PERCEPTIONS OF A MULTI-DISCIPLINARY TEAM ON THE EFFECTIVENESS OF THEIR TREATMENT APPROACH AT AN IN-PATIENT ADOLESCENT DRUG TREATMENT FACILITY

by

WILLEM BRONKHORST

Submitted in fulfilment of the requirements for the degree of

Master of Arts: Research Psychology

in the

Faculty of Health Sciences

at the

Nelson Mandela University

Supervisor: Doctor K. Navsaria

Co-Supervisor: Doctor V. Goliath

2019

Declaration

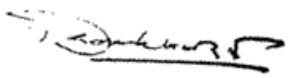
Name: Willem Lukas Rudolf Bronkhorst

Student number: 216242681

Qualification: Master of Arts (Research Psychology)

Title: Perceptions of a Multi-disciplinary Team on the Effectiveness of their Treatment Approach at an In-Patient Adolescent Drug Treatment Facility

Declaration: In accordance with Rule G5.6.3, I hereby declare that the above-mentioned dissertation is my own work and that it has not previously been submitted for assessment to another University or for another qualification.



Signature:

Date: 20 March 2019

Dedication

This study is dedicated to my wife, Alti Bronkhorst.

“Pursue what is meaningful, not what is expedient.”

- **Jordan B. Peterson**

Acknowledgements

I would like to thank those who have guided me throughout my studies, this would have been far more difficult without your support.

Professionally

- My Supervisor, Dr. K. Navsaria who was willing to hear me out and who guided me through the research process.
- My Co-supervisor, Dr. V. Goliath who's expertise and passion for research served as an inspiration to me.
- Prof. S. Van Wyk and Prof Z. Zingela, Your interest in me and my research idea helped me take that first step.
- The participants, may your voices carry far. Without you, this study would not have been possible.

Personally

- My wife, Alti, who lovingly supported me every step of the way. You helped create an environment in which I was able to grow. Love you.
- My parents, Willie and Cheryl Bronkhorst, your many years of love, care, hard work and sacrifices helped me become the man I am today.
- My two brothers, Denton and Heinrich, love you guys.
- My good friend, Jacques Victor, for listening to my complaints (Whenever).
- All my friends who understood why I wasn't spending time with them. I look forward to seeing you more often.
- My colleagues at work, your prayers and encouragement made all the difference.

May your lives be blessed and filled with joy.

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Abstract

The problem of adolescent substance use disorder as well as the high relapse rates associated with addiction treatment has been recognised both locally and internationally. The ability to effectively implement and monitor existing treatment programs therefore becomes critical to improving treatment outcomes at addiction treatment facilities that serve adolescent clients.

The Multi-disciplinary team (MDT) have a key role to play with regard to the delivery and implementation of effective adolescent addiction treatment. The main aim of this qualitative research study was to explore the functioning of the MDT at an in-patient adolescent drug treatment facility and their perceptions regarding the extent to which the nine essential key elements of effective adolescent addiction treatment aligns with their approach to program implementation.

This qualitative exploratory-descriptive study employed a non-probability purposive sampling technique to recruit research participants from an adolescent drug treatment centre in Nelson Mandela Bay. Two separate focus group interviews were conducted with participants who met the study's inclusion criteria. The first group included eight participants, with the second consisting of ten participants. Tesch's framework for qualitative data analysis was used to analyse raw interview data; validated by an analysis conducted by an independent coder. Guba's model was used to ensure trustworthiness throughout the research process and of the findings. Emphasis was therefore placed on the concepts of truth value, applicability, consistency, and neutrality. The findings of the study were presented in ten main themes and associated sub-themes.

Ethical conduct was ensured by meeting the requirements for 1) ethical review, 2) informed consent, 3) confidentiality and anonymity, 4) the right to confidentiality and privacy of data, 5) beneficence and non-maleficence, and finally 6) exiting ethics.

Chapter One:
Introduction and Problem Statement

1.1 Introduction

This chapter provides a foundation for the study described and discussed in this dissertation. The rationale for the study will be described in conjunction with a short literature overview. By virtue of situating the problem in context, the readers understanding of the need for research that can explain and improve the effectiveness of adolescent addiction treatment in South Africa will be enhanced. A brief overview of the methodological approach and ethical considerations will be provided. Subsequent chapter organisation is set out as a conclusion.

1.2 Rationale for the Present Study

When I was a teenager I used drugs, I drank, I pretty much tried whatever was out there. (Obama, 2016).

A survey conducted among Moscow's youth aged from 15 to 18 found that 12% of males had injected drugs. Overall, up to 25% of injecting drug users in Eastern Europe and Central Asia are estimated to be 20 years of age or younger (Unaids, 2003). Furthermore, an estimated 14% of girls and 18% of boys aged 13 to15 in low- and middle-income countries use alcohol (World Health Organisation, 2015). A recent report by the South African Community Epidemiology Network on Drug Use, indicates that between 21% and 28% of people admitted across all centres in South Africa were younger than 20 (South African Community Epidemiology Network on Drug Use, December 2017). The report adds that the increase in patient admissions between the ages of 10 and 14 in the Western Cape is a situation that needs to be carefully monitored (SACENDU, 2017). Locally, in the Eastern Cape, it was reported that for the period July to December of 2014, 32% of all people admitted for substance abuse in Port Elizabeth were younger than 24 years of age (South African Community Epidemiology Network on Drug Use, December 2015). The report indicates that 29% of all admissions were re-admissions (SACENDU,

2015). Adolescent drug abuse is a very real concern across the globe. International and local statistics confirm that there is a definite need for research that can help improve treatment and reduce the rate of relapse and re-admission of adolescents with substance use disorder.

Tapert, Caldwell & Burke (2005) assert that adolescence is a critical period in which young adults make important decisions regarding education, occupation and social interaction. It is crucial that cognitive functioning is not impaired during this time. More recent research suggest that teenage addiction may also stunt and jeopardise normal functioning and health for the rest of an individual's life (WHO, 2015). Affected adolescents are more likely to engage in high-risk sexual behaviours putting them at risk for teenage pregnancies, sexually transmitted diseases and HIV (Tapert, Aarons, Sedlar, & Brown, 2001).

The National Institute on Drug Abuse (NIDA) categorically states that treatment should address the needs of the whole person and that effective programs need to address a multitude of issues such as; academic concerns, medical/health problems, level of psychological development, gender differences, family and peer relationships, cultural factors, child abuse, HIV, STD's, legal problems and co-morbid psychiatric disorders (National Institute on Drug Abuse, 2014). Straussner (2014) agrees, stating that "multiple patterns of dysfunctional substance use occur in various types of people, or within the same person at different times in his or her life, with multiple prognoses requiring a variety of appropriate interventions" (p.14).

Given the research problem and the NIDA position regarding adolescent treatment needs, this study focuses on the effectiveness of in-patient adolescent treatment using the biopsychosocial model of addiction within a systemic framework. An in-patient treatment facility is defined as a resource-intense structured environment with a team of staff members offering a 24 hour, high-level of care (NIDA, 2014). Additionally, Galvin & McCarthy (1994) note that "the Multi-disciplinary Community Team (MDCT) has become the gold standard for service delivery in the mental health field" (p.157) Schofield & Amodeo (1999) suggest that a multi-disciplinary team (MDT) can be defined as a group of practitioners from various disciplines working independently on the same task. In this

case, members of the MDT are all working on obtaining successful treatment outcomes for patients at the facility.

The researcher's aim was to answer the research question by exploring the perceptions and experiences of the MDT at a recently developed adolescent in-patient treatment centre in the Nelson Mandela Metropole. The MDT were purposively sampled as participants for this study as their perceptions and experiences have been informed by multiple years of service within the field of adolescent addiction treatment in South Africa. Each member of the MDT plays a contributing role to treatment program implementation. Their individual contributions as well as their perspectives on effective treatment program implementation will be discussed in Chapter five of the current study.

There are various factors that prevent addiction treatment providers from consistently delivering effective services over time (Knott, Corredoira, & Kimberly, 2008). Treatment outcomes have historically been assessed by comparing a treatment modality's treatment outcomes against control group outcomes or by making use of pre-post differences in a single modality and also by comparing the post treatment effects of two or more treatment modalities (Catalano, Hawkins, Wells, Miller, & Brewer, 1990).

The current study was designed to be qualitative in nature as there are numerous quantitative studies that focus on the treatment of adolescents with substance abuse problems (Tanner-Smith, Wilson, & Lipsey, 2013). These studies attempt to identify the specific treatment approaches that are responsible for the best outcomes. Worthwhile effects have been identified, but without convincing results favouring any singular specific treatment method (Michie, Fixsen, Grimshaw, & Eccles, 2009).

A large majority of quantitative studies have, however, consistently discovered that treating adolescent addiction is a very complex and uncertain process and recommend that practitioners consider treatment from what has been termed a more holistic or multicausal perspective. (Tanner-Smith et al., 2013; Waldron & Turner, 2008; Williams & Chang, 2000).

The inability of published studies such as these to pinpoint one specific model or theory that seems to be conclusively more effective than others, suggests that it might be useful to consider a qualitative or "bottom-up" approach to addiction treatment. Griffiths (2005) argues that any bottom-up framework for the conceptualisation of addiction should

be flexible, integrative, reflexive and accountable to various groups of people (addicts, families, researchers, practitioners, policy makers, etc.). Perhaps the focus should be on the adolescent as opposed to the treatment approach itself. Each adolescent should be treated holistically with an awareness of his or her unique needs, and, furthermore, the interaction of systemic processes that form part of the adolescent's unique context should be considered a crucial factor related to addressing the needs of all affected groups of people.

Winters, Botzet & Fahnhorst (2011) conducted a review of existing studies relating to advances in adolescent-specific substance abuse treatment. They state that treatment programs could be enhanced across all approaches if they contained all of what are considered the most essential elements of effective treatment for adolescent addiction. They refer to a set of nine core elements that were identified via literature review and expert panel consensus by Drug Strategies in 2003 (Cacciola et al., 2015). These elements were later reviewed and updated to include one additional element (Cacciola et al., 2015). Accordingly, this research project was conceptualised using the nine elements of effective adolescent treatment. The nine elements can be usefully applied to a bio-psychosocial model of addiction and will be theoretically linked to a systemic approach of addiction treatment.

The researcher believes that the multitude of existing modalities and the inconsistent use of terminology, coupled with, in some cases, absent or in-house methods of treatment program assessment, creates uncertainty amongst practitioners regarding consistent and effective implementation of treatment programs. A call for the implementation of a universal set of elements that can be used across borders, treatment models and programs to assess and improve in-patient treatment from a more fundamental or "bottom-up" perspective needs to be made.

Catalano et al. (1990) note that *pre-treatment factors* (factors that precede admission to treatment), *in-treatment factors* (program characteristics during the course of treatment) and *post-treatment factors* (variables that affect sobriety after treatment) should be considered in order to enhance the therapeutic potential of treatment programs. The present study aimed to explore the key elements of effective in-patient treatment as it pertains to all three stages of the treatment process. Members of the MDT at the

treatment facility were considered suitable participants for this study because they are involved in all three phases of treatment.

The nine key elements identified by Drug Strategies in 2003 were designed to be part of a holistic approach to program implementation and leans towards an ecosystemic perspective. Using the nine elements to describe and appraise treatment program implementation in South Africa could be a very effective way to determine which areas of treatment can and should be usefully strengthened. The results of the present study could also serve to inform legislation regarding the implementation and development of future treatment programs in South Africa.

1.3 Aim and Objectives of the Study

The primary aim of the study was to explore the functioning of the MDT at an in-patient adolescent drug treatment facility and their perception of the extent to which nine essential core elements of effective adolescent addiction treatment aligns with program implementation. Specific objectives include;

- To explore and describe the MDT's perception of how the MDT functioning is promoting and inhibiting treatment programme outcomes.
- To explore and describe the MDT's experiences and perceptions of implementing the in-patient adolescent drug treatment programme.
- To explore and describe the MDT's perceptions on how the nine elements that are essential to adolescent treatment program efficacy are incorporated in their treatment programme.
- To report findings and make recommendations regarding MDT functioning and treatment program implementation that will enhance adolescent drug treatment outcomes at the research site and similar in-patient adolescent drug treatment facilities.

1.4 Research Methodology

This study made use of an exploratory-descriptive research design. The data collection process was qualitative and, data analysis was performed from within the critical-realist paradigm. An interpretative approach was followed. Terre Blanche, Durheim & Painter (2006) state that the interpretative approach uses the power of everyday language to allow the researcher to understand the subjective perceptions and experiences of individuals or groups. Accordingly, the nine elements of effective adolescent drug treatment was used as a frame to elicit the subjective experiences and perceptions of the MDT regarding program implementation at the treatment centre. The reader is directed to the methodology chapter of this study for a detailed description on how the realist paradigm was integrated with an interpretive approach. The following section provides an overview of the research methodology followed by this study, a more detailed description is provided in chapter four.

1.4.1 Data collection

Data collection consisted of a short biographical questionnaire and two focus group interviews conducted with members of the MDT at a Treatment Centre for adolescent addiction in Port Elizabeth, South Africa. Non-probability purposive sampling was used to identify participants. Participants had to have had previous experience relating to adolescent care and should have been current members of a MDT at an adolescent drug treatment facility.

A week prior to focus group interviews, participants were asked to complete a reflection sheet which summarised the nine elements. The reflection sheet required participants to write down key words or draw small images to help them think about how the nine elements were being applied at the centre.

The researcher attempted to elicit rich descriptions from participants by employing qualitative interview techniques such as paraphrasing, clarification, reflection, reflective summaries, and listening and probing during focus group interviews. An interview schedule was followed that made use of open-ended questions. Visual cues of the elements were displayed during the interviews to enhance participant interest and to encourage discourse. Two recording devices were used to record interviews. This had

the effect of enhancing the trustworthiness of the data by minimising the possibility of data loss and allowed the researcher an opportunity to revisit the interviews at a later stage. An experienced external transcriber was used to transcribe interviews. The text format was used during data analysis.

1.4.2 Data analysis

Thematic analysis was conducted using the eight step process as described by Tesch (1990, p.142-145). The process requires the researcher to identify categories of interest within the data. These are then grouped under themes and sub-themes. To enhance the credibility of the study, an independent coder analysed the data at the same time, also using Tesch's eight step process. Guba's model (as cited in Krefting, 1991, p.215-217) was used to establish the reliability and trustworthiness of the study. The model requires that findings and conclusions be validated by considering truth value, applicability, consistency and neutrality. A more comprehensive discussion of these concepts have been provided in the methodology chapter of this study.

1.4.3 Ethical considerations

The researcher has an obligation towards participants to do no harm by conducting research in an ethical manner. Due care was taken to inform each participant about the goal and purpose of the study. Each participant was informed that participation was voluntary and that he or she could choose to discontinue participation at any time. Privacy was emphasised during meetings and permission was obtained to record interviews. Participants' names were not recorded and the information they provided was kept confidential. Anonymity may have been slightly restricted due to the small sample size and the specialist training that some participants have. Every effort was taken by the researcher to remove possible identifiers from the resulting data. The reader is directed to the methodology chapter of this study for a detailed description of these measures. The data set was only accessed by the transcriber, the researcher, and official members of the research team. The researcher explained all the ethical considerations to participants before each interview and gave the opportunity for questions before the interviews, allowing time for participants to sign an informed consent agreement.

1.5 Conclusion

This dissertation is organised into six chapters. Chapter One has provided a brief introduction and rationale for the study, as well as its, primary aim and specific objectives. The methodology has been described, with an overview of the data collection process, data analysis and ethical considerations.

Chapter Two and Chapter Three review the literature related to the treatment of adolescent substance use disorder. More specifically, Chapter Two defines drug abuse, provides a description of the most prominent etiological theories of addiction, and highlights the importance of adopting a bio-psychosocial perspective when addressing adolescent addiction treatment.

Childhood development and the adolescent's unique treatment needs as well as implementation and the different components of evidence-based practice are reviewed. Chapter Three will discuss the nine elements of effective addiction treatment for adolescents at in-patient facilities. This chapter pays specific attention to the bio-psychosocial characteristics of each element as viewed from a systemic perspective, its relevance to the unique needs of adolescents, and its relevance in the South African context. The research design and methodology employed in this study are outlined in Chapter Four. The results and findings are discussed in Chapter Five. Chapter Six concludes the study by summarising the main findings. Recommendations are made in accordance with the aims of the study, and this is followed by a description of its value, and limitations and recommendations for future research.

Chapter Two:
Adolescent Addiction Treatment: A Biopsychosocial Perspective

2.1 Introduction

The aim of the study was to explore the functioning of the MDT at an in-patient adolescent drug treatment facility and their perception of the extent to which nine essential core elements of effective adolescent addiction treatment aligns with program implementation.

This chapter defines drug abuse by providing a detailed description of the most prominent etiological models of addiction. The historical origin and relevance of what is currently considered the most dominant treatment modality is discussed and contrasted with the bio-psychosocial model of addiction.

Childhood development is addressed in general, with a specific emphasis on Urie Bronfenbrenner's bioecological model of development. The developmental period of adolescents who receive treatment at the facility is defined and described. Important factors related to addiction treatment during this specific stage of development are also discussed. An introduction to evidence-based adolescent addiction treatment and a description of its different components are provided in conclusion.

2.2 Defining Drug Abuse

Many terms have historically been used to discuss drug abuse. The term 'addiction' is probably the most well-known of these. Unfortunately, addiction is not that easy to define (Mcneece & DiNito, 2012). It is a multi-layered, socially defined construct and not a physical entity with clear, unique boundaries (West, 2013).

The first definition of addiction that could be applied to the use of drugs under international control was provided by the World Health Organisation Expert Committee in 1952 (Edwards, Arif, & Hodgson, 1981). The same WHO Expert Committee recommended in 1964 that the term 'addiction' be substituted for 'drug dependence', an important distinction was also made between *psychic* and *physical* dependence (Edwards et al., 1981). The implication of this distinction was that the phenomenon of drug abuse was much more complex than it was previously thought to be.

Sadock, Sadock & Ruiz (2015) argue that the term addiction has taken on a derogatory meaning in modern day society which tends to ignore the concept of drug abuse as a disease or medical disorder. Their comments are directed at the fact that the term is now also used 'trivially' for phenomena such as 'TV addiction' and 'money addiction'. While reviewing more recent literature, the researcher observed that the term 'dependence' seems to be favoured by practitioners.

A description of the term 'dependence' takes the discussion a few steps further. Edwards et al. (1981) suggest that dependence should be classified "as a socio-psycho-biological syndrome manifested by a behavioural pattern in which the use of a given psychoactive drug (or class of drugs) is given a sharply higher priority over other behaviours which once had significantly greater value" (p.240). Simply put, this suggests that the drug use has become more important than any other activity.

Sadock, Sadock & Ruiz (2015) make a distinction between *behavioural dependence* that relates to substance-seeking activities with pathological patterns of use, *physical dependence* which refers to the physiological effects of multiple episodes of use, and *psychological dependence* (habituation), which entails a continuous or intermittent 'craving' for the substance in order to avoid a dysphoric state. Some have argued that addiction should be viewed as a syndrome with multiple expressions where the focus is not only on substance use disorders (SUD's) but also on behavioural expressions such as pathological gambling (Shaffer et al., 2004).

West (2013) states that definitions serve a purpose and that different definitions are needed for different purposes. It is therefore necessary to consider how the term will be used in this study. This study specifically investigates substance abuse and the treatment thereof. It aims to explore the effectiveness of what is specifically termed addiction treatment and is therefore primarily concerned with the term 'addiction' as opposed to the term 'dependence'. The researcher ascribes to a multicausal understanding of addiction that suggests that it is caused by a multitude of different contextual variables interacting with each other to induce and maintain drug abuse. Addiction should therefore be viewed holistically without emphasising specific variables while ignoring others. Griffiths (1999) shares this perspective and states that addictions are always a result of the interaction between the person's biological disposition,

psychological constitution, social environment and the nature of the activity. The researcher considered various different descriptions and found that the definition adopted in West's report (2013) captures the multi-faceted nature of addiction as envisioned by the nine key elements associated with effective adolescent addiction treatment programs.

West's definition emphasises that addiction treatment should not only be aimed at specific mechanisms of causation as is often prescribed by definitions conceptualised in specific occupational fields. According to West (2013) the following definition defines the domain of interest but, as far as possible avoids pre-judging the underlying mechanisms, which may vary from case to case:

"Addiction is a powerful motivation to engage in a purposeful behaviour that has no survival value, acquired as a result of engaging in that behaviour, with significant potential for unintended harm."

2.3 An Etiological Framework for Understanding Addiction

It becomes helpful to reflect on the etiological theories of addiction if one wants to understand the complex nature of adolescent substance use disorder. Currently, there is no one single theory that explains addiction and there are at least as many explanatory theories of addiction as there are definitions (Mcneece & DiNito, 2012). The current study prescribes to a multi-causal model of addiction that creates and maintains adolescent substance use disorder. It is therefore beyond the scope of this study to review each model in detail. Specific emphasis has therefore been placed on the multi-causal model and the bio-psychosocial nature of adolescent substance use disorder. The most prominent models have however been listed in order to provide the reader with a point of reference for comparison, these include the following, as identified by Hitzeroth & Kramer (2010) and Mcneece & DiNito (2012).

- **The moral model:** This model states that addiction is the result of immorality and that people who are addicted to drugs choose to be 'bad' or 'evil'. The model is very simplistic and states that there is no formal treatment for addiction. Addiction

is seen as a lack of character and addicts are required to use willpower to overcome their sinful behaviour (Marlatt, Baer, Donovan, & Kivlahan, 1988).

- **The legal model:** This model is based on the premise that taking illegal drugs is a criminal act and should be punished. Relapse is viewed as an illegal act by a "criminal" person. It states that the addicted individual has a choice in the matter and that fines or even jail time need to be implemented in order to stop the perpetrator from offending again.

- **The sociocultural model:** West (2013) states that the rate of addiction is determined for individuals within populations as a function of social connections between people. Addiction is seen to be caused by the cultural environment and one would thus expect to see more cases of what is medically defined as addiction in societies where substance use is more readily tolerated.

- **The psychological model:** This model is based on the assumption that addiction is a problem of the mind and human emotions. This model states that treatment should teach addicted people to recognise maladaptive behaviour and should help them develop new skills to enable them to maintain sobriety.

- **The medical/disease model:** This model suggests that addiction is a brain disease that is caused by drug or alcohol use. The disease causes loss of control and creates a craving which leads to continued use. Complete abstinence following medical detox is considered the only effective treatment.

- **A multicausal model:** Also known as a bio-psychosocial approach, this model proposes that there is an interaction between the following three factors in all instances of substance use disorders: the *agent*, the *host*, and the *environment*. It defines the agent as the substance of abuse. The host is the person, including his or her genetic composition, cognitive structure, drug use expectations and personality. The environment consists of social, cultural, political and economic

variables that have an effect on the use of drugs and the consequences of use. These factors emphasise the integration of individual biological differences, situational characteristics of activities/substances and the developmental or temporal nature of addiction (Griffiths, 2005). Interaction between these variables is understood to be the cause of substance use and treatment should consist of examining and addressing these variables as they exist in a person's life.

Which one of these models can really offer a complete etiological explanation for substance use? Disagreements are common among professional bodies as well as the general public (Mcneece & DiNitto, 2012). The moral and legal models both propose that the person is able to choose addiction and ignore biological and social influences. The sociocultural model seems to agree in that it suggests a certain amount of choice regarding addiction. That choice, however, seems to be heavily influenced by one's sociocultural system, and the model does not recognise individual biological or psychological factors. The psychological models emphasise addiction as maladaptive behaviours which can be influenced by social and cultural factors, but seem to devalue the biological causes and consequences of addiction. The medical model defines addiction as a brain disease that the person has no choice or control over. Psychological and social factors do not feature in this model and medical detox in conjunction with complete sobriety is considered the only effective form of treatment. It is noted that many models of addiction provide an inadequate explanation of addiction because it is a multifaceted form of behaviour that is sharply influenced by contextual factors (Griffiths, 2005). Not being able to discredit a model or provide a definitive answer regarding the superiority of one model over another emphasises the complex and dynamic nature of addiction and could in itself be a strong indicator that a multicausal model should be promoted.

2.4 The Dominant Model

A biologically-focused approach to science, policy and practice has been the dominant model of the American healthcare system for more than three decades (Deacon, 2013). The model adopted by society has important implications for treatment

practices (Wade & Halligan, 2004). The biomedical paradigm highlights the primary importance of uncovering the biological causes of mental disorders and emphasises pharmacological treatment which targets biological abnormalities (Deacon, 2013). Its present day dominance is most likely attributed to the historic discovery that paresis (syphilis related dementia/paralysis) is caused by bacterial microorganisms which could be treated with penicillin, this was followed by the development of electroconvulsive therapy, lobotomy and insulin coma therapy leading to the belief that mental disorders could also be cured with somatic therapies (Deacon, 2013). More than four decades ago, Engel (1977) proposed that the bio-medical model was created solely for the study of disease. He argued that it narrowly embraces both *reductionism*, in this case, the philosophical view that only physics and chemistry can explain biological phenomena, and *mind-body dualism*, the belief that mental function is separate from biological function (Engel, 1977). The implications of this argument was that the bio-medical model was limited by its assumptions and thus too narrow in its application. Drugs that were formerly classified as “major tranquilizers” because they were believed to reduce symptoms by sedating and altering brain states were subsequently re-classified as “antipsychotics”, leading to a present day view that antipsychotics specifically target and reduce psychotic symptoms (Deacon, 2013).

The biomedical model is backed by a wealth of supportive biological findings and has undoubtedly been relevant in many cases where illness could be described as disease based (Wade & Halligan, 2004), unfortunately, it ignores and devaluates anything that cannot be explained at the level of molecular and cellular process (Borrell-Carrio, Suchman, & Epstein, 2004). Engel (1977) was a proponent of this line of thought and labelled the biomedical model a cultural imperative or “dogma” which requires discrepant data to be forced to fit the model or risk being excluded. Deacon (2013) notes that modern classification of drugs make them appear to target the biological basis of mental disorders and adds that pharmaceutical companies have been a major driving force behind engineering a fundamental culture shift towards maintaining a biomedical model. Engel (1977) issued a challenge to the medical community at large, stating:

“We are now faced with the necessity and challenge to broaden the approach to disease to include the psychosocial without sacrificing the enormous advantages of the biomedical approach" (p.131).

Engel believed that integrating these two models could improve and add value to the field of medicine. Deacon (2013) however, is of the opinion that there are those who have a professional, financial or ideological interest in maintaining the biomedical model and that they might find this type of dialogue threatening. Engel argued that a comprehensive medical model must take the relative contributions of the patient’s social, psychological and biological aspects into account before practitioners would be able to accurately explain why some people experience somatic symptoms when dealing with problems related to living such as grief (Engel, 1977). Griffiths (2005) agrees with this line of reasoning and maintains that addictions should be viewed as part of a bio-psychosocial process and should not be restricted to drug-taking behaviours.

2.5 Basic Principles of a Bio-psychosocial approach

Philosophically, we can explain the biopsychosocial model as a way to understand how debilitating conditions are affected by multiple levels of organisation, from a practical perspective it provides a way to understand how the patient’s subjective experiences can contribute to accurate diagnosis and treatment (Borrell-Carrio et al., 2004).

Griffiths (2005) argued that Engel’s biopsychosocial model relates well to what is currently known as the complex systems model. From a complex systems perspective it would be possible for practitioners to consider the interaction between common and unique psychological, physiological, social and cultural factors that influence a particular individual (Griffiths, 2005). The conclusion that can be drawn from the above is that the inherent complexity of addiction necessitates a biopsychosocial or complex systems perspective. Straussner (2014) states that intervention and treatment of Substance use disorders (SUD) requires a multisystemic model that is able to address the complexities of addiction. The model controls for the many different variables that need to be addressed when providing addiction treatment. Accordingly, this theory suggests that all of the unique structures that exist in an adolescent’s life are related to different and

complex systems, they influence and are in turn influenced by each other. It is interesting to note that two evidence-based approaches found to be substantially more effective in the treatment of substance use disorders than others are Multidimensional family therapy (MDFT) and Functional family therapy (FFT) (Waldron & Turner, 2008). These approaches are based on an ecosystemic model that takes a multidimensional view regarding peers, school, the justice system and all the other sub-systems within which adolescents interact (Straussner, 2014).

"The study of drug dependence and addiction is truly multi-disciplinary, with a span from molecular and cellular biology to psychiatry and sociology" (Altman et al. 1996, p.285). The multivariate approach of the bio-psychosocial theory has provided a new understanding of substance abuse that directs the practitioner towards a different set of questions regarding its nature (Alcohol & Drug Services, 1996). "At the heart of the bio-psychosocial model is the premise that physical health and well-being are shaped by the interactions between biological, psychological, and social factors" (Suls & Rothman, 2004, p.121). The Association of American Medical Colleges have since recommended that colleges ensure students have sufficient knowledge of the non-biological causes of poor health before graduating (AAMC-Association of American Medical Colleges, 1998). Straussner (2014) supports this recommendation stating, "It may be best to view substance abuse as a dynamic, multivariate syndrome, in which multiple patterns of dysfunctional substance use occur in various types of people, or within the same person at different times in his or her life, with multiple prognoses requiring a variety of appropriate interventions" (p.14). Accordingly, it has been recognised that the implementation of a bio-psychosocial perspective holds many advantages for the treatment of addiction (Alcohol & Drug Services, 1996). A report by the Alcohol and Drug Services of British Columbia Ministry for Children and Families (1996) highlights the following hypothesised considerations:

- The model has a conceptual framework which allows attention to be focused on all problems related to substance abuse.
- The model is amenable to empirical scrutiny.

- The model allows for the preservation of appealing, intuitive concepts of older or lesser known theories.
- The model unifies and retains the value of the biological, psychological and social theories of addiction.
- The model's theories on substance abuse is congruent with modern theories of health and education.

This studies literature review uncovered a wealth of textbooks, articles, reviews and commentaries regarding the integration of a bio-psychosocial model to various different medical fields (Borrell-Carrio et al., 2004; Engel, 1989; Griffiths, 2005; Linnet, 2005; Marlatt et al., 1988; Morgan, 2009; Pasche, Kleintjes, Wilson, Stein, & Myers, 2015; Shaffer et al., 2004; Winters, 1999). Some have made strong cases for the inclusion of a 4th component (spirituality) and refer to a 'bio-psychosocialspiritual' model (Alcohol & Drug Services, 1996). Even though the authors recognise the value of the model and make valid comments regarding its implementation to medical practice, they all refer to the model in a very general or basic way (i.e., It's three or four different components). Currently, "this theory is still mostly a set of working hypotheses requiring further testing and verification" (Alcohol & Drug Services, 1996, p.7). What seems to be lacking in this regard is a well-defined description of each component as part of a valid and reliable model with its own distinct structure and nomenclature. Further efforts in this regard seems to be necessary in order to establish the model as a viable alternative to the medical model.

2.6 An Introduction to Childhood Development

Berk (2013) lists *physical development*, *cognitive development* and *emotional & social development* as the three main domains of childhood development (p.4-5). These domains of development are interrelated and dependent on each other (Berk, 2013). Development in one domain is usually influenced or caused by development within another domain, different age periods lead to the development of new capacities and are seen as significant transitions in major theories of development (Berk, 2013).

Additionally, bio-psychosocial changes that are characteristic of adolescent development plays a critical role in the onset of health problems (Williams, Holmbeck, & Greenley, 2002). It therefore becomes important to understand the different stages of childhood development as it may impact on the acquisition and maintenance and treatment of adolescent substance use disorder. The following periods of development as identified by Berk (2013, p.5-6), provides a logical way for the reader to understand the three domains of development according to the process of aging:

- The prenatal period: From conception to birth (9 months).
- Infancy and toddlerhood: From birth to 2 years.
- Early childhood: From 2 to 6 years old.
- Middle childhood: from 6 to 11 years.
- Adolescence: From 11 to 18 years.

The current study focussed on what scholars have characterised as the adolescent period of childhood development as patients admitted to the treatment centre are typically between the ages of 12 and 17.

2.6.1 Theories of Childhood Development

The preceding section delineated the different stages of childhood development and highlights the interdependence of the complex biological, psychological and social changes that typically take place as children develop. A brief historic overview of the different theories of childhood development is provided next. The researcher placed an emphasis on Bronfenbrenner's bio-ecological theory of development as it was found to theoretically compliment a bio-psychosocial perspective to adolescent addiction treatment.

Many theorists have proposed their own theories on how children acquire new skills and reach developmental milestones as part of the aging process. Pioneers in the tradition of childhood development such as Locke, Darwin, Hall, and Baldwin are viewed as forerunners in defining the nature of childhood development. Locke's claim that the child at birth is a "tabula rasa" or blank slate on which life experiences create the mind,

started the debate around nature versus nurture (Blackman, 2002). Are humans born with innate characteristics or are our characteristics shaped by the environment? Freud's psychosexual theory of development followed, which in turn was challenged by Erickson' psychosocial stages of development. According to Berk (2013) their psychoanalytic views emphasised a stage like development in which children have to confront and resolve conflicts between biological drives and social expectations before moving to a next stage. Skinner's behaviourist approach to childhood development maintained that all behaviours are developed as a consequence of past learning experiences or conditioning (Blackman, 2002). Bandura's social learning theory followed and emphasised 'modelling' and observational learning as a key factor in development (Berk, 2013). Piaget went on to develop his influential stages of cognitive development theory which states that children move through four distinct developmental stages while actively revising knowledge as they manipulate and explore their world (Berk, 2013).

More recent theoretical perspectives include Vygotsky's sociocultural theory which emphasises the role of how culture transmits and shapes knowledge (Bruner, 1997) and Bronfenbrenner's Ecological Systems theory which views the child as developing through continuous interaction within complex relationships and multiple levels of their social environment (Berk, 2013).

Bronfenbrenner's theory has specific relevance to the current study as it illustrates the effects of complex interactions between the adolescent and its environment. Even though, Bronfenbrenner's theory specifically refers to how different ecological systems influence a child's development it may also be provide a useful way of understanding the acquisition and maintenance of adolescent substance use disorder.

In conclusion, even though there are various different theories regarding childhood development, Ecological Systems theory is currently believed by many to be at the forefront of the field and offers the most discerning and comprehensive account of contextual influences on a child's development (Berk, 2013). Additionally, Von Bertalanffy (1975) notes that a bio-psychosocial framework embraces systems theory (cited in Borrell-Carrio, Suchman, & Epstein, 2004).

The ecosystemic approach requires that one remains cognisant of how different aspects of an adolescent's environment interact to create and maintain health and

pathology. Accordingly, this study recognises systems theory as complimentary to its bio-psychosocial stance regarding the effective treatment of adolescent substance use disorder. A detailed description of this model will be provided in Chapter Three and subsequently linked to the nine elements of effective addiction treatment.

To employ Bronfenbrenner's model to research findings one has to carefully examine the interdependent roles of developing individuals, preferably over time and within the specific context of their existence (Tudge, Mokrova, Hatfield, & Karnik, 2009). Data collection did not specifically focus on acquiring this type of information and the resulting data does not fall within these parameters. Due to the fact that childhood development will not be studied directly the researcher does not explicitly employ Bronfenbrenner's Bioecological theory of development as a conceptual framework. The framework is used supplementally as a way to show the reader that both the individuals themselves and the context they live in are influential in human development and will thus have implications for the acquisition of adolescent substance use disorder and the effective treatment thereof.

2.6.2 Bronfenbrenner's Bio-ecological Systems theory.

Bronfenbrenner's theory of human development is a theory that has undergone many evolutionary changes since its original inception (Tudge et al., 2009). The model is currently called the Bioecological model, this subtle change indicates a progression towards a model which not only recognises the environmental forces at work but also the biological dispositions and processes that influence the child's development (Bronfenbrenner & Morris, 2006). Ecological systems theory is interested in explaining the child's development within a complex system of relationships affected by various levels of the individual's environment (Berk, 2013). Berk (2013) explains that Bronfenbrenner envisioned the environment as a series of nested structures which surround the child and together form a complex system, each layer of the environment joins with the others to ultimately direct and affect development. The following is a description of the four primary nested structures and the temporal structure of time that influence child development as discussed in Berk (2013):

The *Microsystem* is the inner layer of these nested structures and represent the relationships a child has within its immediate surroundings (e.g., immediate family, child care or school, neighbourhood play areas).

The *Mesosystem* is the second layer and represents the relationships or connections between the structures in the previously mentioned microsystem (e.g., the relationship between the child's teacher and parents).

The *Exosystem* is the third layer and defines the larger social system that does not influence the child directly. It affects the child's development by influencing the structures in the child's microsystem (e.g., parents busy work schedule or lack of employment can have negative effects on development).

The *Macrosystem* is the outermost layer in the child's environment. These are the values, customs resources and laws that affect interaction in all the other layers (e.g., Children are less likely to experiment with alcohol if societal laws impose harsh penalties for underage use).

The *Chronosystem* is not a specific context. It refers to the changing nature of the child's environment over time. Life changes can either be imposed on the child or they can arise from within the child.

Bronfenbrenner & Morris (2006) maintain that the model has gradually shifted its focus from the individual's *environment* as a primary influence on development to that of "*proximal processes" (p.794)*. They clarify proximal processes as how the environment is subjectively experienced by the person and propose that these processes be operationalised in the form of the "Process-Person-Context-Time (PPCT) model" (Bronfenbrenner & Morris, 2006, p.796-799). Tudge et al. (2009) maintains that the theory in its current, fully developed form, deals with interaction between the four PPCT concepts and this interaction has become the essence of the theory.

The bioecological model provides a promising avenue for the conceptualisation of future research endeavours. It could be employed to investigate the developmental origins of adolescent substance addiction and therefore inform the development of evidence-based treatment programs. Furthermore, its holistic approach provides insight with regard to the individual needs of each adolescent which implies that knowledge regarding the developmental sciences could be of invaluable assistance to practitioners who are working towards improving addiction treatment outcomes from a bio-psychosocial perspective.

2.7 Defining Adolescence

Dahl (2004) defines adolescents as “that awkward period between sexual maturation and the attainment of adult roles and responsibilities”, implying that it begins in the domain of physical changes at its onset and ends in the domain of social context (Dahl, 2004, p.9). Adolescence is an important developmental period in which young adults become more independent, strengthen relationships with peers and envision their future career goals (Burrow-Sanchez, 2006). Berk (2013) concurs, stating that it is a time in which a person’s thoughts become abstract and idealistic, when young people establish autonomy from family and define their personal values and goals before transitioning to adulthood. Some, however, develop problems with substances that substantially affect their development (Burrow-Sanchez, 2006). Substance abuse thus negates the adolescent’s ability to develop these skills and to fulfil adult roles. Berk (2013) contributes to this line of thought and adds that these individuals often enter into marriage, childbearing and the work world prematurely, they fail at these roles and suffer painful outcomes that could promote addictive behaviour.

Additionally, serious health risks associated with substance use compounds the need to admit drug abusing teenagers into treatment as quickly as possible (Volkow, 2014).Trajectories are set during adolescents that impact later life, and it would be reasonable to assume that changing these trajectories in a positive way preceding adulthood can have a larger scale effect than similar interventions applied at a later stage of life (Dahl, 2004). Adolescence can thus be described as a moment of opportunity within

the different stages of human development in which addiction treatment can be most effective.

The effectiveness of adolescent addiction treatment has been chosen as the main focus area of this research project, therefore it becomes crucial to understand normal development during adolescence. Sadock & Sadock (2007) differentiate between “early adolescence (12-14 years), middle adolescence (14-16 years) and late adolescence (17-19 years)” (p.36-38). They define the ‘normal’ progression of adolescent development throughout these stages as the degree to which an individual adapts psychologically while reaching milestones characterised by this stage of development (Sadock & Sadock, 2007). Adolescent chemical addiction may impede the adolescent’s ability to complete these crucial developmental tasks (Van Der Westhuizen & De Jager, 2009). The research site where the current study was conducted caters for adolescents between the ages of 14 and 17 years, clients are thus located within the middle to late stages of adolescence.

2.7.1 Neurobiology of Adolescent Addiction

Preliminary observations made by participants (in preparation for data collection) was that many of the adolescents treated at the centre acquired substance use disorder as a result of peer pressure.

Because a teenagers brain is seen as still developing and malleable (a phenomenon known as “neuroplasticity”), adolescence is regarded as a critical window of vulnerability regarding the development of substance use disorders (Volkow, 2014). The parts of the human brain that process feelings of reward and pain are first to develop and seems to be a major driver of drug use (Volkow, 2014).

Hitzeroth & Kramer (2010) state that a very early brain structure called the dopaminergic mesolimbic pathway has in particular been associated with pleasure, reward and motivation. It starts in the ventral tegmental area (VTA) of the brain stem and projects to the nucleus accumbens, stimulating this pathway by doing something enjoyable releases a neurotransmitter called dopamine in the nucleus accumbens which causes a pleasurable sensation (Hitzeroth & Kramer 2010). The ‘high’ produced by taking drugs hijacks this process and floods the ‘pleasure pathway’ with more dopamine than normal activities ever could and creates a drive to repeat the experience (Volkow, 2014).

The brain develops up to the age of 25, from the rear toward the decision-making frontal cortex (Straussner, 2014). The prefrontal cortex has been associate with attention, inhibition of impulses, and integration of information, memory, reasoning, planning and problem solving (Berk, 2013). The prefrontal cortex remains incompletely developed during adolescence, making it difficult for teenagers to assess situations, control impulses and make sound decisions (Volkow, 2014).

In light of the above description it can be surmised that the adolescent brain has not had sufficient time to develop the ability to make sound judgements regarding the risks that might be involved in certain pleasure seeking activities, making it very difficult to “say no” to drugs.

Practitioners need to be aware of this as it may have implications for treatment and relapse prevention. Furthermore, Volkow (2004) states that substance use disorders during adolescence can interfere with normal brain maturation leading to lifelong consequences that might not be reversible even if usage is halted during adulthood.

2.7.2 Co-occurring Disorders

The clinical picture is further complicated by the presence of various comorbid psychological disorders. Drug abuse and addiction has been connected to a wide variety of psychological disorders and may in some cases mimic psychopathological behaviours (Mash & Wolfe, 2005). Treatment of co-occurring mental health and substance use disorders is much more complicated compared to treatment of patients with only one disorder (Mcneece & DiNitto, 2012). Prior to data collection, centre management informed the researcher that the centre made use of a sessional psychiatrist to address the pharmacological aspects of these disorders and did not employ one as a permanent member of the MDT. Drug use in adolescents frequently overlap with mood, anxiety, learning or behavioural disorders which makes diagnosing mental health problems more difficult (Volkow, 2014). These disorders are detrimental to maintaining sobriety. It is difficult to determine whether these disorders maintain addiction or whether the disorders are somehow substance induced.

The most frequently cited explanations for co-occurring substance use and psychopathology include that of causality based on a temporal relationship, self-medication (where attempts are made to alleviate the symptoms of mental illness by using substances), the existence of risk factors for either substance use or the psychiatric illness, or those factors may mediate or moderate the association between co-occurring or comorbid substance use and psychopathology (Degenhart, Hall & Lynskey 2001). Volkow (2014) agrees, stating that in some cases teenagers may start taking drugs to deal with pre-existing mental health problems, in other cases the frequent use of drugs could be viewed as a precipitating factor in the development of various mental disorders. Straussner (2014) states that there has been an increase in studies examining the role of comorbidity in the formation and maintenance of substance use disorders among all age groups with a specific focus on adolescents. Volkow (2014) recommends that adolescents who abuse drugs should be screened for co-occurring mental disorders and that treatment for these problems should be integrated with addiction treatment. Additionally, Straussner (2014) warns that practitioners should be aware of the adolescent's current usage, its influence on psychopathology and that medication should only be prescribed once the toxic effects of drugs are no longer present. Comorbidity of different disorders were significantly more prevalent among women than men (World Health Organisation, 2002), a finding that suggests practitioners need to be especially aware of the different treatment needs as they relate to the different genders.

2.7.3 Gender Differences

A report by the World Health Organisation (WHO, 2002) states that depression and anxiety is more commonly found in girls while substance use disorders and antisocial behaviour is more prevalent in boys.

Adolescent girls typically experience symptoms inwardly as opposed to boys who display symptoms by acting out (WHO, 2002). Thus, as opposed to girls, boys use drugs in different ways and for different reasons (Straussner, 2013).

The research site where this study was conducted alternate between all female or all male intakes. Therefore, the MDT's understanding of the gender differences regarding

the methods of use and reasons for use could be an important factor when matching adolescents to treatment.

In a study conducted by (Grucza, Norberg, & Bierut, 2009) it was found that the risk for binge drinking among girls and young women in the United states were rising. Straussner (2014) states that traumatic experiences seems to be a particularly common among women who misuse substances. Sexual violence is more commonly experienced by girls than boys (WHO, 2002) and general population research confirms that women are twice as likely to experience PTSD as a co-occurring disorder (Straussner, 2014).

Practitioners need to be sensitive to the possibility of a history of sexual violence among girls and the role it has to play in substance use and treatment. Additionally, gender related variations between PTSD and substance use disorders can help explain how traumatic experiences serve as forerunners of substance use disorders (SUD's) (Straussner, 2014).

Mcneece & DiNitto (2012) add that even though women use less alcohol than men they are generally more stigmatised for having a substance use disorder. It is thus emphasised by (Covington, 2008) that in order to be holistic and gender sensitive, addiction services should be able to address substance abuse, trauma and mental health through comprehensive, integrated and culturally relevant methods.

2.7.4 Cultural Differences

South Africa is a multi-cultural country. Adolescent addiction treatment should therefore be sensitive to the different values, beliefs and practices of these different cultures. "Ethnicity and culture have important influences on social systems, including individuals and groups attitudes and behaviours with respect to alcohol and drug use" (Mcneece & DiNitto, 2012, p.285). McMurran (2005) states that there are differences across cultural groups that vary over time in response to their laws and attitudes regarding drinking and drug use. Mcneece & DiNitto (2012) concur and state that sociocultural differences have been found to account for differences in drinking patterns between different European cultures.

In a study conducted to examine predictors of alcohol abuse among American Indian adolescents (Yu & Stiffman, 2007) found that family member substance problems

and participation in generic cultural activities positively predicted alcohol symptoms while cultural pride and spirituality predicted fewer alcohol symptoms. Depending on individual's context, culture can thus be seen as either a risk factor or a protective factor related to substance abuse. Mcneece & DiNitto (2012) claim that discrimination has been linked to substance abuse problems, and that minorities experience more severe health and social consequences, even though their patterns of use might be similar to that of the majority population. (Volkow, 2014) has urged treatment providers to be sensitive of the unique social and environmental features that may influence drug abuse and treatment for racial and ethnic minority adolescents with regard to stigma, discrimination and a lack of community resources.

2.7.5 Role of Peers and Role-models

It was mentioned earlier in this chapter that members of the MDT felt that peer pressure has a major role to play in the development and maintenance of adolescent substance use disorder. Straussner (2014) agrees stating that "peer influence has a well-documented impact on adolescents' behaviour and has been indicated as a strong predictor of current drug use" (p.402).

Adolescents may use drugs as a way of gaining acceptance or social status amongst peers (Winters, 1999). According to Nash McQueen & Bray (2005), a positive family atmosphere was associated with better self-efficacy for declining alcohol, a reduction of the effect of undesirable peer influence, and a lesser frequency of alcohol use and associated difficulties.

2.7.6 The Role of the Family

Violence, physical or emotional abuse, mental illness, or drug use in the home may increase the odds that adolescents start using drugs (Volkow, 2014). Conversely, families who are involved with and forge trusting bonds with adolescents usually serve as a form of protection against drug abuse (Mcneece & DiNitto, 2012).

Family involvement is usually encouraged in all phases of treatment because of the possible role it played in creating the problem and its ability to act as an agent of change in the adolescents environment (Winters, 1999). Straussner (2014) states that

behaviour change in one of the members, such as using substances, being imprisoned, or maintaining sobriety, has an effect on individual family members, along with the family in its entirety.

Mcneece & DiNitto (2012) list several types of evidence based family therapies that could be implemented for treatment of adolescents with SUD's but recommend that practitioners holistically consider the needs of the adolescent and family to help identify the most appropriate type of treatment. Additionally, Straussner (2014) states that family therapy is more complex than individual therapy and should be conducted by practitioners who have specific training and a high level of skill. Treatment facilities should therefore ensure that practicing staff members are suitably qualified and that they undergo continuous training.

Consequently, adolescent addiction treatment is seen as a very complex field. From a systemic perspective we could say that the adolescent's current situation or the "status quo" is being maintained by the interaction of the various systems, subsystems and contextual factors which constitute the adolescents existence.

Developmentally speaking, substance use can irrevocably impede the adolescent's ability to attain his or her adult status, both intervention and treatment require a multisystemic model that can be used to provide integrative and seamless treatment within a variety of modalities (Straussner, 2014). The conclusion to be drawn from the abovementioned discussion is that the multi-disciplinary team is working with a particularly vulnerable group of individuals who are going through a very important transitional period in their lives. Utmost care should be taken to address their addictive behaviour from an evidence based systemic perspective, while also remaining cognisant of adolescent specific developmental trajectories and their unique biopsychosocial needs. The following section attempts to provide the reader with an overview of addiction treatment.

2.8 Introduction to Addiction Treatment

Meyer (2005) states that the treatment of addiction should be provided in three stages, namely "*detox, treatment programs and continuing aftercare"* (p292-293). Michie,

Fixen, Grimshaw & Eccles, (2009) further state that in order to provide benefits to future populations, to accumulate evidence of their effectiveness and to enable accurate replication, terminology should be consistent across interventions and their functional components must be known and described. Some of the most widely used forms of addiction treatment as well as a summary of their functional components will be described next.

2.8.1 Treatment Approaches

"An important task for clinicians is to determine appropriate forms of treatment for clients with substance use problems" (Straussner, 2014, p.22). This research project was conducted at a facility that offers intensive treatment services from within an inpatient setting. According to Mcneece & DiNitto (2012) there are nine different components ascribed to a biopsychosocial continuum of care for addiction treatment. They refer to *detoxification, intensive treatment, residential programs, outpatient services, medication, aftercare, maintenance, education and psychoeducation,* and *adjunct services* (Mcneece & DiNitto, 2012, p.121). A general description of each component is provided next.

Detoxification is the first step in treatment and can be done in many different ways and in many different settings. Patients who are physically addicted to substances go through an unpleasant and dangerous withdrawal process once they discontinue drug use (Straussner, 2014). Detoxification is a process in which the patient undergoes a medically supervised drug or alcohol withdrawal that makes the process of withdrawal less harmful and more bearable (Hitzeroth & Kramer, 2010).

Rehabilitation generally happens after detox and takes place at treatment facilities on an inpatient or outpatient basis (Hitzeroth & Kramer, 2010). Intensive treatment used to be exclusively provided at inpatient facilities but is now also offered at outpatient facilities (Mcneece & DiNitto, 2012). In patient and residential treatment facilities offer substance abusers a place away from their daily drug using routine which initially helps them maintain a drug-free life (Straussner, 2014). The aim of rehabilitation is to facilitate long term abstinence by providing assistance with medical, mental health, occupational and family functioning issues (Hitzeroth & Kramer, 2010). Mcneece & DiNitto (2012) state that because of high costs and health insurer requirements, these programs don't ever

run for much longer than 28-30 days. Intensive in-patient treatment may be a logical option for an individual who cannot maintain sobriety in his or her current environment (Mcneece & DiNitto, 2012). Outpatient treatment usually entails living at home and maintaining a work and family life while attending regular outpatient meetings with appropriately qualified health care practitioners (Hitzeroth & Kramer, 2010). A typical outpatient program may include up to five meetings a week and can last 10-12 weeks (Mcneece & DiNitto, 2012).

"Medications can help diminish the cravings for drugs and assist clients in re-establishing normal brain functioning" (Straussner, 2014, .p24). Mcneece & DiNitto (2012) add that there is no one medication that can cure addiction but there are some that can help people maintain sobriety, allowing them to engage in treatment programs more successfully.

Hitzeroth & Kramer (2010) state that patients should attend regular meetings with healthcare professionals or group meetings with mutual help programs such as the AA or NA once they have been discharged from treatment facilities. "The objectives of the new Prevention of and Treatment for Substance Abuse Act, No. 70 of 2008, highlight the point that chemically addicted persons should have access to professional after-care services to ensure that treatment is not terminated prematurely" (Van der Westhuizen, Alpaslan & De Jager, 2011, p.350). Aftercare provides patients with an opportunity to monitor their progress and to address further problems related to maintaining sobriety after treatment (Mcneece & DiNitto, 2012). The seventh component of the treatment continuum is related to aftercare. It involves the lifelong commitment to attend mutual help groups and to consistently practice the relapse prevention techniques learned during rehabilitation (Mcneece & DiNitto, 2012).

Straussner (2014) states that psycho-education is an essential component of treatment that allows the individual to develop emotional regulation and coping skills that are necessary for daily living without substance use. Psycho-education may include provision of information during treatment regarding the physiological effects of drugs and the effect it has on the individual's family or social circle (Mcneece & DiNitto, 2012). Relationship challenges, depression, self-care, self-soothing and self-expression are also

considered valuable educational topics to prescribe for this type of treatment (Straussner, 2014).

The final component speaks directly to the biopsychosocial and systemic aspects of treatment. Adjunctive services run in parallel to addiction treatment and considers other areas of dysfunction in the addicted individual's life. Mcneece & DiNitto (2012) state that these services include assistance with employment, legal, family, health and other problems related to living. "If service professionals are to continue to support a systems, multidimensional or biopsychosocial view of substance abuse treatment, it is necessary to demonstrate that addressing problems in addition to the substance abuse or dependence promotes better outcomes for clients" (Mcneece & DiNitto, 2012, p.152).

2.8.2 The Cycle of Change

"How people intentionally change addictive behaviours with and without treatment is not well understood by behavioural scientists." (Prochaska, Diclemente, & Norcross, 1993, p.1102). A model of particular interest to practitioners treating substance abuse is called the "model of change". The model has its roots in the study of human behaviour and recognises that recovery is not a once of, all or nothing decision (Hitzeroth & Kramer, 2010). The model is comprehensively based on empirical evidence and attempts to predict the typical stages that addicted individuals have to navigate on their journey towards recovery (Straussner, 2014). *Precontemplation* is the first stage followed by *contemplation*, *preparation*, *action* and finally *maintenance*. The model has been labelled as 'transtheoretical' because it is believed to be compatible with a wide range of treatments (Mcneece & DiNitto, 2012)

The model assumes that therapy will differ from client to client based upon the clients particular history, environment and personality (Prochaska & Di Clemente, 1982). The model can be illustrated as a circular cycle or spiral consisting of five stages, people have to move from one stage to the next in order to achieve the intended change in behaviour (Hitzeroth & Kramer, 2010). The following are brief descriptions of the five stages as identified by (Prochaska et al., 1993):

- **Precontemplation:** The individual has no intention of changing behaviour and is unaware that a problem exists. Friends, neighbours, spouses, employers or the criminal justice system are usually aware of a problem and may influence the individual to seek treatment.
- **Contemplation:** In this stage the individual has become aware of the existence of a problem and intends to change the problem behaviour. The individual has however, not yet made a commitment to take action and is in the process of weighing pros and cons regarding the problem versus the solution. Individuals may remain stuck in this stage for extended periods of time.
- **Preparation:** This stage presents with a combination of intention and behavioural criteria. The individual intends to change behaviour within a month's time and has started to make small changes like reducing the target behaviour.
- **Action:** This stage is reached once the individual has managed to successfully change the target behaviour for a period of at least one day to six months. A particular criteria for this stage is the total cessation of the target behaviour and not just a modification thereof. The action stage should not be mistakenly viewed as permanent change because the action needs to be maintained.
- **Maintenance:** Being able to remain free of the target behaviour for at least six months is a hallmark of the maintenance phase. Maintenance could last a lifetime during which Individuals have to work to remain free of the addictive behaviour.

Relapse and subsequent recycling through these stages occur frequently until the target behaviour has permanently changed or ceased (Prochaska et al., 1993). Simply put, many individuals relapse and have to repeat the cycle. Relapse can be considered a normal or even expected part of the outcome and should be viewed as a learning opportunity that can inform the process of change once the cycle has been re-entered (Hitzeroth & Kramer, 2010). It is also important to maintain a warm, non-judgmental therapeutic relationship after relapse in order to create the necessary environment for the cycle of change to start again (Hitzeroth & Kramer, 2010). Optimal treatment can be achieved by being prepared to begin treatment before the client is ready to change (Straussner, 2014). This type of approach could tip the scales towards determination and

ultimately action (Hitzeroth & Kramer, 2010). Different stages of change should include different treatment methods and approaches (Hitzeroth & Kramer, 2010). Practitioners should thus avoid missing critical opportunities to aid affected individuals by matching therapy to the individual's stages of change (Straussner, 2014).

2.9 Conclusion

The application of substance addiction treatment for adolescents remains a complex field of study. In an effort to address this situation, many conflicting and overlapping perspectives have been promulgated. There has however been much progress in the field.

One such area of progress has been what seems to be a widespread recognition and acceptance of the fact that adolescents have their own unique needs with regard to treatment. Ecosystemic theory also known as 'cybernetics' has led to various forms of family systems therapies, some of which remain the most researched and successful forms of addiction treatment to date. Evidence of the multicausal nature of addiction has emphasised the importance of the biopsychosocial model of treatment as complimentary to addiction treatment. McGeorge (1989) states that working with the individual and family system necessitates the use of chemical dependency knowledge as it relates to components of the biopsychosocial model (McGeorge, 1989).

The following chapter will review treatment program efficacy as well as the development, application and components of the ecosystemic perspective. The nine essential elements of successful addiction treatment will be considered as constructs of this modality.

Chapter Three:
Ecosystemic Theories and the Elements of Addiction Treatment Efficacy

3.1 Introduction

It has been alluded to in the previous chapter that there are various different ecosystems in which we interact with others within our immediate environment. They form separate systems that overlap and interact with each other. Change in one system will affect change in another system. These small changes ultimately affect our behaviour. Bronfenbrenner has characterised human existence as consisting of a variety of these nested structures, more specifically, he explained how their interactions influence early childhood development.

Adolescents are still developing as they move towards adulthood. For this reason, an understanding of how these systems interact is crucial to understanding the causes and maintenance of addictive behaviours during adolescence. Extensive research has been done to determine how treatment can influence these systems in order to improve addiction treatment outcomes.

Determining treatment program efficacy is an uncertain and complex endeavour, comparative reviews of treatment outcomes have traditionally been employed to gauge the relative efficacy of treatment programs. Based on these findings and in an effort to improve treatment outcomes at these facilities, practitioners have since developed a range of evidence-based treatment modalities based upon systems theory or “cybernetics”. More recent efforts towards improving treatment outcomes have emphasised program characteristics and the identification of specific elements that all treatment programs need to have in place to ensure effective, generalizable and holistic treatment. It is the latter type of measure with which this study is primarily concerned.

This chapter will begin with an introduction to treatment efficacy. This is followed by a general description of systems theory as it relates the family’s role in the development of adolescent substance use disorder and the effective treatment thereof. An overview of the literature concerning the effectiveness of addiction treatment programs is provided after which the elements of effective addiction treatment programs are discussed.

The chapter concludes with a rationale for the use of the nine elements as a standardised framework for adolescent treatment program implementation in the South African context.

3.2 Addiction Treatment Efficacy

"Quality is defined as the degree of excellence that an entity possesses; thus program quality refers to the manner in which and degree to which a treatment program helps its participants" (Magura, 2000, p.1618). Furthermore, These assessments of program quality are influenced by the interests and perspectives of various stakeholders (Magura, 2000). In other words, there are many different perspectives on what constitutes effective treatment and stakeholders are mostly interested in outcomes that promote their individual needs. This lack of consensus becomes problematic when discussing treatment program efficacy and could be one of the main reasons why it is so difficult to compare one treatment program or model with another.

Magura (2000) states that results from studies that gauge the effectiveness of treatment programs are often viewed as inaccurate by those who work from different theoretical perspectives, he refers to this phenomenon as "talking past each other" (p.1619). Morell, Hilscher, Magura, & Ford (2010) state that these programs need to conform to high levels of coordination in order to produce effective outcomes. People form part of multi-level environments [social, cultural, economic and legal] that nest and overlap with entities such as schools, governments and companies (Morell et al., 2010). We typically attempt to monitor treatment programs in order "to provide valid information about a program's merit to interested parties" (Morell et al., 2010, p.50). Simply put, it becomes increasingly important to do so when one is trying to determine whether adolescent addiction treatment actually works (Drug Strategies, 2003).

3.3 Evidence Based Practice

"Evidence based practice" (EBP) becomes relevant for discussion when addressing the efficacy of addiction treatment. Mosby's Medical Dictionary (2005, as cited in Morell et al., 2010) states that EBP can be defined as "the practice of health care in which the practitioner systematically finds, appraises, and uses the most current and valid

research findings as the basis for clinical decisions" (p.41). Additionally, EBP can considered as "practices, interventions or programmes for which there is a large body of research evidence in support of its effectiveness" (Myers, Harker, Fakier, Kader, & Mazok, 2008, p.5). Prendergast & Podus notes that evidence based medicine is considered by some as the principal measure of treatment quality (as cited in Magura, 2000). "One unified response from both researchers and policy makers has been to urge programs to increase the number of 'evidence-based practices' they provide during treatment" (Cacciola et al., 2015, p.2).

It is generally accepted that the most relevant benchmark for treatment effectiveness is a noticeable decrease or total cessation of substance use during and after treatment (Magura et al., 2002). However, despite the existence of evidence that confirms positive outcomes for a variety of treatment modalities, there are still considerable variations with regard to treatment outcomes among different programs, even for those that operate within similar modalities (Prendergast, Podus, & Chang, 2000).

The systemic perspective can be viewed as a meta-theory that can be applied to multiple fields of study, including addiction treatment. Some of the most effective forms of evidence-based treatments for adolescent substance abuse such as multidimensional family therapy and functional family therapy are based on a systemic approach (Waldron & Turner, 2008). Furthermore, "complex systems science has been promoted as a significant theoretical advance in a range of fields related to the evidence-based practice domain " (Morell et al., 2010, p.38).

It has been surmised that the implementation of EBP does work but that its adoption into main stream practice has been problematic (Morell et al., 2010). It has been found that common perceptions among practitioners regarding the quality of addiction treatment still does not align with the evidence-based approach (Magura, 2000). Magura (2000) states that the continued use of more traditional forms of treatment may be caused by limited and inconsistent studies related to alternative models that are current and valid. There are also those who are under the impression that controlled clinical trials are irrelevant to real world populations and clinical settings (Magura, 2000). Magura (2000) argues that there is a pattern…researchers continue to be funded regardless of whether

their findings can be generalised or usefully applied in real clinical settings and clinicians continue to be funded regardless of the outcomes they achieve or the “quality-associated criteria” they ascribe to (p.1619). Accordingly, it would be prudent for stakeholders and treatment facilities to lobby for evidence-based approaches to treatment. Most notably, “organisations such as NIDA, NIAAA and CSAT have all initiated efforts to increase the number of evidence based programs provided within community programs; again suggesting these are a direct measure of treatment quality” (Cacciola et al., 2015, P.4). The Iowa Consortium for substance abuse research and evaluation, (2003, as cited in Myers et al., 2008) identify the following criteria that enable practitioners to determine whether treatment can be considered evidence based:

- A minimum of one clinical trial should demonstrate a programs treatment efficacy.
- A program has demonstrated efficacy in different studies, using different populations.
- The program is capable of changing behaviours that relate to positive treatment outcomes.
- Practice is based on clear and recognised behavioural theories.
- Programs and interventions can be evaluated.
- Programs address cultural diversity and can be adapted for different populations.

If one considers the negative biological, psychological and social impact of substance addiction on adolescent development, it becomes a moral imperative to introduce a set of evidence based guiding elements to program implementation in South Africa. A universal set of guidelines would be easily generalizable between programs and treatment outcomes may improve as a result. Unfortunately, treatment program implementation has traditionally been based on a linear model which simplifies an inherently complex problem by focusing only on the patient’s symptoms. This type of view negates our ability to analyse, explain and predict the way complex systems behave (Morell et al., 2010). For this reason we find that it is difficult to determine why some programs have better treatment outcomes than others even though they employ the same treatment modality.

It has become apparent in this studies literature review that in order to address the problem of substance abuse holistically, the MDT need to follow a bio-psychosocial approach. Additionally, it has been found that the implementation of EBP leads to improved treatment outcomes. Furthermore, Morell et al (2010) state that there is a need to view existing theories of effective program implementation from a complex adaptive systems perspective. Complexity science suggests that most problems result from complex, dynamic and unique interactions between components of a system (Wilson, Holt, & Greenhalgh, 2001). It has been noted in Chapter 2 that the bio-psychosocial perspective aligns with this view. Similarly, it promotes a holistic perspective that acknowledges the different components of a person's life and accepts that all of these components need to be addressed during treatment.

"Increasingly, there is recognition that programs develop and evolve over time, and that multiple system influences affect change along multiple interacting lines of causality" (Morell et al., 2010, p.33). In other words, systems are always adapting because they affect each other in multiple ways. Furthermore, researchers have recognised that multicausality and the interrelatedness between a person and the environment gives rise to the inherent complexity of a system (Moos, 1997). Bronfenbrenner's bio-ecological model of development supports this perspective and explains the relevance of ecosystemic interaction during childhood development (Berk, 2013).

Even though the systemic perspective offers a promising avenue for improving treatment outcomes, it remains a very complex field and requires that clinicians consistently monitor treatment program features that may influence the adolescent's family and social systems. Ecosystemic theory incorporates all the elements of a bio-psychosocial perspective to addiction treatment and may also be used to identify and address problems within the treatment environment. The MDT also exist within what can be termed an ecological system and staff may benefit from an understanding of how systems interact within the treatment program. The following section provides an introduction to ecosystemic theory as it applies to addiction treatment and program implementation.

3.4 An Introduction to Systems Theory

Systems theory had its origins in physics and has been described as a “theory of machines” or cybernetics (Ashby, 1961, p.1). In accordance with complexity science, “Human beings can be viewed as composed of and operating within multiple interacting and self-adjusting systems (including bio-chemical, cellular, physiological, psychological, and social systems)” (Wilson., Holt & Greehalgh, 2001, p.685). It therefore becomes apparent that a very clear connection exists between systems theory, the multicausal model of addiction and a bio-psychosocial perspective to adolescent addiction treatment.

Becvar & Becvar (2009) state that many theorists adopted systems theory because of its ability to describe human interaction, they “fleshed out its bones with concepts drawn from a variety of sources, including individual psychology, anthropology, biology, cybernetics and communications theory” (p.11). The reason for this, is that “the science of complex adaptive systems provides important concepts and tools for responding to the challenges of health care in the 21st century” (Plsek & Greenhalgh, 2001, p.625). All of the various applications of systems theory can thus be described as falling under the “umbrella” of complexity science.

Umpleby & Dent (1999) have found that students currently refer to systems theory and cybernetics as one field. Beer (1974) notes that “for some, cybernetics and general systems theory are co-extensive, while those could be found who regard each as a branch of the other” (as cited in Becvar & Becvar, 2009, p.65). This researcher made use of the concept of cybernetics which consist of both first-order cybernetics and second-order cybernetics.

3.4.1 A Question of Perspective

According to Guttman (1986) “Every theory of human behaviour and every attempt at changing human behaviour has an underlying theory of knowledge which must be further specified” (p.14). Furthermore, Becvar & Becvar. (2009) refer to such an interpretive system as epistemology and state that it is used as a means to justify the validity of what we believe to be true, they clarify by stating that epistemology may be seen as a personal framework or world view that individuals use to interpret reality.

Terre Blanche, Durheim & Painter, (2006) state that “epistemology explains the relationship between the observer and what can be known” (p.6-7). If we are to understand adolescent addiction treatment from a systems perspective, we need to first understand how systemic theorists view reality. The two different incarnations of cybernetics are best explained and further specified by their epistemological perspectives regarding “reality”.

What is “reality” and how do we define it? The Oxford Advanced Learners Dictionary (2005) defines reality as “The true situation and the problems that actually exist in life” (p.1210). A cursory internet search using the google search engine describes reality as “the state of things as they actually exist, as opposed to an idealistic or notional idea of them”. These definitions suggests that reality is something physical and concrete, something that we as observers can objectively quantify and describe. This description of reality aligns with the traditional Lockean tradition which postulates that reality is separate from the individual and that its qualities can be ordered, recognised and universally defined by the observer (Becvar & Becvar, 2009). Reality is seen as concrete and objective, what is true for one person must be true for all people. The moral model of addiction serves as a good example. It postulates that there is a problem [substance abuse/immorality] and a solution [willpower/repentance] that applies to everyone.

The Oxford Dictionary of Psychology (2009), makes a distinction between reality and psychical reality. It defines psychical reality as “anything that strikes a person as real, including fantasies…whether or not they are based on real events” (p.616). This definition would lead us to deduce that the nature of reality is subjective and that reality is created by how individuals perceive what they observe. The Multicausal model of addiction aligns with this perspective. It defines the problem [substance abuse] while recognising that the solution [bio-psychosocial treatment] is situated within multiple areas of each person’s life.

This apparent contradictory view regarding the nature of reality is what sets systems theory apart from the more traditional Lockean approach to addiction treatment. The principles that define systems theory and the principles behind the constructivist paradigm were developed from within the same worldview (Patton & Mcmahon, 2006). Therefore systems theory can be said to embrace a perspective which recognises that

people construct reality and that there are many different subjective interpretations of reality. This point of view aligns with the critical-realist perspective which forms part of the current study's methodological underpinnings. A detailed description of the study's ontological and epistemological views are presented in Chapter 4 of this study.

3.4.2 First-order Versus Second-order Cybernetics

Even though systems theory is generally considered to be constructivist in nature, there does however exist a distinction between first and second-order cybernetics with respect to how our relationships with reality may influence it.

According to Bateson (as cited in Searight & Openlander, 1987), first-order cybernetics is characterised by the view that "the physical world is not something that is objective and static, but is instead, a cognitive construction" (p.55). To elucidate, reality is not external to the individual, we assign meaning and order to our world by subjectively and socially constructing reality according to our perceptions and experiences (Becvar & Becvar, 2009). Cronen, Johnson & Lannamann (as cited in Searight & Openlander, 1987), assert that "these internal construct systems are not a direct representation of an external "objective reality" (p.55). Additionally, we need to remember that even though each of us creates and lives in a slightly different reality, we still need to consider each person's perception of reality as equally true and valid (Becvar & Becvar, 2009).

For first-order cybernetics the observer does not form part of the adolescent's family and social systems. The systems can be observed without being influenced by the observation process, problems in the system can be identified by the MDT and change can be directed from outside of the system (Becvar & Becvar, 2009). Members of the MDT are viewed as part of an "expert system" with privileged knowledge (Amundsen, Stewart & Valentine, as cited in Becvar & Becvar, 2009., p.266) that provides strategic suggestions and interpretations "creating a context for epistemological change" (Hoffman, as cited in Becvar & Becvar, 2009., p.94). This is the key difference between the first- and second order perspectives and implies that the first-order observer's reality is separate and has no influence on the realities of the person being observed. From this perspective, members of the MDT would therefore be able to identify and directly address specific problems that are deemed responsible for the adolescent's substance abuse.

Keeney (as cited in Becvar & Becvar, 2009) criticised first-order cybernetics by stating that it might be inadequate to describe human phenomena because it fails to consider these “higher order punctuations” that connect the observer to the observed (p.77). Keeney is of the opinion that the observer cannot observe the system without becoming a part of its reality and subsequently exerting influence upon it. Becvar & Becvar (2009) concur and state that “we should remain aware of the system level that includes and defines the observer as part of the systems context” (p.77).

A second-order cybernetics epistemology also states that there is no absolute, objective truth or reality, instead proposing “a multiverse of many equally valid observer-dependent realities” (Becvar & Becvar, 2009, p.84). Conversely, if first-order cybernetics describes the systems which we study, then second order cybernetics describes the systems “of which we are a part of” (Becvar & Becvar, 2009, p.84). We as the observers thus become part of the system and the multiple realities it contains are influenced by our own reality. Becvar & Becvar (2009) state that “in the process of observing we are inevitably interacting with and therefore helping create the reality of the consensual domain that we are attempting to observe” (p.84). Therefore, it can be said that we are actually generating the world that we live in by living it (Maturana, as cited in Becvar & Becvar, 2009). During treatment the MDT’s task would be to only influence the adolescent’s systems in a way that allow members to create and construct more functional perceptual realities so that the system and these individuals may function more efficiently (Becvar & Becvar). Team members should therefore be constantly aware of how their own realities affects the multiple realities that are present in the adolescent’s life.

It has become apparent that first and second-order cybernetics have much in common but that there are also fundamental differences between them. Should adolescent addiction treatment favour a first-order or second-order perspective? The answer lies in the approaches’ core assumption regarding reality, a cybernetic or systemic perspective disallows an either/or view (Becvar & Becvar, 2009) and proposes instead a constructivist approach which can be described as “acknowledging the necessity for, or complementarity of, both sides of the coin” (Becvar & Becvar, 2009, p.10). For this reason,

it must be possible to integrate the first- and second order cybernetic approaches and the use of one approach cannot imply the rejection of the other.

First order models are more pragmatic and lend themselves well to treatment, but practitioners are advised not to become “attached to the clients acceptance of their suggestions and interventions” (Becvar & Becvar, 2009, p.95). The MDT should endeavour to keep thinking with “a second order mind while doing first order therapy” (Simon, as cited in Becvar & Becvar, 2009, p.95).

3.5 A Cybernetic Perspective to Adolescent Addiction treatment

“Contrary to the natural way of thinking about problems (i.e., ‘If someone has a problem, something inside must be bothering them’), a systems perspective holds that all behaviour is interactive” (Lastoria, 1990, p.45). A person’s behaviour is always a reaction to somebody else’s behaviour (Lastoria, 1990).

As discussed in the previous chapter, Bronfenbrenner suggests that the adolescent’s environment consists of different layers that consists of but are not limited to “the home, school, and neighbourhood settings in which they spend their everyday lives” (Berk, 2013, p.26). For this reason, the MDT working with adolescent substance addiction will not approach the presenting problem, that of substance abuse, as an individual issue, but will rather approach it in relation to the biological, psychological and social systems that are operating and interacting within the adolescents life. Systems theorists are often of the opinion that family dynamics are responsible for major psychopathology (Lange, Schaap, & Van Widenfelt, 1993).

The cybernetic perspective concerns itself with these patterns of interaction and according to Hoffman (1985) it is the system that creates an adolescent’s problem. According to Keeney (1979) “symptoms are inextricably part of relationship systems” (p.3). An ecological focus by the MDT involves directing intervention away from the adolescents symptoms, towards interactions within the life contexts that seem to be relevant to the clients presenting difficulties (Wilkinson & O’Connor, 1982).

3.5.1 Pathology

As noted, within the framework of first-order cybernetics, the clinician is able to observe the system from the outside and can judge the relative health or pathology within the system (Becvar & Becvar, 2009). Thus, the observer occupies a place outside of the system and offers "strategies, interpretations or suggestions for behavioural change" (Hoffman, as cited in Becvar & Becvar, 2009, p.94). Simply put, practitioners are able to identify pathology and address symptoms directly while still recognising the interrelated nature of its origin.

The framework of second-order cybernetics prevents treatment providers from doing so. Combrinck-Graham (1987) has stated that "The concept of pathology, the notion that something is malfunctioning and wrong, is in-consistent with [second-order] ecosystemic thinking" (p.505). This perspective implies that the adolescents actual substance use is not a problem, it is merely a normal reaction caused by systemic influences.

The reason for this is that second-order theorists believe that systems are always structurally determined (Becvar & Becvar, 2009). *Structural determinism* is a systemic concept that suggests that a system responds to "perturbations in a manner determined by or consistent with its structure" (Maturana, as cited in Becvar & Becvar, 2009, p.104). If we assume that families who experience problems with addiction consists of both users and enablers (Becvar & Becvar, 2009), continuation of addictive behaviour makes sense. What the system does, therefore, is not pathological, but rather it is appropriate to its unique requirements. The enabler needs the user to use and the user needs the enabler to enable, therefore, their behaviour, and by default the system will attempt to maintain its structure. Additionally, at the level of cybernetics of cybernetics [Second order], it becomes unfitting to say a system is not normal or that it may be dysfunctional (Becvar & Becvar, 2009). What could be described as pathological by first-order practitioners, is seen as "normalcy in context" by second-order theorists (Becvar & Becvar, 2009, p.360).

3.5.2 Morphogenesis and Morphostasis

From a first-order perspective, *morphogenesis* enhances the system and "allows for growth, creativity, innovation, and change, all of which are characteristics of functional

systems" (Becvar & Becvar, 2009, p.69). Conversely, *morphostasis* is the proclivity of a system to remain stable (Becvar & Becvar, 2009). Both morphogenesis and morphostasis need to be in balance for the system to function properly.

Becvar & Becvar (2009) suggest that a family moves through stages and that appropriate changes need to be incorporated for the family to maintain its level of functioning. These stages are characteristically defined according to "the presence of, and ages of children in the household" (Kapinus & Johnson, 2003, p.155).

Neighbor (1985) notes that boundary testing becomes the main task for families who are currently in the stage known as "family with adolescent children" (p.12). Here the issues that can be expected are characterised by power struggles and rebellion regarding control and freedom, as well as the need for individuation and social or sexual exploration by the adolescent (Neighbour, 1985).

The concepts of *morphostasis* and *morphogenesis* apply here. Family stage progression depends on whether necessary changes have been incorporated as the family moves through various stages (Becvar & Becvar, 2009).

Adolescent children have very specific needs during this developmental phase. Therefore, a child's passage into adolescence requires functional changes or morphogenesis from the family system in order for it to remain stable. Families who have teenage children need to increase the family's flexibility regarding boundaries in order to allow the child to develop its independence (Becvar & Becvar, 2009). This will allow functional change to take place within the family system.

3.5.3 Recursiveness and Feedback/self-correction

Cybernetic systems are characterised by the twin principles of *recursiveness* and *feedback/self-correction*, and it is according to these that reality operates (Keeney, as cited in Becvar & Becvar, 2009, p.66). The recursiveness principle stipulates that every person or system influences and is in turn influenced by every other person or system (Becvar & Becvar, 2009).

Becvar & Becvar (2009) states that it is through "recursion" that feedback about past behaviours are relayed "into the system in a circular manner" and that this allows the system to self-correct if necessary (p.67).Thus, it can be said that the behaviour of

different members of a system is interactive and occurs in relation to the behaviours of others.

As an example, an adolescent who lies about substance use may continue to do so until he or she is caught. This behaviour is maintained by the process of recursion until it is interrupted by feedback [being caught] and self corrects [lying stops]. It may be possible that the adolescent is lying in order to avoid restrictions of freedom and possible arguments with loved ones. As a result, the adolescent will be allowed more freedom, escapes conflict and avoids punishment. Consequently, the adolescent will continue to lie about substance use. The process will continue to repeat itself until the adolescent is caught and has to face the consequences for lying.

3.5.4 Reciprocal Causality

Systems are considered bound to reciprocal causality in that they repeat common patterns by the process of recursion (Becvar & Becvar, 2009). The members of an adolescent's family system will most probably have established "habitual ways of behaving and communicating with one another" (Becvar & Becvar, 2009, p.72). These patterns are called "characteristic end states" which are also referred to as *equifinality* (Becvar & Becvar, 2009, p.72). Family systems may become stuck in a state of equifinality. Habitual ways of communicating and ineffective methods of problem solving are repeated and may end up aggravating problems (Becvar & Becvar, 2009).

Equipotentiality is the exact opposite. It describes how "different end states may be arrived at from the same initial conditions" (Becvar & Becvar, 2009, p.72). Treatment providers need to guide the system towards a state of equipotentiality in which these ineffective processes are replaced by new ways of communicating which may alleviate the problem (Becvar & Becvar, 2009).

3.5.5 Feedback

Treatment is mostly concerned with facilitating change. Addiction treatment facilities focus on changing addictive behaviour and maintaining sobriety. *Feedback* allows for what is known as self-correction and can also therefore be seen as an agent of change in a system (Becvar & Becvar, 2009).

We can distinguish between positive and negative feedback. Positive feedback is indicative of a change having been accepted and incorporated into a system, whereas negative feedback causes the system to resist change even when change is necessary to maintain system stability in a functional way. (Becvar & Becvar, 2009).

Allen (as cited in Lastoria, 1990) refers to adolescence as “the most traumatic change of all in the level of connectedness” within the family (p.46). Therefore, the MDT need to view adolescence as happening to the entire family and not as a developmental stage that only affects the adolescent. Consequent changes in family relationships should therefore be addressed by the MDT as these could be indicative of negative feedback processes which are responsible for limiting functional changes and maintaining substance abuse.

3.5.6 Change

A distinction can be made between first-order and second-order change in systems. According to Becvar & Becvar (2009) “First-order change occurs within the system, consistent with the rules of the system” (p.286). Therefore, first order theorists believe that problems like substance abuse will continue until changes are made to the family system to accommodate the adolescents changing needs. The process of morphogenesis therefore needs to occur for the system to become functional and to move on to a new phase of the family life cycle. When parents seem reluctant to acknowledge the adolescents new needs or the adolescent attempts to avoid negotiation, the system can be described as holding on to homeostasis or resisting functional change.

“Second-order change involves a change in the rules of the system and thus a change in the system itself” (Becvar & Becvar, 2009, p.286). The rules of the system are the typical relationship patterns of the system (Becvar & Becvar, 2009). “Change from the perspective of systems theory [second-order] requires a change in context” (Becvar & Becvar., 2009, p.287). Clinicians working from a second-order perspective do not attempt to change the family system (Becvar & Becvar, 2009), instead they change their behaviour and observe the impact of these “perturbations” in terms of any reaction to it and then react to these reactions accordingly (Becvar & Becvar, 2009, p.83). Simply put, practitioners allow their own realities to influence those of the adolescent and his or her

family. The MDT thus monitors and facilitates a continuous process of modification and if the system changes, it is said that “a change in context has occurred” (Becvar & Becvar, 2009, p.83).

According to Hoffman (1985), when working from a second-order approach, the therapist recognises that it is only in the context that they can affect changes and not in the individuals themselves. Thus, members of the MDT can be viewed as “participant observers” who engages in a “collaborative process between themselves and the client system” (Becvar & Becvar, 2009, p.250). The practitioners presence creates a new family where family members behave differently and the goal of treatment becomes to “perturb the system in such a way that it compensates with more functional behaviour for the system” (Becvar & Becvar, 2009, p.291). The desired outcome of therapy is to create a context in which a change in behaviour “is a logical response” (Becvar & Becvar, 2009, p.83).

3.5.7 Homeostasis

So, why do systems accept negative feedback and resist functional change? The concept of homeostasis was mentioned in the previous paragraph and is relevant for discussion here. The central idea in this concept is that “the behaviour of individual family members has as its … function the maintenance of a particular family homeostasis or pattern of organisation” (Bogdan, 1984, p.376). This means that the family system has been functioning in a certain way for a considerable amount of time and would prefer to maintain the status quo.

In order to change an adolescents behaviour and to address the child’s new needs, family members might have to change the way they have always functioned [i.e., move to a different city]. The family system will attempt to resist this change in order to stay the same and avoid the accompanying instability it might create. This phenomenon serves to reduce tension and restores balance to a family system (Lastoria, 1990).

Similarly, an adolescent’s addictive behaviour may be seen as an attempt at maintaining system stability or homeostasis. For example, an estranged parent will have to spend more time with the family in order to address the adolescent’s substance abuse.

By using drugs the adolescent is able to reduce caregiver tension created by a broken home and thus restores balance in the family system.

As an additional example, Substance use may serve as a form of self-medication which allows the adolescent to meet his or her new needs by reducing the inner conflict and anxiety experienced as a result of parental discord. Lastoria (1990) states that even though it may be balanced in an unhealthy way, the system still prefers balance to the tension created by imbalance. For practitioners working from a cybernetic perspective, intervention is subsequently extended from a focus on the individual, to a focus on the "interactions within the individual's ecosystem" (Wilkinson & O'Connor, 1982, p.987).

3.5.8 Triangulation

Bowen's (as cited in Lastoria, 1990) systemic concept of *triangulation* can be drawn into a first-order analysis with regard to the adolescent's addictive behaviour. Bowen describes this as the process whereby a third member becomes involved in a relationship between two people (Bowen, as cited in Lastoria, 1990). A friend or peer might become an understanding ally in a disagreement between the adolescent and his or her parents. This helps to relieve the adolescents stress and tension, but does not allow the adolescent to constructively solve family arguments. Peer relationships such as these may also represent triggers for using and thus promote adolescent substance use. Members of the MDT would therefore have to focus on 'de-triangulating' relationships such as these in order to allow family members "to constructively solve their differences" (Lastoria, 1990, p.47).

3.5.9 Open or Closed Systems

A system can be described as being either open or closed to new information. The degree of *openness* or *closedness* of a system is related to how much new information it is willing to either reject or incorporate into the system (Becvar & Becvar, 2009). Systems typically become closed to accepting new information if it threatens to cause unwelcome changes to the system (Becvar & Becvar, 2009).

The MDT working from a first order perspective should keep this in mind when working with systems that seem to cling to morphostasis at the expense of

morphogenesis. When providing treatment as the “expert system” the clinician should consider the possibility that overt suggestions and interpretations from outside of the system could cause the system to close its boundaries before a context for functional change has been established.

3.5.10 Entropy and Negentropy

First order theorists also describe systems along the continuum of *entropy* and *negentropy*. A system which is in a state of entropy is either too open or too closed and is considered to be in a state of extreme disorder and disintegration (Becvar & Becvar, 2009). Negentropy is a term used to describe a system which integrates change that is beneficial and screens out information that threatens its continued existence (Becvar & Becvar, 2009). It becomes the task of the MDT to identify systems that are stuck in a state of entropy and to encourage a movement towards negentropy. This will allow functional change to be incorporated and will promote healthy development of all systems members.

3.6 Program Evaluation

The following section provides a general review of both historic and more recent attempts at improving treatment outcomes. Evaluation research becomes relevant for discussion as it is situated at the heart of previous efforts at improving treatment outcomes. It is important to note however, that the current study did not attempt to evaluate an existing addiction treatment program. The focus of this study was directed at exploring the MDT’s perceptions regarding the effectiveness of their own approach to treatment.

Historically, in what could be called an inadvertent attempt to integrate the complexity of ecological systems with the theory of evaluation. Moos (1997) developed a common conceptual framework for evaluating treatment programs. This conceptual model was developed within the parameters of three basic assumptions. The first being the assumption that one needs a systematic method of measuring important aspects of the treatment process in order to understand how treatment programs influence patient adaptation (Moos, 1997). Secondly, it should be possible for such a conceptual

framework to be applied to both psychiatric and substance abuse programs (Moos, 1997, p.1). The third assumption is that one should place an emphasis on matching patient and program factors while also considering connections between the person, the environment and patient outcomes (Moos, 1997).

This model specifies five different domains, each of which includes different interacting variables that are recommended for consideration during comprehensive program evaluation (Moos, 1997). It should be noted that when Moos started working on program evaluation, he focused on the domain of 'social climate' within the treatment environment as the primary determinant of successful outcomes (Moos, 1997). His initial line of enquiry was inspired by Philippe Pinel who discovered in 1792 that by removing the shackles from inmates at insane asylums he could reduce their violent tendencies (Moos, 1997). Pinel's was a form of 'moral treatment' that identified aspects such as 'humanitarianism', 'tolerance', 'acceptance' and 'loving care' within the treatment environment as essential for obtaining positive outcomes.

Moos's model evolved over time to include the four additional domains of *objective program characteristics* [institutional context, physical design, policies & services, patient/staff characteristics], *patient personal factors* [sociodemographic details, personal resources, cognitive status, level of impairment], *patient in-program outcomes* [satisfaction, self-confidence, interpersonal behaviour, program participation], and *patient community adaptation* [health status, social skills, work skills, psychosocial functioning] which interact with each other to determine treatment outcomes.

Flowing from his research and learnings he recognised the need for a more holistic perspective. Even though he doesn't explicitly integrate systems theory, it becomes plain to see that the model evolved into what can only be described as a conceptual framework which acknowledges the many different variables that interact and influence treatment efficacy. Moos eventually realised that the client's problems are complex and that program evaluation should focus on all aspects of treatment while also considering the context in which they exist.

Addiction treatment is generally considered an intervention designed to promote the total cessation of a target behaviour or the introduction of some form of limitation in

order to control the behaviour (Marlatt & George, 1984). More plainly stated, treatment has become synonymous with changing the behaviour of an individual. "'Behaviour change interventions' can be defined as coordinated sets of activities designed to change specified behaviour patterns" (Michie, van Stralen, & West, 2011, p.1). Researchers raised concern regarding the fact that theory can be used as a very useful foundation for designing interventions but that it hardly ever explicitly states how this should be done (Michie, Johnston, Francis, Hardeman, & Eccles, 2008).

Accordingly, Michie et al (2011) developed what they termed the "behaviour change wheel" (BCW). This wheel is a physical representation of a conceptual framework for designing interventions that change unwanted behaviour (Michie et al., 2011). The BCW has at its centre or hub, the B-COM model of behaviour which asserts that behaviour is the net result of the complex interaction between *capability*, *opportunity* and *motivation* (Michie et al., 2011). The hub is surrounded by intervention functions [Education, Persuasion, Incentivisation, coercion, training, restriction, environmental restructuring, modelling, enablement] and then by policy categories [Marketing strategy, practice guidelines, fiscal sanctions, regulatory rules, legislation, environmental /social planning, service provision] on its outer perimeter (Michie et al., 2011).

In theory, the B-COM model can be used to interpret behaviour which in turn would then be utilised to select appropriate intervention functions and policies that can effectively change the specified behaviour. However, assisting clinicians to design treatment programs is not the BCW's sole purpose. It can also be viewed as an attempt by the authors to address what Magura has termed "talking past each other" by making programs more generalizable and promoting comparisons between them (Magura, 2000).

Michie et al. (2011) state that the BCW's major strength is its inclusion of "opportunity" as a component of behaviour which entails that behaviour can only be understood in relation to its context. Similarly, one of the main assumptions of the systemic perspective is that behaviour should be seen as taking place within a specific context where the opportunity to do so exists.

West (2013) took this model a step further and applied the B-Com model to addiction treatment by examining the underlying mechanisms of addiction. His intention was to develop a comprehensive strategy for addressing the issue of addiction. He

reviewed multiple different theories of addiction and made an attempt to produce an all-encompassing framework or model that could be applied to prevent, assess and treat addiction (West, 2013).

West states that, as “an overarching model of behaviour (the COM-B model, which recognises that behaviour arises out of capability, opportunity and motivation) can be usefully applied to understanding addiction” (West, 2013, p.12). Furthermore, he believes that the occurrence of co-morbid psychological problems combined with multiple addictions arise from a “common aetiology” and from the way in which capability, opportunity and motivation interact with each other (West, 2013). Employing this framework would allow clinicians to improve the efficacy of addiction treatment by analysing the behavioural influences of the target population and then integrating the corresponding interventions and policies to the system in order to change the target behaviour (West, 2013).

Researchers such as Moos, Magura, West and others believe that the field of addiction treatment is complex, changing and nested within biological, psychological and social processes, highlighting the need for a systemic approach. They emphasise the fact that it has been difficult to compare treatment programs because of the existence of a multitude of different approaches and opinions. Their individual efforts have been directed at creating conformity between approaches, an overarching discourse if you will. (Prendergast et al., 2000) add that despite such contributions, it still remains difficult to identify the salient factors that have a direct bearing on treatment outcomes.

3.7 The Key Elements of Effective Adolescent Addiction Treatment

More recently, “The question that has perplexed parents, school personnel, and the criminal justice system is how to identify those substance abuse treatment programs that are appropriate and effective for adolescents once need for treatment is established” (Cacciola et al., 2015, p.2).

“In comparison with studies of client characteristics and treatment processes, research has been limited on the program features of drug dependence treatment programs and how these may affect client outcomes” (Prendergast et al., 2000, p.1932). Accordingly, this study’s aims were directed at exploring the program features that may

affect client outcomes. More specifically, the study focused on the perceptions and experiences of the MDT in respect of the effective implementation of in-patient adolescent drug treatment. The nine essential elements of effective adolescent addiction treatment were utilised as a theoretical lens with which to interpret the resulting data.

The nine core elements were identified via literature review and expert panel consensus by an organisation called Drug strategies (Cacciola et al., 2015). The nine elements were designed to investigate the efficacy of US adolescent programs (Cacciola et al., 2015) and might be used to determine which areas of treatment can and should be usefully strengthened in South Africa. Furthermore, these elements can be used to assist "parents, physicians, juvenile court judges, and school counsellors" in making informed choices when selecting treatment programs that suit the individual teen (Brannigan, Schackman, Falco, & Millman., 2004, p.908).

Brannigan et al (2004) conducted one of the first studies that focused on the abovementioned elements as they apply to the actual content or quality of adolescent addiction treatment. In the original study they identified five components (C) within each key element (KE) of addiction treatment (Cacciola et al., 2015). Consequently, the measurement tool consisted of a total of 9 KE's and 45 C's. They then used interviews with program directors at various highly regarded treatment centres to determine how many C's were present and how many were absent from the program, this rating system allowed them to calculate scores for each KE (Cacciola et al., 2015). Their findings indicated that participating treatment centres only complied with half of the recommended 45 C's (Cacciola et al., 2015).

Schackman et al (2007) used the same sample group and conducted a follow up study in which they attempted to determine the degree to which treatment program reimbursement levels are associated with treatment quality. Their findings suggest that reimbursement levels do correlate with treatment quality and that further research is needed to determine reimbursement levels that would improve treatment quality (Schackman et al., 2007).

Knudsen (2009) conducted a study in which the organisational characteristics of treatment programs were linked to program availability and in which the nine elements

were similarly utilised to measure program quality. In depth interviews were conducted with 154 managers in order to determine the quality of service and respective levels of care (Knudsen, 2009). Findings indicated that higher levels of quality were associated with programs that offered more intense levels of care (Knudsen, 2009). Results were consistent with similar studies and indicated medium levels of care across treatment centres which suggests that the initial call for quality improvement remained unanswered (Knudsen, 2009).

Mark et al. (2006) conducted a systematic review in which they examined the characteristics of treatment programs that were not adolescent specific but included at least 10 adolescent clients as part of their treatment profile on any given day. Their findings indicated that a large proportion of these facilities lacked components that align with the nine elements of effective adolescent treatment (Mark et al., 2006). Most notably, they found that attention to mental health, medical problems and specific curricula with a focus on developmental and cultural needs were lacking (Mark et al., 2006).

Ten years after the initial publication of the Drug Strategies list of key elements Cacciola et al (2015) undertook to "update, improve and test the original measurement approach" (p.4). This important study was conducted under the auspices of the Parent Translational Research Centre (PTRC) that aims to address crucial research assumptions as part of national efforts to advance addiction treatment, and the general lack of access to objective and comparable information on adolescent treatment programs (Cacciola et al., 2015). They conducted an extensive literature review combined with a 'consensus based revision' of the nine elements (Cacciola et al., 2015). As a secondary measure, they obtained feedback from the PTRC Parent advisory board regarding effective treatment and asked parents of affected adolescents about what they considered important in respect of treatment for their children (Cacciola et al., 2015). The information gathered from these four approaches confirmed the legitimacy of the original nine elements and prompted the inclusion of a tenth element (Cacciola et al., 2015).

Attention to mental health had been included in the original nine KE's as C's of both *assessment* and *comprehensive treatment,* however, comorbidity was found to be prevalent to such an extent amongst addicted adolescents that its inclusion as an individual KE was deemed necessary (Cacciola et al., 2015). The original nine KE's were

retained with only minor wording revisions to improve clarity while C's were adapted more extensively to improve empirical support (Cacciola et al., 2015). Accordingly the revised form of measurement currently includes 10 KE's with a total of 67 C's (Cacciola et al., 2015).

The original coding system was dichotomous and only made provision for present or absent responses, they proposed a three point response in order to make the coding measure more accurate and sensitive (Cacciola et al., 2015). In an effort to provide a packaged 'program measurement protocol' that would allow clinicians to perform measurements that can provide valid estimates of treatment quality across geographical locations, the authors also updated the measurement battery to include the following three components: *The Treatment Components Inventory for Directors (TCI-D), the Treatment Components Interview for Patient (TCI-P)* and the *Treatment Components Inventory 'audit' procedure* (TCI-A) (Cacciola et al., 2015).

A limitation of the current study is the exclusion of *attention to mental health,* the tenth KE that was included in the most recent update of essential elements. The original nine elements as identified by Drug Strategies were used in this study.

- *Assessment and treatment matching (KE1)*

  "Assessment of substance use disorders is far more complicated for adolescents than for adults" (Straussner, 2014, p.403). Various comprehensive assessments should initially be used to enhance treatment. Screening is a necessary part of treatment that helps clinicians identify the specific kind of help the adolescent requires (Drug Strategies, 2003). Additionally, understanding the nature of the problem and its severity may provide valuable information regarding the required level of treatment (Drug Strategies, 2003).

  Each new client will have a unique and individual history that should be known to treatment providers before treatment is initiated. In order to provide an understanding regarding the extent of substance abuse "assessment of substance use disorder must involve a detailed drug history and pattern of use" (Straussner, 2014, p.403-404). The use of standard screening systems that are both valid and reliable have been recommended, however, some treatment programs have been

known to develop their own screening systems (Drug Strategies, 2003). “Assessment requires an understanding of normal adolescent development, in addition to the interrelatedness of individual risk factors, family variables, peer relations, school/vocational performance, legal status, physical health, and comorbid psychiatric conditions”. (Straussner, 2014, p.403).

The bio-psychosocial model emphasises a holistic approach to treatment. Before treatment, a complete medical exam is necessary to determine whether the adolescent’s drug problems are related to existing physical or bio-medical conditions (Drug Strategies, 2003). Practitioners should also “consider social, psychological, and biological factors in every family member” (Kaufman, 1985, p.910). An effort needs to be made to contact and invite parents and caregivers to attend the preliminary assessment session (Straussner, 2014). Accordingly, Assessment should include an exploration of “family functioning, school performance, peer relationships and socioeconomic issues” (Drug Strategies, 2003). Systemic theorists are concerned with how the interaction between these factors within the adolescent’s existential system contribute towards the adolescent’s problems with substance abuse.

What makes adolescent assessment difficult is that substance abuse intensifies behaviour problems that are associated with normal development during this stage (Straussner, 2014). Adequate knowledge regarding the adolescent’s specific life context and unique developmental stage can provide valuable insight for developing effective treatment strategies that may influence change within a system of interest. Good practice includes continuous screening that allows practitioners to adapt treatment strategies as the adolescent progresses through the program (Drug Strategies, 2003).

- *Comprehensive integrated treatment approach (KE2)*

In line with a bio-psychosocial and systemic perspectives, practitioners should implement treatment holistically rather than concentrating solely on curbing substance abuse. Adolescents may have many interrelated problems that contribute towards substance abuse (Drug Strategies, 2003). The majority of

young adolescents treated for substance abuse also suffer from comorbid conditions such as “depression, anxiety, conduct disorder and post-traumatic stress disorder” (Drug Strategies, 2003, p.5). Additional areas of concern may also include individual learning problems, problems at home and school, or specific health issues such as HIV and other sexually transmitted diseases (Drug Strategies, 2003).

Comprehensive, integrated treatment aims to address both the adolescents substance abuse as well as the other interrelated problems that may be caused by or are responsible for substance abuse (Drug Strategies, 2003). Such a treatment plan should be collaborative and should include input from the adolescent, family members and the practitioner (Drug Strategies, 2003). A collaborative, holistic approach to treatment may create a context for change within the adolescent’s family and social systems while increasing “the likelihood that the adolescent will be able to reduce both drug use and other problem behaviours” (Drug Strategies, 2003).

The social systems that influence their lives are also important and may include peer interaction, welfare issues and the criminal justice system (Drug Strategies, 2003). As opposed to adults, adolescents have little control over these social systems and may need treatment centres to provide support within these areas (Drug Strategies, 2003). Subsequently, treatment programs should strive to perturb a multitude of nested structures or systems within the adolescent’s life. A wide array of services that address these ecological systems should ideally include “psychiatric care, health and sexual health care, family counselling, home visits, parent education, recreational activities and on site remedial or educational classes” (Drug Strategies, 2003, p.5).Simply put, matching the adolescent’s specific needs with treatment is the key component of providing comprehensive and integrated treatment (Drug Strategies, 2003).

- *Family involvement in treatment (KE3)*

The systemic perspective maintains that each person has a unique but equally valid perspective regarding reality and that this reality affects behaviour.

Primary caregivers or parents play a major part of the central reality within the lives of most adolescents (Drug Strategies, 2003).

It was noted in Chapter 2 that family involvement has been identified as a protective factor against substance abuse (Mcneece & DiNitto, 2012). Furthermore, Brannigan et al (2004) conducted an evaluative study of treatment centres in which they found that the top quartile of 144 highly regarded treatment centres in the US employed Multi-dimensional Family Therapy (MDFT) as a form of treatment. Drug Strategies (2003) state that MDFT is a family-based treatment program with a focus on the interacting social systems that surround the adolescent's life, it attempts to simultaneously treats the family on its own, the adolescent individually and the family and adolescent together.

It has also been mentioned in chapter two that the family system may be a causative factor in adolescent substance abuse (Winters, 1999). Therefore, it is also recommended that family members be asked to address their own patterns of substance use and to consider the effect thereof on the entire family system (Drug Strategies, 2003). Family life skill development, in respect of parenting and the availability of community and mental health services reinforces the complete family system (Drug Strategies, 2003) Most experts agree that the family context and substance abuse are linked, involving primary caregivers in the treatment process may increase the probability of achieving lasting positive outcomes (Drug Strategies, 2003).

- *Developmentally appropriate programs (KE4)*

"Many substance abuse treatment programs that were initially designed for adults fail to address the needs of adolescents" (Brannigan et al., 2004, p.904). Adolescence is characterised by increased biological, cognitive and behavioural development creating very specific needs, therefore treatment programs should not simply be adult programs that have been revised for younger clients (Drug Strategies, 2003). Furthermore, adolescents are moving towards individuation in which their original family-based identity becomes more peer-based, this may lead

to risk taking behaviour and increases the potential for injury and even death (Drug Strategies, 2003).

Drug Strategies (2003) state that this particular demographic has been largely overlooked and that there are not many programs that were specifically designed for adolescents. It does however seem that research regarding adolescent specific treatment programs are becoming more prominent, specifically within the criminal justice system (Henggeler et al., 2006; Douglas, Young & Dembo, 2007; Henderson et al., 2007).

Treatment programs need to address a variety of different contexts which shape the adolescent's life, adolescents are not as capable as adults to fend for themselves and clinicians need to join forces with community systems in order to provide treatment that is sensitive to the possibility of sexual or physical abuse (Drug Strategies, 2003). Furthermore, It is unlikely that adolescents are concerned with topics such as employment or marital relations and program activities need to focus on topics that they find relevant such as school, recreation and peers (Drug Strategies, 2003).

- *Engage and retain teens in treatment (KE5)*

Treatment completion is an integral part of reducing substance use and has been linked to a general improvement of "school, work and social relations" (Drug Strategies, 2003, p.7). Unfortunately, it has been found that a large number of adolescents drop out of treatment and do not complete treatment programs (Drug Strategies, 2003).

Many young adolescents enter treatment because they have been forced to do so (Drug Strategies, 2003). It has been suggested that there are different stages within the family life cycle (Becvar & Becvar, 2009). Within the stage of 'families with adolescent children' the adolescent's quest for individuation will be characterised by rebellion and the need for control and freedom (Neighbor, 1985). Adolescents who need treatment for substance abuse usually do not believe that they have a problem, many view treatment as a plan devised by adults to restrict their independence (Drug Strategies, 2003). Thus, resistance to treatment and the

occurrence of adolescent drop-out from treatment is in actual fact not that surprising.

Parents often play a role in treatment retention. They ultimately provide much needed motivation if they are able to recognise the levity of the problem and also believe that their child has the ability to overcome substance addiction (Drug Strategies, 2003). Accordingly, practitioners should interact with and observe family members in different settings while always fostering new insights and developing family relationships (Drug Strategies, 2003).

Creative program content is essential in maintaining an adolescent's interest (Drug Strategies, 2003). "The key is to find ways to make treatment relevant to the everyday concerns of the adolescent so that he or she will be motivated to make the necessary effort to change" (Drug Strategies, 2003, p.8). Treatment program developers need to be cognisant of this when treating adolescents. In an effort to maximise retention rates, treatment programs should be designed so that activities are engaging for adolescents in particular (Drug Strategies, 2003). It is also important for staff members to foster an environment of trust with adolescents that may assist in developing an acceptance of the problem, an internal commitment to change, emotional recovery and a life in which substance use is not necessary (Drug Strategies, 2003). The main strategy should be to help adolescents take ownership of treatment instead of seeing it as something that has been imposed on them by adults (Drug Strategies, 2003).

- *Qualified staff (KE6)*

This element highlights the importance of employing qualified staff while also maintaining continuous training and further development of the multi-disciplinary team.

Adolescents who abuse substances usually have other problems that affect them in multiple ways (Drug Strategies, 2003). Problems such as depression, delinquency and attention deficit disorder may also be present in the adolescents life and should be addressed by practitioners who are able to work effectively with

families and who have knowledge regarding adolescent development (Drug Strategies, 2003).

As mentioned before, practitioners need to address the full bio-psychosocial spectrum as they relate to various systems operating within the adolescent's everyday life. Therefore, treatment programs should employ a diverse group of experienced staff members who have been specifically trained to deal with multiple issues (Drug Strategies, 2003). Furthermore, an emphatic understanding of how adolescents think and the ability to identify psychiatric problems are crucial practitioner skills that contribute to treatment success (Drug Strategies, 2003).

Staff qualifications vary extensively among treatment providers in the US and only a few programs have staff that are trained in both mental health treatment and adolescent substance abuse (Drug Strategies, 2003). Staff supervision, clinical supervision and regular staff meetings are considered important factors related to provision of staff guidance and the continuous development of the MDT (Drug Strategies, 2003).

Even though training and suitable credentials are important, staff also need to display a warm and caring attitude that creates an environment in which the adolescent is able to connect to treatment (Drug Strategies, 2003). Practitioners should be able to act as positive role models for adolescents while building relationships and maintaining suitable boundaries (Drug Strategies, 2003). A lower staff to client ratio can help foster this therapeutic relationship and it is generally recommended that one practitioner be responsible for a maximum of eight adolescents at in-patient facilities (Drug Strategies, 2003).

- *Gender and cultural competence (KE7)*

Developers of addiction treatment programs historically overlooked women and children, opting to design programs that were essentially intended for white males (Drug Strategies, 2003). However, both gender and cultural competence have since been recognised as essential components of effective addiction treatment programs (Drug Strategies, 2003).

The many differences between male and female drug users have been highlighted in chapter two and gives credence to the idea that they should therefore also have different treatment needs. Practitioners who are accepting of minorities and who display gender and cultural sensitivity are able to build trusting relationships that enable adolescents to address important aspects of their identity that they may find uncomfortable sharing with strangers (Drug Strategies, 2003). This is particularly relevant when treating adolescents who identify as gay or lesbian (Drug Strategies, 2003) and equally so in countries with culturally diverse populations such as South Africa.

Some of the unique issues that should be addressed when treating males include changing violent behaviour, fostering maturity, date rape, education regarding sexually transmitted diseases and creating an awareness regarding their cultural rites of passage into manhood (Drug Strategies, 2003). Conversely, females are more susceptible to problems such as anxiety depression and post-traumatic stress disorder which in many cases are caused by physical or sexual abuse (Drug Strategies, 2003). It has also been found that mental health problems and trauma are responsible for and usually precedes substance abuse in girls (Drug Strategies, 2003). Therefore, practitioners will need to address issues such as abandonment, abuse and family violence when treating girls who are abusing substances (Drug Strategies, 2003).

Making use of single-sex groups, designing gender specific content, keeping girls physically safe and assigning same sex councillors during treatment are considered effective ways of improving program sensitivity to gender differences (Drug Strategies, 2003). A lack of understanding with respect to cultural differences has been identified as a major cause of treatment program inability to treat adolescents from minority groups (Drug Strategies, 2003). Therefore, treatment programs may achieve better outcomes with these individuals if a concerted effort was made to develop an understanding of the different cultures within a programs main area of intake. Cultural sensitivity has also been shown to improve if program content is adapted to reflect factors that

are considered important to the affected families specific culture (Drug Strategies, 2003).

- *Continuing care (KE8)*

Drug Strategies (2003) reports that 75% of adolescents who enter treatment programs relapse within the first three months after discharge. Continuing care is aimed at maintaining treatment gains and includes measures such as “relapse prevention training, follow-up plans and referral to community resources” (Drug Strategies, 2003, p.10).

A South African study published by Van Der Westhuizen & De Jager (2009) found that chemically addicted adolescents most frequently cited easy access to drugs, caregiver problems, social problems and emotional issues as key factors leading to post treatment relapse. Therefore, program content should include training that teaches the adolescent to effectively manage the influence that these systems exert on their behaviour. Drug Strategies (2003) recommend that programs do regular post-treatment check-ups and educate adolescents on craving suppression, trigger avoidance, negative peer influence and should provide emergency steps that may be followed if relapse occurs. Additionally, Van Der Westhuizen & De Jager (2009) states that both “adolescents and their parents need support and guidance to change lifestyles after treatment; the development of life skills is an important element in the ability to change lifestyles” (p.87).

Varying levels of aftercare exists within the different available programs, most of which only provide contact details for community based assistance such as 12-step programs and self-help groups (Drug Strategies, 2003). Fortunately, there are some programs that develop aftercare plans during treatment and include continuous services such as provision of post-treatment recreational activities, counselling, sustained contact and post treatment Check-ups (Drug Strategies, 2003).

In many instances research regarding relapse prevention strategies have focused on what has become known as Mindfulness Based-Relapse Prevention (MBRP) (Bowen et al., 2009, Bowen et al., 2014; Hendershot, Witkiewitz, George,

& Marlatt, 2011). Accordingly, Witkiewitz et al (2014) have suggested that because people generally start experimenting with substances during their adolescent years, an exploration of the "potential benefits of mindfulness in younger populations also deserves further attention" (p.520). Additionally, Van der Westhuizen & De Jager (2009) indicate that special attention needs to be given to developing the adolescent's ability to "reason" as it plays an important role in relapse prevention. Effective reasoning provides the adolescent with the ability to develop self-efficacy, motivation for change and the necessary skills to solve problems (Van der Westhuizen & De Jager, 2009).

- *Treatment outcomes (KE9)*

Drug Strategies (2003) have included the recording and appraisal of treatment outcomes as the final key element of effective treatment programs. Brannigan et al (2004) have stated that one of the most critical needs of existing adolescent treatment programs is the need to invest in the empirical appraisal of post-treatment outcomes. They add that treatment outcome appraisal was found to be one of the elements with the poorest rate of adoption among adolescent treatment programs (Brannigan et al., 2004).

Only a limited amount of treatment programs conduct these appraisals. Post discharge information remains difficult to obtain and requires "a high level of specialised research expertise" (Drug Strategies, 2003, p.10). Additionally, The cost involved in conducting rigorous assessments on treatment outcomes prevents even the most highly regarded programs from undertaking such efforts independently (Brannigan et al., 2004). Accordingly, it has been found that less than 10% of existing treatment programs have been subjected to a rigorous scientific follow-up with respect to the programs direct influence on treatment outcomes (Brannigan et al., 2004). However, those that have been able to conduct post-treatment assessments have indicated that respondents reported an improvement in societal functioning and a reduction in substance use (Drug Strategies, 2003). These studies, despite their limitations have found that

treatment completion seems to be closely related to attaining successful outcomes (Drug Strategies, 2003).

Even though rigorous scientific appraisal might not always be possible, it is recommended that treatment programs devise methods of measuring client progress during treatment (Drug Strategies, 2003). Feasible ways of doing this that may apply to inpatient settings include regular urine tests that monitor drug use, noting reductions in delinquent behaviour and improved family functioning (Drug Strategies, 2003). Simply put, treatment programs should attempt to record and report any changes in the adolescent's life and behaviour regardless of whether these changes occur within treatment or outside of treatment (Drug Strategies, 2003).

3.8 The South African Context

In a recent South African study, Ramlagan, Peltzer, & Matseke, (2010) reported that the typical ages of initiation regarding substance abuse in the country was estimated to be "9 years old for glue, alcohol 10 to 12 years old, dagga 11 to 12 years old, poly-drug use (alcohol, tobacco & dagga) at 14 years old, and harder drugs such as cocaine and heroin at 16 to 17 years old" (p.48). Accordingly, South African treatment programs need to be as effective as possible in order to provide quality treatment to adolescents before substance abuse escalates to dependence. "In South Africa, treatment is either voluntary or statutory and includes detoxification, inpatient, outpatient and community-based services, as well as aftercare and reintegration services" (Substance Misuse: Advocacy, Research and Training, 2008, p.22). For South Africans, the first entry point into the substance abuse treatment system is usually the district social service offices (Burnhams, Dada, & Myers, 2012).

In South Africa, the Department of Social Development (DOSD) has been mandated to implement "the Prevention and Treatment of Drug Dependency Act" (SMART, 2008, p.2). Official documents such as The "Policy on Management of Substance Abuse, Minimum Norms and Standards for In- and Out-patient Substance Abuse Treatment Centres (DOSD, 2006) as well as Norms and Standards for Community

Based Programmes" (SMART, 2008, p.2) have been developed towards implementing the act.

It was found that "family, legal, financial, health and domestic violence problems were the five most frequently reported problems associated with substance use" (Burnhams et al., 2012, p.6). Ramlagan et al (2010) emphasise a need for more treatment centres in rural areas, a shortage of qualified staff at treatment centres and a lack of aftercare initiatives at South African in-patient treatment centres. "Increased calls from affected communities for additional substance abuse services, has placed pressure on the DOSD to respond by providing additional resources for prevention and treatment services regarding substance use disorders" (Myers et al., 2008, p.3).

In a review of interventions that work best for the treatment and prevention of substance use disorders, it was deemed necessary to ensure that program implementation consists of "a sound rationale, theoretical framework and evidence for its effectiveness" (Myers et al., 2008). The authors of this South African report also made it clear that the measurement of behavioural outcomes should be viewed as an indispensable component of research focusing on treatment program efficacy (Myers et al., 2008).

Furthermore, "To ensure accountability, findings from monitoring and evaluation should be regularly reported to parliament and the people of South Africa" (SMART, 2008, p.61). Regrettably, South African programmes are not monitored on a regular basis (Myers et al., 2008). Harker et al. (as cited in Myers et al., 2008) notes that this remains a grave concern and raises questions about program efficacy and quality in South Africa.

In order to enhance program monitoring, the DOSD should implement mechanisms that are capable of efficiently collecting accurate information on alternative initiatives for improving treatment capacity and service quality at South African treatment centres (SMART, 2008). The nine elements of effective adolescent treatment programs as described by Drug strategies may be such an alternative initiative. The South African Substance Abuse Policy Implementation Guidelines (SASAPIG) state that Governmental departments, the National council of Provinces, the Central Drug Authority, Research organisations, university-based researchers and independent or private treatment providers are considered eligible for the monitoring and evaluation of treatment programs

in the country (SMART, 2008). The nine key elements used in this study could, if applied for such purposes, aid entities responsible for monitoring and evaluation of adolescent treatment programs and may provide new learnings regarding additional elements that might be better suited to our culturally diverse society.

The SASAPI guidelines state that treatment providers need to conform to internationally accepted guidelines and provide 13 such principles as published by the National Institute of Drug Abuse (NIDA, 2000). Some of these principles correspond with the nine elements used in this study and do provide relevant information regarding treatment program implementation [See Table 1]. Unfortunately, these principles are essentially unmeasurable in their current form. Conversely, the nine elements as prescribed by Drug Strategies could easily be used to guide treatment program implementation as well as any possible future evaluations.

Table 1

Principles of effective treatment

- *No single treatment is appropriate for all individuals*
- *Treatment needs to be readily available*
- *Effective treatment attends to multiple needs of the individual not just his/her substance use*
- *An individual's treatment plan must be assessed continually and modified as necessary to ensure that the plan meets the person's changing needs*
- *Remaining in treatment for an adequate period of time is critical for treatment effectiveness*
- *Counselling (individual and/or group) and other behavioural therapies are critical components of effective treatment*
- *Medications are an important element of treatment for many patients, especially when combined with counselling and other behavioural therapies*
- *Dependent or abusing individuals with co-existing mental disorders should have both disorders treated in an integrated way*
- *Medical detoxification is only the first stage of treatment and by itself does little to change long-term substance use*
- *Treatment does not need to be voluntary to be effective*
- *Possible substance abuse during treatment must be monitored continuously*
- *Treatment programmes should include assessment for HIV/AIDS, Hepatitis B and C, Tuberculosis and other infectious diseases, and counselling to help patients modify or change behaviour that place themselves or others at risk of infection*
- *Recovery from substance dependence can be a long-term process and frequently requires multiple episodes of treatment*

The National Institute of Drug Abuse, NIH 00-4180

*Cited in: (SMART, 2008)

3.9 Conclusion

Adolescent addiction treatment facilities serve some of the most vulnerable individuals within our society. These adolescents typically struggle with multiple issues of which substance abuse is only one. They are currently moving towards individuation and the choices they make now will affect their lives for years to come. For these reasons and others, treatment programs need to be as effective as possible and should be continuously monitored and evaluated to ensure service quality.

Treatment efficacy is a difficult concept to define and is influenced by the varying perspectives of various stakeholders. Ultimately, the main goal of treatment should be obtaining positive outcomes that enhance the adolescent's life and subsequent developmental trajectory. Being able to monitor and evaluate treatment programs for alignment with evidence-based practice also provides benefits to society. Providers can be held accountable for service delivery and the general public are empowered to make informed choices when selecting programs that meet the adolescent's unique needs.

The Systemic approach has been shown to be a valuable addition to the field of addiction treatment and provides an effective way of understanding and implementing a bio-psychosocial perspective to treatment. Understanding the way systems interact and influence each other remains a highly valuable tool with respect to addiction treatment. However, the systemic approach may be just as effective at understanding and addressing issues within the treatment environment itself.

The DOSD have developed numerous documents that are able to guide treatment facilities towards providing desirable services and obtaining positive outcomes. Unfortunately, current legislation does not make provision for a valid and reliable program-level measurement protocol. The nine elements as developed by Drug Strategies have been successfully used to measure treatment program characteristics in the United States and may also provide a standardised way of monitoring and evaluating treatment programs in South Africa. The following chapter will provide an overview of how the studies research methodology was applied. Research design, data collection and ethical considerations will be discussed in detail.

Chapter Four:
Research Design and Methodology

4.1 Introduction

This chapter will focus on the aim of the current study as well as its specific objectives, and the methodological procedures that were followed. The chapter includes a description of the research design, sampling procedure, data collection methods and the data analysis procedure. The chapter concludes with an overview of the study's ethical considerations as well as the researcher's reflections as they relate to the research process.

The primary aim of the study was to explore the functioning of the MDT at an in-patient adolescent drug treatment facility and their perception of the extent to which nine essential core elements of effective adolescent addiction treatment aligns with program implementation. Specific objectives included; (1) To explore and describe the MDT's perception of how the MDT functioning is promoting and inhibiting treatment programme outcomes (2) To explore and describe the MDT's experiences and perceptions of implementing the in-patient adolescent drug treatment programme; (3) To explore and describe the MDT's perceptions on how the nine elements that are essential to adolescent treatment program efficacy are incorporated in their treatment programme. (4) To report findings and make recommendations regarding MDT functioning and treatment program implementation that will enhance adolescent drug treatment outcomes at the research site and similar in patient adolescent drug treatment facilities.

4.2 Research design

The aim of this study is very specific. By exploring and describing the experiences of the MDT at an in-patient adolescent drug treatment facility, the researcher attempted to gain a deeper understanding of the extent to which the nine essential core elements of effective adolescent addiction treatment aligns with program implementation in the South African context.

Four specific objectives have been included in this study. Realising these objectives allowed the researcher insights into the MDT's subjective perception of how

the adolescents respond to the implementation of the treatment program in its current form. A secondary reason for inclusion of these objectives is that it allowed the researcher the opportunity to report new learnings and derive recommendations regarding the elements in the treatment program that is not contextually and culturally relevant.

The current study can thus be viewed as containing elements of both basic and applied research. Basic research is conducted in order to enhance current knowledge of the world we live in while applied research attempts to provide immediate practical applications that can be used to address problems related to both social interaction and community development (Terre Blanche, Durheim & Painter, 2006).

Kidder & Fine (1987) distinguish between Qualitative research with a big “Q” and qualitative research with a small “q”. The main difference being that, “Big Q’ refers to open-ended, inductive research methodologies that are concerned with theory generation and the exploration of meanings” (Willig, 2001, p.11). However, the purpose of the current study was not to generate new theories regarding adolescent addiction treatment. Its purpose was to explore and describe the MDT’s perceptions regarding the effectiveness of their approach to adolescent addiction treatment at the research site. The nine key elements of effective addiction treatment were used as a theoretical lens with which to contrast findings.

Therefore, the researcher employed what the literature refers to as qualitative research with a small “q”. Qualitative research with the small “q” makes use of interviews with open-ended questions that have been structured according to specific categories so that the resulting data can be interpreted against existing theories (Kidder & Fine, 1987), in this case, the key elements of effective addiction treatment for adolescents.

This type of qualitative design is also referred to as a hypothetico-deductive research design as it starts “with a hypothesis and researcher-defined categories against which the qualitative data are then checked” (Willig, 2001, p.11). Important to note is that it should not be considered akin to quantitative research as this branch of qualitative research does not make use of numerical data (Willig, 2001).

The advantages of employing qualitative research (small q) were two-fold. It allowed direct theoretical comparison with internationally prescribed guidelines for effective adolescent addiction treatment and also allowed the use of open-ended

questions. The use of open-ended questions enabled the researcher to probe when answers were vague, therefore, allowing for unexpected findings that enhances the "richness" of data (Kidder & Fine, 1987). This advantage was deemed especially useful as it allowed the researcher to explore and describe the MDT's personal experiences in the South African context and the Eastern Cape in particular. This made findings and recommendations more relevant to the treatment context and addressed the studies primary aim and specific objectives simultaneously.

A possible disadvantage of this design is that it is not in line with what is considered a "pure" qualitative methodology and that it may be "characterised by the imposition of the researcher's meanings" (Willig, 2001, p.11). However, the current study included the use of reflexivity, member reflections and Guba's model as control measures intended to enhance trustworthiness.

The following design, sampling and data collection methods were employed by the researcher in order to achieve the study's primary aim and specific objectives.

4.3 Qualitative Research

The current study made use of a qualitative research design grounded within an interpretive paradigm. Qualitative researchers attempt to understand the "feelings, experiences, social situations, or phenomena" related to research participants as they occur in the natural environment (Terre Blanche et al., 2006, p.272). "In a qualitative study, the researcher is the instrument of research, meaning data are generated by asking questions in personal interviews or focus groups, making observations and recording notes" (Magilvy & Thomas, 2009, p.298). The qualitative approach was employed in this study because of the researcher's belief that the primary aim and specific objectives of this study would best be realised by interacting with and understanding the perceptions and experiences of the MDT at an in-patient adolescent drug treatment facility.

Furthermore, qualitative research becomes necessary when one does not know which specific variables are relevant to a specific situation (Terre Blanche et al., 2006). Even though the key elements used as indicators of program quality were known to the researcher, they have not been applied to the South African context. This created the

need to identify variables that may be redundant or alternatively, uniquely valuable to the South African situation.

A qualitative design allowed for the expression of participant's lived experiences in context and thus becomes necessary to determine which elements (if any) are important and applicable to the South African and specific treatment context. The researcher attempted to address this need by exploring and describing the MDT's experiences and perceptions regarding treatment program implementation. Additionally, Qualitative research has the added benefit of facilitating the researchers understanding of how complex biological, psychological and social phenomena interact and may provide valuable insight when attempting to improve clinical practice (Boyle, as cited in Biggerstaff & Thompson, 2008). Thus, establishing congruence between the primary aim and specific objectives of the study.

Qualitative research is considered to be interpretive. The interpretive paradigm aligns with a qualitative research design by allowing the researcher to describe individuals or specific settings, while also interpreting data and drawing personal or theoretical conclusions (Creswell, 2003). The researcher who employs an interpretive approach relies on first-hand accounts gathered within context and tries to describe phenomena in rich detail (Terre Blanche et al., 2006). The current study aimed to explore and describe treatment program efficacy within the participant's working environment –an adolescent addiction treatment centre, making a qualitative interpretive research design appropriate for this study.

Moreover, this study adopted a realist perspective. "Here, the researcher seeks to generate knowledge that captures and reflects as truthfully as possible something that is happening in the real world" (Willig, 2013, p.68). It is important to note that ontologically, critical realists believe that our environment exists separately from our senses and beliefs, while epistemologically recognising that the environment is constructed by our own opinions and perspectives. This perspective was deemed useful because the primary aim of this study was focused on determining the true extent to which addiction programs in South Africa are conforming to internationally recognised standards associated with effective adolescent addiction treatment. Additionally, the research aim is to describe and

explore participant perceptions and experiences. This perspective is informed by a discovery orientation and the researcher plays the role of an investigating detective who uses personal skills and existing knowledge to determine what is actually happening in a given situation (Willig, 2013, p.68-69).

According to Willig (2013), realist researchers are tasked with conducting a detailed analysis of participant accounts that systematically describes the decision-making process. Therefore, participant accounts were analysed by the researcher as well as an independent coder. Consensus discussions were held to clarify participant accounts which served to inform the decision making process.

Finally, this study was exploratory-descriptive in nature. Exploratory research is generally used when one's knowledge regarding a specific area of interest is lacking (De Vos et al., 2005). Descriptive research is used to answer "how" and "why" questions, allowing the researcher to paint a detailed picture regarding the exact details of a certain situation (De Vos et al., 2005). Additionally, De Vos et al (2005) note that exploratory and descriptive research have many similarities and that it is possible to blend them in practice. The exploratory-descriptive nature of this study provided the researcher with an opportunity to gain a deeper, more detailed understanding of the area of interest and aided the researcher in providing "thick" descriptions of a rather under-researched area of study.

4.4 Sampling

This study made use of non-probability purposive sampling to identify research participants. Purposive sampling is the act of selecting research participants according to their relevance regarding a particular research problem and requires participants to be homogeneous in that they have shared experiences regarding the phenomenon of interest (Willig, 2013).

"The sample for a qualitative descriptive study is often smaller than in other qualitative designs and is conveniently and purposively selected" (Magilvy & Thomas, 2009, p.299). "A typical sample size for a qualitative descriptive study may be as few as three to five persons, ranging up to about 20 participants" (Magilvy & Thomas, 2009, p.299).

Non-probability purposive sampling was employed to provide the researcher with participants who were deemed to possess first-hand knowledge and experience regarding the implementation of adolescent drug treatment programs in South Africa. Another sampling criteria was that the participants had to be employed at the specific adolescent drug treatment site where the research was conducted, and they had to contribute to the functioning of the multi-disciplinary team.

Participants who form part of an MDT have various different qualifications and areas of expertise making them uniquely suited to providing in-depth descriptions of all aspects related to treatment program implementation.

Participants were asked to complete a short biographical questionnaire prior to interviews. The questionnaire was administered in order to provide the researcher and reader with information regarding participant characteristics.

Being qualitative in nature, this study did not make use of numerical or statistical information during data analysis. Use of participant biographical data was included in order to enhance the reader's ability to make deductions related to the trustworthiness of this qualitative study. Terre Blanche et al (2006), argues that the readers of a research report need to be able to form their own opinions regarding the researchers methods. Moreover, Terre Blanch et al. (2006) refer to the inclusion of this type of information as part of "leaving a research trail", which enables readers and other researchers to evaluate the applicability of research methods and to replicate the study (p.557).

4.5 Data Collection

Focus group interviews were employed as the main method of data collection for this study. De Vos et al (2005), describe focus group interviews as group interviews. Interaction among participants are typically recorded and used as a data source. (Willig, 2013). The current study made use of two focus group interviews. The first focus group consisting of eight participant. The second was conducted with a group of ten participants.

A noteworthy advantage of conducting focus group interviews over individual interviews is that group dynamics tend to facilitate the sharing of information (De Vos et al., 2005). Willig (2013) concurs, stating that "The strength of the focus group as a method of data collection lies in its ability to mobilise participants to respond to and comment on

one another's contributions. In this way, statements are challenged, extended, developed or qualified in ways that generate rich data for the researcher" (p.122).

The researcher's contribution to this type of interview entails asking a sequence of questions that have been developed in relation to the aim of the study, which drives the overall research project (Willig, 2013). The interview is called "focused" because it usually involves a collective activity of some sort (De Vos et al., 2005). Additionally, "The researcher takes on the role of moderator whose task it is to…introduce the focus of the group (e.g. a question or a stimulus such as an advert or a photo) and to gently 'steer' the discussion" (Willig, 2013, p.122).

Focus groups may also be used in instances where one wishes to "shed light on quantitative data already collected" (De Vos et al., 2005, p.301). The current study made use of a set of guidelines for effective adolescent addiction treatment developed for use in the United States. The primary aim of the current study was focused on shedding light on how these guidelines align with local practice and its relevance for use within a multi-cultural South Africa.

For this particular study, two focus group interviews were conducted with members of the MDT at an adolescent drug treatment facility. Focus groups were deemed appropriate because it allowed participants who function in different areas of treatment to discuss their roles in relation to each other. This provides a more holistic perspective of treatment program implementation. Additionally, the dynamic nature of focus group interviews facilitates discussion surrounding shared experiences. This allowed information that may not have become available during individual interviews to surface.

The advantages of making use of focus group interviews is that it shortens the data gathering process and is especially useful when a multitude of different points of view and responses related to a specific topic is needed (De Vos et al., 2005). Focus group interviews were thus considered appropriate as it provided a way of obtaining a multitude of different perspectives while minimising disruption of service delivery at the facility. Moreover, focus groups provide "a setting that is less artificial than the one-to-one interview, which means that the data generated by it are likely to have high(er) ecological validity" (Willig, 2013, p.123).

The studies aim and its approach to knowledge becomes relevant when discussing the disadvantages of focus group interviews. “If our aim is to obtain valid and reliable information about the participants’ views and/or experiences in relation to a particular concern (i.e. a realist research aim), then we need to employ analytic techniques that will allow us to detect, and remove from our analysis, distorting influences such as the contributions of domineering group members or overly acquiescent comments” (Willig, 2013, p.124-125).

This study was conducted from within a critical realist approach. For this reason, one focus group interview consisted of junior staff members only, while the other was conducted with a more senior group of individuals. This was deemed necessary to alleviate potential power dynamics that could inhibit the spontaneous sharing of views. Additionally, this study made use of thematic analysis in order to further minimise this disadvantage.

Two separate focus group interviews were conducted in English by the researcher. The researcher’s co-supervisor acted as moderator at these interviews. This measure was taken in order to enhance the trustworthiness of the study. Interviews were conducted within a five week period and were recorded using digital-audio recorders. Both interviews were initially scheduled to take place on the same day. However, the first interview took longer than envisaged and the second had to be re-scheduled. Recordings were professionally transcribed by an independent transcriber and coded by the researcher, an independent coder was used to verify emergent themes.

4.6 Procedures

Permission to conduct this study was gained through contact with the provincial managers of the Department of Social Development (DOSD) and the drug treatment facility gatekeepers. Ethical approval was granted by the Research Ethics Committee - Human (REC-H) at the Nelson Mandela University, after successful presentation of the research proposal at departmental and Faculty level.

The treatment facility was purposefully selected due to its unique characteristics - provision of adolescent specific drug treatment. Additionally, the facility was deemed

appropriate because of its geographical distance from the researcher's place of residence as well as the university, making the execution of the study more feasible.

The treatment facility is also the first of its kind and is owned and managed by the South African Government, operating under the mandate of the DOSD. This offered a unique opportunity for the researcher to gain a deeper understanding of a relatively new and under-researched area of clinical practice in South Africa.

Once the facility was selected, the researcher personally contacted the treatment program manager via e-mail. In certain settings it becomes necessary to obtain permission from gatekeepers to conduct research with a specific population (Terre Blanche et al., 2006). The program manager agreed to act as gatekeeper and forwarded the researcher's application to conduct research to the relevant authorities at the DOSD.

Permission was only granted after several months of correspondence between the researcher, various gatekeepers and the relevant authorities at the DOSD. Unfortunately, the delay severely affected this study's proposed time-line. The researcher could have avoided this delay by approaching gatekeepers before conceptualising the research design.

The DOSD eventually agreed to allow this research project to take place under the auspices of a similar study that was being undertaken by a team of researchers associated with the Faculty of Health Sciences at the Nelson Mandela University. This collaboration was deemed appropriate by both research parties as the research was very similar and interview schedules could easily be aligned to extract data that would be useful to both studies. Additionally, it offered a way to conduct both research projects simultaneously, minimising possible disruptions of service delivery at the facility.

After written permission was granted by the DOSD for this researcher to conduct focus-group interviews with members of the MDT at the treatment facility. The researcher amended his research proposal and interview schedule to reflect the collaboration and re-submitted it to the Research Ethics Committee - Human (REC-H) at the Nelson Mandela University. The revised proposal was accepted and ethical approval was reinforced. Data from focus group interviews were subsequently shared between these studies. The second study, under discussion, was not for academic degree purposes.

This particular team of researchers had already obtained permission from the DOSD and the centre manager to conduct research at the facility and had informed participants of their proposed research activities at the facility. An updated e-mail was sent to staff members via the primary gatekeeper containing details about the collaboration between these studies.

The researcher, in conjunction with the above-mentioned team of researchers then proceeded to make arrangements via e-mail and per telephone with the program manager and staff members in order to schedule a time for focus group interviews that would be suitable. The interviews were conducted in private venues at the facility, which provided a familiar and non-threatening environment for participants.

Additionally, the researcher personally delivered a participant informational leaflet to the centre one week prior to the first focus group interview. The leaflet contained detailed information regarding ethical considerations as well as the aim, objectives and nature of the study. Willig (2013) states that participants can be motivated to express their experiences and perceptions in more detail by providing them with some form of stimulus that will focus the discussion. Therefore, this leaflet also included a participant reflection sheet. The reflection sheet contained information regarding the nine key elements of effective adolescent addiction treatment and was included so that participants could reflect on their experiences before the actual interview. Blank areas on the document were provided for each key element and participants were asked to write down reflections or draw images regarding each key element.

Moreover, the researcher attempted to further focus interviews by creating and displaying a PowerPoint presentation during interviews. The presentation was displayed using a data projector and consisted of slides containing visual cues of each key element. The researcher obtained these visual cues by conducting a google image search. Visual cues relating to the key elements were selected based on the researcher's Appreciation of the unique treatment context and the demographic profile of the research participants. The researcher's interpretation was checked by obtaining feedback from his research supervisors.

The research process was explained by the researcher prior to each interview. Thereafter, participants were made aware of the voluntary nature of participating in the

study after which written consent was obtained. These matters are discussed in more detail under the “ethical considerations” section of this study.

The data collection phase of this study was terminated by thanking participants for their contribution to the research project. The researcher also sent a formal thank you letter to the centre manager and participants after the data collection phase.

The current study was hypothetico-deductive in nature, accordingly, the researcher made use of theoretical knowledge to inform interview questions (Willig, 2001). This was done so that findings could be interpreted against the guidelines and elements of evidence-based practice. It was stated earlier in this chapter that a disadvantage of this type of research is that the researcher runs the risk of imposing his perceptions on the interview process and subsequent results of the study. As a way of minimising the influence of this occurrence, Willig (2013) suggests that researchers consider the concept of reflexivity when working from within a realist paradigm.

4.7 Researcher Reflexivity

“Reflexivity requires an awareness of the researcher’s contribution to the construction of meanings throughout the research process, and an acknowledgement of the impossibility of remaining ‘outside of’ one’s subject matter while conducting research” (Willig, 2013, p.55). Therefore, the researchers influence on the research project cannot be avoided and has to be acknowledged. Additionally, reflexivity necessitates a continuous examination of the role that the researcher plays in the research process and promotes validity by negating the imposition of the researcher’s perspectives (Willig, 2013, p.92).

Willig (2013) adds that reflexivity can be implemented by including honest, clear and informative reflections regarding the researcher’s influence and role in the study. The researcher’s opinions and perceptions were therefore examined throughout the research process and becomes relevant for discussion.

Firstly, the researcher had prior knowledge regarding evidence-based adolescent addiction treatment as a result of his familiarity with the literature. Therefore, reflexivity in this study involved developing an awareness of how the researcher might subjectively

lead participants during focus group interviews. Thus, emphasising the need to scrutinise the data for evidence of such influence.

Additionally, there had been significant delays in acquiring permission to conduct this study at the specified treatment facility. The researcher's interactions with various stakeholders and gatekeepers during this delay had the inevitable effect of familiarising the researcher with the perspectives of various people who are involved with treatment at the facility. This had the unavoidable effect of "colouring" the researcher's perspective regarding various processes and practises at the facility.

The researcher acknowledged these influences and the possible role they might have played in the creation of meaning while conducting interviews and analysing the data. Thematic analysis of the data was therefore conducted by the researcher as well as an independent coder. As an additional measure, the researcher participated in consensus discussions with the independent coder, his supervisor and co-supervisor.

In light of the above, reflexivity was considered particularly relevant to this study and member reflections played an integral part in addressing the researcher's role in the study.

4.8 Data Analysis Procedure

"Thematic analysis is a method for identifying, analysing and reporting patterns (themes) within data" (Braun & Clarke, 2006, p.79). Terre Blanche et al (2006) describe thematic analysis as interpretive and states that its aim is to produce a convincing description of a phenomenon as it occurs in its specific context. Moreover, thematic analysis accommodates the critical-realist approach followed by this study and can produce "a rich and detailed, yet complex, account of data" (Braun & Clarke, 2006, p.78). Ideally, the resulting account should seem recognisable and true to those who are familiar with the phenomenon but should also provide them with a different way of understanding it (Terre Blanche et al., 2006).

The current study made use of the framework for qualitative data analysis by Tesch (1990). Tesch's framework for data analysis was used because it provided the researcher with a concrete, user-friendly process, and allows for the accurate and systematic

interpretation of data. Tesch's (1990) framework for data analysis consists of eight specific steps (p.142-143). Accordingly, the researcher analysed the data from focus group interviews as follows:

1. The researcher obtained the transcripts of focus group interviews from an experienced, independent transcriber. Focus group interviews had been transcribed in Microsoft word. The researcher proceeded to carefully read each interview. Additionally, the researcher made notes and recorded ideas that surfaced as he read. Tesch (1990), explains that this is done to get a holistic picture of what has been collected and to help the researcher understand what he is reading. As an additional measure, the researcher read through each transcript while listening to the audio recordings of interviews. This measure was taken to enhance reliability of the data by verifying transcript accuracy.

2. The researcher chose what he deemed to be the most interesting transcript and re-read it. During this step, Tesch (1990) suggests ignoring "what" is said and focusing on the "meaning" behind the words (p.142). The researcher followed this step and concentrated on "deeper meaning" while noting topics and codes as they emerged from participants. In this case the researcher considered "deeper meaning" as the possible causes of emotionally loaded statements; i.e., signs of fervour, frustration, anger, empathy, reluctance and avoidance.

3. During this step the researcher repeated step two with the remaining transcript. Tesch (1990) suggests that researchers proceed by creating a column for each transcript and list topics for each data set. The researcher created such a column on each transcript and noted possible topics that emerged from the transcripts. Similar topics from both transcripts were then combined on a separate list. Tesch (1990) refers to these combined topics as "clusters" (p.143).

4. The researcher proceeded to choose descriptive codes for each cluster. The researcher had identified 47 different codes that seemed relevant to this study.

Using these codes the researcher revisited the transcripts and used different colours to highlight specific phrases, existing codes were noted in the column beside these phrases. According to Tesch (1990), the advantages of this particular step include; (a) the researcher can compare codes with data in order to see how well codes correspond to the actual text; and (b) new, unexpected topics may be identified.

5. After step four, the researcher returned to his initial list of topics and either amended them or added to them. Topics with similar characteristics where then clustered together. Tesch (1990) characterises this step in data analysis as the refinement stage and notes that identified topics can now more accurately be described as “categories” (p.143).

6. The researcher studied the remaining categories and discarded those that were not considered relevant to this study. Categories were screened according to their relevance regarding this studies primary aim and specific objectives. The remaining categories were then listed and coded against the complete data set. To summarise, categories were matched to corresponding sections of text within both interview transcripts. The researcher noted these as possible themes. Nine themes specifically related to this study as well as one unique theme was listed. The unique theme was included because it was found pervasively throughout the data set. It also seems to have had an influence on how the MDT perceive and experience their roles regarding effective adolescent addiction treatment.

7. The researcher then proceeded to scrutinise themes individually. At this stage the researcher is required to focus on the actual content within the data that each theme relates to (Tesch 1990). Each theme’s content was collected and summarised in paragraph form. Terre Blanch et al (2006) notes that one should attempt to “think in terms of processes, functions, tensions and contradictions” when summarising content (p.323). Accordingly the researcher tried to envision how the various systems of treatment interact and affect each other at the

treatment facility. This phase of analysis was terminated once data saturation had been achieved, this typically takes place when the resulting conclusions become repetitive.

8. The purpose of the abovementioned steps are to organise and interpret the data in its raw form (Tesch, 1990). Once the researcher had systematically complied with each step, a comprehensive report was written based on the results of the analysis. A detailed discussion of the themes that emerged and the resulting interpretations will be included in the next chapter.

The entire research process and resultant findings were compiled in the form of a dissertation. The dissertation was submitted in fulfilment of the requirements for the degree of Master of Arts in Research Psychology in the Department of Psychology at the Nelson Mandela University. A copy of this dissertation will be made available in the University library and research findings may be published or presented at conferences or research symposiums if such an opportunity arises.

4.9 Data Verification

Guba's model (as cited in Krefting, 1991, p.215-217) was used to enhance the trustworthiness of this study. Guba's model was considered appropriate for use because it was designed to increase the "rigor" of qualitative studies, is conceptually well developed and provides a means for the reader to evaluate the credibility of findings (Krefting, 1991). The following four aspects of trustworthiness were considered for this study:

1. Truth Value

   Truth value, also known as credibility, is an indication of "how confident the researcher is with the truth of the findings based on the research design, informants, and context" (Krefting, 1991, p.215). Therefore, the researcher offered adequate descriptions of his methods, explained the suitability of participants and

took measures to ensure a credible description of the MDT's perceptions and experiences at an adolescent drug treatment facility.

Moreover, an experienced transcriber was used to enhance the credibility of transcribed interviews. This measure was considered important because focus group interviews are generally more difficult to transcribe than individual interviews. This difficulty was addressed by using two recording devices during data collection, enhancing the possibility of obtaining accurate transcriptions from focus group interviews. Additionally, this study made use of focus groups that contained more than six participants per group which made it even more difficult to discern particular individuals from others during transcription

Furthermore, "Credibility requires adequate submersion in the research setting to enable recurrent patterns to be identified and verified" (Krefting, 1991, p.217). Simply put, the researcher had to spend time with participants, familiarity with participants increases the researcher's ability to understand and confirm conclusions that were drawn from the data.

Focus group interviews lasted for approximately 90 minutes per interview. The researcher started interviews with questions that were deemed to be less sensitive [i.e., Questions regarding individual roles in the MDT], leaving more sensitive questions for last [i.e., Questions about problems in the working environment]. This strategy was deemed appropriate as it allowed participants to grow accustomed to the researcher and the interview context. It served to increase truth value because participants became more comfortable as interviews progressed, leading to a more honest representation of perceptions and experiences during the interviews.

Moreover, the researcher also had the opportunity to meet participants before interviews. The researcher attended a workshop on substance addiction that was hosted at the facility prior to this study. The participants and researcher have a shared interest in addiction treatment which undoubtedly had an impact on establishing rapport and facilitating a climate of trust between the researcher and participants. Additionally, the researcher spent several months attempting to obtain access to the facility which led to various interactions with different members

of the MDT and management. A possible disadvantage of this is that the researcher, by virtue of association, might lose objectivity during the data analysis phase (Krefting, 1991). In order to minimise this risk, the researcher employed the concept of reflexivity during data analysis. Additionally, the presence of a moderator during the focus group interviews served as buffer against this potential disadvantage.

The researcher further enhanced truth value by taking notes during interviews and by writing down his own experiences regarding the actual interviews after they were conducted. This was deemed useful as it helped the researcher control for his own influence, biases and pre-conceptions while interpreting the data (Krefting, 1991).

An additional method used to strengthen the truth value of this research project was the implementation of what is referred to as triangulation. Triangulation enhances the credibility of a study and is described by Krefting (1991) as “a powerful strategy for enhancing the quality of the research” (p.219). Knafl & Breitmayer (as cited in Krefting, 1991) explains that triangulation can be achieved by combining and comparing data from different sources or by combining the different perspectives of investigators during data analysis.

Accordingly, the researcher achieved triangulation by conducting and comparing two focus group interviews which made use of the same interview schedule. Additionally, the researcher, supervisor, co-supervisor and independent coder were involved in data analysis. Subsequent consensus discussions served to facilitate discussion regarding the different meaning making processes of the same data set.

2. Applicability

Applicability is “the degree to which findings can be transferred to other contexts and settings; or with other groups” (Krefting, 1991, p.216). Basically, this refers to whether findings can be usefully applied to other populations in different situations. This is particularly relevant to the current study because learnings from

this study could possibly inform treatment program implementation and its evaluation at other addiction treatment facilities in South Africa.

Generalisability has been considered to be irrelevant to qualitative research as this type of research emphasises the uniqueness of the specific situation being studied (Krefting, 1991). This point of view suggests that no situation is similar and findings cannot be transferred to other contexts. However, Guba (as cited in Krefting, 1991) noted that qualitative researchers may provide a measure of applicability by providing thick descriptions of similarities between two contexts allowing researcher to compare contexts and make informed decisions regarding transferability. If researchers have access to these descriptions it would allow them to apply findings to different settings that can be similarly described.

The researcher has ensured applicability by presenting sufficient amounts of descriptive data regarding the research context of this study. This will allow for comparison by any person who wants to transfer the findings to a similar context. Additionally, “It is critical that researchers provide dense background information about the informants…to allow others to assess how transferable the findings are” (Krefting, 1991, p.220). Therefore, the researcher asked each research participant to complete a short biographical questionnaire. The researcher included this information to give the reader an indication of the qualities and characteristics of participants. Information deemed relevant for this purpose have been included in the research report, but identifying details have been omitted in order to ensure participant anonymity. This study’s use of non-probability purposive sampling has further enhanced transferability by being very specific about participant inclusion criteria.

3. Consistency

A study’s data is considered “consistent” if it leads to the same findings and conclusions each time the study is repeated on the same group of people or in a similar situation (Krefting, 1991). This criterion adds to a studies reliability and refers to whether the findings would remain consistent if the research was replicated.

Guba (as cited in Krefting, 1991) argues that one can achieve what quantitative researchers refer to as ‘dependability’ in qualitative research by tracking variables that might influence consistency. Doing this will give the researcher an indication of whether the findings were solely related to the experiences of the participant in relation to the topic or whether they were influenced by other factors like educational background, experience, mood or fatigue. Tracking and noting these factors may improve a studies propensity for replication. Therefore, the researcher took notes of any observations or thoughts that occurred during and after the interviews in an effort to account for any such variables.

Examples of ‘trackable variability’ that was noted by the researcher was the fact that participants from the first focus group interview displayed significantly higher levels of frustration, feelings of hopelessness, subjectivity and a lower mood state in general. Conversely, participants who formed part of the second focus group seemed rather amicable and embraced an objective, problem-solving orientation regarding their frustrations.

The researcher primarily ascribed these differences to the timing of interviews. The first interview was conducted at the end of the year in December and the second in January of the following year. Unfortunately, same day interviews could not be accommodated due to participant schedules.

The researcher believes that mental fatigue and exhaustion among working individuals is generally more common at the end of a working year and that people feel more positive after a restful holiday season. However, these variables may also be related to individual differences among participants as they were purposefully allocated to specific groups. This was done to avoid the possible influence that perceived staff hierarchy may have had on participant disclosure. Another possible reason may be that the behaviour was caused by the researcher. The researcher might unintentionally have associated more strongly with the second group of participants and could therefore have influenced their behaviour or misinterpreted their mental state because of his own perceptions.

Krefting (1991) states that the researcher and the participants are the main instruments that must be tracked for consistency as their influence varies significantly within qualitative research projects. Therefore, variables such as these were tracked and controlled for during data analysis. Noting these variables may enhance consistency and serves to increase the potential replicability of this study.

4. Neutrality

The data should be unbiased. Guba (as cited in Krefting, 1991) argued that the results of the data should be based solely on the data obtained from participants and should be free of “other biases, motivations and perspectives” (p.216). This is quantitatively achieved by maintaining a professional distance between the researcher and participants to avoid the “enmeshment” of personal perspectives (Krefting, 1991, p.217). This however, creates a bit of a double-bind for qualitative researchers. Qualitative researchers have always attempted to establish rapport with participants as this increases the likelihood of participants providing rich, detailed descriptions of their unique experiences (Krefting, 1991). In order to address this issue, Lincoln and Guba (as cited in Krefting, 1991) suggested that qualitative studies focus on the neutrality of data instead of researcher neutrality and that this should be established by achieving both truth value and applicability.

It has been noted that the researcher controlled for and established both truth value and applicability during this study. Therefore, it can be argued that neutrality has also been achieved. Moreover, the disadvantages of establishing rapport with participants was acknowledged and consideration was given to minimising the effects thereof.

Furthermore, the researcher consciously attempted to identify and minimise any pre-conceived perspectives and biases during the data gathering process as well as the data analysis phase of this research project. The researcher also obtained continuous feedback from his supervisor and co-supervisor on how his

level of research experience and personal perspectives have influenced the data collection, findings and conclusions of this research project.

4.10 Ethical Considerations

Research participant safety and dignity should at all times receive priority over research interests (Terre Blanch et al., 2006). Simply put, the well-being of participants should always be considered more important than the possible benefits associated with conducting the research project. Therefore, a researcher has a moral and legal responsibility to protect participants from all forms of harm or loss. Since the 1940's, various laws and professional codes were introduced to protect society from scientific exploitation (Fouka & Mantzorou, 2011). "The Nuremburg code" was introduced in 1947 in response to Nazi scientific exploitation, another such code is called "The declaration of Helsinki", which was introduced in 1964 (Fouka & Mantzorou, 2011). The following passage summarises some of the basic principles from the more recent "Belmont report" *(The Belmont Report, 1978)* and gives the reader an idea of what these codes entail:

Respect for persons, beneficence and justice are principles that are particularly relevant when conducting research involving human beings and require that the researcher includes due care to include elements of informed consent, risk/benefit assessment and the just selection of subjects (The Belmont Report, 1978).

The researcher acknowledged these codes and maintained the ethical values they uphold while conducting this research project. Ethical considerations that were taken into account during this study include; *Ethical review*, *Informed consent, confidentiality and anonymity, the right to privacy and confidentiality of data, beneficence and non-maleficence and finally exiting ethics.* A written communication was utilised to familiarise gatekeepers and participants with these concepts prior to focus group interviews (See appendix A). Additionally, the researcher provided a detailed explanation thereof and allowed participants to ask clarifying questions before consent forms were signed.

4.10.1 Ethical Review

"An independent and competent research ethics committee should subject all protocols to independent ethical review prior to commencement of data collection" Terre Blanche et al. 2006, p.72). Accordingly, the researcher initially presented his research proposal at a meeting of the Departmental Post Graduate Studies Committee for the Department of Psychology, before initiating this research project. Feedback was obtained and the necessary changes were made.

Thereafter, the researcher submitted the revised proposal to the Faculty Postgraduate studies committee of the Faculty of Health Sciences, followed by a review by the Research Ethics Committee – Human (REC-H) at the Nelson Mandela University. The researcher's proposal was discussed and evaluated by this committee. The proposal was approved and feedback was provided. Once again, the researcher amended his proposal and submitted the final draft to his supervisor after which it was officially processed by the university.

However, gatekeepers at the DOSD preferred that this study be conducted under the auspices of an existing study that was being conducted at the facility during that time. The researcher contacted this particular research team and a collaboration was discussed. The researcher and the research team had to make minor amendments to their initial proposals and re-submitted to REC-H for ethical approval.

The data gathering process was only initiated once final approval was received from the university ethics committee.

4.10.2 Informed Consent

Informed consent is one of the primary ethical issues that researchers have to consider when conducting research (Fouka & Mantzorou, 2011). "Informed consent ensures the full knowledge and cooperation of subjects, while also resolving, or at least relieving, any possible tension, aggression, resistance or insecurity of the subjects" (De Vos et al., 2005, p.60). The first step in obtaining informed consent entails providing potential participants with accurate information regarding the study that is also understandable and comprehensive (Terre Blanche et al., 2006).

Accordingly, a detailed e-mail was sent to gatekeepers and prospective participants at the facility. The e-mail was typed in English as all members of the MDT were considered to be in command of this language. This e-mail was sent by the researcher in conjunction with the NMU research team under which's auspices this study was allowed to be conducted.

This letter included detailed information regarding the channels that were followed in obtaining permission from the DOSD to conduct research at the facility and explained under what condition it was granted. It also included information regarding the research collaboration and ethical approval. This study's title, aim and objectives were also clarified. Additionally, the e-mail explained the research procedure and the data gathering process.

Another aspect of informed consent includes the assurance that participation is voluntary and that participants can refuse or withdraw without incurring any consequences (Terre Blanche et al., 2006). Therefore, This e-mail was sent well in advance of the first focus group interview and categorically stated that the interviews were voluntary and that members of the MDT need not participate and may withdraw at any time without penalty if they so choose.

However, noteworthy to mention was that the researcher took the time to revise the content of this e-mail and the ethical considerations of the study with participants immediately prior to conducting interviews. The researcher was surprised to note that participants from the first focus group did not know that participation was voluntary, indicating possible coercion by centre management. The researcher did however explain the voluntary nature of these interviews personally and informed participants that they were free to withdraw from the study without fear of negative consequences. All participants did however agree to participate on their own account after the explanation was afforded. Conversely, a pre-interview enquiry revealed that participants from the second focus group had been made aware of the voluntary nature of participation before the researcher arrived to conduct the interview.

Additionally, this e-mail contained a biographical questionnaire. This was deemed necessary to provide the reader with a basic description of participants. This information can be used to assist the reader in determining the credibility of the study.

The nine elements of effective adolescent addiction treatment was designed for international use. Therefore, the researcher acknowledged that participants may not be familiar with these elements. Consequently, a reflection sheet designed to help participants reflect on their perceptions and experiences in relation to these elements was included. This reflection sheet also served the purpose of helping participants focus their discussion during group interviews.

The researcher acknowledged that some members might not have access to e-mail and that some might not have received this communication. Therefore, as an additional measure, the researcher printed hard-copies of this e-mail and personally delivered them to the treatment facility for distribution by the gatekeeper. The researcher also printed a duplicate set of these documents which was taken to focus group interviews. These were re-issued to participants who had forgotten theirs or who had not received a copy.

Ethical considerations were discussed and explained by the researcher before focus group interviews were initiated. No translation of information was required as participants verbally acknowledged that they understood the contents of the document. Prospective participants voluntarily signed consent forms directly after this discussion took place. Participants also had the opportunity to ask questions or to raise concerns during this discussion. This particular study did not attempt to deceive participants to any extent. Additionally, the researcher did not foresee any possible harm to staff members resulting from their participation in this study.

4.10.3 Anonymity and Confidentiality

Participants were informed that their participation would be anonymous and confidential. Participant's names were not recorded and the information that they provided was only accessed by those identified individuals who were directly involved in the research process. However, the researcher could not promise complete anonymity.

Fouka & Mantzorou (2011) Suggests that anonymity is ensured by making sure that the reader cannot link the identity of participants with their individual responses.
The researcher explained to participants that the risk for what has been termed "deductive disclosure" exists, but that the utmost care would be taken to guard against it. This is the

ability of a reader to determine the identity of a participant by means of deduction (Tracy, 2010).

This concept was particularly relevant to the current study because of the small sample size and the specialist training that some members of the MDT have received. For instance, a trained nurse would most probably use medical jargon to explain a particular situation. This would make it fairly obvious that a specific comment was made by a medical professional.

To guard against this phenomenon, the researcher used pseudonyms to identify participants. Another such measure, was the omission of questions related to where participants live in the biographical questionnaire. This was deemed necessary because Ford & Reutter (1990) warns that identities can also be deduced from particular biographical details such as postal codes. Moreover, every effort was made during the write-up phase of this study to protect the identity of participants. This was done by creatively distorting any identifying details in participant responses without changing the content and meaning thereof (Ford & Reutter, 1990; Tracy, 2010). The researcher made use of member consensus and triangulation to ensure that the meaning of participant responses were not lost or distorted by this measure.

4.10.4 Right to Privacy and Confidentiality of data

Privacy was emphasised when arranging venues for interviews and the researcher personally ensured that venues were suitable before conducting interviews. According to Willig (2013), realist researchers are to ensure the real or perceived safety of participants in order to create a comfortable environment in which they are able to provide accurate and detailed information. Therefore, interviews were conducted in an environment that was familiar to participants. Additionally, staff hierarchy was also considered when participants were selected to attend a specific focus group interview. The researcher deemed this appropriate as it would make it easier for participants to be open and honest while relating their ‘stories’.

Permission was obtained from participants to record interviews before they were conducted. The recorded interviews were independently transcribed and saved to an encrypted hard drive. “As a method of procedural ethics, researchers safeguard

participants from undue exposure by securing all personal data—in a locked office or drawer, or a password-protected website" (Tracy, 2010, p.847). The researcher's hard drive remained in his possession and was kept in a locked cabinet in his personal study. Participant biographical questionnaires and informed consent forms were kept in the locked office of the researcher's co-supervisor. The resulting data and documents were only accessed by those identified individuals who were directly involved in the research process.

4.10.5 Beneficence and Non-maleficence

Non-maleficence is a pre-requisite for obtaining informed consent. In research this concept refers to the researchers responsibility to cause no harm to participants (Ford & Reutter, 1990). Beneficence refers to any benefits that might arise from conducting and completing a research project (Ford & Reutter, 1990). "A researcher must consider all possible consequences of the research and balance the risks with proportionate benefit" (Fouka & Mantzorou, 2011, p.5). Accordingly, Communication of possible risks and benefits along with an assurance that participation is voluntary and that participants can refuse or withdraw without incurring any consequences is essential in achieving this criterion (Terre Blanche et al., 2006).

Regardless of how clinically significant this study may prove to be, the benefits of this study may not be achieved at the expense of its participants. The risks should never outweigh the benefits and participants should be made aware of any possible risks.

Therefore, the researcher ensured that the current study did not employ any form of participant deception and that no risks were associated with participation. Enhanced treatment outcomes, reduction in adolescent relapse rate and the improvement of the MDT's general working environment were noted as possible benefits of participating in the study.

4.10.6 Exiting Ethics

Tracy (2010) argues that "ethical considerations continue beyond the data collection phase to how researchers leave the scene and share the results" (p.847). Tracy (2010) refers to 'feminist communitarianism' and explains that researchers who follow this

philosophy return to the research scene and share their findings with participants. The researcher shares this perspective and endeavoured to communicate findings to participants before making it available to any outside sources.

Accordingly, the facility gatekeeper was contacted after data analysis was completed. A suitable time was arranged in order to provide research feedback to participants. Findings were presented to facility staff on 28 August 2018 at the treatment centre. The researcher thanked participants for their contribution to the research project. Research participants were informed that a detailed copy of the report would be e-mailed to those who indicated that they were interested in receiving one. This was done after the final write-up of the researcher's dissertation had been completed.

4.11 Conclusion

This chapter addressed both the primary aim and specific objectives of this study. A detailed description of the research methodology was provided. The study was exploratory in nature and made use of a non-probability purposive sampling technique to identify participants. Focus group interviews were used to gather data.

The researcher's ontological and epistemological views were grounded within a critical realist perspective. This perspective dictates that there is a real world that exists outside of our awareness and that our knowledge of this world is influenced by our individual perceptions. This perspective allows for the qualitative-descriptive research design that was employed in this study.

Consequently, the researcher's 'way of thinking about thinking' allowed this study to shed light on a problem within what is considered to be the 'unknowable real world' by describing the unique perceptions of participants who have experienced it within its context. Simply put, the resulting union of different perceptions was used to increase our knowledge regarding a very real problem.

Data analysis was performed using Tesch's (1990) eight steps for qualitative data analysis. Trustworthiness was ensured by employing Guba's model (as cited in Krefting, 1991).

All aspects of the ethical principles endorsed within guiding codes such as ‘The Belmont report’ were upheld throughout the research process as the researcher endeavoured to conduct research in a responsible and professional manner.

Results and findings from this research project will be outlined and discussed in the following chapter.

Chapter Five:
Findings and Discussion

5.1 Introduction

The qualitative design of this research project focused on exploring the functioning of the MDT at an in-patient adolescent drug treatment facility and their perception of the extent to which nine essential core elements of effective adolescent addiction treatment aligns with their approach to treatment program implementation. The researcher conceptualised four additional objectives that were considered necessary to achieve this aim.

Important to the analysis of the participants' interviews is the framework provided by the interpretive approach. This approach highlights the importance of gaining a rich and deep understanding of the experiences and perceptions of participants within a specific context (Terre Blanche, et al 2006). However, Terre Blanche et al (2006) postulate that interpretation should always be compared with lived experiences because there is a difference between "life as it is lived in psychological experience and life as it is represented through interpretation" (p.346). Therefore, the interpretive process was informed by the lived experiences, values and beliefs of participants who at the time of this study were actively involved with treatment program implementation in South Africa.

The researcher's ontological and epistemological views were grounded within a critical-realist perspective. As described in Chapter 2 of the current study, this perspective dictates that the real world exists outside of an individual's awareness and that knowledge of this world is influenced by our individual perceptions. Participant perceptions therefore inform their realities as well as the researchers understanding thereof. The researcher attempted to remain aware of this occurrence as well as his own perceptions, pre-conceptions and beliefs throughout the research process in order to be able to describe his interpretations as objectively and credibly as possible.

The nine essential elements of effective adolescent addiction treatment was used as a comparative lens (Drug Strategies, 2003) with which to interpret the resulting data. Theoretically, the researcher followed a bio-psychosocial approach to adolescent drug treatment which was complemented by Urie Bronfenbrenner's ecological systems theory

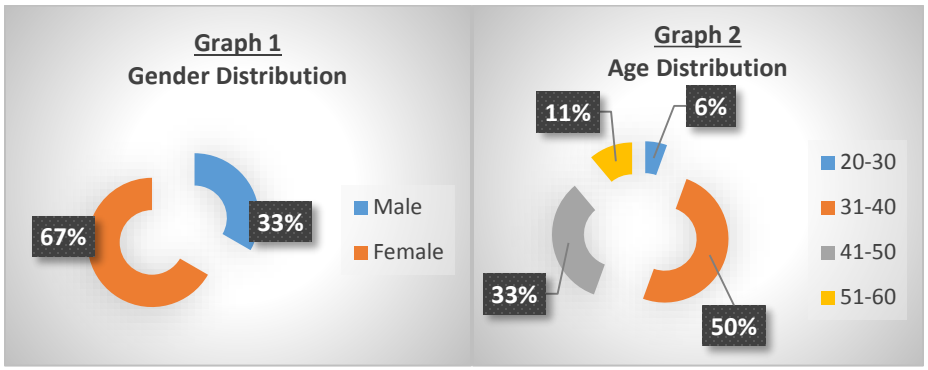
as well as the ecosystemic perspective/cybernetics. The researcher employed these theories to illustrate the interactions between the different 'nested structures' surrounding the adolescent as well as the MDT. Accordingly, the researcher's interpretation of the research participants' views were informed by the complimentary theoretical lenses employed in this study.

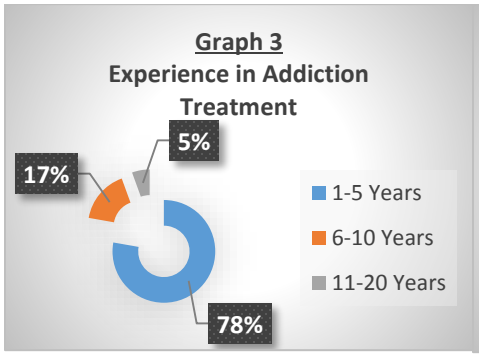
The current chapter will provide an in-depth discussion of the themes and sub-themes that emerged from the resulting data. Terre Blanche et al (2006) state that the discussion should include the most important findings of a qualitative study and that the significance of these results should be emphasised. Therefore, the discussion will contrast and compare the results by drawing from the literature review as outlined in Chapter 2 as well as Chapter 3 of this dissertation.

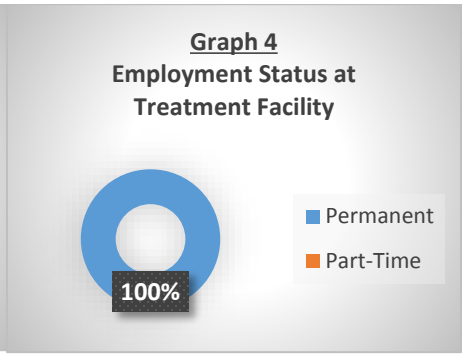
5.2 Description of the Sample Population

The sample population consisted of a total of 18 participants. 12 were female and 6 were male. The ages of participants ranged from 25 to 54 years with an average of 40 years. The majority of participants fell within the 31-40 year category, while the 20 to 30 year category had the lowest number of participants. 78% of participants indicated that they had between 1 to 5 years' experience within the field of addiction treatment with 17% indicating between 6 to 10 years of experience. Only 5% indicated that they had between 11 to 20 years of experience. All participants indicated that they were permanently employed at the treatment facility. The abovementioned biographical information indicates that the sample population have the necessary first-hand experience needed to provide valid and reliable information regarding the implementation and efficacy of adolescent addiction treatment programs in South Africa.

The following graphic illustrations provide a visual representation of participant biographical data that was considered relevant to this study (Graph 1-4):







5.3 Themes and Sub-themes

Participants in this study provided detailed descriptions of their perceptions and experiences concerning the implementation of the in-patient adolescent addiction treatment program at the treatment center where they were employed. The resulting narrative provided the researcher with an in depth understanding of how the nine elements are employed at the facility as well as new learnings unique to adolescent addiction treatment in the research context. The collected data resulted in the following themes, sub-themes and resulting conclusions (See Table 2):

Table 2: Themes and Sub-themes

Themes	Sub-Themes
Theme1: Screening procedures	1.1 Lack of accurate client history 1.2 Contribution of screening to program efficacy 1.3 Underutilisation of staff
Theme2: Comprehensive services	2.1 Biopsychosocial aspects of treatment. 2.2 Barriers to comprehensive services. 2.3 MDT interaction with ecological systems in the client's life. 2.4 Role of comorbid mental health issues
Theme3: Family involvement	3.1 Family involvement in the treatment process 3.2 Role of the family in creating and maintaining adolescent addiction 3.2 Role of the family in facilitating effective addiction treatment
Theme4: Developmentally appropriate services	4.1 Adolescents are prone to boredom and need to expend energy to facilitate treatment 4.2 Measures taken to enhance developmental appropriateness 4.3 MDT suggestions on how to facilitate developmentally appropriate services
Theme5: Strategies to engage & keep teens in treatment	5.1 How the MDT understands the adolescent's perspective regarding addiction treatment. 5.2 The value of recreation and informal interactions between staff and clients. 5.3 Corrective emotional experiences from staff members facilitate growth and change

	5.4 The value of peer interaction and acquisition of positive role models.
Theme6: Continuous training and development of staff	6.1 Availability and implementation of further training and development for staff members. 6.2 Specific areas of training that staff members believe would improve treatment program effectiveness
Theme7: Consideration of cultural and gender differences	7.1 How treatment needs differ between boys and girls. 7.2 How religious practices are observed at the treatment center 7.3 Perceptions on how culture influences treatment
Theme8: Aftercare support	8.1 Lack of aftercare negates treatment and promotes relapse 8.2 Aftercare services at the facility. 8.3 Opinions on how to implement aftercare services
Theme9: Measuring treatment outcomes	9.1 Post treatment feedback obtained by word of mouth 9.2 Feelings related to a lack of treatment outcome information 9.3 Taking initiative towards obtaining treatment outcome information
Theme 10: (Unique Theme):	The multi-disciplinary team's experiences relating to trust and group cohesion

5.4 Findings and Discussion

As outlined in Chapter 2 of this dissertation, the literature refers to various different etiological models that have been developed to explain the origin and maintenance of addiction. The researcher argued that addiction should be viewed as a complex phenomenon that is caused and maintained by a host of bio-psychosocial factors within an adolescent's life and environment. Consequently, this study subscribes to a multicausal model of addiction.

The nine elements of effective adolescent addiction treatment was shown to be bio-psychosocial in nature. This is because each element addresses a different structure or system within the adolescent's life and environment which may increase the individual's susceptibility to addiction and the maintenance thereof. Urie Bronfenbrenner's Bio-ecological theory of human development aligns with the multicausal model of addiction and was included to illustrate how the nested biological, psychological and social structures in an adolescent's life may interact to influence development as well as behavior.

In Chapter 3 it was noted that the interactions between Bronfenbrenner's nested structures can be defined and explained by employing what is known as systems theory/cybernetics. Additionally, treatment approaches based on systems theory was shown to be the most effective form of form of evidence-based addiction treatment for adolescents (Brannigan, et al., 2004).

The findings and outcomes of this research project will now be discussed according to the themes and sub-themes that emerged from the resulting data.

5.4.1 Theme 1: Screening Procedures

There is a distinction to be made between screening and assessment. Straussner (2014) postulates that screening should be done to determine whether a person has an actual problem with substance abuse, whereas assessment only starts once dependence has been confirmed. Participants have indicated that the treatment facility follows what can be defined as a formal assessment process prior to each new intake of adolescents. Some participants however, have expressed concern regarding what Straussner (2014)

terms ‘screening’. The participants’ views will be illuminated under the discussion of the respective sub-themes.

Concerns were raised that some adolescents are incorrectly screened prior to referral, leading to ‘false-positive’ admissions and that the facility is not equipped to address the various other bio-psychosocial concerns that might have led to their specific problems.

Ultimately, three lines of thought emerged as specifically relevant within this theme. The first being that it is not always possible for the MDT to obtain accurate information regarding client history in the South African context due to a lack of capacity in the social services sector. The second, is that assessment is an ongoing process that should not and cannot be rushed. The third, is that the building of rapport and the facilitation of genuine relationships with clients enhance screening and assessment.

The following sub-themes were informed by participant discourse and provide thick descriptions of the MDT’s perceptions and experiences regarding the screening process.

5.4.1.1 Sub-theme 1: Lack of accurate client history

The first element of successful adolescent addiction treatment highlights the importance of having a client screening process in place. “Screening is the first step in finding the appropriate kind of help for a teen with substance abuse and other problems” (Drug Strategies, 2003, p.4). Participants indicated that screening was indeed an integral part of treatment program implementation and that a client history file accompanies a client’s initial application. The information in this file is compiled by the social worker who referred the adolescent to the facility. Participants reported that it is not always apparent whether adolescents who have been referred to the program have actual substance abuse problems.

> F2P3: “What usually happens is that we have an application that goes out and then we receive it. The application includes the medical history, psychosocial report and anything to do with the child being in conflict with the law…we then discuss the suitability of the applicant for the centre”

Ongoing assessment also forms part of the treatment program. Weekly progress discussions are held by members of the MDT to assess clients on a case by case basis.

F2P4: “Case discussions is also part of that continuous assessment.”

F2P5: “Almost every Friday we have assessments.”

Additionally, participants indicated that the facility employs a “generic screening tool” to determine the extent of an adolescent’s substance abuse prior to admission. This tool in conjunction with the information provided by the referring social worker is then used to determine the clients treatment needs.

F2P1: “We do the assessment with the screening tool together with the care plan and the individual development plan.”

F2P1: “It’s supposed to be aimed towards getting information pertaining to the substance use difficulty of the client.”

Drug Strategies (2003) recommend the use of standardised screening tools that have been evaluated for reliability as well as validity. It is unclear whether the screening tool in question complies with this recommendation.

Interviews highlighted a diverse range of factors that influence the screening process at the facility, most notably was the lack of accurate and complete client history as provided by referring social workers. Straussner (2014) states that it is necessary to obtain the history of an individual’s substance abuse in order to determine the level of “disruption in bio-psychosocial areas of his or her life” (p.118). Participants identified this as an aspect that hampers the screening process. Additionally, CYCW members made use of the pronouns “they” and “them” when referring to staff who conduct screening at the centre, indicating non-involvement of CYCW in the screening process. The following comments were made:

F1P4: “I was not happy with the information they [referring to the adolescent drug treatment staff] got from the outside social workers. I felt that they [referring social worker] didn’t give them enough information and yet they are forced to take the child according to that small information.”

F1P7: “The questions that we had were not answered even in the, in the information in the file of the child, err…how long has the child been smoking there’s nothing there.”

F2P8: “I think they sometimes leave out information or they don’t actually declare that information.”

In some cases, the lack of an accurate bio-psychosocial client history has led to ‘false-positive’ admissions at the facility. These admissions hamper effective addiction treatment. Some members of the MDT stated that inappropriate referrals were difficult to manage as those clients present with conduct problems. Based on their observations of the gaps in the client history file, participants reported that they have had to amend the screening process to place more emphasis on ongoing assessment.

F1P3: “You sit with the child and you discover a lot about the child maybe that the child is not even supposed to be here right.”

F1P4: “Some children that we have here don’t really have a drug problem more than their social behaviour.”

F1P7: “Someone will come and say, I stopped smoking five months back my social worker knows this my mother knows this but they said I must come here and that’s where the behaviour starts getting bad.”

F2P9: “It’s only when we have the child here. When we talk to the child we find out that there are more things, like what’s happening at home that the social

worker was not aware of so that's why we have to continue getting information."

In addition to comments regarding the effects of the inaccuracy of these reports, participant (F1P4) indicated that parents also hide information that would exclude them from placement. Parents eventually share this information after building better relationships with members of the MDT.

F1P4: "…and you'll find that sometimes you will ask the parent whether the social worker knows about this and he'll say no I didn't tell the social worker."

As noted in Chapter three, systemic theorists concern themselves with patterns of interaction between people and the systems they form part of. A system's behaviour is seen as a reaction to a perturbation (Maturana, as cited in Becvar & Becvar, 2009). In this case it seems as if the social service system is responding in a manner which is consistent with its structure, also known as structural determinism.

It is the researcher's opinion that there is an overwhelming need for adolescent social services in the Nelson Mandela Metropole and that this need far exceeds what local social workers are able to deliver. Participants felt that external social workers don't have the means or time to conduct a comprehensive assessment of the client's circumstances.

F2P4: "I think the other contributing factor is it's not a long relationship prior to application. Sometimes it will be literally on intake, one contact session then the report is compiled from that information and it's always based on crisis."

F1P3: "Outside social worker what they do most of the time they withdraw the info, the full information of the child because they want the child to be accepted."

The resulting data suggests that outside social workers might see the facility as one of the only places of safety for troubled adolescents regardless of whether their primary

problems are directly related to substance abuse. If this is true, we can say that the actions of the outside social workers are a direct interactive response to a social service system that does not have the capacity to address the various bio-psychosocial problems that South African adolescents are confronted with.

Second-order theorists refer to this occurrence as “normalcy in context” (Becvar & Becvar, 2009, p.360). Outside social workers are determined to provide social services as is consistent with the structure of their training in an environment with limited resources. Their actions can therefore be described as normal for this specific context, even though it might hamper effective addiction treatment at the facility. Further research regarding the need for, and capacity of social service delivery in South Africa is therefore needed to investigate and address the current state of this system.

5.4.1.2 Sub-theme 2: Contribution of Screening to Program efficacy

There where differing views regarding the ultimate usefulness of the screening procedure at the facility. Participant’s experiences of the screening process ranged from positive to negative.

Positive experiences related to the structured way in which screening is conducted at the facility. These participants perceived the process as conforming to legislative requirements as well as minimum norms and standards at the facility. Positive perceptions seemed to be further bolstered by a sense of confidence regarding the professional competence of members of the MDT and the belief that the full bio-psychosocial spectrum of enquiry is considered during screening.

> F2P3: “…one’s role is to go through the file, make a summary and present it to the MDT and then we discuss the suitability of the applicant for the centre.”

> F2P4: “Screening is a stage only measured against our admissions criteria to see whether the applicant falls within the criteria, from there additional areas of concern might come out so we might recommend that the child see nursing or psychiatry or social or psychologist on admission.”

Participants who perceived the screening process as ineffective felt excluded from the decision making process and placed more value on personal intuition when screening clients for admission to the program. Additionally, the researcher identified a notable difference in how some members of the MDT conceptualised the manifestation of substance abuse and addiction. Some participants felt that there was a clear distinction between behavioural problems and substance abuse while others felt that these two problems are always linked. This distinction may have had a direct influence on the approach to screening that was being followed at the treatment facility, and therefore the occurrences of 'false-positive' admissions.

> F1P7: "I told them even on that day of the screening that this is how I felt and the answer that I've got is that it goes together drugs and behavioural problems it goes together. So I told them you don't hear what I'm talking about yes it goes together but this child that we are talking about here does not belong here at all and really that child was here only for three weeks after that the child left the place."

In addition to these comments, one participant mentioned that the screening process was too short. It was inferred that more screening time would generate more information allowing for improved service delivery.

> F1P7: "It seemed like they didn't have enough time to talk about each child you know because we are going to spend time with the child they are supposed to know everything about the child."

Additionally, excluded members stated that they were originally briefed after each screening session but that they were no longer being briefed. This occurrence complicates care and hampers their ability to provide for the specific needs of each individual adolescent.

F1P7: “On our first intakes they [Screening team] use to sit like this and then they would tell us [CYCW] about everything in the file about this child that is coming.”

F1P6: “Both of us, me and the nurse were so shocked because it was not shared it was not in the file of the child.”

F1P7: “I would have done something different you know I would have found information, I would have done something for this child.”

“Assessment provides a basis for determining if the adolescent’s needs match the services available at the particular program.” (Drug Strategies, 2003). Screening at the facility was found to be systematic and also controlled for biological, psychological and social variables.

From the participant’s discussion it emerged that the screening process at the facility attempts to identify adolescents who are suitable candidates for treatment. It did however become evident that not all members of the MDT were being included in the screening process itself. There were those who were not completely aware of what the actual screening process entailed and there also seemed to be a difference in opinion as to what constituted suitability for treatment.

In Chapter 3 it was noted that it can be difficult to identify adolescent substance use disorder as some of the signs of substance abuse can be attributed to normal behavioural changes that are associated with this stage of development (Straussner, 2014). It therefore makes sense that clients who presented with conduct problems may in some cases have been incorrectly admitted for drug treatment.

5.4.1.3 Sub-theme 3: Underutilization of staff

Not all members of the MDT are included in the screening process. The Child and Youth Care Workers (CYCW) do not officially form part of the MDT at the facility. These individuals stated that they are usually represented by their team leader at the screening meeting and are only included when the team leader is absent from the facility. Even though they are not part of screening, they feel that their experience within the field allows them to make valuable contributions that could possibly reduce the occurrence of 'false positive' admissions.

> F1P4: "You'll only get an experience of screening if the team leader is not at work, we are acting on behalf of the team leader…that's how I get the opportunity to be a part of the screening."

> F1P7: "The screeners are not here when we work shifts, so they are not here to, to actually see what they have screened".

> F1P7: "I would say as child and youth care workers, we can actually see that this child is a problem and as soon as he gives us a problem we just know that we saw when he came in but they don't."

Duties of the CYCW include but are not limited to weekend and after hour care, supervision of extramural activities and ensuring that the basic needs of adolescent are met during their stay at the facility. Adolescents therefore spend the majority of their time in the company of these ancillary members of the MDT.

CYCW members report that this leads to close bonds forming between themselves and their clients. These bonds lead to adolescents sharing information with members of the CYCW that are not in their files and that they would not share with other members of the MDT. The resulting data indicates that this information is not always incorporated into the treatment program.

F1P3: “When it comes to the screening part there are a lot of things that they don’t pick up, since we are the only people that have been with those children for twelve hours we saw a lot of or discover a lot about the child because we are with the child for more hours than everybody else.”

“Accurate screening and assessment of the adolescent client, the family, and mental health issues are essential in developing and guiding successful strategies throughout the course of treatment.” (Gans, Falco, Schackman, & Winters, 2010, p.7). Members of the CYCW felt that the bonds that form between them and adolescents represent a valuable opportunity for the ongoing screening and assessment of the adolescent throughout treatment duration. In addition, one participant mentioned that the facility’s minimum norms require them to conduct a comprehensive assessment within ten days after intake.

F2P4: “Our minimum norms say that within ten days the child must have, there must be a comprehensive assessment, so that is done with the social worker the psychologist and the OT”.

In this regard, the minimum norms at the facility were found to align with the literature. Gans et al. (2010) note that the initial screening process should be followed by a comprehensive assessment of the client’s needs and presenting symptoms.

5.4.2 Theme 2: Comprehensive Services

Drug strategies (2003) indicate that substance abuse problems are usually accompanied by co-morbid mental health disorders, learning disabilities, and problems with the law, family issues and health problems. Accordingly, it was argued in the literature review that when addressing addiction from a multicausal perspective one should guard against treating the problem of substance abuse in isolation. Therefore, “Effective treatment requires a multidimensional approach that may include neuropsychological testing; pharmacological interventions; cognitive, behavioural, and psychosocial interventions; as well as a multidisciplinary team approach that includes medicine,

nursing, psychology, social work, and other allied health professionals" (Straussner, 2014, p.63).

Bronfenbrenner's theory of Bio-ecological development was discussed in Chapter Two. A systemic parallel was drawn between the bio-psychosocial factors that interact to maintain addiction and the 'nested structures' the author refers to in his theory of development. Additionally, adolescence was shown to be a critical stage of human development and that substance abuse may have a negative impact on the development of normal cognitive functioning, physiological adaptation and the social skills necessary for adult life.

"Both international and South African research have identified a list of risk factors that increase the probability that a person will use substances problematically as well as a list of factors that protect individuals against the initiation of substance use." (Myers et al., 2008, p.15). A comprehensive approach to substance abuse treatment thus require MDT members to assess which systems contribute to the maintenance of addiction for each different client. Members of the MDT will also need to determine whether substance abuse has caused any developmental delays that may impede treatment.

In general, participants indicated that the treatment facility does attempt to provide comprehensive services to clients and that members of the MDT are qualified to deal with the entire bio-psychosocial spectrum of problems that adolescents may present with. There were however contextual barriers that hampered their efforts in this regard. The following four sub-themes provide the reader with a detailed description of comprehensive service delivery at the facility.

5.4.2.1 Sub-theme 1: Bio-psychosocial aspects of treatment.

Participants once again mentioned the lack of adequate screening information as a barrier to effective treatment. Some stated that they sometimes only realise the true extent of an adolescents biological, psychological and social deficits after several weeks of treatment.

F1P3: “A child has been admitted because of drugs and they are here to be treated for the drugs but then you discover that drugs are not the problem. Something else or other things are the problems, you understand.”

F1P6: “The child was giving the information to the doctor the child told the nurses and the doctor that she also has bulimia, she eats and then goes to the toilet and brings up the food and both of us me and the nurse were so shocked.”

F1P8: “You will see that the child can’t sign the register, he doesn’t know how to write his name, so you write in the file so that they can see that this child needs to be taken back to school.”

“Teenagers present different patterns of substance use, have unique developmental and social issues, and a higher prevalence of co-occurring disorders.” (Gans et al., 2010, p.2). Different adolescents will therefore probably need different levels of care. Myers et al. (2008) concur, stating that service needs differ between individuals and that the matching of interventions, services and treatment setting to the adolescent’s specific needs is crucial to improving addiction treatment outcomes. Accordingly, the provision of comprehensive and effective treatment effectively boils down to matching a treatment plan to the individual bio-psychosocial needs of each adolescent.

5.4.2.2 Sub-theme 2: Barriers to comprehensive services.

The researcher noted that some participants felt that there was a strict staff hierarchy present within the MDT. Child and youth care workers stated that they found it difficult to provide comprehensive care for their clients because of this.

F1P3: “You can only write a report and submit it as a referral, but it’s not up to us. No matter how thorough you are or how spot on you are about the child’s behaviour. In the end, as long as the child was admitted for this. What are you talking about? Okay, we hear you but we pay no attention to that. ”

Participants explained that their clients have immediate needs that they could not address because of what they perceived to be a lack of authority and an overwhelming amount of ‘red tape’ that needs to be dealt with before they can acquire the necessary resources to assist clients with these immediate needs.

> F1P4: “Maybe the child needs some clothes or other necessities. We first talk with Mr --------- [the Child care worker manager] and ask, do you have anything in the office? Then Mr -------- has to go and ask someone else, then that someone has to ask another someone, then it drags. You end up without anything. You are the one staying with this child and this child doesn’t have a jacket and its cold.”

In some cases members of the MDT have felt forced to provide for adolescent’s immediate needs by obtaining resources like warm clothing and toiletries from home and distributing it amongst adolescents. This was only done after all other avenues of recourse had been exhausted.

> F1P4: “Sometimes if we’ve got things from home that we can assist with. We bring things from our own home that can assist with the child.”

Upon the researcher’s enquiry, the participant confirmed that the basic needs items they provide in their person were clothing and toiletries.

> F1P4: [Reply] “Clothing and toiletries!”

As mentioned earlier in this chapter, the CYCW spend more time with clients than other members of the MDT. Interviews have indicated that members of the MDT that have access to facility resources are not on duty over weekends. This was perceived as a major barrier that prevents provision of comprehensive services. The participant’s discussion revealed that they did not have the authority to access these resources over weekends and that this has made it difficult to provide comprehensive care to adolescents.

F1P8: “Sometimes it’s weekend, those supervisors are not here. It’s only us. The kids are suffering to wash their bodies. There’s no soap or lotion.”

F1P8: “We don’t have access for those things. The laundry during the weekend it’s locked. There was a child here he was bed wetting at night. Now its weekend, the bedding is dirty and smelly there’s nothing we can do. We have to put on the washing line so that he can sleep with those things again.”

It was also noted by participants that communication channels were affected because of the hierarchical nature of their employment. Important client information that may be crucial to providing effective care was not always shared amongst the entire MDT.

F1P7: “We [CYCW] were not told about this child, so I don’t have information about this child. I only know that she is here because of the drug problem.”

F1P7: “We’ve been dealing with this behaviour for six weeks we do not know what is wrong with this person and all of a sudden when his about to go home ooh he has a problem and then you feel like, I would have done something different you know.”

This lack of transparent communication was considered to be a barrier that negated treatment program implementation. Participants also mentioned that they sometimes prepare and attempt to present life skill classes as part of treatment only to discover from clients that the topic had already been presented by other members of the MDT. The researcher observed that participants projected feelings of frustration and powerlessness while discussing this situation.

F1P7: “We as the child care workers we must be very careful. We must try to be very careful, careful because social workers are also doing life skills classes.”

F1P7: “We cannot do the same thing because it doesn’t make any impact. If we are doing the same thing because they didn’t tell us prior that they will be doing this, the kids become bored.”

Additionally, some participants noted that they felt underutilised at the facility. A discussion took place in which these participants described some of their skills that were not directly related to addiction treatment but which could be used to supplement recreational and educational activities at the facility.

F1P7: “Sometimes I feel that they deprive us, we have skills like cooking skills that we can teach to the children, to do the baking and now all that is done by one person.”

F1P8: “Even computer skills. We can teach them the basics but we cannot do that. Only one person can do that, we don’t have the access. We have to go and plead that person to open the computer room for us.”

F1P1: “I remember one time we were teaching the girls how to do an apron we had to come with the needles, with the sewing needles, then they, they do an apron”.

Childhood development was discussed in Chapter Two of this study. The literature revealed that adolescence is a stage of human development in which teenagers develop crucial skills that are necessary for fulfilling adult roles and that this sense of industry is sometimes fast tracked or negatively impacted due to early onset drug use (Burrow-Sanchez, 2006; Berk, 2013).

Dahl, (2004) emphasises the importance of addressing the resulting negative developmental trajectories as they have an impact on adult role acquisition. The need to address and minimise barriers to the provision of comprehensive care therefore becomes

a crucial part of improving the adolescent's future prospects and facilitating positive developmental trajectories.

5.4.2.3 Sub-theme 3: MDT interaction with ecological systems in the client's life

The literature review highlighted the importance of following a bio-psychosocial approach which does not focus on treating substance abuse in isolation. Additionally, Bronfenbrenner maintained that the various different ecological systems within an adolescent's life interact and play a critical role in normal childhood development (Berk, 2013). It therefore stands to reason that members of the MDT who work with developing adolescents should ideally be able to address problems within these systems in an effort to improve treatment outcomes.

In general participants reported that they regularly interact with the different ecological systems in their client's lives.

> F2P5: "We are also assisting, in terms of the legislation now where you, you are working with the other institutions outside…what I am saying is that you are working holistically with all of the domains in the environment and all of that, at a system level."

Participants noted that family conferences are held at the facility. At these conferences family members receive feedback regarding the adolescent's behaviour and progress. It also allows members of the MDT to get to know caregivers and to acquire additional information regarding their clients.

> F1P8: "We get involved when it's family conference. The social workers, child and youth care workers, and the child and the family."

> F1P7: "I will share the positive and the negative progress of the child that's how we, we normally do it."

F2P3: “You get a good understanding of what the family dynamics are.”

F1P8: “Sometimes you find out the parents are not together, they are divorced and now the boy has to stay with the father and then there’s a step mother who doesn’t treat it nice. You’ll find out everything started from there.”

Family conferences afford members of the MDT an opportunity to discuss family issues that might be causing or maintaining the child’s substance use. Additionally, these conferences provide the MDT with an opportunity to educate family members about substance abuse and relapse prevention.

F2P5: “You are preparing them for the discharge of the child because they have to receive the child warmly when he comes back. You find that situation where they are still not ready in terms of accepting that child.”

F2P6: “We are assisting them on substance abuse they are not aware of substance abuse. What is actually happening within the environment where the child is? What has influenced the child in using the substance? How can all of them also involve themselves in the recovery of the child? It’s their participation and involvement that is the importance of coming.”

Participants explained that they also interact with the outside social workers responsible for referral. Information regarding the adolescent’s specific bio-psychosocial needs are discussed with these individuals. Outside social workers are then expected to conduct family intervention sessions with the adolescent’s parents or guardians. It is hoped that this type of intervention will empower family members to be able to assist the adolescent to maintain sobriety after discharge from the facility.

F2P1: “We obviously try to plan the, the client’s aftercare with the external social worker to ensure that those areas are continually worked on obviously it doesn’t always happen in practice but I mean that’s the ideal situation”.

Additionally, one participant added that they also attempt to assist adolescent's with school placement after discharge and help family members apply for a social grant if it is deemed necessary.

F2P10: "Also to help like we are going to try and negotiate at school for you so you can go back to school."

F2P5: "I want to say that we don't end with the family, interacting holistically in all the domains to an extent where you find that … you have to place a child to school, but also materially. Let's say for a parent we have to apply for a grant and assist the social worker outside to apply, this is material and not just physically now."

As noted in Chapter 2 of this study, Mcneece & DiNitto (2012) refer to "*detoxification, intensive treatment, residential programs, outpatient services, medication, aftercare, maintenance, education and psychoeducation,* and *adjunct services"* as the nine different components ascribed to a bio-psychosocial continuum of care for addiction treatment (p.121). Provision of comprehensive services at the facility therefore requires the careful planning and implementation of these components of care.

In this regard, it should be noted that treatment program implementation at the facility is in line with what literature refers to as the prescribed objective of rehabilitation efforts. Hitzeroth & Kramer (2010) describe this aim as facilitating long term abstinence by providing assistance with medical, mental health, occupational and family functioning issues. Moreover, the MDT planned and facilitated these rehabilitation efforts in conjunction with primary caregivers.

5.4.2.4 Sub-theme 4: Role of comorbid mental health issues.

Participants indicated that they often encounter comorbid mental health issues in addition to that of the adolescent's substance abuse problem. Even though these issues

complicated service delivery, members of the MDT felt that they were appropriately equipped to treat these mental disorders in conjunction with substance abuse problems.

"Integrated treatment of comorbid psychiatric disorders in drug treatment programs for adolescents has trailed other integrated treatment services because of clinical and systemic barriers" (Riggs, 2003, p.18). Programs such as these should therefore ideally be staffed by a team of individuals with a wide variety of clinical abilities (Straussner, 2014).

It becomes clear that the MDT at this treatment facility meet this requirement as members are professionals from different fields of health care. The team consists of social workers, professional nurses, child and youth care workers, a psychologist and an occupational therapist. Additionally, the facility makes use of the services of an external medical doctor and a psychiatrist to bolster comprehensive service delivery.

"Given the prevalence of co-occurring mental disorders in persons with SUD, clinicians should use individual sessions to screen for comorbid mental disorders" (Straussner, 2014, p.316). One participant explained that the screening process at the facility was designed to identify any co-occurring physical and mental health problems that adolescents might present with. The screening process informs each individual adolescent's treatment plan.

F2P4: "From there, additional areas of concern might come out, so we might recommend that the child see nursing or psychiatry, the social worker or the psychologist on admission.

Interviews revealed that the psychologist worked with adolescents in respect of their individual mental health problems. This service was provided in conjunction with nursing staff and a sessional psychiatrist in order to identify and treat any medical concerns that might be present.

F2P3: “From the Psychologists side, the focus is mostly on the individual and the psychological factors that they present with, but then also working closely hmm with the nurses and the psychiatrist in terms of medical needs.”

F2P3: “I think if we are looking at psychiatric disorders. If you looking at major depressive disorders and anxiety disorder. There is a big overlap in terms of medical treatment and psychotherapy. We work quite closely with the psychiatrist to see at what stage we should introduce medication or whether we should try psychotherapy.”

One participant mentioned that legislation as well as the minimum norms and values at the facility requires every child to have a comprehensive assessment after ten days stay at the facility. This assessment is conducted in tandem by the Psychologist, Social worker and the Occupational therapist. Additionally, it was noted that family consultations were sometimes scheduled if they needed more information regarding a problem or if they needed to explain an issue to the primary caregiver.

F2P4: “We are required by legislation, our minimum norms say that within ten days… there must be a comprehensive assessment, so that is done with the social worker hmm the psychologist and the OT.”

F2P3: “We look at general medical conditions first and if need be…consultation or obtaining collateral or giving feedback and involving the family.”

One participant stated that adolescent’s attend life skill classes during their stay at the facility. These classes are facilitated by the nursing staff and are intended to educate clients regarding matters of general health and the changes their bodies are currently going through”.

F2P9: “In our skills programmes we mostly give things like hygiene or health status we even sometimes call people from outside to come and talk to them and

explain certain things like what's happening to their body and how diseases can affect them in life."

"Adolescents who abuse drugs possess special characteristics that include behavioural problems, skills deficits, academic difficulties, family problems, and mental health problems that generally have been shaped by environmental adversities and biological vulnerabilities that began in early childhood." (Riggs, 2003, p.18). A comprehensive approach to the treatment of adolescents who present with substance use disorders should therefore be aimed at identifying and addressing the interplay of the various nested structures within the adolescent's life. Participant discussions indicated that the MDT consider both the bio-psychosocial aspects related to treatment as well as the systems that influence the adolescent's behaviour.

5.4.3 Theme 3: Family Involvement

Chapter Two of this dissertation explained how both peer and family influences may heighten the risk for, or act as protective factor against substance abuse (Winters, 1999). Additionally, systems theory [first and second order] acknowledge the role of the family system in causing and maintaining addiction.

"Family factors that place an adolescent at risk for drinking and drug use include parental modelling of substance use, tolerance or approval of substance use, unclear rules for behaviour, inconsistent rewards and punishments, low family bonding and high levels of family conflict." (McMurran, 2005, p.58) .

From the above one can appreciate the significance of family involvement in the treatment process. Drug strategies (2003) note that primary caregivers play a major role in shaping the adolescents reality and that family life-skill development may increase the likelihood of achieving positive treatment outcomes. The following three sub-themes emerged from the data.

5.4.3.1 Sub-theme 1: Family involvement in the treatment process

Family involvement during the treatment process is encouraged at the treatment facility. Participants felt that family involvement was an essential aspect of treatment program efficacy, and that the nature of the adolescent's relationship with the parent will determine whether they serve as a risk or protective factor in the adolescent's recovery. Their discussion revealed that parents' absence and inconsistent visits whilst the adolescent is in the treatment facility, serve as a risk factor to the adolescents' response to treatment.

> F2P3: "Mostly, sometimes you know family members can be a negative influence on service users as well. Depending on the parents and the role the parents have in that child's life."

> F2P4: "When children are acting up, especially over the weekends. You will find that the parents did not come, nobody came to visit. That is also where the social worker will intervene and ask the family why they didn't come. The child was expecting them."

> F2P1: "On the whole it's beneficial. You do get some parents that, that actually exacerbate the situation rather than make it better."

On the inverse, participants revealed that parents who are consistently engaged with the adolescent and with the MDT serve as protective factor to the adolescents' recovery potential.

Participants explained that families are allowed to visit their children over weekends. They felt that weekend visits provided a valuable opportunity to establish rapport with parents and to obtain collateral information that might be used to guide treatment. These weekend visitations were noted as having an influential effect on the adolescent's mood and behaviour.

F1P4: “The parents come here and visit the children on the weekend so we also build a relationship with the parents when the parents are here.”

F1P4: “Sometimes the parents want feedback from us. How’s the child and whatever. Then we end up having that confidential talk with the parent and then you also get information from the parent.”

Participants explained that whenever they had the opportunity to interact with family members, they utilised the opportunity to educate them on how the child’s environment contributes to substance abuse. They also discuss discharge procedures to prepare parents for adolescent reintegration at home.

F2P6: “Involving them in the recovery of the child is part of their participation. That is the importance of their coming here.”

F2P6: “They are not aware of substance abuse, you have to assist with what is actually happening within the environment where the child is.”

F2P5: “Also, you are preparing them for the discharge of the child because they have to receive the child warmly.”

It was also reported that some adolescent’s parents live far away and that others do not have parents. It was noted in response to the researcher’s enquiry that in cases where there are no parents, the outside social worker assumes the role of the child’s guardian during treatment. Family involvement is therefore not always possible.

F2P5: “We directly meet with the whole family here in the centre, they come from Transkei and all over the Eastern Cape.”

F2P2: “It does [referring to parentless kids] and then external social workers come to attend.”

In a published study by Riggs (2003), the author reported that the majority of interventions for adolescent substance use disorder emphasise the importance of including family members in treatment. This may be because family members are viewed as being responsible for both facilitating and maintaining the child's substance use (Drug Strategies, 2003). Conversely, families who are involved with and forge trusting bonds with adolescents usually serve as a form of protection against drug abuse (Mcneece & DiNitto, 2012). The participant' perceptions and experiences were shown to be in agreement with the literature and further highlighted the multifaceted interplay between the members of the MDT, the adolescent in treatment and the adolescent's primary caregivers.

5.4.3.2 Sub-theme 2: Role of the family in creating and maintaining adolescent addiction

Volkow (2014) reports that the probability for substance abuse amongst adolescents is increased for those who experience family conflict in the home. Participants in this study echoed this sentiment and added that family conflict becomes especially apparent at family group conferences. MDT members noted that they then respond in a protective manner towards the adolescents.

> F1P8: "You will see in the family group conference there's no peace. Both parents want to point at each other. This is you who makes this boy like this you are spoiling this child."

Additionally, participants suggested that family disintegration and blended families had undesirable effects on achieving positive treatment outcomes. Members of the MDT felt that the families sometimes blame and begrudge their children for causing an imbalance within the family system. They explained that stepparents don't always support the child as a legitimate member of the new nuclear family. Moreover, participants observed that they felt parents were sometimes relieved to have the child out of the house. The following comments were made.

F2P1: “There is blame for the issues that are happening in the house…it’s obviously a sore point that your child or your relative has, you know a substance use issue so there can be that sort of you know, mistrust of the child.”

F1P8: “You find out the parents are not together, they are divorced and now the boy has to stay with the father.”

F1P8: “So now the child is fighting with the step mother and he now wants to move to the mother’s house.”

F2 P4: “Sometimes it’s such a broken relationship that parents are half relieved when the child is here so they can just recalibrate themselves”.

Normal adolescent development is characterised by the need for autonomy. Adolescents have a need to define goals and personal values before transitioning to adulthood (Berk, 2013). It was implied that parents deny their kids the autonomy and individuation that they actually need. Participants were therefore describing what can be referred to as a family system resisting functional change. Important to note however, is that cultural norms associated with families of African descent may be considered more prescriptive or patriarchal in terms of parenting style which may account for parents being experienced as less democratic.

It was noted that family conferences provided kids with a platform to express their needs without being admonished. MDT members would act as mediators during these family conversations. Parents were described as being very authoritative when it comes to their children’s future, life choices and decisions.

F1P6: “Because it also give a child a chance to talk about everything that he wanted to talk about for all this time, it provides a chance for a child to talk about his future plans.”

F1P6: “Sometimes a parent just comes in here and they already picked a school for the child and then the child will say, *no I don’t want to go to that one this and that*. Then he will be given a chance to explain why. Sometimes you end up going with the child plans.”

A family system that remains rigid and authoritative inhibits functional change and can be systemically described as clinging to morphostasis. Furthermore, Berk (2013) notes that as adolescents become more mature they often demand to be treated like adults. By refusing to accept the developmental needs of their children, parents might be creating a context for rebellion and therefore substance abuse.

From a second order perspective, the system is considered responsible for creating the context that maintains substance abuse. What family members do is therefore considered to be normalcy in context. Practitioners do not address the family system as something pathological that needs to be changed. The MDT would therefore need to keep interacting with the family system to change the context. By behaving in a certain way they can ‘perturb’ the system and induce changes in the rules of the system.

These rules can be defined as the relational patterns between members in the system. These changes should be constantly observed and the clinician’s behaviour needs to be adjusted as is deemed necessary to induce a context in which refraining from substance abuse is a logical reaction to changes in the rules of the system.

The dilemma with employing a second order perspective to the South African context is that it requires regular interaction with the family. It takes time to ‘perturb’ the system, to observe reactions and to re-assess future perturbations.

In Sub-theme 2 participants noted the unique challenges that may contribute to this dilemma. They stated that many parents live far away from the facility and that some adolescents do not have parents. Furthermore, family group conferences are not held that often and therefore cannot be considered a substitute for structured family therapy sessions.

Conversely, from a first-order systemic perspective the family system is viewed as pathological and needs to change for substance abuse to discontinue. First-order

theorists identify the needs of the adolescent and attempt to educate parents regarding these needs. The ultimate goal of interacting with the system is to encourage morphogenesis which leads to a functional system in which the adolescent's needs are met and the need for substance abuse becomes unnecessary. It is the researcher's opinion that the MDT are operating from a first order perspective. They simply don't have enough exposure to parents to perturb and observe systems as second-order practitioners might do.

In the South African context it therefore seems necessary to employ a first order perspective with a more direct approach. Morphogenesis of the family system should thus be encouraged by educating and empowering family members during their brief visits to the facility.

5.4.3.3 Sub-theme 3: Role of the family in facilitating effective addiction treatment

While listening to the participant's discussion regarding family group conferences it became evident that they all felt that these sessions contributed greatly to the effectiveness of treatment.

A notable aspect that was mentioned was that of relationship building. Participants felt that establishing a bond with family members made clients more responsive to treatment. Staff knowledge of client history and family dynamics improved significantly after these conferences. This provided the MDT greater insight regarding the potential risk and protective factors within the family system. Straussner (2014) states that "Information collected during individual and family interviews provides a foundation for describing the family's strengths, resources, members' presenting problems, and contributors to those problems" (p.316).

F1P4: "So we also build a relationship with the parents."

F2P5: "I say to them, you know I was talking to your mother. They like that bond you establish with their family. You know I was phoning I was talking to your

mother this morning and you will find that it also, it builds that trust with you just to say that you are in contact with their parents."

F2P3: "Group conferences are so useful in terms of planning interventions because really you get a good understanding of what the family dynamics are."

It becomes clear that the MDT's perceptions regarding family involvement in treatment is generally positive and that it offers them many benefits regarding treatment program implementation. The interviews do however indicate that one cannot consider parental involvement as truly integrated within this specific treatment program. It does happen, but it just might be a very promising area for further development at the treatment facility.

5.4.4 Theme 4: Developmentally Appropriate Services

"The treatment of adolescent substance use disorder is no longer in the province of the solo practitioner conducting individual counselling, nor is it desirable to treat adolescents with adult models that are insensitive to the developmental needs of this population" (Straussner, 2014, p.415).

Drug strategies (2003) note that there aren't many treatment programs that cater for the specific developmental requirements of adolescent clients. The discussion within this theme predominantly deals with whether participants felt that the treatment program was sensitive to the developmental needs of adolescents. Their experiential learnings in this regard was also explored.

5.4.4.1 Sub-theme 1: Adolescents are prone to boredom and need to expend energy to facilitate treatment

One participant mentioned that the treatment program manual that was being followed at the facility had been developed specifically for young adolescents. Conversely though, it also came to light during interviews that participants felt they had to adapt certain aspects of the treatment program in order to enhance its developmental appropriateness and reduce the boredom that the adolescents were manifesting with.

Some participants described adolescents as prone to boredom and that they need to physically expend a lot of energy. Literature reveals that boredom has been directly linked to “autonomy development, cognitive agility, and possibly identity development” (Caldwell, Darling, Payne, & Dowdy, 1999, p.119). These finding correspond with the characteristics Berk (2013) associates with the adolescent period of human development, and suggests that adolescent drug treatment should control for heightened levels of boredom during treatment.

F1P7: “They get bored doing the same thing.”

F2P10: “They just like to transfer some energy because some of them…feel like they need to do something instead of sitting and talking so that’s why we take them on the field.”

One participant described the general length of some treatment sessions (75 minutes) as slightly too long and that adolescents tend to lose concentration after 35 minutes.

F2P8: “The sessions is not really, I don’t know the best for children in a sense that you cannot expect a child to concentrate for a seventy five minute session where maybe a forty five minute session or a shorter session would be better for that child…they switch off midway. I don’t think, that’s really child friendly.”

She believed that longer sessions were initially prescribed by program developers in order to optimise the adolescent’s engagement in active treatment during their relatively short stay at the facility.

F2P8: “Because we are also expected in some sense to keep them busy or keep them for such a long duration in the session.”

An interesting discovery of this study was that participants noticed that the adolescents responded well to the physical activities when incorporated with treatment. Adolescents were also noted to be more amenable and cooperative after exercise. They mentioned that it helps the adolescents build interpersonal relationships and that they enjoyed discussing these activities at formal treatment sessions.

F1P10: “Sometimes we take them outside playing programmes which are fun so they can be interested in the programme.”

F2P4: “the boys usually like to organise soccer games for them and we have one of our staff members who kind of trains them and I think at some level they really do appreciate the discipline because there’s a structured way of exercising and usually when that starts they always comment on that they how they were playing soccer and the training and the discipline that they learn also there so I think that all that’s always something that’s something that really works for us”

F1P7: “We have noticed that when we have done these programmes, especially on a weekend they become very tired. This is when we get a chance to sit with one of them and sit there by the grass…and then you got a nice conversation they start to talk even deep things.”

F2P4: “If there’s a game the Friday or over the weekend they really look forward to that and they will on Mondays when we have our meetings they will always comment on those games, so it has an impact on them and on building relationships between each other as well”

The conclusions that the MDT have drawn from their experiences were that adolescents seemed to respond positively to physical activities. They build rapport with members of the MDT and become more expressive during treatment. Some of the positive psychosocial outcomes associated with physical activity during adolescence

were identified as improved self-esteem, a reduced likelihood of mental health problems and enhanced cognitive functioning (Biddle & Asare, 2011). Consequently, physical activities may be responsible for enhancing treatment program efficacy by making teens more receptive to drug treatment in general.

5.4.4.2 Sub-theme 2: Measures taken to enhance developmental appropriateness

Participant discussions revealed that members of the MDT sometimes adapted treatment sessions to accommodate the specific developmental and educational levels of their clients. The researcher discovered that some participants were of the opinion that treatment program developers did not take adolescent literacy levels into account when designing the program as many of the prescribed treatment sessions involved writing activities.

> F1P8: "When we are doing life skills we have to take register attendance so you will see that the child can't sign the register so he doesn't know how to write his name."

Measures the MDT took to enhance the developmental appropriateness of treatment were discussed. Some participants included games and adapted writing activities by asking adolescents to draw pictures or to provide oral feedback instead. Treatment sessions were sometimes shortened or broken into sessions. These changes were reported to be helpful in maintaining interest and concentration levels during treatment sessions.

> F1P4: "Maybe if you are doing a programme then they need to write. We only ask them to draw … and then that child would stand in front of them and also explain like others that have written so you find out it works like that."

> F2P1: "You make it more interesting, you would make it more practical and you'd make that client feel at ease by making your experiential exercise more on an interactional level rather than on a written level…and you obviously want

to include all the kids you don't want some kids to be excluded so you know you have to take that into consideration."

F2P8: "Like say they had to do something practical in that session, the session goes quicker and they enjoy it more but if they had to sit there and listen to something then you can see that they switch off … so like you know to break up your session."

In addition to adapting prescribed work, participants noted that the different backgrounds and abilities of their clients needed to be considered for each new intake. They felt that their learnings evolved after every intake and that adolescents responded well to these minor adaptations.

F2P1: "the other thing about this particular programme which we could maybe take into consideration is that we have kiddies of different backgrounds but different intellectual strengths. I don't think our programme has taken this into account."

F2P1: "So for example you got kiddies who have maybe intellectual delays or haven't been to school for a long time so their ability to process information is different and you find that you have to adapt the programme a lot to take that into consideration."

F2P3: "I think it's constantly being tailored to meet the requirements of the children who are here presently."

Participants identified client literacy levels, intellectual ability and background, as key areas of concern with regard to the developmental appropriateness of the program. They implemented adaptations that were found to be in alignment with the Drug Strategies (2003) recommendation that treatment programs should consider learning and attention deficit problems as part of treatment program implementation.

Additionally, their adaptation may be considered a reflection of the unique cultural and social circumstances of clients within the programs main area of intake which indicates high levels of cultural competence from participants. Interviews indicated that the difficulties caused by client social context were not insurmountable and that the MDT's methods were constantly evolving to be more developmentally and culturally sensitive.

5.4.4.3 Sub-theme 3: MDT suggestions on how to facilitate developmentally appropriate services.

Sub-theme 3 illuminates a recommendation that participants had regarding the facilitation of developmentally appropriate services. Their discussion was mainly focused on the element of treatment duration. Simply put, participants felt that the program was too short and that adolescent needed to spend more time at the facility for them to be able to 'cement' the changes that had taken place during treatment. At that time, treatment program duration at the facility was set at 70 days.

Two participants linked this concern to the provision of life skills development and structured clinical therapy. Both participants were of the opinion that these areas of treatment take time to become effective. One participant noted that there might be a need to employ more staff members in order to reduce the necessary time needed for life skills development.

F2P8: "I sometimes feel like maybe a twelve week programme or sometimes longer would be better."

F2P3: "For a psychologist, nine to eight sessions is not much to have for a significant intervention, so it does become very concrete. You can't really get to a lot of the issues that need to be dealt with so in terms of that nine weeks does not feel sufficient."

F2P8: “We cannot actually take them a bit further because the time doesn’t allow but I also feel that if there was more than one occupational therapist it could become a bit easier.”

Extending treatment duration makes sense when one considers the cognitive deficits caused by early onset substance use and therefore treatment prognosis.

It was noted in Chapter 2 that an adolescent’s decision making pre-frontal cortex may still be incompletely developed. Additionally, “Early onset substance use may affect the development of fronto-temporal white matter circuits, potentially resulting in disturbed memory, executive and affective functioning” (Lubman, Yücel, & Hall, 2007, p.793).

Adolescents with substance use disorder might therefore find it more challenging to incorporate program content and may also struggle to retain the changes that were made during treatment.

5.4.5 Theme 5: Strategies to Engage and Keep Teens in Treatment

The fifth theme refers to the MDT’s ability to retain adolescents in treatment. The researcher discussed this element in Chapter 3 of this study. The literature review revealed that adolescents don’t always realise the gravity of their problem and that they might perceive treatment as being imposed on them by adults (Drug Strategies, 2003).

Moreover, the adolescent stage within the “family life cycle” is characterised by the adolescent’s need for freedom and a proclivity for rebellion (Neighbor, 1985). It is therefore not surprising that many adolescents resist treatment and do not complete addiction programs (Drug Strategies, 2003).

It was noted in Theme 2 that effective drug programs tailor treatment to the specific bio-psychosocial needs of each individual adolescent. Similarly, the third assumption of Moos’s (1997) conceptual framework for program evaluation states that patient and program factors should be matched while also considering the connections between the person and the various influences within the person’s immediate environment.

Accordingly, Program developers and members of the MDT should strive to implement programs that match the unique interests and characteristics of the client. This in turn, might motivate the adolescents to accept treatment and to realise they have a

problem, helping them to enter what literature refer to as the ‘contemplation’ stage within the stages of change model that “individuals modifying addictive behaviours move through” (Prochaska et al., 1993, p.1103).

The following four sub-themes describe the MDT’s experiences and perceptions regarding the fifth element of affective adolescent addiction treatment.

5.4.5.1 Sub-theme 1: How the MDT understands the adolescent’s perspective regarding addiction treatment

It is noteworthy to mention that participant experiences closely matched findings that were highlighted in this study’s literature review. Interviews revealed that many adolescents want to leave and do not realise the risks associated with adolescent substance abuse. The participants reported that the majority of the adolescents are not admitted to the treatment centre by choice but instead on parental request and therefore they can only be discharged with parental consent.

> F2P3: “There are some of those who are definitely adamant that they are not going to stay.”

> F2P4: “In the first three weeks everybody wants to go home… they feel they don’t belong here.”

> F2P4: “They are minors and the parent’s guide the duration of the initial stay.”

It was noted that adolescents are only expelled from the facility if they severely disrupt program implementation or if it is found that the specific individual is not a suitable candidate for addiction treatment.

> F2P4: “If there is a serious transgressions or if there’s behavioural issues and we get to the point where we feel that the child is not benefitting or is disrupting the treatment of other children we might terminate their treatment.”

The findings revealed that admission to the treatment centre was typically the cumulative effect of the interactions between what Bronfenbrenner refers to as bio-ecological systems within the adolescent's surrounding environment (Berk, 2013). In terms of the Child Justice Act a child offender can be diverted from the criminal justice system to a rehabilitation centre for treatment as part of a diversion option. In such a case, the interaction between Bronfenbrenner's exosystem (community services) and macrosystem (societal values/laws) are not only responsible for the child's developmental trajectory but also for the child's current contextual situation.

> F1P6: "Like sometimes they steal things then the child is sent to the social worker and the magistrate. They will say, *do you want to go to jail or do you want to go to rehab? You must choose*. Then the child will say, *no I want to go to the rehab*."

Participants explained that even though they don't like being at the facility, the adolescents eventually realise that the MDT are there to help. They realise the benefits of treatment and start to think of the facility as a place of safety. It was noted that adolescents almost seem anxious about leaving and that they don't look forward to returning to their usual environment.

> F2P10: "I need to be here so all those problems I have can be sorted out [recalling the words of one of the adolescents]…it works in their minds and makes them start to feel that they want to stay here."

> F2P3: "I think by week six they've formed enough of an attachment to staff and the facility that they recognise it as a place of safety. They start to recognise that there are problems at home and their concerns and their stress about how to manage themselves at home starts to increase and then this does become a bit of a refuge for some of them."

Participants felt that their efforts to facilitate an awareness of the value and benefits of treatment was generally successful. They report that they observed a genuine change in perspective in their clients. These changes seemed to be mainly caused by the bonds that form between the adolescents and members of MDT.

The Matrix model, which is an evidence-based intervention for the treatment of substance use disorders validates their perceptions as it advocates the therapist-client relationship as a key factor related to retaining clients and facilitating positive changes in behaviour (Myers et al., 2008).

Participants also noted that adolescents start feeling anxious prior to being discharged from the facility and become apprehensive about returning home. Interviews indicated that clients had been drug free for the entire duration of treatment and that they start worrying about maintaining changes outside of treatment.

In reference to what has been described as “the cycle of change’ in Chapter 2 of this dissertation, Adolescents who are discharged from the facility can therefore be described as being in the *action stage* of this model which is followed by the *maintenance stage*. (Prochaska et al., 1993).

5.4.5.2 Sub-theme 2: The value of recreation and informal interactions between staff and clients.

Participants once again discussed the positive effects of forming bonds and building relationships with adolescents. In this instance they felt that it helped clients understand that staff are there to help.

> F2P10: “They start to realise ok I’m getting help here and I’m going to get something out of here.”

Two participants [affectionately] discussed a repeat form of interaction between staff and clients in which they are approached by clients to help them acquire a small treat from a street vendor. Participants perceived this example of a seemingly insignificant interaction as a form of bonding and felt that it was important enough to mention. The following dialogue illustrates the value staff place on informal, non-clinical interaction

between themselves and adolescents as an important part of making treatment programs more effective in general.

F2P4: “Stokkies ! [Laughing].”

F2P8: “Lollipops.”

F2P4: “Lollipops, ja, they love that, they will find you. They will ask, juffrou buy me a stokkie [referring to a lollipop], buy me stokkie and then sometimes they really climb into you and then you’ll buy one and say, don’t tell anybody and then someone else will come later and then they bother you to please buy a stokkie. (Laughing).”

Some participants explained that weekend recreational activities contributes to relationship building. The building of informal relationships was noted to be very important when attempting to engage and retain teens in treatment. The bonds they form with staff made them more comfortable with staying at the facility. It was stated that these activities also serve to distract them from their problems outside of the facility.

F1P10: “They are more relaxed around us because we do these activities with them. They are free around us as opposed to being with the social workers who they see twice a week.”

F1P6: “On Sundays we have activities that are informal. Trust games, we bringing some blindfolds from home, some eggs and some sacks so we can do sack races and tug of war and treasure hunts. All stuff that makes them excited and forget about the outside.”

Participants noted that they prefer an outdoor oriented approach to treatment. They felt that this form of treatment builds rapport, represents a less clinical form of interaction, fosters interest in the program and creates a sense of belonging at the facility.

F1P10: “That’s our point, that’s our point we decided we shouldn’t keep them in an indoor programme…teaching them all the time. Sometimes we take them outside for playing programmes which are fun…so they can be interested in the programme.”

Interesting to note was that participants believed that the most important relationship building interactions between themselves and the adolescent was informal in nature. They perceived the bonds that formed as a result of these interactions as more genuine and the discussion thereof seemed to be emotionally loaded.

Additionally, theme 4 referred to the developmental appropriateness of the treatment program. Fun activities and exercise were associated with maintaining the interest of adolescents and negating their propensity for boredom.

Biddle & Asare, (2011) note that “while physical activity may enhance psychological well-being, it is possible that the prevailing psychological climate and social interactions inherent in such settings will also be crucial” (p.14-15). The findings of this study lend credence to their hypothesis and illustrates how social interactions fostered by informal recreational activities contribute to relationship building and therefore adolescent receptiveness to treatment.

5.4.5.3 Sub-theme 3: Corrective emotional experiences from staff members facilitate growth and change

The researcher noted during the discussion about family involvement that many of the adolescents at the facility originate from disintegrated families. Moreover, family conflict as well as a general devaluation of the adolescents behaviour, views and choices by family members where prominently noted in the third theme (Sub-theme 2) of this chapter.

One participant mentioned that many adolescents who are admitted for treatment are not used to being appreciated. This participant felt that corrective emotional experiences from members of the MDT were extremely valuable.

F2P3: “I also think it’s got a lot to do with how they are treated by staff members of having that experience that someone is speaking to you respectfully and that what you’re saying is valued and that you are important, that you as a whole person are being seen by someone. I don’t think that is an experience that a lot of them have out there.”

She believes that the children enjoy being treated as individuals and that these types of experiences helped them understand that their stay at the facility is a form of assistance and not a form of punishment. It was noted that kids often ask for mementos from staff members that they can remember them by.

F2P3: “I think that really gives them a sense of value and they seek that, they seek it out.”

F2P3: “You can especially see it when they leave and they look for transitional objects from everybody that they can take out of here and hold onto. I think you know that adds great value.”

This view was echoed by Bernier & Dozier (2002), who stated that “The corrective interpersonal experience allows the client to experience a different way of relating to others, providing him or her with the opportunity to gradually develop a more flexible and diverse repertoire of interpersonal behaviours” (p.35).

Interviews revealed that members of the MDT form strong bonds with their clients over the course of treatment. These bonds were described as playing an integral part in motivating adolescents to accept and complete addiction treatment. Additionally, one of the core components of the Matrix model for the treatment of substance use disorders is helping adolescents learn about the nature of addiction, its effects on the human body and relapse prevention (Myers et al., 2008). It is the researcher’s opinion that these bonds

help create a safe therapeutic space from within which adolescents can understand and address the various bio-psychosocial issues that cause and maintain addiction.

5.4.5.4 Sub-theme 4: The value of peer interaction and acquisition of positive role models

In Chapter 2 it was noted that peers often influence the behaviour of adolescents and that peer interaction "has been indicated as a strong predictor of current drug use" (Straussner, 2014, p.402). Additionally, Berk (2013) notes that the adolescent typically tends to increase time spent with friends who share a specific identity, status, political view, educational aspirations and deviant behaviour. It therefore becomes important for treatment programs to acknowledge and address peer influence in order to help the adolescent navigate the influence of peer pressure after discharge from the facility.

Participants reported that informal sporting events were sometimes organised at the facility. These recreational events allowed adolescents to interact with children from outside the facility and to bond with other children who are also in treatment.

F1P8: "Sometimes we take them outside to play with others…they enjoy it a lot to go out."

F1P6: "We also organise soccer teams from outside. They come inside to play with them."

F2P10: "They become attached to other children, they start forming those relationships with other children then they start to understand its better here than being at home."

MDT members felt that events such as these provided adolescents with a valuable learning opportunity. In addition to interacting with peers and building healthy friendships, participants felt that clients benefitted from the structure and discipline needed to train for matches. It was noted during their discussion that substance using adolescents normally

spend their weekends at home abusing substances with friends. These events therefore helps them realise that weekend fun with friends doesn't have to include drugs.

F2P4: "They play soccer and the training and the discipline that they learn there … I think that that's something that really works for us."

F1P6: "Because it's weekend now, they know they usually go to meet others to smoke and drink. So Fridays and Saturdays we are busy doing those games"

One participant mentioned that some of the adolescents from previous intakes visit the facility over weekends. They attend the church service and use the opportunity to address adolescents who are currently in treatment. They share their stories and relate their progress. This allows adolescents the opportunity to acquire positive role models that have stopped using drugs, with whom they can hopefully associate.

F1P8: "Sometimes when we have church on Sundays the kids that are from previous intakes visit and share with the other boys that are here. They say *I was here, now I'm clean, I'm safe"* [recalling adolescent's words].

It became clear to the researcher that participants believe it is important to introduce adolescents to fun physical activities with healthy peers. Volkow, (2014) notes that highly motivating experiences (listening to music, playing sports and spending time with friends) contribute to an adolescent's feelings of well-being, learning ability, health and the strengthening of social bonds. Rapport between staff and adolescents notably improved after weekend activities and client receptiveness to treatment also seemed to improve.

It appears as if these activities provided adolescents with feelings similar to that of the euphoria associated with the dopaminergic reaction caused by drug use (Volkow, 2014). Participants felt that it represents a valuable learning opportunity which allowed adolescents to explore healthier alternatives to drug use in the company of positive role models.

5.4.6 Theme 6: Continuous Training and Development of Staff

It was argued in Chapter 2 of the current study that adolescent addiction should be viewed from a multicausal perspective. The researcher underscored the importance of employing qualified staff that have been trained to deal with the multiple issues that cause and maintain an adolescent's substance abuse (Drug Strategies, 2003). Members of the MDT should therefore be equipped to deal with the various biopsychosocial problems that are usually associated with adolescent substance abuse.

The fifth theme of the present study provides the reader with an in depth understanding of the participants need for and their perception of availability of continuous training and development at a South African adolescent drug treatment facility.

5.4.6.1 Sub-theme 1: Availability and implementation of further training and development for staff members

A discrepancy in perception between two participants of the same profession was noted during their discussion on the availability of further training and development at the facility.

One participant felt that staff members who wanted to further their training in a specific area of addiction treatment would have to do so independently. Whereas the other reported that facility management was not against training and that they have had the opportunity to attend training workshops in the past.

Participants who had attended these workshops described them as being very general in nature. They noted that these training sessions would typically take place in the short spaces between client intakes.

> F2P1: "From my general experience, I haven't had any specific new knowledge imparted on me specifically within this particular field other than from what I've done out of my own volition."

> F2P4: "I would say there is enough opportunity for training. The centre is quite open for training on substances or for training. It's not necessarily always directly

substance abuse training but there has been quite a few training sessions presented…most of the team has already participated in two or three."

F1P10: "When there's a gap situation, sometimes there are no kids here. We attend training on things like anger management. We are invited to workshops."

Additionally, participants noted that the facility does allocate money for training and efforts were being made to address the need for continuous training and development at the facility. One participant mentioned that monthly academic workshops had recently been introduced at the facility.

F2P4: "We have quite an extensive budget for training that is one of our main goals it's an important aspect of what we do here that we want to train staff."

F2P3: "Something we've started recently is academic workshops, where we have presentations related to substance abuse, we had one in October and I think we had one before that… it is something still quite new and we are trying to get speakers who are specifically working in the areas of addiction, substance use, mental issues or adolescence to present topics."

Two participants discussed the difficulties related to creating training opportunities for a multi-disciplinary team of staff members. Their discussion revealed that every member of the MDT had a different area of speciality and therefore different training needs. Training that would be very relevant for one staff member might be completely irrelevant for another.

F2P8: "Profession specific training is difficult because not everyone must be trained on the medical aspects of withdrawal or the nursing aspects…sometimes I feel like training is just very broad instead of specific…yes you can apply that but as professional, you want it to apply specifically for you."

It was also mentioned that training opportunities were simply not available for some professions in Nelson Mandela Bay and that logistical issues made training difficult for these individuals.

F2P3: “It’s like training specifically in my area, there’s not really much available in Port Elizabeth. So it does require one to wait for someone from Cape Town or Johannesburg or Durban or Bloemfontein to come to Port Elizabeth or you have to go to the workshops in other centres.”

The value of peer learning and previous working experience emerged during their discussion. Participants noted that during the course of their employment in social services and at the facility they had acquired and learned valuable skills. The ability of participants to learn from each other was noted as a positive aspect, their different perspectives lead them to holistic interpretations during treatment.

F2P5: “There are certain things that we learn, we complement each other in our interventions.”

F1P1: “We come from different organisations so we do have experience of working there and with the kids, so that also helps us a lot.”

F2P2: “Kids behave differently in different groups, someone would pick up something which I did not observe in my individual group so that helps as well. It’s one of the positives.”

One participant stated that even though each member was trained to do things in a specific way they easily adapted their methods after observing a more effective method.

F2P1: “I think everybody has individual strengths so you learn. People do things differently and they sometimes get better results than you normally would.

> So then you would learn from their specific approach and maybe take a leaf out of their book, so to speak."

Straussner (2013) notes that clinicians need to have a substantial amount of knowledge regarding the treatment of substance use disorders in order to provide effective treatment. Accordingly, participants reported that further training and development was necessary to improve their ability to treat adolescents with substance use disorders. They did however acknowledge that there were many benefits related to working within an interdisciplinary environment. They noted that their ability to provide comprehensive drug treatment had been significantly enhanced by learning from each other.

Participants emphasised the need for profession specific training and noted that training workshops they had attended in the past were very general in nature. Additionally, interviews indicated that participants in no way expressed naivety regarding the difficulties associated with hosting learning opportunities that can be deemed suitable to each individual profession within the MDT.

5.4.6.2 Sub-theme 2: Specific areas of training that staff members believe would improve treatment program effectiveness

Participants discussed their individual training needs. Their discussion confirmed earlier comments made about the difficulties of providing training that suited each professional field.

One participant expressed a need for training in the latest practical techniques within his field as opposed to general theoretical training.

> F2P1: "Maybe in terms of techniques and the way you apply it within your context … so if there's a new technique that applies to adolescence within the substance use field that's the type of training that I would be more interested in because it would actually improve results I would think."

Another felt that it would be useful to receive training on withdrawal symptoms and detoxification.

F2P10: “We wanted to go and do training on withdrawal symptoms and detox.”

Others wanted training on handling medical emergencies and first aid techniques while some felt that mental health training would improve their ability to perform their individual roles at the facility.

F1P8: “Sometimes you find out that the child has got a seizure problem and you don’t know anything… we’ll be a far from the nurse and you don’t even know first aid.”

F1P7: “We really need those trainings it will really, really help us. The behaviour of one child was showing and I thought it was because he was craving drugs but according to the nurse he has bipolar…so really we need trainings and workshops on, on those issues.”

It was noted in Chapter 3 of this study that evidence-based practice (EBP) can be defined as the implementation of treatment strategies that have been proven to be effective (Myers et al., 2008). However, “A large majority of clinicians are not skilled in EBP and continue to encounter multiple barriers that inhibit the rapid translation of research into practice” (Melnyk, 2017, p.3). Continuous training of the members of the MDT should therefore be viewed as a key requirement for maintaining evidence based practice.

It becomes clear that the MDT’s request to be equipped with the latest knowledge and methods relevant to treating adolescents with substance use disorders should not be ignored. The acquisition of new and relevant competencies assist practitioners to improve performance (Fisher, Cusack, Cox, Feigenbaum, & Wallen, 2016). The facilitation of both general and specific training opportunities for members of the MDT could therefore contribute towards ensuring best practice at the facility.

5.4.7 Theme 7: Consideration of Cultural and Gender Differences

It was stated in Chapter 2 that treatment program developers traditionally overlooked gender differences when conceptualising addiction treatment programs and that most programs were intended specifically for men. (Drug Strategies, 2003). The literature notes that what has conventionally been a problem mostly associated with males “is now inching toward sexual equality in teens” (Straussner, 2014, p.399).

Boys and girls are admitted and treated separately at the facility in question. Straussner (2014) notes that “there is more to gender-specific treatment than simply separating women and men.” (p.454). Participant experiences confirmed this statement and provides the reader with an understanding of how gender influences program implementation at an adolescent drug treatment facility in the Nelson Mandela Metro.

There are 11 official languages in South Africa and a wide variety of different cultures reside within its borders. Therefore, the provision of culturally appropriate treatment also becomes relevant for discussion within this theme. In addition to gender specific treatment, participants described the South African context and the difficulties related to accommodating children from different cultures and religions at the treatment centre.

5.4.7.1 Sub-theme 1: How treatment needs differ between boys and girls

It was noted in Chapter 2 of this study that the different genders use drugs differently for different reasons, they also experience and process emotional concerns in different ways (Straussner, 2014). Boys were described as acting out physically, presenting with issues such as conduct disorder and aggression while girls tend to internalise emotions and therefore present with issues such as anxiety and depression. (WHO, 2002).

The research participant’s experiences with the adolescents mirrored these findings. Boys were experienced as more likely to initiate physical fights and to potentially cause property damage at the facility. Conversely, girls were described as being ‘catty’ and more likely to form cliques and steal from each other.

F1P1: “The girl fights are less intense than the boys because it will be the cat fights without going and vandalising the treatment centre. The boys are fighting very hard, they hit and involve things to stab each other with.”

F1P8: “There’s are a lot of challenges with girls because there are a lot of fights they are gossiping…They have different groups so you’ll see that, this group is not attached to that one, then they fight and gossip. They also steal things like hair conditioning, shampoos and everything.”

Participants also stated that boys tend to suppress their feelings. One participant noted that for this reason boys found it more difficult to make progress during therapy as it takes a long time for them to ‘open-up’. Girls were more expressive and open to explore their feelings which made them more likely to benefit from therapy.

F2P3: “Girls have a need to talk more and they are more verbal, they are more aware of their feelings whereas with boys the focus is really getting them into an awareness of feelings other than just anger. Girls are fully aware of a complete range of emotions so it does add a different flavour to therapeutic sessions.”

F2P3: “Boys really only get into the creative work of art therapy towards the end whereas the girls have more of an inclination to be creative, to use colours during art therapy and to explore feelings.”

It was also noted that because of their different needs, program content was slightly different for girls as opposed to the content presented to male adolescents. An example that was mentioned was the distinct difference between medical briefings. Boys and girls mature and develop in different ways creating a need for relevant content that matches their unique physiology. It is therefore more applicable for girls to receive information regarding breast cancer as opposed prostate cancer. Members of the MDT also noted

that they follow strict ethical protocols when conducting physical examinations on adolescents.

F1P4: “There’s a lot of needs related to the girls that are different from the boys. Mostly because the girls, according to their puberty stage, they’ve got these different needs.”

F2P7: “yes when, when we do our sessions with boys and we talk about cancer, we focus more on things that refer to males and with girls it would be more like referring to females so that’s where the difference will be.”

F2P7: “When the children arrive male nurses don’t do physical examinations on females. We also do pregnancy tests with girls so like that’s how it differs because with males we don’t do pregnancy tests (laughing in background).”

Additionally, participants experienced girls as more promiscuous than boys. It was noted that male staff members had to set boundaries and consciously tried to maintain a professional distance from clients when treating girls. Female members of the MDT felt that this did not detract from care as the girls could still form nurturing bonds with female staff. One participant referred to this bond as a motherly connection.

F1P4: “As female and male staff members we are all involved a hundred percent but when there are girls here it is only us [Female staff] that are more involved compared with guys because of the behaviour of the girls. They seek boyfriends.”

F1P4: “I think it has also made us comfortable ‘tina mamzi’ [us mothers] because we relate more with the girls, yes we relate with the boys but there’s a lot of pride in that our guys must attend to them compared to the girls.”

Romantic relationships between clients as well as differing sexual orientations were experienced as problematic by members of the MDT. Participants explained that some adolescents do not identify as heterosexual and attempt to establish same sex relationships during their stay at the facility. It was noted that they do not discriminate against adolescents but that they needed to be careful of the possible legal issues that could arise from relationships at the facility. The participants explained that this was one of the reasons why the centre alternate their programmes for male and female adolescents instead of treating them simultaneously.

F1P10: “Also on gender and sexual identity, girls who are lesbians, when they are here they will date everyone. Then there are boys who provide other challenges so we have to be vigilant.”

F1P10: “We are concerned, we are not discriminating. We don’t allow that because in a case it may indicate that a child was assaulted. So we don’t allow it here.”

Participants of this study reflected on the nature of program implementation with regard to gender specific treatment. The different genders were reported to have different needs that required them to adapt the program according to the needs of the specific gender in treatment.

Volkow (2014) notes that treatment strategies should be ideally be adapted in accordance with the different developmental and social issues typically ascribed to the different genders. Participants explained that program content was specifically tailored to address the developmental concerns of the different genders.

Furthermore, “the need for gender-specific services creates infrastructure and staffing challenges that programs must address to ensure quality care.” (Rieckmann et al., 2011, p.91). Accordingly, it was noted that the rotation of intakes according to gender had noteworthy implications for members of staff. Strict ethical practices were in place to protect the interests of both staff and clients.

5.4.7.2 Sub-theme 2: How religious practices are observed at the treatment centre

Participants noted that as treatment providers, they do allow and incorporate spiritual practices at the facility. The official practice at the facility is to provide adolescents with the opportunity to attend church on a Sunday. Attendance is voluntary and sermons take place at the facility.

F1P4: “We’ve got church here every Sunday.”

F2P4 “We encourage them to participate but they are not forced to participate in that programme.”

When asked whether adolescents with other religions were also accommodated, they noted that there haven’t been many instances of adolescent’s requesting alternate arrangements.

F1P3: “We don’t want to be a stumbling block to one’s belief or practice you see but as yet we haven’t really met with so many of that but we are aware of that so we deal with that situation.”

They mentioned that they have had a Muslim client at the facility. This client was allowed to practice in accordance with his customs. The facility also allowed spiritual leaders from other religions to visit their clients when needed.

F1P4: “One time we had this child. I think he was an Islamic believer, so we let him stay there alone and do his own thing while others are busy in our church and then we respected his religion.”

F2P4: “We ask them and open it up for them. You are welcome to invite your Imam to have, hmm, I don’t know if it’s called a religious session.”

Participants explained that the majority of staff where Christian. They felt this made it difficult for them to facilitate other practices as they were unfamiliar with Muslim practice. One participant observed that it would be beneficial to the program if there were more Muslim staff within their ranks.

> F1P10: “It is perhaps unfortunate that we are all Christians. We don’t have people who are Islamic who are child care workers maybe that child when we want to give it back such space we don’t have such people.”

An interesting finding of this study was that there have been adolescents who claimed to follow the Rastafarian religion. These individuals could not be accommodated because the use of cannabis is expressly forbidden at the treatment centre. Additionally, participants observed that in most cases they could not determine the legitimacy of the adolescent’s claimed spiritual affiliation. They explained that these individuals would in most cases be referred back to the outside social worker for re-evaluation as addiction treatment conflicts with the adolescent’s spiritual practices.

> F1P10: “The issue we have is the Rastafarian, and since we provide drug rehabilitation, we can’t accommodate that.”

> F1P3: “There has to be proof, a history. Your file must say that and also your family or your parents must confirm. In that example of that boy, that boy was not really a Rastafarian it’s just that he had dreadlocks.”

> F2P3: “We questioned the impact that such a programme would have on the child because then you cannot tell the child not to use dagga but it is part of him. It is still very new, so we refer it back to the social worker to say really consider whether you want to apply.”

Participant comments illustrate that all members of the MDT are very sensitive to the religious needs of their clients and that they are willing to accommodate adolescents

from various different religious backgrounds. The exception to this, was noted as their inability to accommodate adolescents who claim to follow the Rastafarian religion. Members of this religion smoke cannabis as part of their religious practices.

In light of the above, a recent landmark ruling by the South African Constitutional Court becomes relevant for discussion. The court's ruling has partially decriminalised the use of cannabis in South Africa.

One tends to wonder what implications this ruling will have for adolescent drug abuse in the country. Many adolescents might be ignorant to the fact that the ruling does not apply to persons under the age of 18 and that it is still limited to personal use in a private space (McGee, 2018).

It stands to reason that many adolescents may interpret this ruling as meaning that they are now allowed to use cannabis legally. This perception may especially be true for those adolescents who are illiterate. Additionally, "the constitutional Courts judgement in no way detracts from the potential clinical and public health impacts of cannabis use." (McGee, 2018, p.6). The Constitutional Court's ruling could therefore have far reaching consequences for adolescent health in South Africa.

5.4.7.3 Sub-theme 3: Perceptions on how culture influences treatment

Participants explained that they treat adolescents from various different cultural groups. They noted that language barriers where sometimes encountered but that children overcome these barriers remarkably quickly. They believe that this happens because the children learn from each other during their stay. Additionally, participants noted that if the child really didn't understand something, they would ask a child who does understand to translate during formal treatment sessions.

F2P4: "You get children who are from rural Eastern Cape who have not been exposed to any other culture other than their own and they integrate very well, even though they've only lived with Xhosa people."

F2P9: "I think when it comes to the children at the beginning, there are some that don't understand another language but you find that if after the sixth or

seventh week, you hear them speaking Xhosa words. I think it's because they are together. They start learning and they learn quickly."

F2P1: "If somebody really does not understand then one of the group members will assist or they'll help."

Participants did however feel that a Western perspective was followed when program content was being developed. Some noted that this type of program content is not always relevant when treating adolescents from African descent.

F1P4: "Most of the children that come here are Xhosa speaking children and you'll find out that the manual…I'm going to say it like it is. Contains more like whitish things you know. It's hard for level four Xhosa children."

Volkow (2014) notes that it becomes important to consider the culture of origin as well as the specific linguistic needs of adolescents in treatment. One example of where this type of consideration might have been necessary at the facility concerned the use of Western names in prescribed activities. It was noted that a person's name is considered very important in African culture as it carries meaning and denotes purpose. It was therefore implied that an Afrocentric approach to program implementation would be more relevant to the specific client demographic that they serve at the facility.

F1P4: "Our names you can get a lot out of our names. It has meaning. When you talk about it, about the name of that child. It helps the child to think about his or her name…it means blessed. Your blessed you know but if you're doing things that are not right, how are you going to be a blessing to your family…it will help me to think about how I'm supposed to be a blessing and then you have to change that just to be more suitable."

Participant discussions provided a comprehensive illustration of the role that culture plays with regard to treatment program implementation at the research site. It was noted

in Chapter 3 that drug treatment programs were historically designed for white males (Drug Strategies, 2003). Unfortunately, after many years, this still becomes apparent when one considers the comments made by members of the MDT. This aspect of treatment seems to be especially relevant to the South African context and warrants further research on aligning treatment programs with the specific cultural needs of adolescents with substance use disorders in South Africa.

5.4.8 Theme 8: Aftercare Support

Noteworthy research has been conducted with regard to the provision of aftercare services for chemically addicted adolescents in South Africa (Van der Westhuizen & De Jager, 2009; Van der Westhuizen, Alpaslan & De Jager, 2011; Van der Westhuizen, Alpaslan, & De Jager, 2013).

Some of the major obstacles to aftercare delivery as identified by Van der Westhuizen et al. (2011) were “Uncertainty about how to equip community resources to render effective after-care services; Lack of transport; Inaccessibility; Lack of knowledge about after-care services; employment-related challenges; high drop-out rates; a lack of commitment to after-care services; A lack of time to render after-care services as a result of a lack of human resources or funds as well as frustration when there is a lack of resources” (p.365).

Participant descriptions of how they experienced provision of aftercare services at their facility were similar to findings from the abovementioned study.

5.4.8.1 Sub-theme 1: Lack of aftercare negates treatment and promotes relapse

The MDT were of the opinion that the Eastern Cape lacks adolescent specific aftercare services. Participants noted that they provided adolescents with reintegration plans but mostly relied on the outside social workers to render aftercare support. One participant stated that aftercare services are poor when compared to addiction treatment services and that the outside social workers do not always have the time to do follow-up visits after discharge.

F2P8: “I feel that sometimes like in P.E itself or even in the Eastern Cape in general there aren’t many places that would easily take children and I think that’s also a downfall, not only for the centre but for our whole province.”

F2P4: “At this stage we rely on the referring social worker to render those services. We do give each child a reintegration plan but I’m not sure how well that is implemented or followed through on.”

F2P3: “It’s very difficult because we rely so much on external people… it’s almost like they get such a good service here and that’s it.”

F2P1: “External social workers are doing a lot of other work besides substance use…once the child exits it’s sort of a reflex that they don’t get round to.”

Moreover, participants related their frustration in this regard as the lack of aftercare initiatives in the Eastern Cape was felt to be a major cause of relapse. They felt that comprehensive aftercare services would ‘cement’ changes that have been affected by addiction treatment and would validate the hard work that was done at the facility.

F2P8: “I sometimes feel like some of the times not all of the times we have children who towards week eight or week nine they show this sudden change and then we are unable to almost like reinforce that change.”

F2P4: “It’s something that makes me sad because you have this child who came in a little bit broken and you fix it, you fix that child as far as possible and you can see there’s a change.”

F2P2: “It’s a nice tool, but only if it can get implemented to avoid a relapse.”

F2P4: “There’s a change in attitude there’s a change in demeanour and everything and you’re almost fearful because you are letting this precious gift go out

there and you know that you're almost throwing that child off the cliff because there's nothing to support the child."

Participant's reported that aftercare support services for adolescents who have been discharged from the facility were not available in the Eastern Cape. They expressed their frustration regarding this matter and felt that it negated the work they were doing at the facility.

The continuum of care from an evidence-based perspective, emphasises the importance of providing comprehensive aftercare services as a crucial aspect related to minimising relapse potential (Myers et al., 2008). The lack of these services can be described as a gap within the continuum of care in the Eastern Cape and may contribute to adolescent relapse after treatment.

5.4.8.2 Sub-theme 2: Aftercare services at the facility

Two focus group interviews were conducted with members of the MDT at the facility. One group of participants stated that they were not aware of how aftercare services were being implemented. Conversely, it was noted by the second group that efforts had been made towards the development and implementation of aftercare services at the facility.

F1P1: "We don't know if there is after care happening here."

F1P7: "There is aftercare I am not sure if it's for the parents or if it's for the children but there is aftercare here."

F2P4: "We tried with the children to have aftercare, it was very difficult."

F2P4: "It's still a bun in the oven but we do now have a support group for parents."

One participant went on to explain that adolescents who have been discharged often return and approach child and youth care workers for further support. He notes that it is an unfortunate situation because members of the MDT are not equipped to assist them in this regard and they end up being re-admitted.

> F1P7: “The problem is that some of these boys are from where we are staying. They just come to our house and knock and then talk to us about their problems.”

> F1P10: “They always relapse and come back.”

Additionally, it was mentioned that aftercare implementation at the facility was difficult. One participant explained that aftercare takes a lot of dedication from clients and that they are often not willing to commit to the service. He also noted that support groups had been organised for parents but that these were not being attended.

> F2P4: “Because it’s a voluntary programme you struggle with commitment, even the parents don’t come. They don’t really utilise the service. I think we will be strengthening efforts towards that this year but currently, it is not well.”

A notable aspect that emerged within this theme was the different levels of knowledge participants had regarding the provision of aftercare services at the facility. This discrepancy might be attributed to the different roles that members of the MDT have at the facility. Some might not always be aware of the tasks that others are involved with. However, it may also be due to a lack of communication within the ranks of the MDT.

It also came to light that discharged adolescents would sometimes attempt to solicit additional help from members of the MDT at their places of residence. This occurrence illustrates the dire need for aftercare services at the facility. Also, members of the MDT seemed to be confronted with an ethical dilemma in this regard. Participants were faced with the not so enviable task of weighing up the potential benefits of assisting an

adolescent to remain drug free as opposed to conducting themselves in an ethical manner.

Krishnaram, Aravind, & Thasneem, (2012) state that the therapeutic relationship becomes compromised when clients and practitioners become 'friendly'. Participant demeanour during interviews indicated that they truly wanted to assist these adolescents in any way they could but that they were not entirely comfortable with crossing that professional boundary. (Krishnaram et al., 2012) add that this type of behaviour compromises the practitioner's objectivity and that the therapeutic alliance might be harmed by involving personal dynamics within a professional relationship.

5.4.8.3 Sub-theme 3: Opinions on how to implement aftercare services

Participants noted that the provision of aftercare services generally fall under the scope of practice of external social workers. They explained that it was very difficult to manage outside aftercare services from within the facility.

A conversation took place in which two participants discussed the viability of tasking members of the CYCW to do follow up sessions with adolescents who had been discharged. One participant recommended that an external team of auxiliary workers should be specifically employed to conduct post discharge aftercare services. Additionally, he believed that the MDT should receive regular feedback reports from these individuals.

F1P7: "Child care workers should be given a chance to go to the families and to the children out there and check how are they progressing because we see them out there but we cannot say anything."

F1P6: "I think if maybe there were…auxiliary workers, that's how we can do the aftercare thing and then they will come back and have a meeting, sitting like this and give us feedback."

They concluded by saying that it would probably not be feasible to expect internal members of the MDT to conduct these follow-up sessions as their current duties would not permit them to do so.

> F1P6: "The child care workers are working 24/7 and on the other side having to deal with the aftercare thing, it will be exhausting for me."

Aftercare has been defined as a continuation of primary care which follows discharge and provides ongoing support to individuals who no longer need intensive in-patient treatment. (Myers et al., 2008). Primary care can therefore be described as highly specialised whereas aftercare provides less intensive support on an out-patient basis.

The main line of thought that emerged from this particular theme was that the participants felt that they had no control over the provision of aftercare services. They explained that this frustrated them as they had to rely on outside agencies to preserve the continuum of care that they had initialised at the facility.

Participant's felt so invested in maintaining the continuum of care after discharge that they took it upon themselves to initiate aftercare efforts from within the facility. Myers et al. (2008) note that "only a small number of programmes have sufficient resources to provide any form of aftercare" (p.58). This became evident as participants noted that their efforts had not been very successful. Moreover, their lack of success in this regard may also be attributed to the fact that they were required to cope with the demands of providing both intensive in-patient treatment as well as out-patient aftercare services.

5.4.9 Theme 9: Measuring Treatment Outcomes

The ninth key element associated with effective adolescent addiction programs is the ability to measure treatment outcomes at the facility (Drug Strategies, 2003).

Brannigan et al. (2004) state that less than 10% of programs in the USA that have been evaluated using the key elements "have been the subject of a scientifically rigorous follow-up of the program's effect on client outcomes" (p.907). Members of the MDT described the situation at their facility in South Africa to be similar in nature. Additionally,

the research site can also be described as relatively new which could imply that it might still be too early for comprehensive treatment outcome data to have been disseminated.

Brannigan et al. (2004) adds that the high costs involved in performing scientific outcome evaluations hampers this process and state that it would therefore not be feasible for treatment facilities to conduct such evaluations without assistance. However, the South African treatment program where this research project was conducted is functioning under the auspices of the South African Department of Social Development and therefore need to request funding for such evaluations to be done.

5.4.9.1 Sub-theme 1: Post treatment feedback obtained by word of mouth

Participants noted that they did not know whether adolescents who have been discharged from the facility were able to maintain sobriety. They indicated that the treatment centre does not collect post discharge information from clients. Participants explained that this was considered a function of the District office and they assumed that the department was still busy collecting data on treatment outcomes.

> F1P3: “We don’t have that information, if we had aftercare we would know the progress of the child but currently, we are in the dark.”

> F2P4: “That function is not here at this office it’s at district office and they are still busy populating that data and just sourcing it.”

One participant noted that post-discharge information was only ever received from parents who called the facility for advice. The odd bit of information received from friends and staff who know clients personally was also mentioned as a source of post-discharge information.

> F2P6: “Parents will call us because they have our numbers after the family meeting, so they will call and say that this has happened”.

F2P2: “There are those who also phone to tell us about how happy they are about the progress of their children.”

F2P3: “it’s word of mouth most of the time.”

F2P8: “yes, someone called someone or someone met someone and you hear everyone just gets the word.”

“A program should be able to document changes in the trajectory of their clients’ lives both while they are in treatment and at periodic intervals in the year following treatment.” (Drug Strategies, 2003, p.10). It is the researcher’s opinion that continuous assessment would provide valuable post-discharge information that could be used to improve treatment program implementation and therefore the efficacy of adolescent addiction treatment at the facility.

5.4.9.2 Sub-theme 2: Feelings related to a lack of treatment outcome information

Participants indicated that they would like to receive treatment outcome information. It was noted earlier in this Chapter that they get to know their clients over the course of treatment and that they therefore develop a vested interest in their future health and a genuine concern for their welfare. This concern becomes evident in the way they referred to their clients as ‘our children’ during their discussion.

F1P6: “Come back to us and tell us what’s going on in terms of our children here in the centre, it will be much better.”

Something that stood out during the discussion of this theme was the MDT’s genuine, almost emotional desire to receive feedback regarding treatment outcomes. The researcher noted a similar emotional response while participants were discussing the lack of aftercare services in the Eastern Cape.

F1P3: “It’s something that we have a problem with because we don’t know whether we are going forward because we don’t have information.”

F1P8: “We became frustrated, we wondered what he was doing, has he relapsed or what because no feedback came to us that he is still clean.”

Najavits, Crits-Christoph, & Dierberger (2000) state that clinicians need more support as issues such as burn-outs and the lack of job satisfaction often prevent them from providing effective clinical care. Findings from the current study revealed that members of the MDT truly believe in the work they are doing and that they find it very difficult to continue providing effective care when they do not really know whether they are making a difference in the lives of their clients.

Providing members of the MDT with reliable treatment outcome information may improve feelings of job satisfaction and therefore increase their ability to provide effective clinical care. Even though these observations may have been informed by the researcher’s point of view, the initiatives taken by the MDT as described in the following sub-theme provides a modicum of evidence in support of his perspective.

5.4.9.3 Sub-theme 3: Taking initiative towards obtaining treatment outcome information

Members of the MDT explained that they sometimes personally phoned parents in order to find out how the child was managing at home. It was inferred that treatment centre rules did not actually allow for this type of action. The situation participants were describing was found to be similar to the ethical dilemma they described in Theme 8 (Sub-theme 2). In this case members of the MDT felt they had no other choice but to blur the lines of ethical practice as it was the only way for them to obtain information about treatment outcomes.

F1P6: “What we do with our children to get feedback is, during the night when we are doing night duty. We pick up the phone call registers of the previous intake and just randomly pick out a child and just phone the parents to check

how things are going at home it's where we get the feedback, otherwise we don't get feedback."

"If boundaries are ignored, physicians can find themselves acting in their own best interest instead of the patient's best interest." (Krishnaram et al., 2012, p.22). The MDT's initiative in this regard can be viewed as a form of boundary crossing. In order to manage this type of phenomenon practitioners will first need to examine their own motives for seeking treatment outcomes. The MDT's initiative should not be motivated by a personal need to reconnect with adolescents that have been discharged. A fine balancing act is therefore required.

The researcher believes that the initiative taken by these participant represents a promising opportunity to gather treatment outcome information. Members of the MDT sometimes work night shift and could therefore be assigned the task of conducting follow-up telephone calls. Records of the information parents provide could be kept and used to inform treatment program implementation as well as future aftercare initiatives. However, Krishnaram et al (2012) notes that the actions of practitioners should at all times remain true to the norms and values of the society they inhabit. Therefore, the actions of members of the MDT still have to remain consistent with the ethos and ethical principles as prescribed by the treatment centre.

5.4.10 Theme 10 (Unique theme): The Multi-disciplinary Team's Experiences Relating to Trust and Group Cohesion

The data analysis phase of the current study culminated in one unique theme. This theme featured consistently throughout participant interviews. The researcher decided to label and include this theme after conducting consensus discussions with his supervisors as well as his independent coder.

"To keep pace with the new health care emphasis on accountability and performance standards, it is necessary to measure quality of services, including quality indicators of team functioning" (Kutash et al., 2014, p.14). Accordingly, the nine preceding themes related to the measurement of service quality at the research site. The tenth

theme attempts to address an underlying sense of tension that was found to inhibit the multi-disciplinary team's functioning.

Particularly relevant to this discussion within the South African context is the recent endorsement of the registration of child and youth care worker as recognised social service professionals in terms of the social services professions act 110 of 1978 (as amended) (Allsopp & Mahery, 2010, p.27). Registration with the SACSSP is subject to a recognised qualification and or the relevant practise experience.

The role of a child and youth care worker in South Africa is comparable to what is referred to as 'family support specialists' (FSS's) within the 'peer based' multidisciplinary team model (Kutash et al., 2014). "Child and youth care practice takes place "in the moment" and integrates developmental, preventive and therapeutic requirements into the life-space of children, youth and families."(Allsopp & Mahery, 2010, p.29).

Similar to child and youth care workers, family support specialists add value to the multi-disciplinary team. They have valuable experience in navigating the child service system, are capable of interacting with family members of children and are in a unique position to earn and build trust while providing hope (Hoagwood et al., 2010, as cited in Kutash et al., 2014).

Findings have indicated that programs with improved organisational functioning were implementing structures designed to improve informal communication between staff, encourages teamwork and acknowledges family support specialists as equal members of the MDT (Kutash et al., 2014).

Several of the Child and youth Care workers were of the opinion that their perceived diminished status and subsequent exclusion from MDT consultation sessions, were informed by divergence in qualification levels and practice experience. They experienced this as inequality among different professions, which they articulated as follows:

F1P6: "We sometimes pick up something with a child that they didn't. They won't even come back to you, not the psychologist or the social worker. Maybe we refer to them because of a family problem of the child, but they won't come back to us."

F1P8: “For us [CYCW] it’s not good. I’m not treated as a professional care worker. They [Professional staff] don’t understand.”

Additionally, participants linked this concern to another experience that they had at the facility. Participants felt that important client information was being withheld from them by other members of the MDT.

F1P7: “It’s so interesting what they are hiding from us, we mustn’t get the whole information about the children.”

F1P7: “The other problem is, we will only find out that a client has a problem like after four or six weeks after he arrives here.”

They explained that the irony of this was that their clients eventually shared this information with them and that the first-hand information they obtained directly from the adolescents were more comprehensive than the information contained in the clients referral file.

F1P7: “When you have time to sit down, you build a relationship with that child and now they will tell you everything, more than what the file is telling them.”

Two participants discussed their frustration at not being granted access to facility resources when weekday staff were not present. They reported that they had a duty to provide for the needs of clients over weekends and that this arrangement made their task much more difficult.

F1P4: “On weekends everything here is locked we don’t have keys for anything.”

F1P10: “A child needs something and you have to fill out a list or form or you have to go to this person, or that person. You see, we don’t have that access

> because of the way the department does things. We see the problem and the child needs something now. That's the experience we have."

F1P8: "I don't know man what do they take us for? It's bad, bad."

One participant added that they sometimes felt singled out at Monday meetings as returning staff would question them relentlessly. They perceived these questions as being overly critical. Another participant noted that they felt misbehaving clients have more rights than what they do.

> F1P8: "Speaking about Monday meetings they want to hear about what went wrong during the weekend. They ask, what did the care workers do to you (Child) they don't care about you (CYCW). These kids are swearing at us, they can even touch us you see. So we wrote that but nothing happened, they don't call you and ask you what went wrong."

Members of the CYCW believe that they are in a unique position to make a valuable contribution to treatment. They spend more quality time with adolescents than other members of staff and therefore have direct access to valuable information that adolescents share. They felt that they could possibly contribute to treatment in this way but that this contribution was often dismissed or overlooked by other members of the MDT.

> F1P7: "I am saying that we obtain a lot of information as child care workers. I believe more than the social workers. The social workers also have one-on-one sessions but we are normal, we don't call it a one on one session to the children we just take the child and then just walk around the field."

> F1P3: "They spend maybe ten to fifteen minutes with the child whereas you spend twelve hours. Maybe you are the one that knows more about this particular child than the person that stays with this child for thirty minutes or less."

One participant explained that they write reports when they learn something new or important about an adolescent but that these reports are never acknowledged and most probably disregarded.

F1P3: “When you write a recommendation on the file, that information goes through whoever social worker but they do nothing about that. Most of the time that is the frustration that we end up having”

Members from other professions within the team also felt this tension but believed that it was due to a split that had occurred within their ranks. They made a clear distinction between what they referred to as the therapeutic team and the caring section.

F2P3: “I think we can’t hide from the fact that there is a split.”

F2P1: “Sometimes, not necessarily within our therapeutic team but regarding the relationship with some members of the caring section…There can be a few issues there.”

Their discussion revealed that these participants attributed the split to a lack of professionalism from some members of the MDT. One participant provided an example and explained that the therapeutic team followed a structured approach when dealing with clients, whereas members of the caring section brought their own personal dynamics into treatment.

F2P1: “in the therapeutic team there seems to be a norm and a standard with regards to behaviour towards children. An absolute standard way of approaching your therapeutic task or whatever you have to do during the day.”

F2P1: “Sometimes in the caring section there’s more. They bring more personal dynamics which gets exposed to the children, a particular ways of interacting with the children that can in my estimation have detrimental effects on what we are trying to do.”

Another participant was especially concerned about client confidentiality. He noted that they would sometimes discuss sensitive client information as a team. This information would then make its way on to the ‘grapevine’ and would become common knowledge throughout the facility. He noted that confidentiality was an aspect that could be usefully strengthened among some team members.

F2P5: “Ja, because in several cases here in the centre you hear something that was discussed in a multi-disciplinary team meeting in the corridors.”

F2P5: “As a multi-disciplinary team you have to discuss those issues of a child, to decide what to do with them, are they professional enough for that kind of confidentiality? That is one area which needs to be strengthened.”

One participant indicated that some team members might benefit from further training with regard to what he described as a lack of knowledge on the subject of teamwork amongst members of a MDT,

F2P5: “You’ll find that a person doesn’t know how to work in a team. To build a multi-disciplinary team is to work in a team. You know you are facilitating a team you are not a directive, they are not supposed to report to you and you are blocking the interaction between this multi-disciplinary team. You need training of some kind in order to function in a proper way.”

Another participant noted a lack of trust between team members. She explained that she is not always capable of implementing her professional recommendations personally. She has found in the past that these recommendations are not always

adhered to by the team members who were tasked to implement them. She noted that this creates a cycle of mistrust. They don't trust her recommendations and she doesn't trust them to implement them.

> F2P3: "There seems to be a lack of trust … trusting that you can hand over a recommendation to someone and have it followed through I think there is a lack of trust, a lack of communication which kind of creates a vicious cycle of not getting much done in terms of follow up."

> F2P3: "Where there are certain instructions given there is a sense of not trusting that this is in the child's best interest from one side and perhaps not trust from my side that this will be implemented. I think the more experiences of that the more the trust gets broken down."

One participant linked the split to the fact that the two groups had been appointed almost a year apart from each other. It was noted that the carers had been appointed a year before the therapeutic team arrived at the facility. He felt that the carers might be feeling a sort of ownership over the facility and do not appreciate the fact that the therapeutic team was instructing them on how to care for the clients.

> F2P4: "I think the biggest part of the split is. I want to call it a split for lack of a better description, is that except for nursing, that group [CYCW] has been together for a year longer. The professional team joined the group later. Sometimes I feel there's a bit of ownership. We've been here longer we know more."

Another participants ascribed the disruption in teamwork between members of the MDT as being aggravated by professional jealousy. He felt that individuals from the caring team were holding on to traditional ways of doing things and did not want to learn from other team members.

F2P5: “What I’ve also observed is that there is also, I would say jealousy of a professional discipline, of trying to claim your own traditional discipline. We are not willing to learn from other people.”

Participants noted that efforts had been made to address the split. Managerial interventions, weekend camping activities and team building activities were provided as examples of these efforts. These efforts were described as being unsuccessful.

F2P1: “Well we do try to solve it, we’ve tried numerous approaches. The staff have approached people personally. Mr---------- has also tried to intervene but there’s sort of a culture of this in our section sort of a, don’t you know this is the way we do things.”

F2P4: “We try, we went for a camp we went for team building but we struggle, we really struggle, it’s not that it’s a bad thing but it’s something that we really struggle with. I don’t know if it should be ascribed to the age of the group in general or to line functions not being adhered to.”

Communication in the health care sector has been described as a process in which information is accurately and concisely relayed between team members and patients (Deering, Johnston, & Colacchio, 2011). Communication between team members were noted as a major concern by participants from both focus groups interviews.

F2P3: “I think a lot of things boil down to good communication.”

One participant referred to the communication problem as a lack of ‘information follow through’. He linked this problem to a lack of urgency in relaying important messages between team members.

F2P4: “Sometimes there’s just no follow through on information with regards to therapeutic intervention and with regards to information. I don’t know why.”

F2P4: “I feel there’s no urgency in communicating certain messages.”

Deering et al. (2011) note that “Inadequate communication is an extremely common contributor to errors, and handoffs of information are times of particularly high risk” (p.90). One participant noted that all members should be partial to the decisions made at morning meetings and that the communication challenges they experienced originated in the actual communication thereof.

F2P10: “Taking responsibility, because whoever attended the meeting needs to report back and then everyone is like aware of what was said in the meeting and like whatever was decided in the meeting will be implemented I think that’s where the challenge is.”

Another participant added that she feels the information was sometimes ignored even if it was relayed. She believed that this situation might be improved by implementing improved supervisory practices at the facility.

F2P8: “I think sometimes the message is passed through, then sometimes I honestly just feel like it’s ignored. Oh it’s like okay, someone said that, I’ll just carry on doing what I use to do.”

F2P8: “I think…no follow through with everything goes with supervision. I think when people are better supervised. I think if it starts from the top and if it’s good from the get go, then it just flows down to everyone else.”

Kutash et al. (2014) has stated that it is difficult to achieve integration among MDT members because their experiences and perspectives differ from each other. Many of the participants in the current study experienced this difficulty to integrate. Additionally, they perceived it as having a detrimental effect on treatment program implementation at the facility.

Moreover, it has been “recognised that a significant number of complications result from team, rather than individual failures” (Deering et al., 2011, p.89). It is therefore quite possible that many of the difficulties experienced with regard to treatment program implementation were caused by issues related to team functioning at the facility.

The value of multi-disciplinary teams within the health care sector has been widely recognised (Schofield & Amodeo, 1999). Accordingly, participants noted in Theme 6 (Sub-theme 1) that they had much to learn from each other and that their individual expertise, when combined, contributed greatly to treatment program efficacy. Firth-Cozens (2001) concurs, stating that the use of multi-disciplinary teams in the healthcare setting has always been beneficial but that it requires skill and an honest recognition that maintaining team function is a long term task that requires consistent watchfulness and modification.

It becomes clear from participant observations that the split within the MDT is something that members are eager to resolve. The interviews do however indicate that it would be very difficult to achieve this aim without first establishing a climate of trust and acceptance among members of different professions.

5.5 Conclusion

The findings and discussion Chapter of this study attempted to provide a rich and thick description of the perceptions and experiences of the MDT. It is possible that findings from the data analysis process might assist in improving adolescent addiction treatment in the South African context and the Eastern Cape in particular. The nine essential elements of effective adolescent addiction treatment was used as a comparative lens during the research process and provided a useful means for the researcher to systematically structure the findings of this study.

Participants discussed each element of effective addiction treatment as they experienced its implementation in the South African context. They further described their interactions with clients, parents, community services, government agencies and each other. These descriptions demonstrated the interconnectedness between different systems within their own lives and those of their clients.

In order to understand adolescent addiction treatment and the factors that influence the efficacy of treatment programs, the researcher had to immerse himself in literature regarding the topic. A similar immersion took place during the interviews and the analysis phase of this study. The latter refers to an immersion into the world of adolescent addiction treatment as perceived by the MDT.

That being said, many formal evidence based recommendations were identified in the literature review as being crucial to treatment program efficacy. However, according to the participants of this study, one of the most important aspects of treatment program implementation is that of relationship building and establishing trust between staff, family members and adolescents.

It is the researcher's opinion that the underlying tension experienced between members of the MDT might therefore also be explained and addressed by virtue of the abovementioned concepts.

The following Chapter will provide a discussion of the conclusions, limitations and recommendations of this research study.

Chapter Six:
Conclusions, Limitations and Recommendations

6.1 Introduction

This Chapter provides a summary and conclusion derived from the selected research methodology, the research findings and the reviewed literature. Included in this Chapter is a review of the strengths and limitations of the present study as well as recommendations for future research. Additionally, consideration has been given to how the findings of this study can be usefully applied in an effort to improve the efficacy of adolescent addiction treatment programs in South Africa.

6.2 Summary of Methodology

The following section briefly summarises the methodology employed to operationalise and achieve the current study's main aim and secondary objectives.

The National Drug Master Plan (NDMP) 2013-2017 of South Africa highlights the damaging effects of alcohol and substance abuse on the youth of South Africa (National Drug Master Plan, 2013-2017, p.2). Additionally, the document recommends the use of evidence-based evaluation and monitoring practices with reference to South Africa's efforts in addressing and reducing substance abuse (National Drug Master Plan, 2013-2017, p.5).

The researcher therefore, identified the need for an exploratory study that would provide insight into the efficacy of adolescent addiction treatment programs in South Africa. It was argued in Chapter 2 of this study that addiction treatment should be viewed from a bio-psychosocial perspective and that the interaction of the various different systems within the adolescents life are responsible for causing and maintaining substance abuse.

The researcher acknowledged the complex nature of addiction treatment and recognised the importance of exploring it holistically. Accordingly, the current study employed the nine elements of effective adolescent addiction treatment (Drug Strategies,

(2003) as a theoretical lens. These elements were used to investigate the complex world of adolescent addiction treatment in a systematic and comprehensive way.

The current study was qualitative in nature and was aimed at exploring the perceptions and experiences of the MDT at an adolescent drug treatment facility. An exploratory-descriptive design with an interpretative approach was followed during the research process. This allowed the researcher to gain a rich and deep understanding of participant's opinions and perspectives while also enhancing the researcher's ability to provide 'thick' descriptions thereof. Additionally, the study adopted a critical-realist perspective which recognises that we can never truly know our environment as it actually exists and that our knowledge of this world has been informed by our opinions and perspectives. Qualitative research with a 'small q' was employed to integrate the interpretive and realist perspectives.

The current study can be described as being hypothetico-deductive in nature as it made use of theoretical knowledge to inform interview questions. It should be noted that interview questions were open-ended and allowed participants the freedom to convey their perceptions and experiences in their own words. Two separate focus group interviews were conducted with members of the MDT at a South African adolescent drug treatment facility. Non-probability purposive sampling was employed and only participants who met the study's specific inclusion criteria were selected.

Participation in the current study was voluntary and informed consent was obtained before interviews were conducted. The process of informed consent included a written as well as a verbal description of the study's ethical considerations, its purpose, aims and goals. Participants were given the opportunity to ask questions prior to interviews and were informed that they were allowed to terminate participation at any stage of the research process.

Interviews were digitally recorded and professionally transcribed to text. The researcher made use of the framework for qualitative data analysis by Tesch (1990) to interpret the resulting data. An independent coder was used to verify the resulting themes and sub-themes. Additionally, the researcher conducted consensus discussions with the independent coder and his researcher supervisors in order to finalise themes.

The present study made use of Guba's model (as cited in Krefting, 1991) to achieve credibility and trustworthiness. Accordingly, the researcher aimed to incorporate the four fundamental aspects associated with 'rigor in qualitative studies, as identified by Guba (as cited in Krefting, 1991). Truth value, applicability, consistency and neutrality were controlled for throughout the research process.

6.3 Conclusions Derived from the Methodology

The qualitative research approach and selected research design and methodology was suitable for the purpose of the study. The relative unfamiliarity of the one sample group about the research study, emphasised the need for an orientation meeting with the prospective research participants and not to reside this task with the gatekeeper to the sample; especially when conducting research in an institutional setting. The rich data generated during the two separate focus group interviews attest to the value of the data generation questions and the applicability of the theoretical lenses which guided the study's focus. The perceived power differentials between the members of the multi-disciplinary team and the child and youth care workers, further confirm the suitability of interviewing the two groups separately. The two separate focus groups furthermore allowed for the triangulation of the research findings and the subsequent recommendations to improve culturally sensitive drug treatment methods. The rigorous data analysis process, supported by the analysis of an independent coder,

6.4 Summary and Conclusions derived from the Research Findings

Findings have been presented according to the main themes and sub-themes that emerged from the data analysis phase of the current study. Each of the ten main themes and related sub-themes have been discussed as a single outcome in the preceding chapter.

These outcomes illustrate the views of the MDT with regard to treatment program efficacy. Additionally, the participant's perceptions and experiences demonstrate how treatment program implementation in South Africa aligns with evidence based practice that has been recognised internationally.

Theme 1 relates to the client screening procedure followed at the treatment facility. Participants described the screening process at the facility as conforming to the Minimum Norms and Standards for In-patient Treatment Centres as prescribed by the National Department of Social Development, and was guided by clear admission criteria. A generic qualitative screening and assessment tool [henceforth referred to as psycho-social report] was used to gather biographical information; history of substance abuse and important family; school; psycho-social and medical information. Participants indicated that adolescents are referred to the treatment centre by external social workers who are responsible for the compilation of the psycho-social report that is used as a baseline to determine client eligibility for admission to the treatment centre. One limitation was the absence of a standardised screening tool that has been evaluated for reliability and validity; and another the frequent omission of critical medical and other information, which participants felt were deliberately withheld by external social workers, as a strategy to subvert decline of the adolescent's admission. A recent amendment to the screening procedure was the inclusion of an interview of the adolescent conducted by the multidisciplinary team to address the aforementioned limitation. The results are used to develop a care plan as well as an individual development plan for each adolescent. Most participants emphasised that screening is an ongoing and both a formal and informal process, and several highlighted the limitation of excluding the voices of the Child and youth care workers, who spend the largest portion of time with the adolescents. Their relational engagement with adolescents over weekends and after hours place them in a favourable position to gauge the adolescents' concerns. This theme overlapped with theme 10, which dealt with the functioning of the multi-disciplinary team. The views of exclusion was juxtaposed by the other professionals who emphasised the ethical imperative of delineating professional boundaries in relation to the adolescents, which not only protect the adolescent but also the professionals at the centre. The argument of protecting client confidentiality was also upheld as a reason for only including professionally registered practitioners in the multi-disciplinary team.

Theme 2 captured the participants' views on the different reasons for what they perceived to be a lack of comprehensive client information, which serve as a barrier to

the provision of holistic care. This ranged from empathising with the limited time external social workers have available to complete comprehensive background checks on clients; the clients and family's lack of transparency, and the deliberate omission of conduct problems and co-morbid mental health conditions as was noted in the discussion of the screening procedure in Theme 1. Lastly, they listed the social workers' desperation to place high risk adolescents in a place of safety regardless of whether substance abuse was considered to be the adolescent's main problem

The resident psychologist in conjunction with a sessional psychiatrist were noted as working closely together in a collaborative effort to address the medical and psychological needs of the adolescents at the facility. The Social workers reported that they initiate regular interactions with family members in the form of group conferences and that they endeavour to address client social concerns such as schooling and social grant applications with external social workers. Additionally, as part of the programs efforts at providing comprehensive care, adolescents participate in educational sessions designed to help them develop an understanding of general health concerns that would assist them with healthy living when they re-enter society.

The perception of the Child and youth care workers' were that the lack of validation of their value to the treatment team, contributed to them being denied access to training materials over weekends and the underutilisation of their skills. Their perceptions in this regard was once again found to overlap with theme 10 as the lack of validation was felt to affect team function.

Theme 3 illuminates the importance of family involvement in the adolescents' addiction recovery treatment. Participants were in agreement that the family visits over weekends and participation during family group conferences facilitate the recovery process. However several of the adolescents hail from disintegrated families and outright rejection by parents and non-involvement in the treatment process serve as a debilitating factor in the adolescent's recovery. Family group conferences were used by members of the MDT to mediate family discussions and provides a platform for the child and the parents to voice their feelings. The MDT's observation of family dynamics during the visits to the treatment centre furthermore serve as valuable assessment information which

inform the treatment goals; and provide an opportunity for relationship building with the adolescent and the treatment team. Family involvement therefore has the potential to act as a protective factor against substance abuse as well as a risk factor that may be responsible for its maintenance. Participants could be described as being mostly in support of family involvement but also critical and weary thereof.

Theme 4 illustrates the participants' views on how the treatment program addressed the specific developmental needs of adolescents. Important lines of thought that emerged during focus group interviews were client literacy levels, the adolescent's ability to concentrate for extended amounts of time and the adolescent's need to expend energy. Participants felt that literacy levels, cognitive deficits and developmental delays had not been taken into account during treatment program development. Program content had to be adapted according to the specific background and abilities of each new intake. Written activities were substituted for play, drawing or oral exercises to accommodate the developmental needs of clients. Less emphasis was placed on the prescribed writing activities as they were perceived to cause boredom and a loss of client concentration. Additionally, participants broke treatment sessions into parts or adjusted the length thereof to facilitate client concentration. Members of the MDT perceived adolescents as being prone to boredom and experienced a difference in client receptiveness to treatment after having participating in fun physical activities. They ascribed this difference in attitude to the adolescents need for structured activities that help them expend energy. The MDT felt that developmentally appropriate services could be augmented by extending program length.

Theme 5 highlights the importance of engaging and keeping adolescents in treatment. The observations reported by the MDT were based on the factors that affected an adolescent's willingness to stay and complete the treatment program. Adolescents are not admitted to the treatment centre by choice and can only be discharged with parental consent. Resistance to treatment was found to be especially prominent during the first few weeks of treatment. Additionally, adolescents were found to be of the opinion that they did not need drug treatment and displayed a general disregard of the risks associated

with substance abuse. Resistance to treatment was linked to the adolescent's need for autonomy and individuation as discussed in theme 4, which dealt with the specific developmental needs of adolescents. It was found that clients only experienced a feeling of belonging at the facility once they had formed bonds with members of the MDT and other adolescents. Additionally, participants recognised the importance of the corrective emotional experience and informal non-treatment related interactions between staff and clients as contributing to the building of trust and rapport. Extramural activities alongside positive role models and peers was found to distract adolescents from everyday problems and helped them realise that fun does not have to include drug use, contributing to their perceptions of the treatment centre as a place of safety.

Theme 6 captured the MDT's views on the importance of continuous development and training for staff at an adolescent drug treatment facility. Members of the MDT expressed a need for further training and development to improve their ability to provide effective treatment. One participant felt that staff members who wanted to further their training in a specific area of addiction treatment would have to do so independently. His view was juxtaposed by the view of another member of the same profession who felt that they have had ample opportunity to attend training workshops in the past. He noted that training usually took place in-between intakes and was supplemented by the more recent addition of monthly training workshops that were facilitated by experts in the field of drug treatment. Several participants highlighted the limitation of training topics being too general in nature and requested training that would be more relevant to their individual professions. Participants placed a high value on previous working experience and inter-professional learning, noting that their individual experiences and skills were complimentary. They did however feel that experiential learning was not always acknowledged by treatment program management. Finally, participants felt that training for the team as a whole should be relevant to all professional fields, whereas individual training should be provided for on a case by case basis.

Theme 7 explored the MDT's approach to accommodating the needs of clients of different genders, while also considering their unique cultural and religious orientations.

A distinct difference was noted in the way participant approached treatment for boys as opposed to girls. They observed that the difference in approach was mostly informed by differences in physiology, emotional maturity, medical concerns, and response to treatment, and the way they tend to behave. Differing levels of supervision was implemented depending on the specific gender being treated at the facility. As part of ethical practice physical exams were only conducted on clients by MDT members of the same gender. Additionally, participants perceived girls as being more promiscuous than boys and had to take measures to protect their clients as well as male staff in this regard. Male staff set strict boundaries with female clients which required female staff to take a more hands on approach to treatment. Client sexual orientation was described as problematic due to the single gender intake procedure at the facility, romantic relationships of any kind between clients were discouraged. Participant experiences with clients who practice religions other than the Christian religion where limited, they did however note, that clients from other religions were allowed to invite their own spiritual leaders to the facility to observe their religious practices. One exception was the Rastafarian religion. Participants explained that clients were not allowed to practice the Rastafarian religion as the use of cannabis was not allowed at the facility. A limitation to religious sensitivity was identified as the lack of non-Christian staff members who would be able to relate more readily to non-Christian clients. With regard to cultural sensitivity, participants did not feel that clients from different cultural backgrounds who speak different languages were being disadvantaged. Participants did however feel that the prescribed topics in the program manual was orientated towards a Western demographic. They described their clients as being mostly of African descent and identified a lack of cultural meaning and significance within prescribed activities.

Theme 8 had as its focus the provision of post-discharge aftercare services. Participants were in agreement that aftercare services were essential in cementing the changes that were made during treatment and perceived the provision of aftercare services as poor in the Eastern Cape. Their observations overlapped with a limitation identified Theme 1, as the challenges faced by external social workers was noted as a contributing factor to the unavailability of aftercare services. Participants expressed their

frustration in this regard and felt that the continuum of care was essentially being disrupted leading to poor treatment outcomes. Their views were informed by experiences of discharged adolescents visiting their places of residence to ask for personal assistance in maintaining sobriety. These experiences placed them in a double bind situation. Participants were faced with weighing up the possibility of assisting an adolescent to remain drug free in that moment as opposed to conducting themselves in an ethical manner. Efforts aimed at establishing an aftercare initiative at the treatment facility were described as being mostly unsuccessful. Participants attributed this to a lack of family dedication. Moreover, participants were in agreement that the demands of providing primary in-patient care is very high and that this negated their ability to facilitate aftercare initiatives at the facility.

Theme 9 had as its focus the recording and evaluation of treatment outcomes. Participants explained that they did not have any indication of whether treatment at the facility could be described as having lasting effects on their clients. Information regarding treatment outcomes could only be obtained via word of mouth. They explained that the treatment centre does not collect post discharge information and that the gathering and reporting of treatment outcome information was a function of the district office. All participants experienced the lack of treatment outcome information as demoralising. Additionally, the absence of official treatment outcomes at the facility was identified as having an influence on job satisfaction amongst members of the MDT. All members of the MDT could be described as having a vested interest in the continued health and futures of their clients as some members reported that they would sometimes covertly phone the parents of discharged clients to obtain treatment outcomes. This act of desperation raised ethical concerns with regard to the crossing of professional boundaries similar to those that were highlighted in Theme 8.

Theme 10 of this study explored the functioning of the Multi-disciplinary team. Participant perceptions regarding trust and group cohesion within the MDT highlighted a significant barrier to treatment program efficacy. All members of the MDT described what they perceived to be a ‘split’ within the ranks of the team. The ‘split’ was ascribed to

differences in perspective, conduct, rank and professional training. Participants identified two different factions within their ranks by distinctly referring to the one group as the ‘caring section’ and the other as the ‘therapeutic team’. Members of the caring team felt devaluated, noting that their contributions were frequently ignored. They indicated that they spend the largest portion of time with adolescents and that this placed them in a unique position to contribute to treatment program implementation. They felt that they were afforded less status than their peers as they are not privy to important client information and do not have access to training materials or facility resources without supervision. Members of the caring section projected feelings of resentment, frustration and anger during focus group interviews. They noted that they felt voiceless. In contrast, the therapeutic team felt that the caring section was deliberately ignoring their recommendations. They felt that the caring section was disregarding the ethical imperative of maintaining professional boundaries in relation to their clients and bringing personal dynamics to a professional environment. Additionally, the therapeutic team noted that they were weary of sharing privileged client information with members of the caring section as they did not trust that the information would remain confidential. Both groups acknowledged that a lack of effective communication between team members played a role in widening the ‘split’. One thing that both groups agreed upon was that the ‘split’ affected treatment program implementation and that they wanted the problem to be resolved.

Interesting to note is that a parallel can be drawn between the situations that the MDT found itself in and that of their adolescent clients. Members of the MDT can be described as being part of their own unique family system in which the rules of the system can be influenced by interactions between its members. Similar to the opposing factions of parents and adolescent we find that members of the therapeutic team are also engaged in a form of power struggle. The caring team’s reported behaviour represents the need for autonomy, freedom and control in relation to their specific role at the facility. Additionally, one can argue that the profession of child and youth care worker is still relatively new and that participants who fulfil this role are in the process of discovering their unique identity within the field. This situation leads to a need similar to that of the need for individuation as experienced by developing adolescents. Conversely, the

therapeutic team has already achieved individuation within their chosen professions as their individual roles have been clearly defined. The therapeutic team's reported behaviour reminds one of an authoritative parent that does not acknowledge the new needs of an adolescent child and therefore has to deal with boundary testing and rebellion. The abovementioned hypothetical description can be viewed as contributing to an unstable system. Functional changes are not being accepted into the system and as a result, the system cannot maintain its level of function. The team members would therefore need to confront issues of boundaries, rebellion and freedom before functional changes can take place and system function is restored.

6.5 Strengths and Limitations of the Current Study

The current study employed several considerations and techniques that enhanced the research process as a whole. The first of these was the researcher's use of the interpretive approach. Following the interpretive approach aided the researcher in gaining a rich and deep understanding of how participants perceive reality within the context of adolescent addiction treatment in South Africa. An additional benefit of following this approach was that it allowed the researcher to interpret and describe the participant's version of reality in greater detail.

The field of adolescent substance abuse is very broad and complex. Therefore, the researcher utilised Drug strategies' (2003) nine elements of effective adolescent addiction treatment as a comparative lens with which to interpret the entire bio-psychosocial spectrum of adolescent addiction treatment at the facility. In addition, the use of the nine elements allowed him to present research findings in a clear and systematic way.

An additional strength of the current study was the use of focus group interviews. The use of focus groups as a means of gathering data proved to be very effective with regard to the current study. The interactive nature of these interviews allowed participants to comment on and interact with each other. This served to stimulate participant conversation and resulted in a very rich and comprehensive data set. The researcher's use of visual cues to stimulate discourse during interviews is another strength of the current study.

Guba's (as cited in Krefting, 1991) model with its four fundamental aspects of truth value, applicability, consistency and neutrality guided the research process. Therefore the researcher was able to ensure qualitative 'rigor' by operationalising techniques such as the provision of thick descriptions, immersion, self-reflection and triangulation via member reflection. Moreover the model encouraged the researcher to provide detailed descriptions of the research context as well as participant details while controlling for research variables that might have influenced the resulting data.

A final strength of the current study was the inclusion of exiting ethics in the research design. Research feedback was provided to all informants who participated in this study. Research feedback took the form of a PowerPoint presentation that was presented to the entire MDT. The MDT's comments at this feedback session revealed that the research process itself had somehow already been instrumental in affecting positive change at the facility even though no recommendations had been made and the results had not been disseminated yet. An example of this was that the program had been extended. The first week of treatment was now earmarked specifically for building rapport with clients and also served as an extension of the screening process. The extended screening process allows the team to obtain a more detailed bio-psychosocial client history before treatment officially starts.

Research limitations in respect of the current study are acknowledged next. The first limitation of the current study relates to focus group interviews. Both focus group interviews were initially scheduled to be conducted on the same day, mid-December 2017. The first interview however, lasted much longer than anticipated. The researcher was therefore not able to conduct the second interview due to a lack of time. The second interview was subsequently scheduled to take place in January 2018.

This was identified as a limitation of the current study as the researcher noticed that the December group was slightly more negativistic and emotional than the January group. It is the researcher's opinion that staff are generally tired and negative towards the end of the year and more positive and optimistic after a restful December holiday. This variable (participant mood) may have influenced informant responses and could therefore have had an effect on research outcomes.

Poor preparation by the gatekeeper at the research site was noted as a limitation of this study. This only became evident when the researcher arrived at the facility to conduct focus group interviews. The gatekeeper had confirmed interview dates and times with the researcher two weeks prior to interviews. However, the researcher needed to acquire keys for suitable venues at the last minute and in some cases had to personally alert members of the MDT that interviews had been scheduled for that time.

Another limitation was the researcher's level of experience related to conducting focus group interviews. Focus groups were quite large and required a fair amount of skill to conduct. The dynamic nature of the conversation made it more intense than individual interviews. Conducting the interview, jotting down field notes and consolidating all the different opinions requires a certain amount of experience and skill. Accordingly, the researcher felt that his field notes were not as detailed as they could have been. He therefore attempted to compensate for this discrepancy by keeping a reflexive journal that was updated directly after interviews took place.

The use of the hypothetico-deductive method to inform qualitative interview questions may be considered a limitation of this study. The researcher acknowledges that this aspect of the study's methodology could be interpreted as an impure example of qualitative research. The researcher did however ensure that all questions were open-ended and that participants were allowed the freedom to express their opinions and perceptions without coercion.

The nine key elements were revised in 2015 to include 'attention to mental health' as the tenth element of effective adolescent addiction treatment (Cacciola et al., 2015). The current study employed the original nine elements as identified by Drug strategies (2003). The researcher acknowledges that this might be seen as a limitation but notes that the original nine elements make provision for mental health concerns as a sub-criterion of the second key element, that of 'Providing comprehensive integrated treatment.'

The second to last limitation of the current study was identified as an over-abundance of themes. The use of the nine elements and the complex nature of addiction treatment necessitated a very broad exploration of the resulting data. The researcher sometimes felt that the resulting data was so rich that he was not doing justice to each

and every identified theme. The large number of themes also resulted in Chapter 5 being much longer and less concise than originally envisioned.

The final limitation of the current study was identified as the inability to generalise findings due to the qualitative nature of the study. Even though the research design allows for replication, there are currently no other similar facilities operating within South Africa. Therefore, the inability to replicate the study at a similar facility in South Africa should also be acknowledged. Hopefully the current study will serve to inform treatment program development, implementation and evaluation in other major centres within South Africa.

6.6 Recommendations

Recommendations have been made according to the findings of the current study. The present study identified adolescent addiction as a major problem in South Africa and focussed on the efficacy of adolescent addiction treatment. The findings of this study however alluded to a much deeper problem.

It was revealed that social workers currently employed in South Africa are struggling to provide the necessary services and care that our population requires. While listening to the comments made by the participants of this study one is confronted by the realisation that a large majority of South African youth are plagued by numerous biological, psychological and social difficulties.

Evidence-based literature confirms that these difficulties are in many cases responsible for substance abuse amongst adolescents and that effective addiction treatment should start by addressing these issues. It is therefore recommended that future research efforts be focused on the need for, and capacity of social service delivery in South Africa in order to investigate and if necessary, address the failings of this system.

The following recommendations have been informed by the voices of the members of the Multi-disciplinary team and apply to the adolescent drug treatment facility where the research project was conducted:

It was found that the treatment program employed a formal screening procedure prior to intake. Assessment and subsequent treatment matching could be improved by

obtaining a more detailed report from outside social workers. Extending the screening process and involving the entire MDT during screening was also noted as possible ways of refining the process.

A comprehensive treatment approach addressing the full bio-psychosocial spectrum was being followed at the treatment facility. Possible improvements to comprehensive service delivery at the facility were identified as the need to eliminate the 'red tape' associated with obtaining basic necessities like warm clothing for clients and the identification of and utilisation of additional CYCW skills to enrich comprehensive service delivery.

The treatment centre attempted to involve family members throughout the treatment process. An additional measure that may be taken to improve treatment outcomes would be to schedule formal family therapy sessions. Members of the MDT need to address the family system as part of their biopsychosocial treatment strategy. The researcher does however acknowledge that this might be almost impossible to achieve due to time and logistical constraints.

The treatment program itself was described as being developed specifically for young adolescents. However, participants noted that the program manual could be made more developmentally appropriate by adjusting sensitivity to client literacy levels and by matching program content to the predominant cultural demographic currently making use of the service.

No specific efforts were made to retain adolescents in treatment as treatment program completion was considered compulsory for minors. Participants did note that the MDT worked very hard to engage teens in order to create a sense of belonging at the facility. They noted that bond forming and relationship building was crucial in this regard. Additionally, it is recommended that structured treatment should be integrated with fun informal program activities as this would engage adolescents more effectively.

A more structured and pre-meditated approach to the planning and selection of relevant staff training opportunities is recommended. General training topics are indicated for group training purposes and profession specific training for individual training purposes.

Findings indicated that religious sensitivity could be enhance by employing additional staff members who possess knowledge of the various practices of non-Christian religions. An alternative way to improve religious sensitivity would be to schedule training sessions designed to enhance the MDT's knowledge of non-Christian religions.

Provision of aftercare services was found to be lacking at the treatment facility where this research study was conducted. Possible recommendations for improvement in this regard include the development of the necessary infrastructure to facilitate aftercare services at the facility and the possible employment of a team of individual's who's main function would be to provide this service to adolescents who have been discharged.

Treatment outcomes were not being recorded or evaluated at the treatment facility. The lack of treatment outcome information may be addressed by formally requesting this type of information from the South African Department of Social Development. Alternatively, as an internal function of the facility, staff who work nightshift could be utilised to conduct follow up telephone calls to determine the status and progress of adolescents who have been discharged. The resulting data should be recorded and used to improve treatment program implementation at the facility.

Participants identified various barriers to group cohesion and trust among members of the MDT. Improving communication channels between team members at the facility is considered to be crucial aspect part of overcoming these barriers. It would therefore be necessary to improve supervision in order to ensure that team members are held accountable for relaying important information. It is further recommended that all members of the MDT receive a refresher course in ethical and professional conduct. Additionally, members of the CYCW should be utilised more effectively as they are in a unique position to contribute to treatment program efficacy. Team members should be granted the same level of access to facility resources.

The current study has shown how the nine key elements of adolescent addiction treatment may be utilised to determine the efficacy of a South African treatment program. The researcher's methods differ from those utilised by international researchers in that

he did not employ a structured Likert-type scale designed to provide quantitative data on treatment program efficacy. This scale however, has the potential to be used as an evidence-based evaluation tool for treatment programs in South Africa. The researcher therefore recommends that the Department of Social Development consider obtaining this measure and utilising it as part of improving treatment outcomes and service delivery in South Africa.

6.7 Conclusion

The current study provided a detailed account of the MDT's perceptions and experiences regarding adolescent addiction treatment program efficacy. The study was qualitative in nature and made use of the nine key elements of effective addiction treatment (Drug Strategies, 2003) as a comparative lens with which to interpret the resulting data. An exploratory descriptive approach was followed throughout the research process and various systemic models and theories were incorporated to explain and delineate adolescent addiction and the treatment thereof. Non-probability purposive sampling was used to identify participants before focus group interviews were conducted. The data was analysed using the eight steps of qualitative data analysis as identified by Tesch (1990). Guba's model (as cited in Krefting, 1991) was operationalised to ensure credibility and trustworthiness of findings.

The primary aim of the study was to explore the functioning of the MDT at an in-patient adolescent drug treatment facility and their perception of the extent to which nine essential core elements of effective adolescent addiction treatment aligns with program implementation at the research site. This aim was achieved by realising the studies four secondary objectives. The researcher realised the first objective by providing an in-depth description of the MDT's perception of how the MDT functioning is promoting and inhibiting treatment programme outcomes. The second objective was realised by exploring and describing the MDT's experiences and perceptions of implementing the in-patient adolescent drug treatment programme. The third objective was realised by exploring and describing the MDT's perceptions on how the nine elements that are essential to adolescent treatment program efficacy are incorporated in their treatment

programme. The fourth and final objective was realised by reporting the findings of this study and by making recommendations regarding treatment program implementation and evaluation that might enhance adolescent addiction treatment outcomes in South Africa.

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Appendix A: Participant information letter

Summerstrand South Campus

Department of Social Development Professions

School of Behavioural and Lifestyle Sciences

Faculty of Health Sciences

Tel . +27 (0)41 504 2197 Fax. +27 (0)41 504 2574

Veonna.goliath@mandela.ac.za

06 December 2017

The Treatment Centre Manager

Dept of Social Development

Research project: Perceptions of a Multi-disciplinary Team on the Effectiveness of their Treatment Approach at an In-Patient Adolescent Drug Treatment Facility

Dear Mr -------

We are a team of Faculty of Health Sciences researchers who are conducting a research project which aims to explore the **Perceptions of a Multi-Disciplinary Substance Abuse Treatment Team on the Effectiveness of their Approach.**

We have permission from the Centre Manager, Mr ------ and the Provincial Population and Research Directorate for the study (find attached permission letter). We also received ethics clearance from the university's Research Ethics Committee in June 2017. The Ethics clearance number is **H17-HEA-SDP-008.**

We completed 12 individual interviews to date and now wish to proceed to conduct the two focus group interviews as per the research proposal. We received permission from Mrs Tatchell to include Mr Willem Bronkhorst a Psychology Masters student to the project as his proposed study is aligned to the broader project's outcome. Mr Bronkhorst and I will therefore co-facilitate the focus group interviews.

The purpose of this letter is to invite your and your staff's participation in the focus group interviews. We welcome the participation of all staff members, ***including*** *those who participated in the individual interviews*.

We need to conduct two focus group interviews:

One with the Child and youth care workers and another with the rest of the multidisciplinary treatment team (i.e., psychiatrist, medical doctor, social workers, psychologist, occupational therapist, nurses, treatment programme supervisor and centre manager). We can accommodate a maximum of 10 people in a focus group and project the estimated time of the focus group to be between 60-75 minutes.

Please find attached the following:

- The gatekeeper consent form
- The consent form that must be signed by each staff member who will participate in the focus group interview.
- Biographical questionnaire
- A reflection sheet that will guide the focus group discussion. The sheet contains a summary of the 9 elements that characterise treatment effectiveness and a focus on the functioning of the multidisciplinary team. (*We wish to encourage you to come up with a picture/image/word or description that signals/stands out about the 9 elements-this will be discussed in the focus group interview*).

Thank you for taking the time to read this letter and for your valuable contribution to this project. As soon as I have a list of potential names from you, I will proceed to set up suitable focus group interview dates.

Yours sincerely,

_____

Dr Veonna Goliath (including the members of the project team: Dr Yaseen Ally, Prof Esmeralda Ricks, Dr Konesh Navsaria)

_____

Mr Willem Bronkhorst

Psychology Masters Student

Appendix B: Biographical Questionnaire

Biographical Questionnaire

This questionnaire is confidential and your information will remain anonymous. Please complete the form by filling in or ticking the most applicable boxes.

1. Where do you work (All facilities):……
2. Work status(Permanent/Part-time):……..
3. Working hours (Days per week/Hours per day):……
4. Work shifts (Day/Night/Alternating):……
5. Age:……
6. Gender:……
7. Years' experience in addiction treatment:……
8. Years' working at current institution:……
9. Designation (Job title):……
10. Applicable Qualifications/Training:……..

    ……

    ……
11. Home language:……
12. Would you like to receive general feedback regarding the study?…….

    If yes, please provide a contact number/E-mail address…….

Thank you for participating in this study!

Appendix C: Gatekeeper Consent Form

Gatekeeper Consent Form

I give consent for you to approach staff members at this facility who meet the criteria for involvement in the abovementioned research study.

I have read the information letter explaining the purpose of the research and understand that:

- The participation of staff members is voluntary.
- Only staff members who consent will participate in the research.
- All information obtained through the focus group interviews and the recording of interviews will be strictly confidential.
- Participants may withdraw from the study without penalty.
- Information obtained will be written in the form of a dissertation and will be made available in the library of Nelson Mandela University.
- Information may be presented at scientific conferences and if the opportunity arises it will be used to write a scientific article.

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Gatekeeper's Name Signature Date

Appendix D: Participant Consent Form

RESEARCH PARTICIPANT INFORMATION AND CONSENT FORM	
RESEARCHER'S DETAILS	
Title of the research project	Perceptions of a Multi-disciplinary Team on the Effectiveness of their Treatment Approach at an In-Patient Adolescent Drug Treatment Facility
Reference number	H17-HEA-SDP-008.
Principal investigator	Veonna Goliath (IPHRU team) and Psychology masters student Willem Bronkhorst
Address	Nelson Mandela University Port Elizabeth
Postal Code	6000
Contact telephone number (private numbers not advisable)	041-5042197

A. DECLARATION BY OR ON BEHALF OF PARTICIPANT		Initial
I, the participant and the undersigned	(full names)	
ID number		

A.1 HEREBY CONFIRM AS FOLLOWS:		Initial
I, the participant, was invited to participate in the above-mentioned research project		
that is being undertaken by	Dr Veonna Goliath, Dr Konesh Navsaria, Dr Yaseen Ally, Prof Esmeralda Ricks and Mr Willem Bronkhorst	
from	The Faculty of Health Sciences	
of the Nelson Mandela University.		

THE FOLLOWING ASPECTS HAVE BEEN EXPLAINED TO ME, THE PARTICIPANT:					Initial
2.1	**Aim:**	This research project aims to explore and describe the multidisciplinary team functioning and their perception of how the nine functional components that constitute treatment programme effectiveness is incorporated into the adolescent drug treatment programme at the research site. The results of this study will be used to make recommendations on how treatment outcomes can be enhanced. *The results will be presented to the Treatment centre staff and may be presented at scientific conferences and in scientific publications with the permission of the treatment centre manager and the population research directorate*			
2.2	**Procedures:**	I agree to and understand that I will need to complete a consent form, biographical questionnaire and participate in a focus group interview. I will also allow audio-recordings of these to be made. All documentation will be returned to the researcher.			
2.3	**Risks:**	I understand that there are no risks attached to this study and that I am free to withdraw at any stage without any negative consequences to myself.			
2.4	**Possible benefits:**	As a result of my participation in this study, results may be utilised by professionals in addiction treatment to improve the efficacy of treatment programs at addiction facilities in the public sector. Results may also be used to improve service delivery and alleviate family stressors by reducing adolescent relapse rates. Treatment facility employment conditions may also improve as a result.			
2.5	**Confidentiality:**	My identity will not be revealed in any discussion, description or scientific publications by the investigators and audio recordings will only be transcribed by the researchers. ***Anonymity may be compromised due to the small sample size but all relevant precautions will be taken by the research team to protect the identity of all participants***.			
2.6	**Access to findings:**	Any new information or benefit that develops during the course of the study will be shared as follows: The results will be made available to interested participants and will be presented in the form of a written dissertation.			
2.6	**Voluntary participation / refusal / discontinuation:**	My participation is voluntary	YES	NO	
		My decision whether or not to participate will in no way affect my present or future care / employment / lifestyle	TRUE	FALSE	

3. THE INFORMATION ABOVE WAS EXPLAINED TO ME/THE PARTICIPANT BY:									Initial
Dr Veonna Goliath and Mr. Willem Bronkhorst									
in	**Afrikaans**		**English**		**Xhosa**		**Other**		
and I am in command of this language, **or** it was satisfactorily translated to me by									
Translator not required.									
I was given the opportunity to ask questions and all these questions were answered satisfactorily.									
4.	No pressure was exerted on me to consent to participation and I understand that I may withdraw at any stage without penalisation.								
5.	Participation in this study will not result in any additional cost to myself.								

A.2 I HEREBY VOLUNTARILY CONSENT TO PARTICIPATE IN THE ABOVE-MENTIONED PROJECT:		
Signed/confirmed at Port Elizabeth	on	2017
Signature or right thumb print of participant	Signature of witness:	
	Full name of witness:	

B. STATEMENT BY OR ON BEHALF OF INVESTIGATOR(S)									
I,	Dr Veonna Goliath and Mr. Willem Bronkhorst							declare that:	
1.	We have explained the information given in this document to								
2.	He / she was encouraged and given ample time to ask me any questions;								
3.	This conversation was conducted in	**Afrikaans**		**English**		**Xhosa**		**Other**	
4.	I have detached Section D and handed it to the participant					**YES**		**NO**	
Signed/confirmed at Port Elizabeth				on				2017	
Signature of interviewer				Signature of witness:					
				Full name of witness:					

Appendix E: Focus Group Reflection Sheet

MDT Focus group reflection sheet

Dear Participant

The following 9 elements including multidisciplinary team functioning, are considered essential criteria related to addiction treatment.

You are invited to reflect on each element and how it relates to your own role as a member of the team. A fun way of doing this would be to draw small pictures or write a few key words next to each element. This reflection sheet is provided to help you generate ideas before the actual focus group interview.

1. Screening and comprehensive assessment Screening helps identify the patient's individual needs. Continuous assessment can improve treatment	
2. Comprehensive services Treatment should focus on all areas of a patient's life.	
3. Family involvement How does the team involve and interact with family members?	
4. Developmentally appropriate services and therapies Does the team attempt to tailor treatment to suit teenagers?	

5. <u>Strategies to engage and keep adolescents in treatment</u> Building climate of trust between team and adolescents.	
6. <u>Qualified staff</u> Continuous training regarding addiction, adolescent development and mental issues of patients.	
7. <u>Consideration of cultural and gender differences.</u> How do we address the different needs of different genders and cultures?	
8. <u>Aftercare support</u> Team's efforts to reduce relapse after treatment.	
9. <u>Data gathering to measure outcomes</u> Measuring success and relapse rates can improve future treatment.	
Multidisciplinary team functioning ➢ the role of each of the professionals in the MDT ➢ How do you experience working in the (MDT) at the treatment Centre. What is easy/difficult and why? What is working/not working and why? ➢ Your perception of the role of the MDT and its impact on the treatment outcomes ➢ What is needed to enhancing the functioning of the MDT	

Thank you for taking the time to reflect on these elements. We look forward to hearing your thoughts and opinions.

Regards

NMU Research team.