourning, I can use grieve counseling together with CBT

Sabelo: How accessible and affordable is CBT treatment to South Africans?

Specialist: Accessible if you have resources to access professional therapist. In affordability, it can be expensive, at least if having medical aid.

Sabelo: What is the feedback from patients who have completed treatment?

Specialist: Positive feedback, for some of them it is an enlightening and liberal experience. Sometimes they become surprised of what they've learned and how good is the new life after treatment.

Participant number 5

Qualification/s – PHD in Social Work

Age – 58 years old

Relevant Employment history – Stabillis Treatment Centre Pretoria

Nature of Experience – therapist in the field of addiction and trauma

Years of Experience – twenty six years

Introductory Question

Sabelo: Which substances are mostly used?

Specialist: Alcohol, ket, cannabis, over the counter medication

Sabelo: Who is the vulnerable population to abuse substances?

Specialist: Patients who grew up with substance abuse in the household, dysfunctional families.

Sabelo: What do you think are the reasons for using or abusing substances?

Specialist: Learning through friends at school or family members who also abuse substances, others it can be problems that they go through in life, such as relationship problems

Sabelo: Which co-occurring disorders standardly co-exist with substance abuse?

Specialist: Bipolar, antisocial behaviour, borderline disorder

Sabelo: Which treatment models are standardly employed to address the substance abuse challenge?

Specialist: Depends with the patient, CBT, eclectic approach, systems approach, biopsychosocial approach, interactional analysis.

Sabelo: Can you please tell me on your experience with the treating substance use disorders with co-occurring disorders?

Specialist: 40% to 60% of the patients got both, as result psychiatrists are always needed to address the mental illness.

Sabelo: What is your experience with CBT as a treatment model?

Specialist: It is important, most patients got distorted thoughts, and restructuring of the mind is important when it's comes to relapse.

Interview Question

Sabelo: How effective is CBT in rehabilitation of substance use disorder with co-occurring disorders?

Specialist: It is one of the main approaches, and it results to positive outcomes

Probes

Sabelo: Do you deem CBT to be your primary theoretical orientation?

Specialist: To a great extent

Sabelo: Do you use CBT when treating patients with substance use disorders with co-occurring disorder? *Specialist: Yes*

Sabelo: Does using CBT with patients with substance use disorders with co-occurring disorders result in fewer relapse incidents?

Specialist: Yes I think so.

Sabelo: What are the contributing factors towards high relapse rates?

Specialist: Lack of proper after care (contingency management care), not following with aftercare programme, if the mood disorder is not under control.

Sabelo: Does the theoretical orientation differ based on the client?

Specialist: Yes we work with patient centred approach, what a patient needs.

Sabelo: How accessible and affordable is CBT treatment to South Africans?

Specialist: I think it is not so accessible; you must have money or medical aid.

Sabelo: What is the feedback from patients who have completed treatment?

Specialist: Majority benefits through the programme, only the few percentage who do not feel they have benefited.

Participant number 6

Qualification/s – PHD in Theology (Therapy)

Age – 55 years old

Relevant Employment history – Stabillis Treatment Centre Pretoria

Nature of Experience – Pastor Counselor dealing with the rehabilitation of substance abuse
Years of Experience – thirty years

Introductory Question

Sabelo: Which substances are mostly used?

Specialist: Alcohol, ket, and cannabis

Sabelo: Who is the vulnerable population to abuse substances?

Specialist: Anyone, because there may be many reasons.

Sabelo: What do you think are the reasons for using or abusing substances?

Specialist: Co-occurring disorders normally easily makes patients to abuse substances, even traumatic episodes such as loss of a love one can drive others to abuse substances

Sabelo: Which co-occurring disorders standardly co-exist with substance abuse?

Specialist: Bipolar, sleeping disorder.

Sabelo: Which treatment models are standardly employed to address the substance abuse challenge?

Specialist: Depends on the value system, how do you deal or cope with your problems e.g. rational emotive behavioural therapy model is not on the situation, but how do you think on the situation.

Sabelo: Can you please tell me on your experience with the treating substance use disorders with co-occurring disorders?

Specialist: As a counsellor I've worked with a lot of patients with both mental and substance disorders

Sabelo: What is your experience with CBT as a treatment model?

Specialist: I have learned it, it is relevant because it is on cognitive, and how you think.

Interview Question

Sabelo: How effective is CBT in rehabilitation of substance use disorders with co-occurring disorders?

Specialist: It depends on brain functionality. Sometimes if the brain is damaged due to too much substance abuse, it is important to start with medical treatment first.

Probes

Sabelo: Do you deem CBT to be your primary theoretical orientation?

Specialist: I think so, my starting point is values, and how you think on life.

Sabelo: Do you use CBT when treating patients with substance use disorder with co-occurring disorder? *Specialist: Yes*

Sabelo: Does using CBT with patients with substance use disorders with co-occurring disorders result in fewer relapse incidents?

Specialist: Yes, because it helps the patient to think on different solutions when confronted with relapse.

Sabelo: What are the contributing factors towards high relapse rates?

Specialist: Patients think it will not happen again, individuals must be realistic on how they deal with it if confronted.

Sabelo: Does the theoretical orientation differ based on the client?

Specialist: Yes, it depends.

Sabelo: How accessible and affordable is CBT treatment to South Africans?

Specialist: It's on money; if you can afford other treatments then you can also afford it. I'm not sure if there are therapists who offer it free.

Sabelo: What is the feedback from patients who have completed treatment?

Specialist: It is positive, at least after treatment they understand what went wrong, instead of having excuse they can find reason to leave positive.

Participant number 7

Qualification/s – degree in Social Work

Age – 46 years old

Relevant Employment history – Dr Fabian and Florence Ribeiro treatment centre and ChristelikMaatskaplikeRaad or Christian Social Counsel (CMR).

Nature of Experience – therapist focusing on group services in a form of support group for patients with substance dependency Years of Experience – twenty years

Introductory Question

Sabelo: Which substances are mostly used?

Specialist: Alcohol, ket, heroine, cannabis, over the counter medication.

Sabelo: Who is the vulnerable population to abuse substances?

Specialist: No exception, all levels of society, and all races.

Sabelo: What do you think are the reasons for using or abusing substances? *Specialist: Peer*

pressure plays a huge role, while other are just rebellious teenagers Sabelo: Which co-occurring disorders standardly co-exist with substance abuse?

Specialist: Bipolar, major depression, paranoia, schizophrenia.

Sabelo: Which treatment models are standardly employed to address the substance abuse problem?

Specialist: They are many, from integrated approach (spiritual, physical, social), CBT, system theory, actually it's depends with the needs of the patient.

Sabelo: Can you please tell me on your experience with the treating substance use disorders with co-occurring disorders?

Specialist: On my personal opinion, dependency can only be overcome easier if the patient is motivated and want to recover. But if it is both, it makes the patients prognosis poor, because the patient must deal with both. If it is both and still early stages, the relapse is more often. You found that each disorder influence the other e.g. when the mood is down, alcohol get used to upper the mood.

Sabelo: What is your experience with CBT as a treatment model?

Specialist: I use it in group therapy, and sometimes with individual therapy. I'm currently involved with initial interviews before referring patients to therapists. In both work experience I have used CBT. It is relevant in relapse prevention; it indicates patients how a negative thought can affect them. They must get practical skills to help them, even the therapist that I refer to use CBT.

Interview Question

Sabelo: How effective is CBT in rehabilitation of substance use disorder with co-occurring disorders?

Specialist: It depends with the patients, how open they are, and their motivation to recover. Some individuals go to rehab for wrong reasons e.g. work or family instructions.

Probes

Sabelo: Do you deem CBT to be your primary theoretical orientation?

Specialist: I also use other theories, but I love CBT.

Sabelo: Do you use CBT when treating patients with substance use disorder with co-occurring disorder? *Specialist: Yes.*

Sabelo: Does using CBT with patients with substance use disorders with co-occurring disorders result in fewer relapse incidents?

Specialist: Yes I do, it depends where the phase of recovery is. In my opinion dependency is complex, even in relapse they are many factors.

Sabelo: What are the contributing factors towards high relapse rates?

Specialist: Positive or negative emotions, thoughts, high-risk environment, interpersonal reasons, lack of skills on how to handle situations.

Sabelo: Does the theoretical orientation differ based on the client?

Specialist: It depends with the patient

Sabelo: How accessible and affordable is CBT treatment to South Africans?

Specialist: It depends with the resources in the community; they are places with more cost effective treatment like here (Church treatment centre). However it is difficult to even access the state rehab centre, because of the red tape and long procedure before referral. Its normally takes weeks before the patient get recommended to a state rehab centre, whilst the private rehabs are expensive.

Sabelo: What is the feedback from patients who have completed treatment?

Specialist: It depends with their religion; some mentioned that they have lost lot of time whilst involved with substances. They start a new life with different personality and new opportunities. In my experience recovery is a process, sober, relapse and sober again. From a Christian point of view, some of them whilst using they get help by the divine of God.

Participant number 8

Qualification/s – BA Social Science Honors

Age – 33 years old

Relevant Employment history –Elim clinic and private/ personal practice

Nature of Experience – therapist (alcohol, substance group and after care group) dealing with rehabilitation of substance abuse

Years of Experience – ten years

Introductory Question

Sabelo: Which substances are mostly used?

Specialist: Cannabis, cocaine, kate, alcohol.

Sabelo: Who is the vulnerable population to abuse substances?

Specialist: Everyone, however mostly youngsters between the age of 18-35 years, whilst on alcohol the age is little bit older.

Sabelo: What do you think are the reasons for using or abusing substances?

Specialist: The environment you are living in does play a role, if majority of people surrounding you abuse substances, you are highly likely to abuse too, for others environment together with genetic predisposition.

Sabelo: Which co-occurring disorders standardly co-exist with substance abuse?

Specialist: Depression, bipolar which is sometimes chemically induced.

Sabelo: Which treatment models are standardly employed to address the substance abuse challenge?

Specialist: In our centre we were using our own programme developed by the centre (Elim clinic), which involved whatever necessary for the patient.

Sabelo: Can you please tell me on your experience with the treating substance use disorders with co-occurring disorders?

Specialist: It is important to pay attention for both disorders, CBT works well with depression, so CBT works well when dealing with both, but sometimes you must start by teaching them to think, due to substances have affected the brain.

Sabelo: What is your experience with CBT as a treatment model?

Specialist: If they are not depressed it may be necessary to try more approaches. It teaches them to think different, and it is relevant whether on individual, group, or after care treatment. The focus is teaching patients' rational thinking.

Interview Question

Sabelo: How effective is CBT in rehabilitation of substance use disorders with co-occurring disorders?

Specialist: It depends what you mean. As long as they are in the safe place like rehab, it works better.

Probes

Sabelo: Do you deem CBT to be your primary theoretical orientation?

Specialist: I always start with it, but it is not the only approach.

Sabelo: Do you use CBT when treating patients with substance use disorders with co-occurring disorder?

Specialist: Yes, as part of the treatment.

Sabelo: Does using CBT with patients with substance use disorders with co-occurring disorders result in fewer relapse incidents?

Specialist: It depends, because they are lot of variables at play.

Sabelo: What are the contributing factors towards high relapse rates?

Specialist: Own motivation, going back to high-risk environment, stress management, how long they have been using substances, lack of support, which age they have started.

Sabelo: Does the theoretical orientation differ based on the client?

Specialist: Yes definitely.

Sabelo: How accessible and affordable is CBT treatment to South Africans?

Specialist: You must have medical aid, and some medical aids do not pay for full treatment. As much as they are state facilities, it is a long, slow process; sometimes patients go to hospital just to detox, without full treatment to stay clean.

Sabelo: What is the feedback from patients who have completed treatment?

Specialist: Through an aftercare programme, the results have been positive. At least if the relapse they know what went wrong. In most case when they are addicted their brain gets affected, and through CBT they learn to think again and activate that part of the brain.

Participant number 9

Qualification/s – BA Honors in Social Work

Age – 40 years old

Relevant Employment history – Elim clinic

Nature of Experience – therapist in the field of addiction dealing with the rehabilitation of substance abuse

Years of Experience – fifteen years

Introductory Question

Sabelo: Which substances are mostly used?

Specialist: Alcohol, ket, cannabis, crystal meth, cocaine, nyaope, over the counter medication.

Sabelo: Who is the vulnerable population to abuse substances?

Specialist: Anyone can be addicted; it is more prevalence amongst youngsters between the age of 14 to 30 years.

Sabelo: What do you think are the reasons for using or abusing substances?

Specialist: For others the presence of psychological disorders such as post traumatic stress disorder, depression lead them to use substances as a way to overcome such disorders, mostly in teenagers its peer pressure.

Sabelo: Which co-occurring disorders standardly co-exist with substance abuse?

Specialist: Depression especially with alcohol, remember alcohol is a depressant, post traumatic stress disorder (police officers), bipolar, ADHA, psychoses, panic attack, suicide.

Sabelo: Which treatment models are standardly employed to address the substance abuse challenge?

Specialist: CBT is our primary, impact theory, psychoanalysis, resilient model, rational behaviour therapy.

Sabelo: Can you please tell me on your experience with the treating substance use disorders with co-occurring disorders?

Specialist: We prefer to focus on addiction first before co-occurring disorders, then send them to psychiatric section for other disorders. The reason is simple, for example, you avoid having a depressed person drinking under medication.

Sabelo: What is your experience with CBT as a treatment model?

Specialist: There is no way that you can change your behaviour before changing your thinking. It's on thoughts, feeling, and behaviour.

Interview Question

Sabelo: How effective is CBT in rehabilitation of substance use disorder with co-occurring disorders?

Specialist: We do not have a way of assessing the impact, because we terminate the relation with the patient after three weeks. But I can use the after care group, which we having once a week. During those sessions I've noticed the change of language from the patients.

Probes

Sabelo: Do you deem CBT to be your primary theoretical orientation?

Specialist: Yes, let why we screen our patient, before the treatment can start, you need to be at the certain state of cognitive functioning, e.g. any brain damage can affect treatment.

Sabelo: Do you use CBT when treating patients with substance use disorders with co-occurring disorder? *Specialist: Yes*

Sabelo: Does using CBT with patients with substance use disorders with co-occurring disorders result in fewer relapse incidents?

Specialist: We can verify in our statistics and research, also our aftercare programme which we've been running for 16 years does indicate positive outcomes.

Sabelo: What are the contributing factors towards high relapse rates?

Specialist: Research tells us that 30% get it right first time, second category get it right the second time because of the motivation, the third category get it right after multiple treatments, and lastly due to addiction being a fatal disease 10% end up dying. among the factors, I can mention triggers both internal and external, environmental factors, risk factors, untreated co-occurring disorders

Sabelo: Does the theoretical orientation differ based on the client?

Specialist: Based on the brain functioning yes it can differ. Also the language factor plays a role, remembers most of these theories are in English, sometimes translating is a challenge. Every treatment must be individualised looking at the needs, background etc. of the patient.

Sabelo: How accessible and affordable is CBT treatment to South Africans?

Specialist: You must have medical aid or money because treatment is expensive.

Sabelo: What is the feedback from patients who have completed treatment?

Specialist: Through our aftercare programme the feedback has been positive. We've got weekly programmes and annual programme (where we light candles).

Participant number 10

Qualification/s – Masters degree in Clinical Psychology

Age – 32 years old

Relevant Employment history – Weskoppies Hospital

Nature of Experience – senior clinical psychologist specialising co-morbid disorder with substance abuse

Years of Experience – seven years of experience

Introductory Question

Sabelo: Which substances are mostly used?

Specialist: Cannabis, alcohol, heroin, kat, nyaope, cocaine

Sabelo: Who is the vulnerable population to abuse substances?

Specialist: Young adults between 20 to 30 years, often from poor social status.

Sabelo: What do you think are the reasons for using or abusing substances?

Specialist: It depends with patients, others get addicted while they were just having fun for relaxation purposes, while others occurring disorders lead them to abuse substances.

Sabelo: Which co-occurring disorders standardly co-exist with substance abuse?

Specialist: Bipolar I and II, major depression, schizophrenia.

Sabelo: Which treatment models are standardly employed to address the substance abuse challenge?

Specialist: CBT, person centred therapy, biopsychosocial therapy.

Sabelo: Can you please tell me on your experience with the treating substance use disorders with co-occurring disorders?

Specialist: Most of the time you found patients with both.

Sabelo: What is your experience with CBT as a treatment model?

Specialist: I've been using it my whole career, it is helpful with the cognitive understanding of their substance use.

Interview Question

Sabelo: How effective is CBT in rehabilitation of substance use disorder with co-occurring disorders?

Specialist: It is difficult to say, it might work when they are still in the centre, but when they get out, the circumstances outside often lead them to relapse.

Probes

Sabelo: Do you deem CBT to be your primary theoretical orientation?

Specialist: Yes

Sabelo: Do you use CBT when treating patients with substance use disorder with co-occurring disorder? *Specialist: Yes*

Sabelo: Does using CBT with patients with substance use disorders with co-occurring disorders result in fewer relapse incidents?

Specialist: It is difficult to tell, it depends with a patient, and some are successful depending how they engage with CBT. This also addresses life changes they make.

Sabelo: What are the contributing factors towards high relapse rates?

Specialist: Poor insight to their substance challenge, co-occurring disorders, peer pressure.

Sabelo: Does the theoretical orientation differ based on the client?

Specialist: If its only substances I only use CBT, but if it's accompanied by other illnesses, I may need to also use other approaches.

Sabelo: How accessible and affordable is CBT treatment to South Africans?

Specialist: The access is poor, not all government centres have CBT, as a result poor individuals do not access it accordingly. Whilst private centres are expensive, as far as I know they can charge up to R800 per hour.

Sabelo: What is the feedback from patients who have completed treatment?

Specialist: It depends if it was a successful treatment. Most successful treatment results in positive feedback. Some patients acknowledge CBT's value, and how they can implement it in life in general.

ANNEXURE F: LANGUAGE EDITING AND PROOFREADING CERTIFICATE

EDITING AND PROOFREADING CERTIFICATE

7542 Galangal Street

Lotus Gardens

Pretoria

0008


27 February 2018

TO WHOM IT MAY CONCERN

This letter serves to confirm that I have edited and proofread Mr SA Mhlungu's dissertation entitled: **"EXPLORING THE PERCEIVED EFFECTIVENESS OF COGNITIVE BEHAVIOURAL THERAPY AS A TREATMENT MODEL FOR SUBSTANCE USE DISORDERS WITH CO-OCCURRING DISORDERS AT SUBSTANCE ABUSE REHABILITATION CENTRES IN GAUTENG."**

I found the work easy and intriguing to read. Much of my editing basically dealt with obstructionist technical aspects of language which could have otherwise compromised smooth reading as well as the sense of the information being conveyed. I hope that the work will be found to be of an acceptable standard. I am a member of Professional Editors' Guild.

Hereunder are my particulars:



Jack Chokwe (Mr)

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Professional
EDITORS
Guild