THE RELATIONSHIP BETWEEN CHILDHOOD EXPOSURE TO SUBSTANCE USE AND SUBSTANCE USE AS AN ADULT.

A full-thesis submitted in fulfilment of the requirements for the Degree of Magister Artium in Child and Family Studies, Department of Social Work, Faculty of Community and Health Sciences, University of the Western Cape

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ABSTRACT

It is a common fact that drug and alcohol abuse has become a complex problem with children in South Africa. There is also a risk that children of substance abusers will become substance abusers themselves. The aim of this study was to determine if there is a relationship between childhood exposure to substance use and substance use as an adult. The theory that was implemented in the study was the Social Learning Theory.

The participants were obtained from an outpatient substance abuse treatment centre. A cross sectional study design was used whereby 192 participants were requested to complete an adapted version of the Child Exposure to Domestic Violence scale. The results of the study show that 48% of the respondents experienced exposure to substance abuse which they witnessed as a child. The results of the study indicated that past exposure to substance abuse accounted for a mean of 2.47. Respondents also responded in terms of exposure to parent/s that abused substances, which had a mean of 2.12. The results illustrated that there is a significant positive relationship between past experiences of substance abuse and current experiences of substance abuse within the total sample (r=.39, p:0.01).

The study showed that for gender a positive relationship was found for males (r = .23, p:0.01) and for females (r = .34, p:0.01). In terms of family structure there was a significantly positive relationship, which for one parent was (r = .23, p:0.05) and for two-parent families was(r = .38, p:0.01).

In conclusion early intervention strategies for children who are at risk and who are exposed to substance abuse, should be implemented.

KEYWORDS

Adult, Child exposure to Domestic Violence scale (CEDV), Cross sectional study, Child, External attributes, Exposure, Experience, Family structure, Social cognitive learning theory, Substance abuse

DECLARATION

I declare that the current study *the relationship between childhood exposure to substance use and substance use as an adult has* not been submitted previously for any degree or examination in any university, and that all the sources I have used or quoted have been indicated and acknowledged as complete references.

_____ July 2015

CARMEN HERBERT **DATE**

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Definition of terms

Adult: Phase when one is 18 and older (Weiten, 2010).

Child exposure to domestic violence scale (CEDV: Child exposure to domestic violence scale is a valid and reliable measure of the level of exposure to domestic violence from a child's perspective (Edleson, Ellerton, Seagren et al.,2007).

Cross sectional study: This examines several groups of people at one point in time. This design can be used to determine whether a particular problem exists within a group of participants and what the level of the problem is (DeVos, Strydom, et al.,2011).

Child: Is defined as a person under the age of 18 years of age (Children's Act, 38 of 2005).

Substance abuse: Refers to the harmful or hazardous use of psychoactive substances; including alcohol and illicit drugs. Psychoactive substance use can lead to dependence syndrome that can manifest in a cluster of behavioural, cognitive and psychological phenomena that develop after repeated substance use and that typically include a strong desire to take the drug, difficulties in controlling its use, persisting in its use despite harmful consequences, a higher priority given to drug use than to other activities and obligations, increased tolerance, and sometimes a physical withdrawal state (World Health Organisation, 2014).

External attributes: Ascribing the causes of behaviour to situational demands and environmental constraints (Weiten, 2001).

Experience: An actual observation of or practical acquaintance with facts or events; knowledge or skills resulting from this, hence an event that affects one (an unpleasant experience). A fact or process of being so affected (Rollin & Ormal-Grenon, 2007)

Exposure: Exposure within the context of the current study refers to an individual being exposed to abuse of substances, such as drugs and alcohol across the lifespan. (National Institute of drug abuse 2011.)

Family structure: Often refers to marital status of a family (Manning & Lamb, 2003) or the type of family in which a child grows up (Stronhschein, Ross & Brownell, 2009). This can include married biological parents, step or foster parents as well as single parents.

Social cognitive learning theory: An individual's response is influenced by the observation of their model or person whose behaviour is observed, with response tendencies seen as products of imitation of these observations, also known as observational learning (Weiten, 2010).

CHAPTER 1

CONTEXT

1.1 Introduction

The family and peer groups have been identified as the most important elements in understanding adolescent and childhood substance abuse, according to (Hoffman & Cerbone, 2002; Windle, 2000). Hoffman and Cerbone (2002) state that peers who use illicit substances are a strong predictor to adolescent substance use. The nature of parental supervision and monitoring are also influences that have found to be significant predictors of teen alcohol and drug use (Dutra & Chance, 1997). Evidence exists that controlling for peer use mediates the association between adolescent peer use and family processes such as parental attachment, discipline and supervision (Aseltine,1995); (Miller,2008). Research suggests that the stronger the quality of parenting, the less likely the teen is to have access to deviant peers or their selection of friends. Relatively few research studies have been explored to mediate the effects of family structure and peer use. However, several studies have examined children reared in single-parent and blended families which include step-parent families. According to Ellickson, Tucker and Klein (2001), children living in single-parent families have a greater risk of substance use than teens residing in traditional two-parent families. Family structure has been influenced by adolescent substance use and the factors are resource deprivation, mobility and parental attachment (Hoffman & Johnson, 1998). While single-parenting has fewer resources, including economic resources, time and energy, than two-parent families it is assumed having that fewer resources gives diminished social control (McNulty & Bellair, 2003).

Unpacking the impact of parental substance abuse on children and identifying the most effective methods of intervention, continues to be a complex challenge (Rhodes and Houmoller, 2010). Sethi & Marais (2004) found that the use of substances amongst school-going adolescents has in recent years increased globally. According to Spear (2000) adolescence is a developmental period of heightened responsiveness to social reward, and an increased desire to fit in among peers. There are different kinds of drugs available in the country which is numbered in the hundreds. Some drugs have positive effects and is life saving; however, other drugs are not legitimate. Using a social learning association according to (Morojele et al., 2007) suggests that living in "broken homes" has an effect on socialisation of children to avoid delinquent behaviour and to increase the risk of a child being exposed to "an excess of prodelinquent definitions". Having one less parent translates to fewer lessons to avoid delinquency; hence children are more likely to be influenced by delinquent peers' norms and values. Social learning principles suggest that peer substance use conditions the relationship between family structure and the adolescent that uses substances in a manner that family structure becomes a protective factor only when the adolescent reports exposure to peer-using adolescents. According to Farrell and White (1998), the only study to have directly explored the possible interaction effects of family structure and peer use was a study conducted with a sample of Grade 10 students across nine high schools. They failed to find a significant effect between peer use and family structure in predicting substance use. However, the research was limited and the sample was over 90% which consisted of African American students. According to Dada, Pluddemann, Parry, Bhana, Vawda and Fourie (2012) treatment admission for patients younger than 20 years of age is generally less common for alcohol-related problems. For the period January to June 2012 a few patients younger than 20 years of age were treated for cocaine-related problems. In the Western Cape 1% of patients younger than 20 years of age were treated for cocaine-related

problems and 5% of adolescents in Kwa Zulu Natal were treated for cocaine-related problems. In the same period methamphetamine "tik" remained the primary drug in the Western Cape in 2012 i.e. 34% of individuals used it compared to July-December 2011, in which 39% of individuals claimed to have used it. There has therefore been a slight decrease in the consumption of 'tik". According to the South African Community Epidemiology Network on Drug Use (SACENDU) report for July – December 2013, Dada et al. (2014) state that in the Western Cape 31% of adolescents were admitted for methamphetamine use compared to 29% in January – June 2013, which shows an increase in the use of methamphetamine. The report of SACENDU for the period January – June 2013, Dada et al. (2014) indicated that alcohol use for patients younger than 20 years of age was 6.2%, cannabis was used by 66.7% of patients younger than 20 years of age and mandrax accounted for 2.3% of patients younger than 20 years of age in the Western Cape. Cocaine and crack accounted for 0.2% of patients younger than 20 years of age in the Western Cape. Heroin was used by 5.9% of patients younger than 20 years of age and methamphetamine "tik" was used by 17.6% of patients younger than 20 years of age.

Males were more likely to use marijuana than females, according to Etile (2005). Family variables, parental discipline, parental attachment and parental substance use were found to be associated with marijuana use. Children living with families with lower levels of discipline and attachment to parents, and those living with parents who themselves are substance users are at greater risk of marijuana use. There are three parental factors to predict drug use which are parental attitudes to drugs, parent-child interactions and parent-drug use behaviours. Given the latter factors it could be argued that role modelling, family management and communication can represent risk factors to adolescent drug initiation and abuse (McMahon, Winkel., et al., 2007). The theory of social learning shows that an individual simply is a product of his or her experience or learning and that learning is a form

of operant conditioning. Ali and Dweyer (2010) state that social cognitive/learning theory in drug use developed through vicarious learning, modelling and/or through reinforcing pharmacological drug effects. Role models who are parents, peers and family members act as teachers of how much, when and how a drug is used. Ali and Dweyer (2010) state that social learning theory explains how involvement with deviant peers affects beliefs about drug use and consequences.

1.2 Problem Statement

Numerous studies have shown that when parents use alcohol and other drugs, children are more likely to use drugs and are two to nine times more likely to become substance abusers later in life. (Arria, Merricle, Meyers et al., 2012). Parenting interventions for substance using parents yielded positive results in parenting practices and parental substance use reductions. Nonetheless, literature suggests that many children living with parents that abuse substances can become well-functioning adults in society without having psychological or behavioural difficulties. Factors promoting resilience include non-using adults, supportive families and access to environments that are supportive, such as school and community activities (Velleman & Templeton, 2007). Substance abuse is one of many problems in South Africa. The Western Cape has the highest substance abuse statistics in South Africa and the numbers are increasing, particularly with methamphetamine, cannabis and heroin according to Sacendu reports for the period January – June 2013, Dada et al., (2014). Substance abuse is linked to the high rate of child abuse, child neglect, family feuds, marital problems, and divorces as well as crime. Dada, Pluddeman, Parry, Bhana, Vawda & Fourie (2013) mention that between 22% (Western Cape) and 52% (Free State, North West and Northern Cape) patients in treatment consume alcohol as a primary drug of abuse. Between July-December 2013 methamphetamine "tik" was the most common primary substance of abuse. The numbers increased from 28% in the previous period, which was from January-June 2013, to

33% for patients seeking treatment. Across South Africa 65% in the Eastern Cape and 89% in Kwa Zulu Natal were male patients seeking treatment for substance abuse for the period July-December 2013. However in other provinces such as Western Cape, Central Region, Durban, Port Elizabeth and East London there has been a gradual increase in female patients who abuse substances. This could be linked to the fact that there are higher proportions of female patients using methamphetamine, heroin and cocaine (Dada, Pluddeman, Parry, Bhana, Vawda & Fourie, 2013). It could be argued that there is a void in the literature that investigated the relationship between childhood exposure to substance use and adults who abuse substances. For the reasons above, there was a need to conduct a study that investigated the relationship between childhood exposure to substance use and substance use as an adult.

1.3 Research Question

The following research question was formed by the literature and the theoretical framework:

1. Is there a relationship between childhood exposure to substance use and substance use as an adult?

1.4 Aim of the study

The research study aims to determine the relationship between childhood exposure to substance use and substance use as an adult.

1.4.1 *Objectives of the study*

The **objectives** were to:

- Establish the prevalence of childhood exposure to substance abuse.
- Establish the prevalence of current and past substance use with family and friends.
- Determine the relationship between past exposure to substance use and current use of substances.
- Establish the relationship between childhood exposure to substance use and current substance use.

- Compare the relationships on the basis of (i) gender and (ii) family structure.

1.4.2 *Hypothesis*

The following outcomes were hypothesised for the current study:

Substance abusers are more likely to report that they had witnessed substance use in their family whilst growing up.

There is no significant difference between males and females regarding the type of substances they abuse.

There is a significant difference in family structure between substance users living in one and two-parent families.

1.5 Significance of the study

Literature indicates that substance abuse affects the human body, and children are specifically vulnerable to its effects. Limited research is done on children specifically exposed to substance use and substance use as an adult in South Africa. Globally there is much research done but on a national level it is limited. Thus, this research study will contribute to social workers and professionals working in the field of addiction to get a better understanding of the important role the environment plays in relation to substance use. For professionals working in the field of addiction it will assist them to obtain a better understanding about childhood development and how Social Learning can be crucial to a child's life, especially if exposed to substance use. It can contribute to further studies with regards to substance use in gender and family structure. Parents can become involved in assisting in enabling correct choices or decisions to substance use. Schools will be able to establish topics on life orientation, which is a subject in South Africa's education curriculum, to assist in decision making to substance use and peer pressure. Family research within South Africa is very limited and the results of the current research project have added to the knowledge base of family research within South Africa. The study explains how family structure can/cannot influence childhood substance use and lastly how parenting and peers could have an impact on decisions related to substance use as a child.

1.6 Summary of chapters

Chapter 1: the first chapter in the thesis provides an introduction to the study as well as important terms that will be used throughout the thesis. It gives background and insight to the rationale for the research study and introduces the Social Learning theory. The overall aim of the study as well as objectives is presented in this chapter. This chapter provides an overview of the chapters to follow.

Chapter 2: provides an overview of research trends on literature that focus on substance abuse, internationally, nationally and locally. It also provides prevalence rates of family factors, peer factors, parental factors and school dropout in addition to substance abuse in childhood. The chapter also explains statistics in the field of substance abuse internationally, nationally and locally. Additionally, there is a discussion on the use of social cognitive learning theory as a theoretical framework in order to describe the theoretical structure that the study was grounded in.

Chapter 3: explains the research methodology and research design used for the study. Outlined in this chapter is information about the research setting, population and sample techniques implemented, the instrument used for collecting data, the pilot study and changes made to the instrument.

Chapter 4: explains and presents the detailed analysis of findings presented in the form of tables to illustrate the results of the study. This chapter provides insight regarding the demographics of the sample and the data gathered from the sample in addressing research questions. The data obtained was expressed through descriptive and inferential statistics. Data collected was analysed by the Statistical Package in Social Sciences (SPSS) version 22 and is presented in tabular format.

Chapter 5: provides a platform for discussing the results that were obtained. The data analysis process is covered within this chapter. It allows for the integration of results with literature internationally, nationally and locally to gain an understanding of the trends of substance abuse. It also provides a conclusion of the study and gives recommendations for future research. Finally it outlines the limitations of the study.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter provides an outline of the literature available on the subjects of substance abuse and the factors contributing to it. In the past decade, substance abuse has increased globally. The chapter will review studies in the field of childhood exposure to substance use and substance use as an adult.

Prevalence rates are provided to show the global, as well as local, impact of substance abuse and being exposed to this as a child. It is also noticeable that these effects have lasting consequences that might set children exposed to substance abuse at risk of becoming adults abusing substances.

2.2 Substance abuse definition

The World Health Organization (2014) defines substance abuse as a harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs. Psychoactive substance use can lead to dependence syndrome - a cluster of behavioural, cognitive and psychological phenomena that develop after repeated substance use. It typically includes a strong desire to take the drug, difficulties in controlling its use, persisting in its use despite harmful consequences, a higher priority given to drug use than to other activities and obligations, increased tolerance, and sometimes a physical withdrawal state.

2.3 Prevalence rates of substance abuse

The impact of parental substance misuse on children and identifying the effective methods of intervention continue to be a complex challenge. Young people can become unnoticed when there is a predominant focus on the needs of vulnerable parents (Turney, Selwyn and Farmer, 2011). The living conditions of the families, especially the vulnerable parents, are characterised by poor housing, homelessness and physical and mental ill-health of the parents. In a study done by Forrester, Holland, Williams & Copello (2014), domestic violence between parents has a significant impact on families. In 19 of the families partaking

in the study, mothers had separated from fathers. In 14 families children had different fathers, reflecting separations, changing relationships and the families' experiences over a period of up to 20 years. Some parents expressed ambivalence about their children's substance use. One parent expressed her concern about her adult children's substance use. Another parent expressed her concern about her adult children's substance use behaviour but also stated that they used together (Forrester, Holland, Williams & Copello 2014). Substance abuse affects an individual in different aspects of their lives. Herrenkohl & Sousa et al., (2008) state that alcohol or drug abuse is the primary problem contributing to other problems such as family conflict, health and psychological problems. In other situations, problems such as dealing with life stresses could highly predispose an adolescent to drug or alcohol use when attempting to resolve those problems. Lipperman-Kreda & Grude et al., (2010) state that many adults in society appear to be developing an attitude of complacency toward the use of alcohol and even marijuana by adolescents. Adults interpret the adolescents' behaviour of consuming alcohol as being normal or acceptable for adolescents (Lipperman-Kreda & Grude et al., 2010). Parry and Myers et al., (2004) found that the use of substances amongst school-going adolescents has in recent years increased globally, and in South Africa since apartheid ended. According to Agostinelli & Grube (2005) we are currently living in a drug-saturated society. There are different kinds of drugs available in the country, and which are numbered in the hundreds. Some drugs have positive effects which can be life saving; however some drugs are not legitimate.

2.4 International studies

World Health Organisation (2014) & United Nations Office on Drugs and Crime (2013), state that substance abuse by adolescents is a serious public health and individual concern. Substance initiation and use are influenced by environmental and social factors

United Nations Children's Fund, (2012) & Volzke, Neuhauser et al., (2006).Miller, Jennings, Alvarez-Rivera and Miller (2008) further indicated that for many decades, substance abuse among adolescents was strongly linked to peer influence. Adolescents who have friends that use alcohol and drugs are far more likely to participate in similar alcohol-related activities and share similar attitudes toward alcohol use (Brook et al., 2006). According to Morojele & Kachieng'a et al., (2006) who investigated the relationship between social learning and gender differences among adolescents at a high school in South Africa, males who were exposed to deviant peers and peers who consumed alcohol, were associated with increased alcohol use amongst adolescents at high school. Hayatbakhsh, Mamun, Najman, Callaghan, Bor and Alati (2008) state that legal and illegal substances, especially by adolescents, is widespread and the harm is of paramount importance in the public health sector. In the domain of the use of illicit drugs, there are two factors that should be given attention to (1) family and (2) personal (individual) factors.

In a study of 480 adolescents across eight outpatient treatment centres, conducted in the United States of America, the results indicated that drug-using parents exhibit at least three times the number of substance use compared with children of non-drug using parents, (Feaster et al., 2010). A consistent correlation between adolescents' drug use and parents' use of alcohol and other legal drugs has also been shown (Mason & Spoth, 2012). A review was done of the familial incidence of substance use which indicated a positive relationship between adolescent drug abuse and parents who also abuse drugs (Miller, Siegal, Hohman et al., 2013). Heroin addicts have fathers with a drinking problem (Mares, Lichtwarck-Aschoff & Burk et al., 2012). Parents who use marijuana have adolescents who use tranquillisers, barbiturates and the use of stimulants Vermeulen-Smit, Koning, Verdurmen et al., (2012). Social learning theory reinforces the above where it indicates that the family environment is an important influence on adolescent behaviour, including substance use and abuse

(Hayatbakhsh, Mamun, Najunan, Callaghan, Bor & Alati, 2008). The low social economic status (SES) of families has shown to be a predictor of substance use. There is a significant relationship in the functioning of the family due to substance use and dependence.

With regards to gender, male adolescents show a higher prevalence rate of substance abuse. In a survey conducted by Getting, Grady & Nowosadzka (2006), approximately 5.2% of the American population over 12 years of age have experimented with methamphetamine. They indicated that adolescents and young adults often use methamphetamines to "party" or study all night. Addiction can be linked to environmental factors, genetic/biological factors and or a combination of both these factors. For example a person can be genetically predisposed to become an addict, but if the environmental stimuli is missing he/she may not become addicted. Tarter (2002) states that environmental factors encourage individuals to either abstain from substance use or these factors attract them to substance use. Parents who neglect, abuse or have a weak parent-child bond may influence a child or adolescent towards substance use (Kaplow et al., 2002).

In terms of research done by Epstein, Botvin and Dyle (2009), friends that drink or smoke, as well as ambivalent parental attitudes towards drinking, were positively related to drug use across genders. Epstein, Botvin and Dyle (2009) state that parental attitudes towards substances were important. Caldwell and Smith et al., (2004) found that drugs are easily available and are often used together with alcohol. In conclusion studies show that circumstances that expose early adolescents to substance use disorders could be parents that use drugs, dysfunctional families and poor parental supervision in childhood.

2.5 National studies

"Drug use is common in South Africa; however for many health care workers it still remains an unfamiliar topic" (Brown, Duby & Bekker, 2012,p5). Research from the Medical

Research Council, Parry (2008) shows that there is a huge and growing problem with regard to the use of crack cocaine, especially among the youth and sex workers. It is said that drug use in South Africa developed later than in developed countries, but it increased at a faster rate. Before 1994, South Africa's drug use mainly consisted of cannabis, mandrax and prescription tablets (Brown, Duby & Bekker, 2012). Brown, Duby and Bekker (2012) found that after the end of apartheid, with the reopening of national borders, the trade increased internationally. Heroin and methamphetamine (tik) entered the country and South Africa was unprepared for the effects of it. Dada, Pluddemann, Parry, Bhana, Vawda & Fourie (2012) mentioned that from the 10059 patients that had gone for treatment from the 67 centres in the Western Cape in January-June 2012, 24% of the patients in the Western Cape and 65% of the patients in KZN stated that alcohol was their primary drug of abuse. The use of tik and heroin use are on the increase compared to alcohol and cannabis. In 1998, 2% of patients received treatment for heroin use and it increased in 2006 to 14%. In terms of gender 74% were male whereas 26% were females. With regards to age distribution 4% were patients between 10-14 years and 17% were aged 15-19 years. The highest age distribution was patients between 20-29 years which was 21%. The ethnic group for January-June 2011 was 82% coloureds, 13% African, white 5% and Asian ≤1% for patients younger than 20 years. There were 60% of patients younger than 20 years who were treated for cannabis/mandrax use and 25% were treated for methamphetamine/speed/tik. The portion of adolescent patients treated for methamphetamine decreased for January-June 2011 while cannabis/mandrax significantly increased. Statistics revealed that 71% of females under the age of 20 years in Cape Town were treated for methamphetamine use when compared to 29% of the males Sacendu (January-June 2011).

According to the South African Community Epidemiology Network on Drug Use (Sacendu) there has been a slight decrease in the number of patients admitted to specialist

treatment centres for the months July – December 2013. Alcohol is the dominant substance of abuse across all sites except for the Western Cape and Northern Cape. Western Cape has seen 22% of the patients seeking treatment for alcohol, 52% of patients in the Central Region, which comprises the Free State, Northern Cape and North West and KwaZulu Natal, Johnson.K, Dada.S & Harker Burnhams.N et al., (2013). Twenty five percent of patients in Eastern Cape and 72% of patients in the Northern Region reported that cannabis was their primary drug of choice compared to 2% of patients in Northern Region and 21% of patients in the Western Cape for cannabis/mandrax. Methamphetamine remained the most common primary drug reported by patients in the Western Cape in 2013, although it decreased from 39% in 2011 to 33% in 2013.

In the Western Cape the most common substances reported by the 32 specialist treatment centres/programmes between July – December 2013 were methamphetamine, alcohol, cannabis and heroin, comprising 86% of all admissions. The methamphetamine slightly increased in the Western Cape from 28% to 33% in this period of July – December 2013.

2.5.1 Employment status and education

According to Sacendu statistics reporting from July until December 2013, 19% of Western Cape patients and 62% of Eastern Cape patients were employed full time across all sites. Seventy percent of patients have some form of secondary schooling across all sites. With regards to the Western Cape, 32% of these patients were unemployed, which is the highest percentage compared to other sites.

2.5.2 Age of patients

The mean age of patients across all treatment centres in South Africa ranged from 27 – 35 years of age for the months July – December 2013.

2.5.3. Cannabis (dagga) and mandrax

In the Northern Region and Gauteng cannabis and mandrax were the primary drug of choice accounting for 46% and 37% respectively. The Western Cape had 21% of patients reporting it as a primary or secondary substance in July – December 2013. Coloured patients were dominant for admission of mandrax in the Western Cape, according to Sacendu statistics reporting from July to December 2013 (Johnson, Dada & Harker Burnhams (2014).

2.5.4. Heroin

In the Western Cape there was a slight decrease from 17% to 13% for admission. The mean age as their primary drug of choice was 23 to 29 years of age across all sites, according to Sacendu statistics reported from July – December 2013 (Johnson, Dada & Harker Burnhams (2014).

2.5.5 Methamphetamine

There was a slight decrease in the Western Cape for methamphetamine abuse which was 33%. The mean age of methamphetamine use was 27 years in the Western Cape compared to 19 years in 2004. This could be due to a reduction of adolescents using the drug. Coloured admission in the Western Cape was 81% and 69% males.

2.6 Theoretical Framework

The theoretical framework that will be used in the study is the Social Learning Theory. According to Bandura (2006) social learning theory states that drug use develops through modelling, vicarious learning and pharmacological drug effects. They found that role models act as teachers in terms of drug use. Social learning theory examines the role of observation of others, their behaviour and their social engagement in drug use behaviour. Social learning theory also places great importance on observational learning characteristics. It promotes changes by informing, enabling, motivating and guiding participants. Structural interconnectedness provides potential diffusion paths; socio-cognitive factors largely determine what diffuses through these paths. It is considerably important to understand the psychological mechanisms through which communication influences human thoughts and effects. Social learning theory examines the determinants and mechanisms of effects. Human behaviour is often explained by unidirectional causation, which behaviour is shaped and controlled by environmental influences or internal dispositions. The theory is viewed as behavioural patterns and environmental events which all operate as determinants for personal determinants. Human self-development, adaption and change are embedded in social systems.

According to Boerma & Weir (2006), people are producers as well as products of social systems. Within biological limits human nature is potentially fashioned by direct and observational experience. Symbolisation provides humans with a tool for comprehending their environment and regulating environmental influences (events) that touch aspects of their lives. It is said, according to Zucker (2008), that most external influences affect behaviour through cognitive processes rather than directly.

Social learning theory states that attention to social origins of thought and mechanisms is through which social factors exert their influence on cognitive functioning. Individuals do not live their lives in autonomy. They work together to secure what they cannot accomplish on their own. Social learning theory extends the conception of human agency to collective agency (Brook, Morojele, Pahl & Brook, 2006) Behavioural, cognitive and learning from direct experience can be achieved by observing people's actions and its consequences for them Trucco, Colder et al., (2011). Social learning occurs from models in one's immediate environment. To an extent, people act on their images of reality.

Observational learning theory has four sub-functions which are:

(i) Attentional processes

Attentional processes determine what is selectively observed in the modelling influences and what information is extracted from ongoing modelled events. Determinants are concerned with the preconceptions, value preferences, attractiveness and functional value of the model. An individual cannot be influenced by observers if they do not remember them.

According to attentional processes the attractiveness also plays a role when a person is observing.

(ii) Retentional processes

This process involves transforming information conveyed by modelled events by symbolic transformations of modelled information into memory codes of the coded information. Recall involves a process of reconstruction rather than simply a retrieval of registered events.

(iii) Production processes

Production processes model the symbolic conceptions of the appropriate course of action. A conception-matching process guides the construction and execution of behavior patterns. These conceptions model for adequateness.

(iv) Motivational process

This process in social learning theory distinguishes between acquisition and performance; individuals do not portray everything they learn. Observational learned behavior is influenced by three major types of incentive motivators: direct, vicarious and self-produced. Individuals will exhibit modelled behavior if it results in positive outcomes than if it is punishing effects. However, people are motivated by success of others who are similar to themselves, like peers or friends, but are discouraged by behaviors that have negative consequences.

According to social learning theory children model the behavior of others in their social environment (Barnes, Hoffman et al., 2006) particularly their immediate family, (Renk, Robert et al., 2003). The theory assists in explaining why parental alcohol use is found to be correlated with children's use (Kelly, O'Flaherty et al., 2011). The question was also asked why American-Indian children with a family history of alcoholism are at a much greater risk of problematic drinking, according to (Swaim et al., 2011). Potential explanations for the latter question were problems related to the family types in family members and in parental control, which means the type of family the child comes from, the type of family members in the family and if there is parental control between child and parent (Wills et al.,2004).

2.6.1 Family factors

Research has identified familial factors that are protective against increased adolescent substance use. Emotional support, (King, Flisher et al., 2004) open and frequent communication with parents (Demuth & Brown, 2004) engaging in family activities, parental rules for substance use and parental monitoring are associated with a decrease in substance use in adolescents. Family involvement is defined by (Epstein, 2009) as a child's participation in and relationship with members of his/her family. It represents a holistic construct that reflects the overall quality of the family environment and interactions between adolescents and their parents.

Positive family experiences, such as participating together (socialising) in activities and having family meals together talking about school and friends can develop positive youth development. It is important to look at family functioning, both negative (conflict) and positive (family involvement), which relate to adult functioning. Contradictory to other studies, Tobler and Komro (2010) and Van Ryzin et al., (2012) found in a study of 193 at-risk adolescents from California who were referred to a diversion programme, that neither family structure nor parental monitoring had a significant impact on marijuana use. It was recommended that further research should be conducted on the influences of family factors such as social drinking and medical marijuana use by teens (Tobler & Komro, 2010; Van Ryzin et al., 2012).

A study was conducted in Washington on substance use from early adolescence to early adulthood. A large diverse sample of 988 early adolescents was used to participate in the study. Their ages ranged from 12 to age 23. They tested direct and indirect effects of parental monitoring, family relationship quality and its association with deviant peers on

changes in substance use across time. The outcome/results suggest that the nature of family influence occurred across adolescence and into early adulthood. Peer influence was consistent across this period.

Evidence of drug use including alcohol has origins in the family. Lippermann-Kreda, Grude et al., (2010), state that parental drug use is associated with the initiation of use by adolescents. Research was done by Spoth et al. (2008) whereby 7,866 grade 6 and grade 8 children/participants found that parental drug-taking behaviour was a predictor to the use of alcohol. There has been a controversy between genetic versus environmental factors.

Vakalahi (2002) states that there are three parental factors to predict drug use: parental drug-using behaviour; parental attitudes about drugs and parent-child interactions. Key factors associated with drug use are parental influences, peer influences, values and beliefs. It is also likely that youth who do not have a good social bond with family and school, could result in them experiencing family conflict, school failure and aggressive behaviour.

A family history of substance abuse disorder is a predictor of risk for a substance use disorder in offspring and parenting factors have been linked to substance abuse disorder risks (Etile, 2005).

2.6.2 Peer factors

Parental monitoring and deviant peer association were predictive of substance use in early adolescence (Johnston, O'Malley, Bachman et al., (2010). Family relationship quality was a predictor across the transition to high school and continued to predict later into adolescence. The results suggest that parental monitoring and family relationship quality indirectly predict later substance use by way of deviant peers. According to Johnston,

O'Malley, Bachman & Schulenberg, (2010) research has been devoted to understanding adolescent use of alcohol and marijuana. Substance use often starts among a small percentage of youth during early adolescence and the percentage continues to increase throughout adolescence. Results show that among 8th grade students in Minnesota, United States of America, 36.6% have tried alcohol, 17.4% have been intoxicated in their lifetime, and 15.7% had used marijuana. However, by 12th grade 56.6% of students had been intoxicated and 42.0% had used marijuana. These elevations in substance use have both immediate and long term implications for adolescent health, well-being and competence in adult roles (Chassin, Pitts & De Lucia, 1999).

Peers are hypothesised to become increasingly influential relative to parents during the course of adolescents (Kandel et al.,2012) research shows that early adolescents are vulnerable to peer influence related to substance abuse (Kandel et al., 2012). Although resistance to peer influence may develop during the course of adolescence (Steinberg & Monahan, 2007), more recent research indicates that peers may apply socialising influence until the age of 20 years (Monahan, Steinberg & Cauuffman, 2009).

According to Conway, Swendsen & Merikangas (2003), among the indicators of drug behaviour and drug-related attitudes, are due to peers' influences. These influences are initiation into the use of marijuana Etile (2005). Social surroundings increase the predisposition to use drugs and it increases the use of substance use (Etile, 2005). Environmental factors such as friends and family that use drugs cause adolescents more likely to use drugs. A longitudinal study of the National Youth Panel found that family bonds and social surroundings influence drug use. However, adolescents have become bonded to families and school before the selection of drug-using companions Etile, (2005). This means

that the influence for using substances initiated by exposure to substances in the adolescents is part of their direct environment, such as with family and peers (Etile, 2005).

Jones, Feinberg et al., (2012) noted that 90% of (American) youth who use substances have friends who use the same drugs. According to Brook et al. (2006), two studies examining youth substance use in South Africa, examined variables from the same domains and it was found peer influence to be important. It was also found that males who had completed high school were less likely to use drugs, while those who were unemployed were more likely to do so. Adolescents' explanation of peer drug use was that it was positively reinforcing. Peer substance abuse is a major and well-established predicator of adolescent drug use. It resulted in excused socially unacceptable behaviour, heightened attention and enhanced status.

2.6.3 Parental factors

There are three parental factors to predict drug use, which are parental attitudes to drugs; parent-child interactions and parent drug use behaviours. Two of these parental influences of adolescent drug use will be discussed:

(i) Parent drug use

Includes parental smoking, alcohol and marijuana use. Studies suggest that drug use by parent(s) predicts a child's drug use; it is an indication of a behavioral model (Morojele, Judith et al.2006).

(ii) Domain of child rearing

This includes attachment relationship between parent and child and parent monitoring. Parents practice control through supervision and monitoring. A mutual attachment through parent-child relationship has been found to predict less tobacco, alcohol and drug use in adolescents (Morojele, Judith et al., 2006).

Parental substance use is an unremitting problem that has an effect on children in their homes. The serious effects of parental substance use disorder (SUD) are overly punitive parenting and child maltreatment, according to Stanton-Tindall, Sprang & Clark, (2013). However it is vital to develop effective treatment plans that reduce risk for children in substance-abusing homes. Much of the literature on parenting among parents with SUD has focused on single drug-abusing mothers, with the exception of prescription drug abuse, whereby men are more likely than women to abuse substances (Substance abuse and mental health services administration, 2014).

In a case of two parent families, in which one or both parents are SUD parents, this may impact their own, as well as their partner's parenting and could be a risk for child maltreatment. Little attention has been given with regards to dual SUD parents and if they convey greater risk for child abuse and over-reactive disciplinary episodes than single parent SUD. Dual parent AUD (alcohol disorder)/SUD may contribute greater risk than single parent AUD/SUD, Osborne & Berger, 2009). A study was conducted by Johnston, O'Malley, Bachman & Schulenberg, (2010) where adolescents in Grade 12 used alcohol (72%), and marijuana (42%). Approximately 7.3% of 12-to-17 year olds are diagnosed with substance abuse disorders, Substance Abuse and Mental Health Services Administration (SAMHSA, 2012) indicating that adolescents are experiencing serious problems as a result of their substance use.

Rhodes, Bernays & Houmoller (2010) states that adolescents with weak bonds with families tend to be attracted to peer groups involved in delinquency and drug use. In the study Brook and Morojele (2006) found that adolescents who use illegal drugs, compared with

those who did not, were more likely to have parents who used legal and illegal drugs. Drug use displayed by some adolescents is learned through modelling the behaviour of their peers.

Given the latter factors it could be argued that role modelling, family management and communication can represent risk factors to adolescent drug initiation and abuse (Morojele, Kachieng'a et al., (2006). The theory of social learning shows that a person simply is a product of his or her experience or learning, and that learning is a form of operant conditioning. Brook, Morojele et al., (2006) state that social cognitive/learning theory in drug use, developed through vicarious learning, modelling and/or through reinforcing the pharmacological drug effects. Role models who are parents, peers and family members act as teachers of how much, when and how a drug is used. Sussman and Ames (2001) stated that social learning theory explains how involvement with deviant peers affects beliefs about drug use and consequences. According to Kulis, Marsiglia et al., (2007) and Brownings, Erickson, et al., (2009) factors of children who are likely to abuse substances are those that are economically disadvantaged and have the absence of fathers as authority figures..

It was found that in addition to individual factors, family and community factors were particularly influential in South African youth substance use. Female substance use was strongly associated with family factors while males were more influenced by community factors. Attention should be given to South African youth living in female-headed households without resident fathers. It could also be argued that it is important to keep in mind that family history does not predict outcome. Most offspring of parents that have a substance abuse disorder do not themselves develop a substance abuse disorder. The individual must not only be viewed as the product of risk factors but must be seen as an individual with their own strengths and liabilities.

2.6.4 School dropout in addition to substance abuse

According to a study done by Flisher et al. (2004) it is stated that 55% of high school students in Cape Town, South Africa dropped out before completing their schooling. A cross-sectional study was done and it was clear that there was an association between alcohol use and school dropout (Aloise-Young & Chavez 2002).

Roebuck et al. (2004) found that marijuana use was directly related to dropping out for both males and females, although more so for the latter group. Marijuana use was associated with an increased risk for dropping out of school for both males and females among African-American youth in Chicago (Green & Ensminger, 2006).

A number of cross-sectional studies found that, besides marijuana/cannabis, other current illicit drug use was found to be higher among dropouts and students at risk for dropping out than in-school students (Aloise-Young & Chavez, 2002) and high school graduates (Aloise-Young & Chavez,.2002). A study was done in 2006 with a random sample of 1535 high school students in Cape Town, South Africa; the results showed that 43% of students surveyed at baseline did not complete a follow-up questionnaire after 12 months. The negative impact of substance use on school performance has a negative effect on adulthood, limiting opportunities for tertiary education, which is linked to lower income, unemployment and lower life satisfaction (Pluddemann, Flisher et al., 2010).

2.7 Conclusion:

This chapter has shed light on literature available on the topic of substance abuse. It captured studies on prevalence rates of substance abuse, studies done internationally and nationally. The national studies depicted gave an overview of the statistics from Sacendu which also focused on socio-economic status, education levels, and mean age of patients

seeking treatment. The information also gave an overview of the types of substances used and the profile of these individuals as well. The chapter also shed light on the social learning theory. The research reflected the sphere of substance abuse, by means of literature investigating substance abuse, the factors that influence it and the effects it potentiates in the lives of future generations that are exposed to it. The theoretical framework gave imminent information as to how the relationship between substance abuse and the prevalence rates of certain factors are linked to social cognitive learning theory observed by the child and potentially lived out in adulthood.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

This chapter will provide an overview of the methodological process followed. Methodology consists of research techniques to ascertain knowledge that will answer the specific research questions of a specific study. The approach will determine the relationship between childhood exposure to substance use and substance use as an adult. The aims and objectives of the research guide the methodology of the study. The methodological process followed for the study took on both a cross-sectional (i) comparative and (ii) correlational research design.

3.2 Research Question

Is there a relationship between childhood exposure to substance use and substance use as an adult?

3.2.1 Aim of the study

The research study aims to determine the relationship between childhood exposure to substance use and substance use as an adult.

3.2.2 Objectives of the study

The **objectives** are:

- To establish the prevalence of childhood exposure to substance abuse.
- To establish the prevalence of current and past substance use with family and friends.

- To determine the relationship between past exposure to substance use and current use of substances.

- To establish the relationship between childhood exposure to substance use and current substance use.

- To compare the relationship on the basis of (i) gender and (ii) family structure.

3.2.3 Hypothesis

The following outcomes were hypothesised for the current study:

- Substance abusers are more likely to report that they had witnessed substance use in their family growing up.
- There is no significant difference between males and females regarding the sort of substances they abuse.
- There is a significant difference between family structure of substance users living in one and two parent- families

3.3 Research methodology

Quantitative methodological research has been linked to positivism in some form or another (Babbie & Mouton, 2001). Quantitative research is used to represent a vast array of social and individual objects, events and processes according to Terre Blanche & Durrheim (1999). The best way to measure the properties of phenomena which this study will focus on is to use a quantitative methodological study. A quantitative study assigns numbers to be perceived as to the qualities of things (Babbie & Mouton, 2001). The intention of using a quantitative approach in this study is an attempt to examine properties of the topic and then to

calculate the participant's responses to the questions asked in the questionnaire, by using numbers.

Blaikie (2000) states that a research design involves planning a research project and a process. It is like an architect designing a building. The research design for this study was quantitative with a descriptive cross-sectional comparative correlation. A cross-sectional comparative correlational research design was used in the study. This allowed the researcher to get a glimpse of the phenomena being studied at one particular point in time and allowed for a comparison. Therefore with the cross-sectional design that was used, the data was collected at one particular time and it can only show results from that particular time and cannot illustrate possible changes that might be occurring (Mertler & Charles, 2005). The comparative design also allowed the researcher to explore the differences between the two groups with regards to the phenomena that compared single and married parent family structures (McMillan & Schumacher, 2006). In using a cross-sectional correlational design, a relationship was sought between two variables tested at one point in time. The study investigated the relationship between exposure and experience of substance abuse in childhood and the substance abuse experienced in adulthood.

3.4 Population and sample

The general population accessing the service of the substance abuse treatment facility are clients who are addicted to either alcohol or drugs. The races of the population are coloureds and genders are mixed males and females. The researcher obtained the participants from an outpatient accredited alcohol and drug treatment centre. On a monthly basis the target at the centre is 20 new clients seen per month. The duration of the data collection was from April 2014 up until September 2014. A sample is a small selection of the total set of objects, events or persons from which a representative election is made (Barker 2003). The sample size of

192 clients was selected for the study; the sample size was calculated from a population size of 240 clients per annum, a confidence interval of 95% and a margin of error of 3.17%. The researcher used a sample size calculator in order to calculate the sample size (Checkmarket, online).

The site is situated in Mitchell's Plain. It is an outpatient alcohol and drug treatment centre which renders services for people who are addicted to substances such as alcohol and illicit drugs. The treatment centre serves communities in Mitchell's Plain and surrounding areas as well. The services are rendered free of charge, as it is a City health initiative. The site caters for adult treatment age ranging from 18 years and older. The staff consists of two substance abuse therapists who render treatment for clients with problems of addiction, one administration clerk and a supervisor. The outpatient treatment centre is a 16 week outpatient treatment programme for substance abuse. The programme consists of early recovery groups, relapse prevention groups, individual sessions, conjoint sessions with family members, family education groups and social support groups. Random drug testing is done to measure the clients' progress in the programme, and if the client needs more intensive treatment. There are two substance abuse therapists at the five matrix sites. There are in all five outpatient treatment centres namely Tafelsig in Mitchell's Plain, Delft South, Khayelitsha Site B, Albow Gardens and Parkwood. Simple random sampling was used for the study. This means that each participant of the sample frame had an equal chance of being selected to participate in the study (Terre Blanche & Durrheim, 1999). The participants were chosen randomly whereby every fifth person was selected for the study after screening. At the treatment centre the client usually goes for a screening whereby questions relating to their personal details and the frequent use of specific substances are asked. The participants were then asked if they would participate in the study.

In terms of the inclusion criteria the participants had to have used any illicit drug namely marijuana, methamphetamine, heroin, mandrax and alcohol. The study was conducted with males and females and the participants were 18 years old and older. The exclusion criteria for the participants were that they should not have a psychological disorder.

3.5 Instrument

The participants in the study completed self-reported questionnaires to collect the required data. The study employed an adapted version of The Child Exposure to Domestic Violence (CEDV) Scale (Edleson, Ellerton, Seagren et al., 2007). The instrument was adapted to obtain the relevant information with regards to childhood exposure to substance use. The original instrument gave information with regards to childhood exposure to domestic violence which was adapted to substance abuse. The original instrument measured "*things I've seen and heard"* which measured exposure to domestic violence, which was adapted to substance abuse. The questionnaire used was a format of a Likert Scale which had four options. The researcher used the Likert scale as it is the most widely used scale in survey research (De Vos, 2011). Likert scales indicate whether the respondent agrees or disagrees with a statement (De Vos, 2011). It is better to use four to eight categories; if there are more distinctions than eight it is not meaningful and respondents will then become confused. By using a Likert Scale questionnaire it accomplishes a calculation and a total score for each respondent. It assigns the value 1 to 4 and then adds up a value based on the participant's responses (Maree, Creswell, Ebersohn, et al., 2007). The questionnaire consisted of three sections; one section looked at (i) demographic information such as gender, age, ethnicity, employment status, drug of choice, highest grade passed, marital status of parents while being a child, past and present socio- economic status). (ii) Short questions about childhood years relating to the exposure to substance abuse as a child as well as (iii) short questions to participants' current and/or recent experiences about substance abuse.

3.5.1 The Child Exposure to Domestic Violence (CEDV) Scale adapted

The questionnaire which was adapted by the researcher was formulated from existing surveys based on key areas which were reviewed earlier by Edleson, (2007). A panel of expert judges, working with children being exposed to domestic violence, was invited to give their input to review each item. The revision of the review provided the experts with a separate space to suggest additional items that should be added in the measure. These processes established content validity of the scale Edleson, (2007). The response on the questionnaire is a 4 point Likert Scale ranging between "Never", "Seldom", "Almost Always" and "Always".

How often were you exposed to substance abuse (alcohol and illicit drugs) as a child?	Never	Seldom	Almost Always	Always

The convergent questions were used to discover frequent exposure to substance use. It permits participants to respond to each item using a four-point Likert-type scale where more than one response can be chosen. If the participants answer "never" to the first question, they skip the second part and answer the next question.

When you were exposed to substance abuse (alcohol and illicit drugs) how did you experience it?	I saw the end-result (e.g. the person was under the influence of alcohol or an illicit drug).	I witnessed the incident.	I heard what was going on but did not see it (e.g. stayed in my room, walked away).	I heard about it afterwards.

The changes to the adapted version of this scale for the purpose of this study included:

(a) The questions were expanded and the focus was on exposure to parent/s, friends, family members (including aunts, uncles etc), of the participants. Also if there was some form of

domestic violence that occurred due to the person being under the influence of a substance when the participant was a child. The options were expanded by using a 4 point Likert Scale explaining the participants' experience to the exposure of substance use.

Part 1 of the original CEDV Scale had ten questions; the adapted version had fourteen questions.

(b) Part 2 was adapted for the participants' current experience whereby questions were asked in terms of the frequency of using, frequency of using with partner, frequency of wanting to stop using, frequency of family members asking/telling the participants to stop, frequency of partner asking/telling the participant to stop, frequency of thinking that the participant was following a similar pattern of abusing substances as their parents/family members or friends did during their childhood years.

(c) The format of the Likert Scale responses to frequency to substance abuse scenarios was adapted to allow the participants to read and answer questions more easily by giving four options "never", "seldom", "almost always" and "always".

(d) The questions asked relating to the present/current experiences focused on ambivalence or resistance of participants seeking treatment for substance abuse.

(e) The demographic information was adapted as socio-economic status (past and present) was added for the studies purpose. There is an option for employment status as it was added for the study as well. The participants' drug of choice, highest grade completed, marital status of participants' parents during childhood, onset of exposure to substance abuse as a child, onset of substance abuse with partner. These questions were adapted for the purpose of the study.

3.5.2 Reliability and validity

Reliability occurs when an instrument measures the same thing more than once and the outcome remains the same (Salkind 2006). Cronbach's alpha was used for the reliability testing of the CEDV instrument and to establish the content validity of the instrument (i.e. questions, format and scales). The Cronbach Alpha is most widely used to measure the reliability and assists in giving a measure of the internal consistency of the index (Tavakol & Dennick, 2001; van Teijilingen & Hundley, 2001). The instrument subscales showed fairly high Cronbach's alphas which was $\alpha = .84$; therefore the alpha scores indicated the instrument was reliable.

Its convergent validity, scores compared with TISH (Things I Heard and Seen) (Richters & Martinez, 1990), which are designed to measure the same construct, were tallied to be statistically significant and a positive correlation existed both at the level of substance abuse exposure with parents/family ($r = .494$, $p < .001$) and substance abuse exposure with friends/community ($r = .397$, $p < .001$) (Edleson, Shin & Armendariz, 2008). The CEDV (Child exposure to domestic violence) scale had been used in South African studies such as Domestic Violence and the role it plays in childhood identity formation by Idemudia and Makhubela (2011) and showed resonance to the South Africa population. The instrument was adapted in terms of substance abuse exposure in childhood. The questionnaire was adapted by the researcher from an existing research instrument based on key areas. The sections were adapted from the original CEDV Scale. It remained a 4 point Likert Scale but it changed to "never", "seldom", "almost always" and "always". The CEDV Scale also had a 4 point Likert Scale but the options differed, namely "never", "sometimes", "often" and "almost always". The CEDV Scale asked questions about frequency of exposure and experience to domestic violence as a child whereby the adapted scale asked questions about exposure and experience

to substance abuse as a child. The CEDV Scale had ten questions whereby the adapted scale had fourteen questions.

The CEDV Scale in part two asked questions pertaining to the mother's partner and different forms of domestic violence as a child. The adapted scale in part two asked for current experience or if it occurred recently in terms of frequency of substance abuse exposure and experience as an adult. The CEDV Scale had twenty three questions whereby the adapted scale had eight questions. The CEDV Scale in part three asked questions pertaining to when domestic violence started between mother and partner, financial status as a child, age, gender, ethnicity, sleeping arrangements last night, living arrangements and people with whom the participants resided. Whereby the adapted scale asked questions: for example gender, ethnicity, age, employment status, drug of choice used and description of using. It also asked questions with regards to highest grade completed, marital status of parents while growing up, substance abuse history as a child, substance abuse questions with their partner and financial status in childhood and adulthood. It could therefore be argued that the CEDV is a reliable and valid instrument that has been investigated internationally as well as in South Africa.

Validity according to Salkind (2006) is the evaluation of the effectiveness of the test or instrument that is used to actually measure what you need to measure. The validity with regard to the research instrument was assessed in relation to face and content validity. A pilot of the instrument was performed in relation to face and content validity.

3.6 Pilot study

Pilot testing is utilised to improve face and content validity of a data collection instrument as well as to judge how long it takes to complete the questionnaire. It is also conducted to assess understanding of the questionnaire and if participants understood what

was read. Pretesting an instrument consists of carrying out all aspects of the total data-collection process on a small scale (Grinnell & Unrau 2008). A pilot study defined by Barker (2003) is a procedure for testing and validating an instrument by administering it to a small group of participants from the intended test population. The participants who participated in the pilot study did not participate in the main study due to changes that were made to the instrument.

The pilot study tested for language appropriateness and to determine face and content validity. Ten percent of the sample was intended to be used in a pilot study to test the reliability of the instrument used. The pilot study was conducted to establish limitations and challenges in the completion of the questionnaires. There was also an opportunity to ask questions by the participants while the researcher went over the information sheet and consent forms. The pilot study was administered to twenty participants individually while they came for assistance for substance abuse treatment. The researcher was planning to use seventeen participants but used twenty participants to make it a round figure for the pilot study. Every fifth client who came for assistance for treatment was asked if they would like to participate in the study. Once they agreed the study was explained to them and the questionnaire and forms were completed.

3.6.1 Pilot study results

The pilot study was conducted at the outpatient substance abuse treatment site. Twenty participants fitted the inclusion criteria for the study. There were participants who asked clarification of some questions especially the first part of the questionnaire. There were three clients who came for a screening but due to mental illness (schizophrenia and a drug psychosis) they could not be used for the pilot study. The age restriction was 18 years and older, as the outpatient treatment centre caters for adults only. Screenings were slow in the

months of April-June 2014 due to weather conditions, which increased the duration of the pilot study.

3.6.2 Changes made to the instrument and the process

There were changes made to the instrument to suit the study. There were questions that needed to be rephrased, changed, additional questions that needed to be added. Changes to the instrument and process were as follows:

(i) All questions asked about domestic violence exposure were changed to substance use exposure.

(ii) Part 1 changed to the frequency of exposure to substance use as a child. It also asked questions as to the participant's experiences of substance use.

(iii) Part 2 related to questions on the participant's current experiences to substance use with family, friends and their partners.

(iv) Part 3 was adapted and a question pertaining to parent/s marital status was added about participants while growing up.

(v) Part 3 had a question with regards to parent/s, friends or neighbors and when did the alcohol and illicit drugs start? There were three options (i) as long as they could remember, (ii) when they were children (0-18 years) and (iii) they can't remember.

(vi) Part 3 asked a question of substance use between the participants and their partners. It had five options (i) as long as they knew the partner, (ii) before they got into a relationship, (iii) as soon as they got into a relationship, (iv) they can't remember and (v) it never occurred.

(vii) Also included in part 3 was past and current socio-economic status.

(viii) Added substance of choice (DOC) to the questionnaire, description of using and employment status.

3.7 Data collection process for the main study

Permission was granted by the Senate of the University of the Western Cape as well as the City Health Head Office. The pilot study and the main study depended on the staff at the outpatient substance abuse treatment centre. The researcher explained to the staff that the main study would be conducted. The main study took place during the months of April – September 2014. Due to the winter months there was a slow intake of screenings. Every fifth client who came for a screening was asked if they were interested in participating in the study. The research was conducted in the administration clerk's office where most screenings take place. If the office was unavailable the two offices of the substance abuse therapist were used. No time period was negotiated as the site is open Mondays – Fridays from 7h30am – 16h30pm, and clients came into the office any time of the day.

The procedure of the data collection for the main study was maintained. The questionnaire took 20 – 30 minutes and the whole session took about 35 – 40 minutes. It allowed participants to ask questions. The questionnaires were handed out by the researcher, substance abuse therapists and the administration clerk. Due to some participants being illiterate they could not complete the questionnaire on their own and they needed to be assisted. In these instances the researcher, administration clerk and the substance abuse therapist would interpret or rephrase the questions. One participant became emotional and the researcher referred the participant to a counselling psychologist to be debriefed straight after the questionnaire was completed. All questionnaires were left with the administration clerk, locked in a draw to insure anonymity and confidentiality.

3.8 Data Analysis

The participants completed a self-administered questionnaire, and the data was transferred into an electronic format. Each week the researcher would collect the questionnaires and it was coded, cleaned and checked for errors through the analysis using the Statistical Package for Social Sciences Version 22 (SPSS).The data was coded into a numerical format on a software programme called SPSS (Statistical Programme for Social Science) which is a programme designed for social scientists for analysing a range of statistical options for a number of procedures (Terre Blanche, Durrheim & Painter, 1999). A correlation is the degree of association, or the strength of the relationship between two variables (Terre Blanche & Durrheim, 1999). A correlation coefficient of greater than 0.80 is normally an adequate measure. Correlations are usually represented by correlation coefficient(r) which is a number that can range from -1 to 1. When r=0 there is no relationship between variables. As r approaches 1 the strength of the positive relationship increases as r approaches -1 the strength of the negative relationship increases. The relationship between variables was identified as strong or weak, or negative or positive as part of whether they correlate. Relationship between dependent and independent variables was clearly described by not only looking at correlation but also by looking at the frequency as well as the comparative relationships between variables. The analysis of the data was used to test the hypothesis relationship between variables and the aim and objectives of this study. The use of descriptive statistics was used to summarise the data that was collected and to describe what the findings were. Inferential statistics were used to generalise from the sample to the population (Pretorius, 1995). Correlation tests were done in order to determine whether there is a relationship between the variables. In order to establish whether there is a significant difference between groups (gender and single/two parent families) an independent T – test was conducted. The independent T – test was done to compare scores for gender and

for family structures (one and two parent family structures).Independent T –test is used when there are two experimental conditions and different participants being used in the study (Field, 2009).

3.9 Ethical consideration

Ethical clearance was sought from the university's Ethics Senate committee to make sure that the study met ethics criteria. When approval was given, contact was made with the City Health research department to ask permission to conduct the study. When permission was granted to conduct the research study for the research department, a meeting was held at the outpatient substance abuse treatment centre with the staff. The research study was explained to the staff and time was given to ask questions. At the meeting the information sheet (Appendix II) was explained as well as the consent form (Appendix III). Participation was voluntary and clients were informed that they could stop participation at any time with no penalty held against them if they did so. Clients were informed that they would remain anonymous as all questionnaires would be numbered for identification purposes and all information obtained from the interviews would remain confidential, as this was stated in the consent form, and information regarding the questionnaires was only to be shared between the researcher and supervisor.

The World Medical Association compiled the Helsinki Declaration for doing research on participants and to safeguard them against all harm and to respect their human rights, dignity and privacy (World Medical Association, 2008). The Declaration states that the researcher's first consideration should be the health of the participants. The purpose of the research involves the understanding, causes, developments and effects of the diseases and to improve preventative, diagnostic and therapeutic interventions. The participants were respected and their health and rights were protected. Some participants were vulnerable and

needed special protection. They were referred for counselling immediately after the questionnaire was completed. The research was voluntary, and the participant could refuse to participate at any given time with the researcher respecting the participant's decision. Confidentiality of each participant was vital and no names and surnames were used. The researcher gave clear contact details of the researcher and supervisor so that the participant could contact the researcher when needed.

3.10 Conclusion

The chapter explored the methodological approach and research design of the study in order to address the objectives. The child exposure to domestic violence scale was adapted to suit the research objectives. The population, sample size, reliability and validity, the pilot study, and the data analysis were explained. The research design was explained as well as the pilot study. The pilot study consisted of 20 participants which were not used again for the main study due to changes that were made to the questionnaire. The main study consisted of 192 participants. The (CEDV) child exposure to domestic violence scale was adapted for the study, keeping in mind the overall aim and objectives of the research study. The data was transferred into an electronic format and coded on a software programme called SPSS (Statistical Program for Social Science). The study results will be explored in the next chapter.

CHAPTER 4

RESULTS

4.1 Introduction

The results presented in this chapter were analysed using the Statistical Package for Social Sciences (SPSS) V21. The results will be presented by means of (i) descriptive statistics and (ii) inferential statistics which determine the associations between the variables of the two groups (one and two parent families). It will compare the two groups and also view the relationship between childhood exposure to substance use and the participant`s current use of substances.

4.2 Analysis Overview

The following outcomes were hypothesised for the current study:

Substance abusers are more likely to report that they had witnessed substance use in their family growing up.

There is no significant difference between males and females regarding the sort of substances they abuse.

There is a significant difference between substance users and living in one or two-parent families.

4.3 Internal Consistency of Instrument

The Cronbach alpha scores of the instrument variables were assessed as it is a measure of reliability and helps in establishing the internal consistency of the instrument (Tavakol & Dennick, 2011; van Teijlinigen & Hundley, 2001). All the Cronbach alpha scores

were above .05 and are considered acceptable (Anastasi, 1982). They assist in establishing the reliability of the variables and instrument used.

4.4 Demographic profile

The demographic profile includes gender, race, employment status, grade completed, marital status and age. This will give the description of the sample that is presented.

Table 4.1 outlines the demographic details collected from the sample of this study. The study consisted of 192 participants from the outpatient alcohol and drug treatment centre.

Table 4.1: Demographic information

Variables		N	**%**
Gender	Males	112	58.3%
	Females	80	41.7%
Race	Black	2	1.0%
	Coloured	190	99.0%
Employment Status	Employed	39	20.3%
	Unemployed	153	79.7%
Grade Completed	Primary School	19	9.9%
	Secondary School	156	81.3%
	Tertiary Education	17	8.9%
Marital Status	Two-Parent Family	96	53.6%
	One Parent Family	83	46.4%
Age	Youngest		18 years
	Oldest		71 years
	Mean		30.42

Table 4.1 shows the demographics of the sample. In terms of the gender, more males 112 (58.3%) than females 80 (41.7%) participated in the study. Of the participants, the majority were coloured190 (99.0%). Their employment status illustrates that the majority of participants were unemployed 153 (79.7%). The majority of participants 156 (81.3%) had

secondary education and17 (8.9%) had tertiary education. In terms of family structure, the majority of the participants were raised in a two-parent family 96 (53.6%).The mean age of the participants within the study was 30 years of age. The youngest participant was 18 years of age and the oldest participant was 71 years of age.

4.2.1 Socio-economic Status

Socio-economic status will explore childhood years which reflect previous socio-economic status and adult years which reflect present socio-economic status.

Table 4.2: Past and present socio-economic status

Variable	**Past SES**		**Present SES**	
	N = 192	**%**	**N = 192**	**%**
No, sometimes there wouldn't even be money for clothes, food, bills, rent etc.	48	25.0	101	52.6
Yes there is just enough money	100	52.1	65	33.9
Yes, even enough money for the things we didn't have	36	18.8	16	8.3
I can't remember	8	4.2	10	5.2

Table 4.2 illustrates that the socio economic status (SES) in childhood shows that most of the participants [100 (52.1%)] had enough money to cover basics such as clothes, food, bills, rent and school fees. However SES in adulthood shows that the majority of the participants [101 (52.6%)] do not have enough money to cover the basics such as clothes, food, bills, rent and school fees. This illustrates that there is a change in the SES of participants from childhood to adulthood.

4.2.2 Substance of choice and onset of using with partner

The tables below illustrate the different substances of choice the participants have used and also the onset of using with their partners.

Table 4.3: Substance of Choice

Variable	N= 192	%
Marijuana	12	6.3
Mandrax	13	6.8
Methamphetamine	103	53.6
Heroin	50	26.0
Alcohol	14	7.3

Table 4.3 illustrates that the most prevalent substance of choice was methamphetamine which was 103 (53.6%), the second most frequent substance of choice was heroin, which was 50 (26.0%), and the third most frequent substance of choice was alcohol, which was 14 (7.3%).

Table 4.4: Onset of using with partner

Variable	N = 192	%
As long as I've known him/her	23	12.2
Before we got into a relationship	36	19.0
As soon as we got into a relationship	29	15.3
I can't remember	14	7.4
Never occurred	87	46.0

Table 4.4 illustrates that the onset of using with a partner differs in responses. The majority of participants, 87 (46.0%) indicated that they had not used with their partner. Of the

responses, 36 (19.0%) show that the onset of using with a partner was before they got into a relationship. These results also indicate that only 14 (7.4%) could not remember their past use. This indicated that participants could remember the onset of using with their partners.

4.2.3 Past experiences of substance abuse

This section will look at the past experiences of the individual to substance abuse as a child; it will consist of the percentages as well as the number of participants that responded in brackets.

Table 4.5 Past experiences of substance abuse

Experience(Scenario)	Options	Percentage
Experience of exposure to substance abuse (alcohol and illicit drugs) as a child.	A = I saw the end-result (e.g. the person was under the influence of alcohol or an illicit drug).	A = 39%
	B = I witnessed the incident.	B = 48%
	C = I heard what was going on but did not see it (e.g. stayed in my room, walked away.)	C = 7.7%
	D = I heard about it afterwards.	D = 5.1%

Table 4.5 illustrates how often participants were exposed to substance abuse (alcohol and illicit drugs) as a child (*M*=2.47). The results indicate that 48% of the participants witnessed an incident whereby they were exposed to substance abuse during childhood. This was followed by 39% of the participants who saw the end-result where the person was under the influence of alcohol or an illicit drug.

Table 4.6 Past experience of user hurting other's feelings

Experience (Scenario)	Options	Percentage
Experience of user hurting other's feelings by shouting, insulting, accused or threaten someone.	A = I saw the end-result (e.g the person was hurt, something was broken, police came, and family or neighbours intervened)	A = 40.9%
	B = I witnessed the incident.	B = 36.9%
	C = I heard what was going on but did not see it (e.g. stayed in my room, hid near-by).	C = 10.7%
	D = I heard about it afterwards.	D = 11.4%

Table 4.6 illustrates that 40.9% of the participants saw the end-result (e.g. the person was hurt, something was broken, police came, and family or neighbours intervened). It also shows that 36.9% of the participants witnessed the incident.

Table 4.7 Past experiences when family/friends used/abused substances

Experience (Scenario)	Options	Percentage
Experience when family/friends used/abused substances.	A = Felt out of place, and used with them.	A = 49.9%
	B = Felt out of place; was pressured to use.	B = 16%
	C = Felt a bit out of place, but was assertive and said no.	C = 14.2%
	D = Did not feel out of place, as I was assertive and said no.	D = 20.4%

Table 4.7 indicates that the experience of participants who felt out of place and used with family/friends was 49.9% which was the majority. The second highest percentage was 20.4% which indicated that the participants did not feel out of place, as they were assertive and said no.

Table 4.8 Parents reaction to substance use/abuse

Experience (Scenario)	Options	Percentage
When your parents knew about it, what was their reaction?	A = Told me to stay away from them, even gave me a beating.	A = 29.9%
	B = Just spoke to me about their concern.	B = 53.3%
	C=They seemed concerned, but didn't say anything.	C = 13.1%
	D=They were not concerned about it.	D = 3.6%

Table 4.8 illustrates that 53.3 % of the parents of the participants spoke to them regarding their concern of substance abuse. The second highest percentage was 29.9% whereby their parents instructed them to stay away from their using friends or even got a beating.

Table 4.9 Parents' reaction when friends at school used substances

Experience (Scenario)	Options	Percentage
Parent/s' reaction, when they knew that your friends at school used substances.	A = They took me out of the school.	A = 3.0%
	B = They warned me about not associating with them.	B = 35.3%
	C = They said that I should choose my friends wisely.	C = 27.4%
	D = They were not aware.	D = 36.3%

Table 4.9 illustrates that the majority of the participants' parents were not aware of the friends at school that used substances, which accounted for 36.3%. The second highest percentage was 35.3%, whereby the parents warned them not to associate with the using friends.

Table 4.10 Experiences of parental substance abuse

Experience (Scenario)	Options	Percentage
Experiences of parental abuse substances.	A = I saw the end result in my parent/s abusing substances eg: arguments, fights, police came, family and neighbours intervened etc.	A = 36.4%
	B = I witnessed my parent/s abusing substances.	B = 35.5%
	C = I heard the arguments, but stayed in my room.	C = 12.4%
	D = Did not affect me.	D = 15.7%

With regards to parents that abuse substances, 36.4% of the participants saw the end result of their parents abusing substances: for example arguments, fights, police came and family and neighbours intervened. The participants who witnessed their parents abusing substances accounted for 35.5% of the sample.

Table 4.11 Experience in intervening in stopping parents

Experience (Scenario)	Options	Percentage
When you intervened in stopping your parent/s using substances, how did you experience it?	A = I witnessed the end result of him/her abusing substances eg. Saw how he/she looked after using.	A = 36.5%
	B = I witnessed him/her abuse it.	B = 16.5%
	C = Was not able to stop him/her. I then rather left it.	C = 35.3%
	D = I was able to stop it.	D = 11.8%

Table 4.11 illustrates that the majority of the participants witnessed the end result e.g saw how he/she (parents) looked after using, when they intervened in stopping their parents in using substances, which accounted for 36.5%. The second highest accounted for 35.3% whereby participants witnessed him/her abuse it.

4.2.4 Past exposure of substance abuse

The next section outlines the participants' past exposure to substance abuse. The word exposure relates to any exposure to substance abuse while being a child - this could be things they saw and heard. This could be via parents, siblings, aunts, uncles, peers or neighbours.

Table 4.12: Past exposure of substance abuse

Variable	N = 192	M	SD
Exposed to substance abuse (alcohol and illicit drugs) as a child.	191	2.47	1.070
Exposed to substance abuse whereby shouting, insults, acquisitions, threats took place due to substances as a child.	192	2.29	1.080
Exposed to people/friends who abuse substances.	192	2.54	1.030
Exposed to friends/family that used and your parents knew about it.	192	2.14	1.110
Exposed to substances at school.	192	2.00	1.060
Exposed to your parents who abused substances.	192	2.12	1.190
Exposure whereby you intervened in stopping your parent/s' abusing substances?	192	1.54	.954
Past exposure to substance abuse - Mean score	189	14.21	6.60

Responses were indicated on a Likert Scale of 1=Never and 4=Always.

Minimum Score for past exposure = 7

Maximum Score for current substance use experience = 28

Table 4.12 illustrates that on a scale of 1 to 4, the majority of responses indicated that the participants were exposed to people/friends who abuse substances that are not family [192 (*M*=2.54, *SD*=1.03)]. It illustrates that more than half of the respondents were exposed to people/friends who abuse substances that are not family. The results depicts that 192 (*M*=2.47, *SD*= 1.07) of the participants were exposed to substance abuse (illicit drugs or alcohol) as a child. This illustrates that more than half of the respondents were exposed to substance abuse as a child. Responses to exposure whereby the participants intervened in

stopping a parent/s' abusing substances were the least [192 (*M*=1.54, *SD*=.95)]. It depicts that less than half of the respondents were exposed whereby participants intervened in stopping parent/s' abusing substances, this is the reason for the low mean score of 1.54. The overall minimum score for past exposure was 7 while the maximum score for current substance use experience was 28.

4.2.5 Current experiences of substance abuse

This section outlines the participants' current experiences or recent occurrence of substance abuse. Substance abuse with partner, frequency of using substances with close friends, frequent thinking of wanting to use daily, frequent thinking of wanting to stop abusing substances, frequent thinking that the participants are following a similar pattern of substance abuse as their friends/parents/ family.

Table 4.13: Current experiences of substance abuse

Variable	**N = 192**	***M***	***SD***
Your partner and yourself abusing substances together.	191	2.09	1.25
Your close friends or associates using together.	191	3.03	.95
You felt that you have to use every day.	191	3.10	1.01
You told yourself you want to stop.	191	3.43	.75
Your friends/family told or asked you to stop.	191	3.28	.10
Your partner told/asked you to stop.	189	2.75	1.27
Your family, friends, children intervened in stopping you abusing substances.	191	2.73	1.14
You thought that you had been following a similar pattern of abusing substances as your parents, family, and friends experienced during your childhood years.	184	2.37	1.23
Current Substance abuse Mean Scores	183	22.72	4.01

Responses were indicated on a Likert Scale of 1=Never and 4=Always.
Minimum Score for past experience = 8
Maximum Score for current experience = 32

Table 4.13 illustrates that the most prevalent response was *You told yourself you wanted to stop* [191 (*M*=3.43, *SD*= .75)], while the least responded to the participants and the partner abusing substances together was [191 (*M*=2.09, *SD*=1.25)].

The results shows that the mean score was high, which illustrates that the majority of the participants response was *You told yourself you wanted to stop.* The results show that the mean score was 2.09 which was low and it illustrates that the participants responded to *Never* for the question asked *How often had you and your partner abused substances together*.

4.2.6 Past exposure of substance use and current experience of substance use

The next section outlines the relationship between the participants' past exposure of substance use and current substance use experiences.

Table 4.14: Correlation between past exposure of substance use and current substance use experiences

4.2.6.1 Hypothesis 1: There is a significant positive relationship between childhood exposure of substance use and substance use as an adult within the total sample (*r*=.39, *p*,0.01). The study proved that there is a relationship between childhood exposure of substance use and current substance use experiences.

Current experience of substance abuse as an adult	**Total Sample**	**Gender**		**Family Structure**	
		Male	**Female**	**Two Parents**	**One Parent**
Past exposure of substance abuse as a child	.39**	.43**	.34**	.38**	.23*

** Correlation is significant at the 0.01 level
*Correlation is significant at the 0.05 level

Table 4.14 illustrates that the results suggest that there is a significant positive relationship between past exposure of substance use and current substance use experienced within the total sample (r = .39, p<0.01) as well as within groups. For gender there was a significant positive relationship in respect of males (r = .43, p<0.01) and for females (r = .34,

p <0.01) between current experience and past exposure to substance abuse. For family structure, there was a significant positive relationship between one (r = .23, p <0.05) and two-parent families (r = .38, p<0.01) and between current experience and past exposure to substance abuse.

4.2.7 Group differences on past exposure of substance use and current substance use experiences

The following section will outline the significant differences between groups in terms of past exposure of substance use and current substance use experiences. An independent t-test was conducted to establish the significant differences between the variables. Only significant effects are discussed.

Table 4.15: Group differences on past exposure of substance use and current substance use experiences

4.2.6.2 Hypothesis 2: For gender there was a significantly positive relationship found for males (r = .43, p<0.01) and females (r = .34, p<0.01) between past exposure of substance use and current substance use experiences. The study indicated that there is a difference between male and female and past exposure of substance use and current substance use experiences.

4.2.6.3 Hypothesis 3: There was a significant difference between one and two-parent families. For current substance abuse experiences there was no significant difference between groups in terms of family structure. However, past exposure of substance use had higher mean scores in two-parent family structures (M = 15.51, SD = 6.32) than in one parent family structures (M = 13.30, SD = 6.29). This difference was significant t (2.33) = .02, p < .05, with a small-sized effect r = .12. The study indicated that the respondents in two-parent family structures were more likely to use substances than one parent family structures in terms of past exposure of substance use.

One Parent Family			**Two Parent Family**			**Male**		**Female**		
Variable	***M***	***SD***	***M***	***SD***	***T***	***M***	***SD***	***M***	***SD***	***t***
Current substance abuse experiences	22.41	3.97	23.34	3.68	1.58	22.96	3.64	22.38	4.46	.43**
Past exposure of substance use	13.30	6.29	15.51	6.32	**2.33***	14.33	6.16	14.04	7.22	.34**

*p<0.05

The results of the independent t-test in Table 4.15 indicate that there was a significant difference between one and two-parent families. For current substance use experiences there was no significant difference between groups in terms of family structure. For gender there was a significantly positive relationship found for males (r = .43, p<0.01) and females (r = .34, p <0.01) between current substance use experiences and past exposure of substance use.

4.3 Summary of main findings

The results of the study indicated that there were more male participants than female. The dominant race of the population was coloured, as the research was conducted in Mitchell's Plain. The area predominantly consists of individuals classified as coloured. The unemployment status was extremely high i.e. 79.7%. The results illustrate that there is a change in the SES of participants from childhood to adulthood. Interestingly the highest grade completed was secondary schooling. In terms of ages the youngest participant was 18 years and the oldest participant was 71 years of age, according to table 4.1. The majority of participants indicated that they had not used with their partner [87 (46.0%)]. The dominant substance of choice of the participants was methamphetamine which was 53.6%, which is not uncommon in the Western Cape. The second most frequent substance of choice was heroin which was 26.0% according to table 4.3. The results suggest that 48% of the participants witnessed the incident whereby they experienced substance abuse during childhood. This is followed by 39% of the participants who saw the end-result where the person was under the influence of alcohol or an illicit drug. In terms of past experience when family, friend's used/abused substances was 49% whereby participants felt out of place and used with them. The study also reported that parents' reaction to substance use/abuse according to table 4.8 was that their parent/s merely spoke to them about their concern which accounted for 53.3%. The second most frequent response was 29.9% whereby their parents told them to stay away

from the using friends and they even got a beating. Table 4.9 suggests that 36.3% of the participants' parents were not aware of the friends that used substances at school. The second most frequent response was 35.3% whereby the parent/s warned them about not associating with the using friends. In terms of respondents' experiences of parental substance abuse, 36.4% of the participants saw the end result in their parent/s abusing substances and 35.5% of the participants witnessed their parent/s abusing substances. In terms of respondents' past exposure of substance use according to table 4.12 the highest mean score was 192 (*M*=2.54, *SD*=1.030) whereby past exposure to people/friends who abuse substances are not family members. In terms of exposure to parent/s that abused substances it accounted for 192 (*M*=2.12, *SD*=1.190). Interestingly the study reported that current experiences of substance abuse response were: *you thought that you have been following a similar pattern of abusing substances as your parents, family and friends* which was 184 (*M*=2.37, *SD*=1.23). The highest response was 189 (*M*=2.75, *SD*=1.27) which accounted for their partners telling them/asking them to stop. Results suggest that there is a significant relationship between past exposure of substance use and current substance use experiences. Additional findings show that for gender there was a significantly positive relationship found for males and females between current substance use experience and past exposure of substance use as a child. In terms of family structure there was a positive relationship found in one and two-parent families as well as current substance use experience and past exposure of substance use as a child.

CHAPTER 5

DISCUSSION, LIMITATIONS, RECOMMENDATIONS AND CONCLUSION

5.1 Introduction

This study compared and investigated the possible relationship between childhood exposure to substance use and substance use as an adult. This chapter provides a platform for discussing the results. It provides an outline of the social cognitive learning theory as a theoretical framework that will be used to conceptualise childhood exposure to substance abuse. It is also noticeable that these relationships have lasting consequences that might cause children exposed to substance abuse to be at risk of becoming adults abusing substances.

The findings in Chapter 4 are discussed and aligned with the aims and objectives of the study, as outlined in the thesis. This chapter also elaborates on environment, familial home environment and parent substance use. It also discusses the results of the investigation in relation to literature and the theoretical framework used to clarify the findings in international and local trends. Finally, the limitations of the study are discussed and recommendations are offered.

5.2 Social Cognitive Learning Theory

In the context of the current study the social cognitive learning theory was used. Social learning theory states that drug use develops through modelling, vicarious learning and pharmacological drug effects (Sussman & Ames, 2001). Role models act as teachers in terms of drug use. Social learning theory examines the role of observation of others, their behaviour and their social engagement in drug use behaviour. Social learning theory also places importance on observational learning features.

Social cognitive learning theory addresses the interaction between individual factors, environmental influences and behaviour (Bandura, 2006). Individual factors and social/contextual factors, such as those which relate to families and the communities in which youth live, have a direct influence on behaviour (Brook & Morojele, 2006).

Families and communities are important because an individual's attributes (and behaviour) may reinforce, or be curtailed, by modelling and the responses they receive from them. For the purpose of the current study, the assumption and key focus was on adults who came for treatment for substance abuse. This relates to the findings which indicate that 48% of the respondents witnessed the incident whereby they experienced the exposure to substance abuse during childhood. This links with the social learning theory, which states that the role of the observation of others' behaviour has a possible effect on an individual`s behaviour. If you associate and are exposed to individuals who use substances it is more likely that you will use substances as well. The findings show that 39% of the respondents experienced the end result when the person was under the influence of alcohol or an illicit drug.

5.2.1 Bandura's theory of social cognitive learning:

5.2.1 (a) Observational learning

Bandura demonstrated that children learn and imitate behaviors they have observed in other people. Three basic models of observational learning:

(i) A live model, which involves an actual individual demonstrating or acting-out behaviour.

(ii) A verbal instructional model, which describes an explanation of behaviour.

(iii) A symbolic model, which involves real or fictional characters displaying behaviours in books, films and the media.

According to Bandura's theory and the findings of the current study, respondents were exposed to all three types of observational learning. Of the respondents, 48% *witnessed the incident whereby the individual abused substances*, whereby 39% of the respondents saw the end result where the person was under the influence of a substance. In terms of *experience when family/friends used/abused substances* 49.9% felt out of place and used with them but 20.4% of the respondents did not feel out of place, as they were assertive and said no. The *respondents' experience of their parent/s abusing substances* accounted for 36.4%, whereby they saw the end result and there were arguments, fights and the police came to intervene. The highest response for *when they intervened in stopping the parent`s abusing substances* was 36.5% where they witnessed the end result of the parent abusing substances.

5.2.1 (b) Mental states are important to learning

(i) Intrinsic reinforcement

External, environmental reinforcement was not the only factor to influence learning and behaviour. Intrinsic reinforcement is a form of internal reward, such as pride, satisfaction and a sense of accomplishment. The emphasis on internal thoughts/cognitions assists to link learning theories to cognitive developmental theories (Bandura, 2006).

This theory emphasizes that it is not only the environmental factors, things that respondents see and hear, which are factors that may influence learning and behavior. The findings of *past experiences of substance abuse* illustrated that the lowest response was 5.1% which illustrated that they heard about the substance abuse afterwards. *Past experiences whereby the respondents experienced the user hurting other's feelings by shouting, insulting or threatening someone* was 11.4%, which was that they heard about it afterwards. This was the second lowest response. In terms of *past experience, when family/friends used/abused substances,* the respondents felt out of place, and used with them to an amount of 49.9%. The second highest response was 20.4% whereby they did not feel out of place, as they were assertive and said no. The item on the questionnaire that focused on the respondent's *parental abuse of substances* shows that 15.7% of the respondents were not affected by it. This was the second lowest response; the lowest response was that they heard the arguments of the parents, but they stayed in their rooms. In terms of *current experiences of substance abuse* the findings show that the respondents thought that they had been following a similar pattern of abusing substances as their parents, family members and friends, which accounted for a mean of 2.37, which is more than half of the respondents.

5.3 Modelling of parenting as a risk factor

Teens living with both their mother and their father reported significantly less alcohol use, according to research conducted by Ewing and Osilla (2014). Research reported marijuana use by an important adult, for example a parent or role model, was significantly associated with greater adolescent alcohol use. This illustrates that the literature contradicts the findings of the current study which compares one and two-parent families. The response from two parent-families *(M* = 15.51, *SD* = 6.32) than to one parent families (*M* = 13.30, *SD*= 6.29), illustrates that participants were more likely to abuse substances than one parent

families. It illustrates that the mean score was higher for two parent families than in one parent families.

According to Barber (1996) parental behavioural control refers to the extent to which parents regulate or control the behaviour of their children. In terms of the findings table 4.8 illustrates that 53.3% of the participant's parents spoke to them about their concerns caused by certain friends and 3.6% of the participants' parents were not concerned about it. This is similar to what the literature states that the extent of parental control is important, especially the peers that use substances. It illustrates that due to parents not being concerned about their children's friends that use substances, they are more likely to use substances.

During the last two decades, investigators have found two types of parental influences in adolescent drug use.

5.3.1 (i) Parental drug use:

In a study done by Brook and Morojele (2006), they suggest that drug use by parent(s) serves as a behavioural model and predicts child drug use. Parental drug use is hypothesised to be related to adolescents' drug use. The findings in the current study are similar to the literature which indicates in table 4.10 that 36.4% of the participants saw the end result in their parent/s abusing substances and whereby 35.5% of the participants witnessed their parent/s abusing substances. It demonstrates that parents serve as a behavioural model to their children.

In a study done by Brooks and Morojele (2006) they state that adolescents who used illegal substances compared with those who did not use, were significantly more likely to have parents who used legal and illegal drugs. It is postulated that two family mechanisms may be operative. Firstly, drug use may be displayed by some adolescents through modelling

the behaviour of their parents. Secondly, parental attributes expressed in less parental monitoring behaviours and in a low parent-child mutual attachment relationship, may account for the association between parent and adolescent drug use. In terms of the findings *past exposure* accounted for [192 (*M* = 2.12; *SD* = 1.190)] and *past experience of parental substance use* accounted for 36.4%, whereby they saw the end result of their parents abusing substances eg: arguments, fights and police presence. The study supports the literature whereby parental substance abuse has a possible factor for children exposed to substance use (Lonczak et al., 2007; Swaim et al., 2011 & Henry et al., 2011)..

Parental control and parental knowledge and activities of children have been found to be associated with lower levels of child and adolescent deviant behaviour according to Stattin and Kerr (2000). This refutes the findings that show that the past exposure to substance abuse at school was reported [192 (*M* = 2.00; *SD* = 1.060)] which shows that half of the participants responded to being exposed to substance abuse at school and that parents' reaction when they knew that children`s friends at school were using, accounted for 36.3%, which states that the parents were not aware of their friends using. The economic disadvantages and the relative absence of fathers as authority figures in black and coloured families, a number of elements of the kinship system, monitor children according to Pluddemann, Myers & Parry, 2008). According to the literature with regards to absent fathers or single parents and substance abuse, this refutes the findings of the study which states that there is a significant difference between one and two-parent families. Participants from two-parent families are more likely to abuse substances than one parent families. Furthermore research has also demonstrated that there is a direct association between marital hostility and youth problem behaviours. This is due to marital conflict and problem behaviours which lead to ineffective parenting. This spills over from marital relationships to the parental relationship and it has been documented in Western samples, according to Stone, Buehler and Barber (2002). With regards to the

findings it is similar to the literature which states that the *current experiences of substance abuse in terms of the participants thought of following a similar pattern to their parents and family members substance using,* accounts for [184 (*M* = 2.37; *SD* = 1.23)] the results shows that more than 50% of the participants responded to following a similar pattern to their parents and family members abusing substances. This illustrates that there is a relationship between parents, family members and friends that use and the participants that were exposed and experienced substance abuse.

Children's drug use can be affected by parental behaviours due to the learning process of observing and role modelling their parent's behaviour. An explanation of social learning theory would lead one to state that the relationship between attachment to parents and children's drug use should be strongly positive and significant for children with drug-using parents. However, behaviour is subjected to various reinforcement from significant others and the socio-cultural environment.

Through observational learning the child can learn drug-use behaviours, but these behaviours can be affected by expected sanctions and reinforcement. It could also be said that parents that use drugs could disapprove of their children's drug-using behaviour. Positive role models, law enforcement, and school peers could also promote nondrug use. When doing research on children's drug use, parents who use drugs should be considered; if not it could lead to misleading conclusions. Dembo and Grandon (1986) show that there is a positive and statistically significant result for parents who use drugs on a low, medium and high level.

5.3.2 (ii) The domain of child rearing:

Includes parental monitoring and mutual attachment relationships between child and parent. Parents exert control through supervision and monitoring; these factors have been seen as protective against alcohol and drug use. The mutual attachment between the parent-

child relationship marked by affection and identification with the parents has also been found to predict less alcohol and drug use in adolescents. Linking this to table 4.11 *when participants intervened in stopping their parent/s to use substances* 36.5%, of the participants witnessed how their parents abuse substances; they saw how their parent/s looked after using. Hence 35.3% of the participants were not able to stop their parents, and they rather left the home. The study illustrates that 11.8% of the participants were able to stop their parent/s. abusing substances.

Oetting and Donnemeyer (1998) note that adolescents with weak bonds to their families are more likely to be pulled into peer groups involved in delinquency and drug use. This is similar to the findings which show that *exposure to substances at school* accounted for [192(M = 2.00; SD = 1.060)]. It illustrates that half of the participants were exposed to substances at school. Peer influence at school could be a factor for delinquency and drug use.

5.4. Prevalence rates of family factors:

Family factors relating to substance abuse, according to Anderson, Bruijn et al., (2009) state that parental drug use is associated with the initiation of use by adolescents. There is a controversy between genetic versus environmental factors. In terms of the findings, factors for substance abuse can be linked to genetic and environmental factors. It cannot be singled out by stating that only one of these can be a factor pertaining to substance abuse as the results show that both environmental and genetic factors play a vital role in the abuse of substances. Parental drug use behaviour can be linked to the findings of the study which shows that the respondents saw the end result of their parent/s' abusing substances whereby fighting, arguments and police intervention resulted which accounts for 36.4%. In terms of *past exposure of parental substance abuse*, the current study suggests that half of the respondents in the study were exposed to parental substance abuse which accounted for [192

(*M*=2.12, *SD*=1.06)]. This indicates that 62% of the participants responded to being exposed to parental substance abuse. Lastly, the thoughts of the respondents *that they follow a similar pattern of abusing substances as their parents, family members and friends,* accounted for [184 (*M*=2.37, *SD*=1.23)] which illustrates that 184 participants responded to the question and 62.5% of the responded *that they think they follow a similar pattern of abusing substances as their parents, family members and friends.* The parents' attitudes and parent-child interaction, according to Kandel (1978) are also factors leading to substance abuse in children. The findings in the study illustrate that parents spoke to the respondents in regard to their concern about their friends that abuse substances which was 53.3%, and 3.6% responded that their parents were not concerned, which shows that the majority of the parents were concerned about the friends with whom their children associated.

According to Preston-Whyte (1978) and Moore (1994) economic disadvantages and the absence of fathers as authority figures in black and coloured families are elements of the kinship system. The results of the current study suggest that in table 4.2 the majority of the participants [100 (52.1%)] had enough money to cover basics such as clothes, food, bills, rent and school fees during childhood. However, socio economic status in adulthood shows that the majority of the participants [101 (52.6%)] do not have enough money to cover the basics such as clothes, food, bills, rent and school fees. The findings of the current study are similar to previous studies that examined the economic disadvantages. The findings of the current study shows in table 4.1 that the percentage of black participants was 1.0% and coloured participants was 99.0%. The current study shows in table 4.1 that participants raised in two-parent families was 53.6% and one parent families was 46.4%. This is similar to the findings by Preston-Whyte (1978) and Moore (1994) where they reflect on race; however there is a contradiction to previous studies that examined the absence of father figures as authority as the majority of the participants were raised in two-parent families.

It was found that in addition to individual factors, family and community factors were particularly influential in South African youth substance use. Female substance use was strongly associated with family factors while males were more influenced by community factors. Attention should be given to South African youth living in female-headed households without resident fathers. It could also be said that it is important to keep in mind that family history does not predict outcome. Most offspring of parents that have a substance abuse disorder do not themselves develop a substance abuse disorder. The results in the current study suggest that in table 4.12 the *past exposure to substance abuse by parents* accounted for [192 (M = 2.12; SD = 1.190)] this results illustrates that more than 55.7% of the participants responded to past exposure to substance abuse by parents which contradicts previous studies that stated that most offspring of parents that have a substance abuse disorder, do not develop a substance abuse disorder. The individual must not only be viewed as the product of risk factors but must be seen as an individual with its own strengths and liabilities.

5.5. Familial home environment

Substance use among adolescents in all parts of the world continues to be a significant health problem. At the present time there are few studies that have examined risk factors for marijuana and other drug use in South Africa. Investigations in the United States have identified risk factors that increase the likelihood of substance use in the demographic, environmental stressors, peer, family and personal domains. Males, older adolescents, and white adolescents report higher frequencies of drug use in the Unites States than other groups. Environmental stressors include poverty, lack of household amenities and hunger Forrester, Holland & Williams et al., (2014). Interestingly in the current study done it is similar to what research says about poverty, whereby looking at past and present socio-economic status there has been a decrease in the participants' status from childhood to

adulthood. During childhood the majority of the participants [100 (52.1%)] had enough money to cover basics such as clothing, food, bills and rent. However during adulthood their socio-economic status indicates that the majority of the participants [101 (52.6%)] do not have enough money to cover the basics such as clothing, food, bills and rent. A study done by Morojele, Brook, Kachieng et al. (2006) hypothesised that higher levels of environmental stress related to adolescent drug use.

5.6 Childhood exposure to substance use

While we do not fully understand the pathways that lead South African youth to use alcohol or drugs, a number of theories have been used to consider risky behaviour, including substance use, among the youth. The findings of the study will be linked to the theoretical framework. Bandura's (1986) social cognitive theory suggests there is a dynamic interplay between an individual's characteristics, their behaviour, and their environment including friends, family and peers as well as their physical environment. Families and communities are also important because an individual's attributes (and behaviour) may be reinforced. In terms of the results of the study it illustrates that 48% of the participants witnessed an incident whereby they experienced being exposed to substance abuse during childhood. This explains that the social learning theory of childhood exposure to substance abuse can have a possible effect on adults to become substance abusers due to childhood exposure to substance abuse. The individual's family is also important, as children interact with family which also relates to social learning theory. In terms of the findings of the current study 36% of the participants saw the end result where the person was under the influence of alcohol or an illicit drug. The findings illustrate that 36.4% of the participants saw the end result of their parents abusing substances whereby shouting and arguments took place.

According to Kilpatrick, Acierno et al., (2000), a youth's environment is usually influenced by families, peers and schools. Strong family and school bonds contribute to positive bonds with peers and less risky behaviour, while weak family and school bonds can lead to greater risk-taking by the youth or adolescent. The findings of the current study illustrate that the parents' reaction to their childrens' friends that use substances at school was the highest when the parents were not aware of these friends, i.e 36.3%, while the second highest response was 25.3% whereby parents warned their children not to associate with these friends that use substances. The influence of substance abuse among South African youth can have a possible influence on bonds with peers, schools, families and communities.

Research conducted by Meghdadpour, Curtis, & Mac Phail, (2012) states that there is a significant association between substance use and factors from almost all domains. The domains most influential for males are individuals and community and for females individuals and families. In overall, there was a significant association with substance use ($p<0.05$) for males than among females. In terms of the findings there were more males than females in terms of the demographics of the study.

Social learning theory indicates that a positive relationship exists between children's drug use and parental drug use. Brook and Brook et al., (2003) state that parents could influence the drug-taking behaviour of their offspring. Bandura (2006), states that social behaviour is moulded by a number of processes. It includes the imitation of others' behaviour, differential reinforcement and the evaluation of significant others' behaviour as negative or positive.

According to Bandura (2006) environment is important for children. And social cognitive theory suggests there is a dynamic interplay between individual's characteristics, their behaviour and their environment including friends, family and peers. The findings

suggest that the respondents who *experienced family/friends abusing substances* stated that 49.9% of them felt out of place, and used with them. This demonstrates that family, friends and peers have an influence on children's substance abuse whereby they are influenced by a family member or friend abusing substances. This shows that family and friends are important, and that they play a role in childhood experience when they witness those abusing substances.

With regards to family closeness and drug use it could be argued that these factors might influence gender and ethnicity. However, the results of the current study show that neither gender nor ethnicities are significantly related to drug use. Marijuana use according to Vermeulen-Smit, Koning et al (2012) is primarily viewed as a peer-related phenomenon.

In the following section there will be a discussion on alcohol misuse and social learning theory. Early alcohol use can be a strong predictor of youth to adult misuse according to Kyprietal (2009). It can also increase mental health problems. Alcohol use and alcohol problems can develop from childhood (Zucker et al. 2008). Furthermore children that are part of peer groups who use alcohol could influence the risk of children drinking alcohol Martino, Collins et al., (2006). It could therefore be argued that peer influence can increase the risk of alcohol abuse. In the past sociological explanations of deviant behaviour were developed, but there have been developments in the theoretical perspectives on definitions of deviant behaviour. Behaviour is strengthened through positive reinforcements, negative reinforcements or weakened by aversive stimuli, positive or negative punishment. In addition, people learn in their interaction with the norms and attitudes of significant groups in their lives. These groups are, for example, peer-friendship, schools, churches etc. When positive rewards in the form of drugs are given from peers to individuals the probability of abstinence decreases. In relation to the study (table 4.7), the participants' response related to their

experience of family and friends abusing substances, 49.9% felt out of place, and used with them. According to table 4.10 the participants also indicated that their *experiences of parental substance abuse* was 36.4% which related to the participants seeing the end result of their parents abusing substances e.g. arguments, fights, police etc. This is similar to what research states that behaviour is learnt through different environments like schools, families and churches etc.

In the current study *past exposure of substance abuse at school* according to table 4.12, illustrates that half of the participants were exposed to substances at school [192 (M = 2.00; SD = 1.060)]. The participants' *exposure to substance abuse as a child* accounted for a response of [191 (M = 2.47; SD = 1.070)] which illustrates that 79.7%of the participants were exposed to substance abuse as a child. Interestingly this shows that exposure to substance use at school and with parents could have a possible effect on substance use as an adult.

In terms of the drug of choice of the respondents, alcohol accounted for 7.3% of the study. It can be illustrated by the findings that respondents felt out of place and used with friends and family. With regard to the past exposure to substance abuse, the findings shows that the highest response was [192 (M=2.54, SD=1.030)], which means that more than half of the participants responded to having experienced substance abuse, and they felt out of place and used with friends and family.

According to Fejer and Smart (1973); Johnston (1973), positive attitudes towards using substance are much more likely to be the cause of use of substances than those that experience negative attitudes towards it. Important factors can be peer and parental influence which increase teenage drug and alcohol behavior. The findings shows that 36.4% responded that they saw the end result of their parents abusing substances e.g. police came, arguments and fights. When the participants were exposed to substances as a child they, felt out of place,

which accounted for 49.9%. This result shows that past experience with substance abuse as a child could have a possible influence on an adult`s current experiences in abusing substances.

Adolescents may have learnt deviant behaviour by family interaction before association with adolescent peers; this however contradicts the theory. However the process of social learning theory limits both definitions and peer association to affect deviant behaviour. It is also said by Akers (1996) that the association with peers is formed around attractions, friendships, and neighbourhoods which has limited reasons for direct or co-involvement in some deviant behaviour. Past research shows much support for social learning theory as an explanation or reason for deviant behaviour and drug use. The rates of nonmedical prescription drug use are the highest among adolescents and young adults (Johnson et al., 2005; substance abuse and mental health services administration 2006).

5.7 Peers influence

Peer substance use is a well-established predictor of adolescent drug use. The influence that the peer group has is modelled as social reinforcement of non-conforming behaviour. Prior research suggests that peer drug use influences adolescent behaviour and that adolescents' own predispositions to using drugs may lead them to select deviant peers. When looking at the study done (table 4.7) the *experience when family/friends used substances* the majority of the participants felt out of place and used with them, which accounted for 49.9%. According to a study conducted by Brook and Morojele (2006) adolescents with higher levels of drug use reported greater peer smoking, drinking and marijuana use and other illegal drug use which is similar to the findings conducted in the study. According to the findings in the study the *parents' reaction when they found out that their friends in school were using substances,* 36.3% of the parents were not aware that the

friends were using. The second highest response was 35.3% which states that their parents warned them not to associate with these friends.

Literature conducted by Morojele and Brooks (2006) states that older male adolescents reported that their peers used drugs. The adolescents' main explanation of their peers drug use was that it was positively reinforced. The participants believed that it resulted in pleasurable consciousness states, heightened attention, enhanced status and exempted socially unacceptable behaviour. This contradicts what the findings of the study found that participants felt out of place and used with them, which accounted for 49.9%. This illustrates that peer pressure for children has a great influence on decision making to substance use. The findings do show that 20.4% of the participants did not feel out of place, as they were assertive and said no. This is a small percentage of participants who did not feel pressured to use substances.

Interestingly time spent with peers who use alcohol or drugs according to Maxwell (2002); Poelen and Engels, (2007) state it has been shown to be a risk factor associated with alcohol and drug use. Historically, research done by Crawford and Novak (2008) and Windle (2000) indicated that peer influence may have a greater impact on adolescent alcohol and drug use than family factors. It is then important to concurrently control the influence of adolescents' peers, not just focusing on family factors. This is similar to the findings of the study which shows that not only family experience of substance use but friends (peers) who use have a contributing factor to substance use.

5.8. Gender

In a study done by Lynskey, Coffey, Degenhardt, et al., (2003), gender discrepancies in substance use were higher among South African youth, with boys (males) on average reporting higher levels of substance use than girls (females) for alcohol, marijuana and

inhalants. In another study done by Sung et al., (2005), the findings were that females are more likely to report drug use than males which contradicts the previous study. In terms of the literature it is similar to the findings of the study that shows that there is a significantly positive relationship for males (r = .43, p< 0.01) and females (r = .34, p<0.01) for substance use. A possible reason could be that males seek assistance for treatment more easily than females do.

5.9 School dropout in addition to substance use

A study conducted in Cape Town, South Africa found that 55% of high school students dropped out before completing their schooling (Flisher et al.,2004). A cross-sectional study done by (Aloise-Young &Chavez, 2002) illustrated that there is an association between alcohol use and school dropout. Previous studies found that marijuana use was directly related to dropping out for males and females among African-American youth in Chicago (Green & Ensminger, 2006).

According to Eggert and Herting, (1993), a number of cross-sectional studies found that, besides marijuana/cannabis, other current illicit drug use was found to be higher among dropouts and students at risk for dropping out than school-going students. A study was done with a random sample of 1535 high school students in 2006 in Cape Town, South Africa. The results showed that of the 43% of students surveyed at baseline, all of them did not complete a follow-up questionnaire after 12 months. This survey indicated that substance use has a negative impact on school performance as well as a negative consequence on adulthood, and restrictive opportunities for tertiary education which are linked to lower life satisfaction, lower income and unemployment.

The findings of the current study illustrates that in table 4.1 the majority of respondents have some form of secondary schooling i.e. at 81.3%, primary schooling was 9.9% and tertiary education was 8.9%.

5.10 Overview of methamphetamine

Substance abuse has become a common phenomenon not only locally but also nationally. Crystal methamphetamine has become the leading drug of abuse in Cape Town over the past years among youth. It is a contributing factor to the increase of high risk behaviour, overdose, physical and psychological damage and economic disadvantage. Research studies have shown that factors that cause adolescents to abuse crystal methamphetamine display a lack of purpose in life, peer pressure and lack of parental supervision or knowledge Pluddemann, Myers & Parry (2008).

Prevention and treatment programmes have therefore been identified to educate youth/children about dangers of crystal methamphetamine and other related issues. In the last few years there has been an increase in methamphetamine epidemic addiction in South Africa, especially Cape Town, which is reported to have the highest rate of methamphetamine use (Pluddeman & Parry, 2007). Methamphetamine use is a continual major public health threat in the Western Cape area as well as on a global scale. The findings of the study illustrates in table 4.3 the highest substance of choice used was methamphetamine which accounted for 53.6%.

5.11 Limitations of the study

The limitations that were encountered during this research study:

(1) When analyzing the questionnaire, the item, onset of substance abuse within adult relationships, the questionnaire did not accommodate incidents of stressors that occurred later in the relationship. The stressors could be unemployment etc.

(2) Regarding the sample of the study, the sample was only taken from one particular substance abuse treatment centre, and if another population had been used or if different treatment centres were used the results might not be the same. For this reason results may not be generalized.

(3) The research study took on a cross-sectional design and this was considered to be a limitation in that it provided a once-off perspective of the relationship between childhood exposure to substance use and substance use as an adult.

(4) Additionally, a longitudinal study would offer information regarding onset and discontinuance as well as within-individual change (Farrington, 1991).

(5) Retrospective recall was used which might have implications. Retrospective recall with individuals over 18 years eliminates the need for parental consent and the sample bias of parental consent (Harris, Sutherland & Hutchinson, 2013). Additionally, recall can become less problematic when asked to recall important events and occurrences rather than feelings or emotions (Hutchinson, 2007). For some participants remembering the past and current exposure to substance abuse was something they had to think about, especially in childhood.

(6) The questionnaire was only available in English and not translated into Afrikaans which could have impacted on the reliability and validity of the study.

(7) Lastly, the research was conducted in one specific area namely, Mitchell's Plain, and this could have had an impact on demographic information of the study.

5.12 Conclusion

This chapter has assisted in providing insight on research within the sphere of substance abuse, by means of literature investigating substance abuse, the factors that influence it and the effect it potentiates in the lives of future generations that are exposed to it. The theoretical framework gave impending information as to how the relationship between substance abuse and social cognitive learning theory is experiential by the child. It focused on certain aspects such as the family, peers, parenting styles and school dropout rates of children which could be possible factors contributing to substance abuse.

The findings of the current study reveal that in terms of gender, 58.3% of the participants were males and 41.7% were females, which indicate that there was not a great difference between males and females seeking treatment. The study showed that coloureds accounted for 99.0% and blacks accounted for 1.0%, which is not surprising as the Western Cape's population, especially the population of Mitchell's Plain, mainly consists of individuals with the racial classification of being coloured. The results of the current study with regard to employment status of the participants were 79.7% unemployed and 20.3% employed which demonstrates that the majority of participants seeking treatment were unemployed.

In terms of past research conducted on substance abuse, the majority of the participants have some form of secondary schooling which was 81.3%, primary schooling was 9.9% and tertiary education was 8.9%. It would be interesting to conduct research as to which grade the participants completed their schooling. There was not a great difference in the study between the marital status of parents: two-parent families was 53.6% and one parent family was 46.4% which illustrates that it cannot be assumed that one parent families are more likely to abuse substances.

The past and present socio-economic status indicates that in the past there was enough money for products they needed, but interestingly their socio-economic status decreased when they became older: for example presently there is not enough money for products they need.

The results of the current study reveal a positive relationship between childhood exposure of substance abuse and current substance use as an adult. The relationship between past exposure of substance use and current substance use experience within the total sample (r = .39, p<0.01) as well as within groups. Experience of the past could have a possible influence on current experience as an adult abusing substance. The results show that hypothesis 1 of the study was proved.

The study also illustrates that the onset of using substances was the highest when participants were children (0-18 years) which was 35.6% which describes past experience of substance use with family and friends. Current substance abuse (onset of using with partner) was 46.0% which states the participant and their partner never used together. Past and current substance use with family or friends, according to the descriptive statistics of the study, indicated a mean of more than half for all 19 questions. In terms of gender differences there is a significant positive relationship found for males (r = .43, p<0.01) and females (r = .34, p<0.01) between current substance use and experiences and past exposure of substance use. The results show that hypothesis 2 of the study was proved. The results for family structure, shows that there was a significant positive relationship found in one (r = .23, <0.05) and two parent families (r = .38, p<0.01) between current experience and past exposure of substance abuse. The study indicated that the respondents in two-parent family structures were more likely to use substances than one parent family structures in terms of past exposure of substance use. The results show that hypothesis 3 of the study was refuted. In

terms of the question in the survey, that focused on whether they thought that they had been following a similar pattern of abusing substances as their parents, family or friends the result was [184 (*M*=2.37, *SD*=1.23)] which show that 62.5% of the participants agreed with the statement. It is evident from the results that were yielded in this research study that there is a relationship between childhood exposure to substance use and substance use as an adult. Thus, we could conclude that there may be other factors associated with childhood exposure to substance use and substance abuse as an adult. The study's results should be interpreted with caution; findings suggest that there is a relationship between childhood exposure to substance use and current substance use experiences. The results interpreted shows that there is a significant positive relationship found for males and females with regard to past experience to substance use and current substance use experiences. It also shows that two-parent families were more likely to use substances than one parent families. Social learning theory was also postulated; it indicated that learned behaviour has a significant relationship to childhood exposure to substance use and substance use as an adult. Although the limitations of this study may not be generalised as the sample is limited to participants from only one area and the majority was with one specific racial background, the study does highlight the need for further research, particularly into prevention programmes with children who are at high risk for substance use.

5.13 Recommendations

The following are suggestions for programme implementation, development and future research:

- Based on the results that were obtained, the majority of the participants were males rather than females. More research should be conducted with females receiving treatment as they experience other traumas like sexual abuse besides the exposure to substance abuse.

- Exploring substance use, when completing the questionnaire with them, exposure to substance use in childhood had to be explained as it was “normal” for participants to be exposed to substance use.

In the findings there is a significant relationship between childhood exposure of substance use and adult substance use. It is of paramount importance that early intervention is recommended within organisations that render services to children for substance abuse treatment. Even the participants’ children should obtain early intervention as well.

- Looking at factors such as onset of exposure to substance use, literature would propose that adolescence is the best time for early intervention. Adolescence is the phase when emotional maturity is forged in creating friendships with peers.
- Public agencies, social development and local government are still the most predominant means of assistance for substance abuse treatment. Substance abuse needs to be reflected as a disease.

Recommendations for further expansion on the topic of substance abuse are that a bigger sample be used within a longitudinal design. It may provide opportunity in gaining insight as well as predicting factors relating to substance abuse. The results of the study suggest that past experiences to substance abuse as a child was high which states that the participants witnessed the incident whereby they saw how the person used substances. As a recommendation it can be proposed that the focus needs to be on primary prevention placing emphasis on education and educating the public, especially those children who are at high risk for substance abuse.

- The results of the current study show that 49.9% of the participants felt out of place and used drugs or alcohol with their friends and family. Teaching children to “say no” to peer pressure has been a long-standing and well-evaluated component of many school-based drug education programs. Prevention programmes have been aimed at young people to focus on self-efficacy and skills training for improving their resistance to the use of drugs and alcohol. These programmes should be implemented at primary school level as part of a subject like Life Orientation.
- The findings of the current study found that heroin accounted for 26.0% and alcohol for 7.3%. Proper understanding of the different protocols in terms of the treatment of addiction, depending on the substances used or abused should be emphasized at treatment facilities.
- In relation to the current findings 81.3% of the participants completed some form of secondary education and 9.9% of the participants completed some form of primary education. Researchers should explore what happens to substances abusers with a low level of education, especially those individuals with only primary schooling. During treatment, clients use a manual which is written mainly in English, and it could be a barrier if the client cannot read and write.
- The results suggest that 26.0% of the participants were heroin users. Medical treatment for detoxification for heroin users has an age restriction of under 16 years of age at Stikland hospital. It is recommended that research be conducted on what happens to those individuals who are under the age of 16 years.

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Appendix I

Instructions:

There are 3 parts to the questionnaire

Part 1:

There are two parts to each question:

- Firstly, answer how often the exposure to substance abuse occurred by ticking in the box below the question.
- Secondly, answer all the ways you had experienced substance abuse by ticking in the box below the question.
- If you had answered **'Never'** in the first question, skip the second part of the question and move on to the next question.

Part 2:

Tick the box that best describes the frequency of the statement in relation to your current life situation.

Part 3:

This is just general information about you. Please do not write your name on this sheet.

Past (Part 1)

These are short questions about your childhood years relating to the relationship between your exposures to substance abuse as a child. The word "exposure" will relate to any exposure to substance abuse while being a child. The exposure can be via your parents, siblings, aunts, uncles, peers or neighbours.

1.a) How often were you exposed to substance abuse(alcohol and illicit drugs) as a child?	Never	Seldom	Almost Always	Always

1b.) When you were exposed to substance abuse (alcohol and illicit drugs) how did you experience it?	I saw the end-result (e.g. the person was under the influence of alcohol or an illicit drug.)	I witnessed the incident.	I heard what was going on but did not see it (e.g. stayed in my room, walked away.)	I heard about it afterwards.

2. a.) As a child have you been exposed to substance abuse whereby shouting, insults, acquisitions, threats took place due to substances?	Never	Seldom	Almost Always	Always

2. b.) How did you experience it when the user hurt other people's feelings by shouting, insulting, accusing or threatening someone; how did you experience it?	I saw the end-result (e.g. the person was hurt, something was broken, police came, and family or neighbours intervened?)	I witnessed the incident.	I heard what was going on but did not see it (e.g. stayed in my room, hid near-by.)	I heard about it afterwards.

3. a.) How often were you exposed to people/friends who are not family and who abused substances?	Never	Seldom	Almost Always	Always

3.b.) How did you experience it when you were around family/friends that abuse substances?	Felt out of place, and used with them	Felt out of place, was pressured to use	Felt a bit out of place, but was assertive and said no	Did not feel out of place, as I was assertive and said no

4.a.)How often were you exposed to friends/family that used and your parents knew about it?	Never	Seldom	Almost Always	Always

4.b.) When your parents knew about it, what was their reaction?	Told me to stay away from them, even gave me a beating	Just spoke to me about their concern	They seemed concerned, but didn't say anything	They were not concerned about it

5.a.)How often were you exposed to substance abuse at school?	Never	Seldom	Almost Always	Always

5.b.) What was your parent's reaction when they knew that your friends at school use?	They took me out of the school	They warned me about not associating with these friends	They said that I should choose my friends wisely	They were not aware

6.a.) How often were you exposed to your parents abusing substances?	Never	Seldom	Almost Always	Always

6.b.) When your parents abused substances how did you experience it?	I saw the end result in my parent/s abusing substances eg: argument, fights, police intervention, family and neighbours involved, etc	I witnessed my parent/s abusing substances	I heard the arguments, but stayed in my room	Did not affect me

7.a.) How often did you intervene in stopping your parent/s abusing substances?	Never	Seldom	Almost Always	Always

7.b.) When you intervened in stopping your parent/s how did you experience it?	I witnessed the end result of him/her abusing substances eg saw how he/she looked after using	I witnessed him/her abuse it	Was not able to stop him/her, I then rather withdrew from the matter	I was able to stop it

Present (Part 2)

This relates to your current experience or even if it occurred recently. 'Your partner' in this regard relates to male or female.

1. How often had you and your partner abused substances together?	**NEVER**	**SELDOM**	**ALMOST ALWAYS**	**ALWAYS**
2. How often had your close friends or using associates used together?				
3. How often have you felt that you have to use every day?				
4. How often have you told yourself that you want to stop?				
5. How often have your friends/family told or asked you to stop?				
6. How often have your partner told/asked you to stop?				

7. How often have your family, friends, children intervened in stopping you from abusing substances?				
8. How often have you thought that you have been following a similar pattern of abusing substances as your parents, family, friends experienced during your childhood years?				

Demographic Information (Part 3)

Gender (M)= Male or (F)= Female _____

How old are you? _____

What race or ethnicity do you consider yourself? (Please tick where appropriate or specify if "d")

a.) Black □

b.)Colored □

c.) White □

d.) Other _____

Employed (E)/Unemployed (U)? _____

Drug of choice? _____

Description of using? (e.g. Smoke, Sniff, Inject, Drink)

_____

What was your highest grade completed?

a.) Primary School □

b.)Secondary School □

c.) Tertiary Education □

What was the marital status of your parents while growing up?

a.) Married □

b.)Divorced □

c.) Single parent □

d) Other _____

(Circle only one answer for the questions below)

When your parent, friend or neighbour used alcohol or illicit drugs when did it start?

1a.) As long as I could remember.

b.) When I was a child (0-18yrs)

c.) I can't remember.

When did the abuse of substances start between you and your partner?

2a.) As long as I've known him/her.

b.) Before we got into a relationship.

c.)As soon we got into a relationship.

d.) I can't remember.

e.) Never occurred.

When you were growing up, was there always enough money for the things you needed?

3a.) No. Sometimes there wouldn't even be money for clothes, food, bills, rent, and school fees.

b.) Yes.

c.) Yes. Even enough money for the things we didn't need.

d.) I can’t remember.

At present, is their enough money to cover the things you need?

4a.) No. Sometimes there wouldn’t even be money for clothes, food, bills, rent, and school fees.

b.) Yes.

c.) Yes. Even enough money for the things I don’t need.

d.) I don’t know.

(Format and instructions adapted from Edleson, Shin, Johnson Armendariz, 2008)

Appendix II

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-959 9339, Fax: 27 21-959 9359

E-mail: msoeker@uwc.ac.za

INFORMATION SHEET

Title of Research: The relationship between childhood exposure to substance use and substance use as an adult.

What is this study about?

The aim of the study is to determine the relationship between childhood exposure to substance use and substance use as an adult. The study will furthermore attempt to establish the prevalence of childhood exposure to substance abuse and establish the prevalence of current and past substance use with family and friends. It will determine the relationship between past exposure to substance use and current substance use. The study will lastly compare the relationship on the basis of (i) gender and (ii) family structure.

What will be asked if I agree to participate in this study?

If you agree to participate in the study you will be asked to complete a questionnaire. The questionnaire can be completed at the outpatient treatment centre. The questions that will be asked will focus on three sections: namely, how often you were exposed to substance abuse as a child and the frequency of the exposure. Secondly, the frequency of the exposure to substance abuse currently in your life and thirdly, general information about yourself.

What are the risks of the research?

The physical and psychological risks involved in this study are minimal. However, should you require any assistance an appropriate referral source such as a counsellor from the centre will be contacted and a referral will be made.

What are the benefits of the research?

The study will investigate the relationship between childhood exposure to substance use and substance use as an adult. The results of the study may assist service-rendering organisations in assessing current programmes and planning future programmes; for example peer facilitator programmes at school and drug information sessions at early childhood development phase. This will also afford the participants in the study to confront issues which pose personal challenges to them.

Do I have to be in this research or may I stop participating at any time?
Participation in this research is voluntary. Once you have consented to participate in the research, you may withdraw at any time during the process without penalty.

What if I have questions?
The research will be conducted by Carmen Herbert under the guidance of the Social Work Department, University of the Western Cape. If at any time you have queries regarding the nature of the study, you could contact the researcher at the details given below:
Researcher: Miss Carmen Herbert
Cell No: 078 346 7732
E-mail: carherbert@gmail.com

Should you have any questions regarding this study and your rights as a research participant, or you wish to report any problems you have experienced related to the study you may also contact:

Head of Department: Professor Nicolette Roman (Child and Family Studies)
Dean of the Faculty of Community and Health Sciences: Professor Jose Frantz
University of the Western Cape
Private Bag X17
Bellville

This research has been approved by the University of the Western Cape's Senate Research Committee and Ethics Committee.

Appendix III

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-959 9339, Fax: 27 21-959 9359

E-mail: msoeker@uwc.ac.za

Consent Form:

Research Title: *The relationship between childhood exposure to substance use and substance use as an adult.*

I …… hereby acknowledge that the researcher has discussed with me the aspects of the study, its purpose and how it will be carried out, by means of the Information Sheet. I understand the purpose of the study and confirm that I have been allowed adequate opportunity to ask questions where I did not understand the explanation. The decision to participate in the study is solely my own.

The research project involves completing a questionnaire. The questionnaire will assist the researcher to capture all the information needed for the study. Only the researcher, the supervisor and the research coordinator will have access to the questionnaires.

…… I agree to participate by completing the questionnaire in this study.

…… I do not agree to participate by completing the questionnaire in this study.

By signing I agree to participate in the study. I know and understand that my participation is voluntary and that I may choose to withdraw at anytime without prejudice or penalties.
I have had the study explained to me and I am willing to participate of my own free will.

Signature of participant ……. Date: ……..

Signature of witness …… Date: ……

Signature of researcher …… Date: ……

Should you have any questions regarding this study or wish to report any problems you have experienced related to the study, please contact the study coordinator.

Study Coordinator's name: Dr. Shaheed Soeker
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